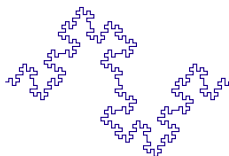


# On the Dependent Character of PI Licensing

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## Intervention

- Intervention caused by *and, every, always, because*-clauses (facts known at least since Linebarger 1981).

- (1)
  - a. I doubt that every housemate of Sue has potatoes.
  - b. \*I **doubt** that **every** housemate of Sue has **any** potatoes.
  - c. \***Doubt** ... **every** ... **NPI**.
- (2)
  - a. I didn't drink a cocktail and a soda.
  - b. \*I didn't drink a cocktail **and any** soda.
  - c. \***Not** ... **and** ... **NPI**.

# Intervention

- Intervention by *some*.

(3) (*Context: Some objects are nowhere to be found...*)

- I'm **not** sure that **anyone** stole **anything**.
- I'm **not** sure that **someone** stole **something**. ✓NEG>SOME
- I'm **not** sure that **anyone** stole **something**. ✓NEG>SOME
- I'm **not** sure that **someone** stole **anything**. \*NEG>SOME

## Important question

- There is no consensus about the exact role of DE (and AA) expressions: what is it really that licenses NPIs?
- **Operators** or **environments?**

## Operator-based approach

Ladusaw 1979, Progovac 1993, von Stechow 1999, Szabolcsi 2004, Guerzoni 2006, Gajewski 2009 a.o.

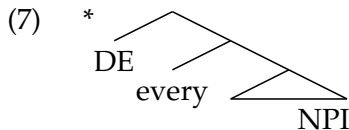
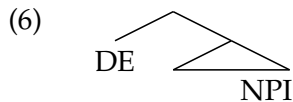
- An NPI needs a DE operator;
- Once licensed, an NPI can no longer be anti-licensed (or so it seems): there can be an arbitrary number of DE expressions above an NPI:

(4) It is **not** the case that John didn't understand **anything**.

- This is suggestive of a structural dependency between an operator and the NPI.
- **Prediction:** an even number of DE expressions cannot lead to anti-licensing.

## Licensing by operators

- (5) An NPI  $\pi^-$  is licensed in sentence  $S$  only if  $\pi^-$  is in the **scope of an operator**  $\alpha$  such that  $\llbracket \alpha \rrbracket$  is DE (AA).



- Claim: an NPI must be in the immediate scope of its 'licenser';
- No clear connection between monotonicity and the presence of interveners.

## Environment-based approach

- (8) An NPI  $\pi^-$  is licensed in a sentence  $S$  only if  $\pi^-$  is in a **constituent**  $A$  of  $S$  such that  $A$  is DE with respect to the position of  $\pi^-$ .  
Chierchia 2004, Gajewski 2005
- (9) A constituent  $A$  is DE (non-DE) w.r.t. the position of  $\alpha$  ( $\llbracket \alpha \rrbracket \in D_\sigma$ ) iff the function  $\lambda x. \llbracket A[\alpha/v_\sigma] \rrbracket^{g[v_\sigma \rightarrow x]}$  is DE (non-DE resp.).  
Gajewski 2005
- (10) It is **not** the case that John didn't understand **anything**.
- The licensers are constituents, whose logical properties are what matters to the acceptability of PIs;
  - The contribution to meaning of **all** the parts of the constituents that a PI finds itself in is taken into account;
  - **Prediction:** an even number of DE expressions can lead to anti-licensing;
  - Interveners ruin the monotonicity of environments.

## PPIs

- A PPI of the *some*-type cannot be in the scope of a *clausemate anti-additive* operator, i.e. negation, negative quantifiers, ...

- (11) a. It is **impossible** that John understood something. ✓ IMPOSSIBLE > SOME
- b. John didn't understand something. \*NEG > SOME
- c. **No one** understood something. \*NEG > SOME
- d. **At most five people** understood something. ✓ AT\_MOST\_5 > SOME

- Universally accepted idea: *some* is only anti-licensed by AA expressions.
- No complementary distribution:

- (12) a. It is **impossible** that J. understood anything.
- b. It is **impossible** that J. understood something. ✓ IMP. > SOME

- ▶ A unified account of *some* and *any* is impossible. (Szabolcsi 2004)



## Anti-additivity

- Strong NPIs, e.g. punctual *until* and *a single* require ‘more negative’ functions.

(13) A function  $f$  is Anti-additive (AA) iff  
 $f(A \vee B) \iff f(A) \wedge f(B)$  [Zwarts 1998]

- Negation and negative quantifiers (*no one, nothing, never, etc.*) are not just DE, they are AA;
- *At most five* is strictly DE.

(14) a. **No one** left **until** Friday.  
 b. ??**At most 5 people** left **until** Friday.

(15) a. **No one** understood **a single** thing.  
 b. ??**At most 5 people** understood **a single** thing.

# Goals

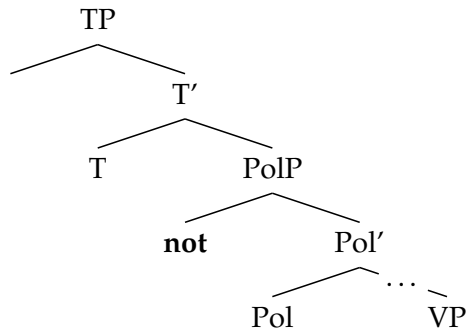
I am going to show that a unified account is possible:

1. PIs are licensed by constituents ('domains'), which need not be maximally large;
2. Not all domains are *eligible* for checking (e.g. for certain PIs, only constituents that contain the Pol head are eligible);
3. Licensing is computed cyclically;
4. PPIs of the *some*-type are in complementary distribution **in a given constituent** with NPIs of the *any*-type (**unity** of the two phenomena).
5. Polarity clashes lead to **intervention**.
  - Analogy with binding and phase theory;
  - Implications for the architecture of grammar.

# 1. Licensing by constituents and Granularity

Assumption: each clause contains a Pol head.

(16)



# 1. Licensing by constituents and Granularity

=Checking of licensing is done on constituents, but not all constituents are eligible for this procedure.

**NPI**

\*[<sub>TP</sub> [<sub>PolP</sub> **DE DE** ...  $\pi^-$

- (17) a. \*It is **n't impossible** that John understood a single thing.  
 b. It is **impossible** that John understood a single thing.

**PPI**

\*[<sub>TP</sub> [<sub>PolP</sub> **DE**...  $\pi^+$

- (18) a. John did **n't** understand something. \*NEG > SOME  
 b. John understood something.

## 2. Entanglement and cyclicity

- Entanglement:

\* $[_{TP} \text{DE} \dots [_{CP} \pi^+ \dots [_{PoIP} \pi^-$

(19) It's **impossible** that someone understood anything.

\*IMPOS.>SOME

▶ Source of 'new' intervention.

- Cyclicity:

✓ $[_{TP} \text{DE} \dots [_{CP} \pi^- \dots [_{PoIP} \pi^+$

(20) It's **impossible** that anyone understood something.

✓IMPOS.>SOME

### 3. Licensing is liberal

- One appropriate constituent is sufficient.

NPI

$\checkmark [_{\text{TP}} \text{DE} \dots [_{\text{CP}} \text{DE} \dots \pi^-$

(21) It's **impossible** that John didn't understand a single thing.

PPI

$\checkmark [_{\text{TP}} \text{DE} \dots [_{\text{PoIP}} \text{DE} \dots \pi^+$

(22) It's **impossible** that John didn't understand something.

## 4. Complementarity

- In any given constituent:

$$(23) \quad [_{XP} \dots \left\{ \begin{array}{l} \text{any} \\ \text{XOR} \\ \text{some} \end{array} \right\}]$$

- (24) a. John didn't understand anything.  
 b. John didn't understand something.

\*NEG > SOME

- Apparent non-complementarity:

(25) It's **impossible** that John understood anything.

(26) It's **impossible** that John understood something. ✓IMP. > SOME

# 1. Licensing by constituents and Granularity

=Checking of licensing is done on constituents, but not all constituents are eligible for this procedure.

**NPI**

- The strong NPI *a single* is sensitive to the relative position of DE expressions above it.

- (27)
- It's **impossible** that John understood a single thing.
  - \*It's **not impossible** that John understood a single thing.
  - Not** that it's **impossible** that John understood a single thing.



# 1. Licensing by constituents and Granularity

- Intuition: in (28b), licensing has to take into account both *not* and *impossible*;
- ‘Flip-flop’ is directly observable with certain NPIs (cf. also Schmerling 1971).

- (28)
- a. It's [ **impossible** that John understood a single thing.
  - b. \*It's [ **not impossible** that John understood a single thing.
  - c. **Not** that it's [ **impossible** that John understood a single thing.

# 1. Licensing by constituents and Granularity

- The distance between two DE expressions matters.
- In each clause  $C$ , the PolP (or NegP) of  $C$  is the smallest constituent eligible for the checking of the licensing of *a single*.
- **Licensing domain of  $\pi$** : a constituent upon which the licensing of  $\pi$  is checked.
- **Minimal licensing domain of  $\pi$** : the smallest constituent containing  $\pi$  upon which the licensing of  $\pi$  can be checked.
- Minimal domains are PI specific.

(28a) It's **impossible** that John understood a single thing.

$[_{TP} [ \text{PoIP} \blacktriangleright 1 ] \text{ impossible } [_{CP} [ \text{PoIP} \blacktriangleright 1 ] \text{ [a single]}_1 ]$

(28b) \*It's **not impossible** that John understood a single thing.

\* $[_{TP} [ \text{PoIP} \blacktriangleright 1 ] \text{ not impossible } [_{CP} [ \text{PoIP} \blacktriangleright 1 ] \text{ [a single]}_1 ]$

(28c) **Not** that it's **impossible** that John understood a single thing.

$[_{TP} [ \text{PoIP} \blacktriangleright 1 ] \text{ not } [_{CP} [ \text{PoIP} \blacktriangleright 1 ] \text{ impossible } [_{CP} [ \text{PoIP} \blacktriangleright 1 ] \text{ [a single]}_1 ]$

# 1. Licensing by constituents and Granularity

- Two English dialects w.r.t. *any*-type NPIs.

- Dialect A:

- (29)
- a. \*It's **not impossible** that John understood anything.
  - b. \*I **don't doubt** that John understood anything.

- Dialect B:

- (30)
- a. It's **not impossible** that John understood anything.
  - b. I **don't doubt** that John understood anything.

- Two options:

- The licensing of *any* in dialect B is not environment-based;
- It is environment based but the minimal domain of this item is smaller than PolP.

- Minimal domain of French weak NPIs: PolP.

# 1. Licensing by constituents and Granularity

PPI (of the *some*-type)

- (31) a. John didn't understand something. \*NEG>SOME  
 b. **No one** understood something. \*NEG>SOME
- c. It's **impossible** that John understood something. ✓IMPOS.>SOME
- d. **At most five people** understood something. ✓AT\_MOST\_5>SOME

- In (31a) and (31b), it is not possible to check the licensing upon a constituent that doesn't contain the clausemate negation (the licensing domain must be at least as large as PolP).
- In (31c) as well as in (31d), the smallest PolP is UE w.r.t. the position of *some*.

(31a) John didn't understand something.

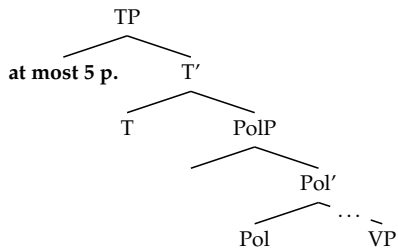
\*[<sub>TP</sub> [<sub>PolP</sub> ▶1] not something<sub>1</sub>]

(31c) It's impossible that John understood something.

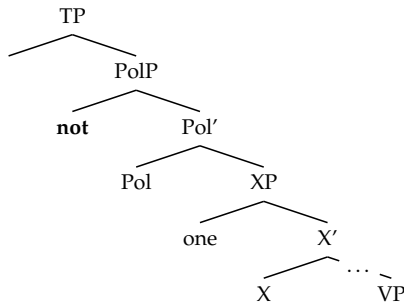
✓[<sub>TP</sub> [<sub>PolP</sub> ▶1] impossible [<sub>CP</sub> [<sub>PolP</sub> ▼1] something<sub>1</sub>]]

(32) At most five people didn't come.

AT\_MOST\_5 > NEG



*'At most five people understood something.'*



*'No one understood something.'*  
(\*n.s. of some)

## Negative quantifiers

- Evidence for analyzing them as made up of negation and an existential quantifier in its scope (Geurts 1996, Zeijlstra & Penka 2005, Iatridou & Sichel 2008, a.o.):
  - Reconstruction impossible (33a).

- (33)
- |    |                                     |                |
|----|-------------------------------------|----------------|
| a. | No doctor can be present.           | *CAN>NO_DOCTOR |
| b. | John cannot be present.             | *CAN>NOT       |
| c. | At most five people can be present. | CAN>AT_MOST_5  |

- Split scope possible (34).



- (34)
- No doctor has to be present.  
 There is no doctor  $x$  such that  $x$  has to be present. (wide scope)  
 It is not required that a doctor be present. (split scope)





# 1. Licensing by constituents and Granularity

(31b) **No one** understood something.

\*NEG > SOME

\* [ TP  ] [ PolP  ] **not one something<sub>1</sub>**

(31d) **At most five people** understood something.

✓ [ TP  ] **at most five** [ PolP  ] **something<sub>1</sub>**

# 1. Licensing by constituents and Granularity

## PPI

- Composition of DE functions ('rescuing') in (35b):

- (35)
- Few people didn't** understand something. ✓NEG>SOME
  - It's **impossible** that John **didn't** understand something.  
✓NEG>SOME
  - It's **not impossible** that John **didn't** understand something.  
\*NEG>SOME
  - Not** that it's **impossible** that John **didn't** understand something.  
✓NEG>SOME

- In fact, this is just 'flip-flop' applied to PPIs.

(35a) **Few people** didn't understand something.

✓ [<sub>TP</sub> ▶1 **few people**] [<sub>PolP</sub> ▶1 **not something**<sub>1</sub>]

(35b) It's **impossible** that John didn't understand something.

✓ [<sub>TP</sub> [<sub>PolP</sub> ▶1 **impossible**] [<sub>CP</sub> [<sub>PolP</sub> ▶1 **not something**<sub>1</sub>]]]

(35c) It's **not impossible** that John didn't understand something.

\* $[_{TP} [_{PolP} \blacktriangleright 1]$  **not impossible**  $[_{CP} [_{PolP} \blacktriangleright 1]$  **not something<sub>1</sub>**

(35d) **Not** that it's **impossible** that John didn't understand something.

✓ $[_{TP} [_{PolP} \blacktriangleright 1]$  **not**  $[_{CP} [_{PolP} \blacktriangleright 1]$  **imposs.**  $[_{CP} [_{PolP} \blacktriangleright 1]$  **not someth.<sub>1</sub>**

## Intervention

- Disruption of NPI licensing (**'intervention'**) caused by the presence of certain expressions, e.g. *every, always, and...*;
- The very same expressions **'shield'** PPIs.

- (36) a. \***Not** everyone understood anything.  
 b. **Not** everyone understood something.      ✓NEG>SOME

▶ Monotonicity disruption.

N.B.: Split scope:

- (37) Not everyone can be on the Board.      NOT>CAN>EVERY

# Intervention

- According to Chierchia (2004), the interveners form a natural class: they are all **strong scalar terms**. Ex.: <**every**, most, some>, <**and**, or>.
- Scalar implicatures triggered by a DE function like *not* outscoping a strong scalar term disrupt NPI licensing.

- (38)
- a. It is **not** the case that **everybody** has roses.
  - b. *Scalar implicature*: Somebody has roses.

# Intervention

- Grammar provides **two** meanings: plain and strong.
- The notion of meaning which is relevant for NPI licensing is the notion of **strong meaning**: the strong meaning of sentence  $\phi$  noted  $[[\phi]]^s$  is the **conjunction** of the **plain meaning** (truth conditions) of  $\phi$  and its **implicatures**.

- Indirect implicatures triggered by a DE expression like *not* outscoping a strong scalar term disrupt NPI licensing.

## Example

(39) \*It is **not** the case that **everybody** has any roses.

(40)  $\llbracket \text{blue roses} \rrbracket \subseteq \llbracket \text{roses} \rrbracket$

(41) a. It is not the case that everybody has **roses**.

*Scalar Implicature:* **Somebody has roses.**

b. It is not the case that everybody has **blue roses**.

*Scalar Implicature:* **Somebody has blue roses.**

(42)  $\llbracket (41a) \rrbracket^s = \neg [\forall x \text{ some}_{D'}(\text{roses}')(\lambda y. x \text{ has } y)]$

$\wedge \exists x \text{ some}_{D'}(\text{roses}')(\lambda y. x \text{ has } y)$

(43)  $\llbracket (41b) \rrbracket^s = \neg [\forall x \text{ some}_{D'}(\text{blue roses}')(\lambda y. x \text{ has } y)]$

$\wedge \exists x \text{ some}_{D'}(\text{blue roses}')(\lambda y. x \text{ has } y)$

$$\llbracket (41a) \rrbracket^s \not\Rightarrow \llbracket (41b) \rrbracket^s$$



## 2. Entanglement and Cyclicity: a PPI and an NPI

### NPI & PPI

- We witness a **polarity clash**, which shows that the licensing of a PI in a given constituent A depends on the licensing of all other PIs in A.

(44) It's **impossible** that someone understood anything. \*IMP.>SOME

\*[<sub>TP</sub> [<sub>PolP</sub> ▶1 ▶2] **imposs.** [<sub>CP</sub> ▶1 ▶2] **someone**<sub>2</sub> [<sub>PolP</sub> **anything**<sub>1</sub>]

- (45) a. It's **impossible** that someone understood you.  
 b. It's **impossible** that someone understood something.  
 c. It's **impossible** that anyone understood anything.

## 2. Entanglement and Cyclicity: a PPI and an NPI

### NPI & PPI

(46) It's **impossible** that anyone understood something.

✓ [<sub>TP</sub> [<sub>PolP</sub> ↘<sub>1</sub> ↘<sub>2</sub> **imposs.** [<sub>CP</sub> **anyone**<sub>2</sub> [<sub>PolP</sub> ↘<sub>1</sub> **something**<sub>1</sub>

- ▶ The PPI is licensed at a previous stage of a **cycle**.
- ▶ Direct evidence that the licensing of *any* is checked on constituents.
- Reminder:

(47) I don't **doubt** that John understood anything.

Dialect B

- Two options:
  - The licensing of *any* in dialect B is not environment-based;
  - ▶ It is environment based but the minimal domain of this item is smaller than PolP.

## 2. Entanglement and Cyclicity: a PPI and an NPI

### NPI & PPI

- Abstractly:

$$*\mathbf{DE} \dots [_{\text{CP}} \pi^+ \dots \pi^- \dots$$

$$\checkmark \mathbf{DE} \dots [_{\text{CP}} \pi^- \dots [_{\text{POLP}} \dots \pi^+ \dots$$

## Licensing Condition

- (48) **Licensing Condition of PIs:** A PI  $\pi$  is licensed in a sentence  $S$  only if  $\pi$  is contained in at least one eligible constituent  $A$  of  $S$  which has the right monotonicity w.r.t. the position of  $\pi$ , and all other PIs in  $A$  are licensed within  $A$ .

## 2. Entanglement and Cyclicity: two PPIs

2 PPIs

- Abstractly:



$$*[_{CP} \mathbf{DE} \dots [_{CP} \pi_k^+ \dots [_{PolP} \mathbf{DE} \dots \pi_l^+ \dots$$

## 2. Entanglement and Cyclicity: two PPIs

- (49) —A: No one is hiding.  
 —#B: That's exactly true, someone **isn't** hiding.
- (50) —A: Someone is hiding.  
 —B: That's exactly true, it's **impossible** that someone **isn't** hiding.

✓ [TP [ PolP  impossible [CP [ PolP  not someone<sub>1</sub>

- (51) —A: Everyone is hiding.  
 —B: That's exactly true, it's **impossible** that someone **isn't** hiding.

✓ [TP [ PolP  impossible [CP  someone<sub>1</sub> [PolP not

## 2. Entanglement and Cyclicity: two PPIs

- (52) —A: Someone is hiding.  
 —B: That's exactly true, it's **impossible** that someone isn't hiding somewhere.

✓  $[_{TP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ imposs.} [_{CP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ not someone}_2 \text{ somewh.}_1 ]$

- (53) —A: Everyone is hiding.  
 —B: #That's exactly true, it's **impossible** that someone isn't hiding somewhere.

\*  $[_{TP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ imposs.} [_{CP} \rightarrow 1 \rightarrow 2 ] \text{ so}_2 [ \text{PolP} \rightarrow 1 ] \text{ not somewh.}_1 ]$

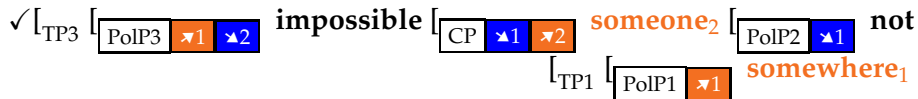
—B': That's exactly true, it's **impossible** that anyone isn't hiding somewhere.

$[_{TP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ imposs.} [_{CP} \rightarrow 1 \rightarrow 2 ] \text{ anyo}_2 [ \text{PolP} \rightarrow 1 ] \text{ not somewh.}_1 ]$

## 2. Entanglement and Cyclicity: two PPIs

- Let's add one level of embedding: the missing reading reappears.

- (54) a. —A: Everyone is trying to hide.  
 b. —B: That's exactly true, it's **impossible** that someone isn't trying to hide somewhere.







## 2. Entanglement and Cyclicity

- Evidence for cyclicity from NPIs:

(57) It's **impossible** that anyone didn't understand anything.

✓ [TP [ PolP ↗1 ↘2 **imposs.** [ CP ↘1 ↗2 **anyo<sub>2</sub>** [ PolP ↘1 **not anyth.<sub>1</sub>**

### 3. Licensing is liberal

NPI

(58) It's **impossible** that John didn't understand a single thing.

$[_{TP} [_{PolP} \text{ impossible} ]_{CP} [_{PolP} \text{ not [a single]}_1]$

PPI

(59) It's **impossible** that John didn't understand something.

$[_{TP} [_{PolP} \text{ impossible} ]_{CP} [_{PolP} \text{ not something}_1]$

- This freedom is restricted by the limited eligibility of domains (granularity).

## 4. Complementarity

- *Some* is anti-licensed by downward-entailingness:

(60) I'm **not** sure that someone understood anything.      \*NOT > SOME

▶ Not sure

(61) **At most five people** sold someone anything.      \*NOT > SOME

- But not by non-monotonicity (while *any* is):

(62) a. **No** salesclerk sold exactly 42 people \*anything/something.

b. It is **not** the case that everybody has \*any/some roses.

- The monotonicity properties that license *some* are the complement of the monotonicity properties that license *any* and vice versa.

## 4. Complementarity

- **In a given licensing constituent, *some* and *any* are in complementary distribution.**

$$(63) \quad [_{XP} \dots \left\{ \begin{array}{c} \text{any} \\ \text{XOR} \\ \text{some} \end{array} \right\}]$$

- (64) a. John didn't understand anything.  
 b. John didn't understand something. \*NOT > SOME
- (65) a. It's **impossible** that someone understood something.  
 b. It's **impossible** that anyone understood anything.  
 c. It's **impossible** that someone understood anything. \*IMPOS. > SOME



## Some doesn't Interrupt a Syntactic Relation

- The problem is general with PPIs:

- (69) a. He would rather be in Montpellier.  
 b. \*He wouldn't rather be in Montpellier.

- (70) There isn't anyone here who wouldn't rather do something downtown.

$[_{TP} [ \text{PolP} \rightarrow 1 \rightarrow 2 \rightarrow 3 ] \text{ not anyone}_3 [_{CP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ not [would rather]}_2 \text{ something}_1 \text{ do } t_1$

- (71) \*There isn't anyone here who wouldn't rather do anything downtown.

\* $[_{TP} [ \text{PolP} \rightarrow 1 \rightarrow 2 \rightarrow 3 ] \text{ not anyo.}_3 [_{CP} [ \text{PolP} \rightarrow 1 \rightarrow 2 ] \text{ not [would rather]}_2 \text{ anything}_1 \text{ do } t_1$

## *Some* doesn't Interrupt a Syntactic Relation

- Difference between the two kinds of intervention:

- (72)
- If someone stole a camera, we're in trouble.
  - If John stole anything, we're in trouble.
  - If someone stole anything, we're in trouble.      ?IF>SOME
- (73) \*If everyone stole anything, we're in trouble.

- The difference is expected: *if*-clauses are not in fact DE (they are only DE given background assumptions).
- Narrow scope of the PPI is not perfect though. I propose that this is due to the tension placed on the system (constituent both DE and pseudo-DE).



# Conclusion

- What (anti)-licenses PIs? Licensing is done by constituents, which must have the right monotonicity w.r.t. PIs;
- What evidence? Flip-flop (with NPIs and PPIs) and entanglement (one NPI and one PPI; 2 PPIs). Existence of minimal domains (PI specific);
- Why do we observe NPIs available under an even number of DE expressions? Licensing is computed cyclically and it is liberal. New perspective on architecture;
- Link between NPIs and PPIs? Unified theory: deep unity between the negative and the positive polarity phenomena (mirror image of each other).

# Acknowledgments

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- My consultants, in particular Heather Burnett and Susan Schweitzer.

## Common argument against licensing by constituents

- The licensing of PPIs of the *some*-type cannot be constituent-based, according to almost all researchers, because the logical composition of an increasing function and an anti-additive function is decreasing;
- It is assumed that *some* is not vulnerable to downward-entailingness, and should as such be salvaged by the composition of the two functions.

(74) More than three people don't understand something.

\*NEG > SOME

- But *some* **is** vulnerable to DEness.

# Liberality

- Evaluation can take place in two different domains of ‘mobile PPIs’ (PPIs that raise to avoid being in a DE (AA?) environment, e.g. *must*, *should*, *ought*, *supposed*...)

- (75) (Speaking about a five-year-old boy, whose parents are very demanding.)
- This poor kid does so many chores: he *must*<sub>deon</sub> empty the dishwasher, feed the dog, clean his bedroom, make his bed...
- Yes, you’re right, and I’m **not** sure that he *must*<sub>deon</sub> **n’t** rake the leaves too. NEG > NEG > MUST<sub>deon</sub>

[ PolP2 ↑1 **not** sure ]<sub>CP</sub> [ XP AA 1 [ PolP1 AA 1 **not must**<sub>1</sub> ... ]

# Liberality

- (76) I know that John's condition imposes drastic precautions, but even then I'm **not** sure that he **must**<sub>deon</sub> **n't** rake the leaves.

NEG > MUST<sub>deon</sub> > NEG

[ PolP2 ▶1 **not** sure ]<sub>CP</sub> [ XP ▶1 **must**<sub>1</sub> ]<sub>PolP1</sub> **not** t<sub>1</sub>

# Identity

- In French, NPIs are productively derived from PPIs:

- (77)
- a. Jean a compris **quelque chose**.
  - b. Jean n'a **pas** compris **quelque chose que ce soit**.

- Hypothesis: (certain) NPIs are **protected** PPIs in disguise (PPIs can be shielded, rescued, but also salvaged by modification, i.e. subtriggering).

## French

- Granularity:

- (78)
- Il est **impossible** que Jean ait compris quoi que ce soit.
  - \*Il n'est **pas impossible** que Jean ait compris quoi que ce soit.
  - Non** pas qu'il soit **impossible** que Jean ait compris quoi que ce soit.

- Entanglement and cyclicity:

- (79)
- Je ne pense **pas** que quelqu'un ait volé quoi que ce soit.  
\*PAS > QUELQUE
  - Je ne pense **pas** que qui que ce soit ait volé quelque chose.
  - Je ne pense **pas** que quelqu'un n'ait **pas** répondu quelque chose. (=  $\exists x \exists y$  [répondre'(x,y)];  $\neq \forall x \exists y$  [répondre'(x,y)])

## Not sure

(80) I'm not sure that Mary read a book  $\Rightarrow$  I'm not sure that Mary read a novel. (DE)

- (81) a. I'm not sure that Mary drinks or smokes  $\Rightarrow$  I'm not sure that Mary drinks and I'm not sure that Mary smokes.  
b. I'm not sure that Mary drinks and I'm not sure that Mary smokes  $\not\Rightarrow$  I'm not sure that Mary drinks or smokes.

(not AA)

◀ Return