1. A class of obligatory presupposition triggers

1.1. Too and the other additives

(1) a. *Jo had fish and Mo did.
   b. Jo had fish and Mo did too. \((\text{Green, 1968})\)

(2) a. *Reagan frightens Jo but he does Mo.
   b. Reagan frightens Jo but he does Mo too. \((\text{Kaplan, 1984})\)

(3) a. — What did Peter and Pia eat?
   b. —*Peter ate pasta, and Pia ate pasta.
   c. — Peter ate pasta, and Pia ate pasta, too. \((\text{Krifka, 1999})\)

(4) Swift Deer could see pine-clad mountains on the other side of the Rain Valley. Far away to the east and west the dry prairies stretched out as far as the eye could see. (i) To the north lay the yellow-brown desert, a low belt of green cactus-covered ridges and distant blue mountain ranges with sharp peaks. (ii) To the south (\(\#\emptyset/\text{too}\)) he could see mountains. \((\text{Sæbø, 2004, ex(1)})\)

(5) a. Context: John, a teacher with a very bad hand writing, has just written an exercise on the blackboard. When he is finished he reads it aloud to make sure everyone can copy it down properly. A student may not hear it all very well and ask:
   b. #Can you read that word?
   c. Can you read that word again? \((\text{Chemla, 2008})\)

(6) Paul est parti en Turquie l’an dernier, il ira (\(\#\emptyset/\text{de nouveau}\)) cette année. \textit{Paul went to Turkey last year, he will go (\(\emptyset/\text{again}\) this year}

(7) Jean est allé il y a deux ans au Canada. Il n’ira (\(\#\emptyset/\text{plus}\)) là-bas. \textit{John went to Canada two years ago. He won’t go there (\(\emptyset/\text{anymore}\))}

(8) a. #Léa a fait une bêtise qu’elle ne fera pas.
   b. Léa a fait une bêtise qu’elle ne refera pas.
   \textit{Lea did a silly thing that she won’t (re)do.}

(9) a. #Two days ago John was cooking. He is cooking.
   b. Two days ago John was cooking. He is still cooking. \((\text{Ippolito, 2004})\)

1.2. Factive verbs

Factive verbs that subcategorize propositions and questions

- In French: \textit{savoir (to know)} \textit{ignorer (not to know/be unaware)}, \textit{vérifier (check)}, \textit{comprendre (understand)}
- ... but not: \textit{découvrir (discover)}, \textit{réaliser (realize)}
[Léa est partie en Afrique.] Jean ne le dit à personne, bien qu’il sache (# si / que) elle est partie là-bas.

[Lea’s gone to Africa.] John tells no one, even though he knows (whether / that) she’s gone there

Jean est revenu de vacances. Mais comme il n’a téléphoné à personne, au bureau, tout le monde ignore (? si / que) il est chez lui.

John has come back from vacation. But since he called no one, at his office everybody ‘ignores’ (whether / that) he is at home.

Il y a eu une fuite d’eau, mais quelqu’un l’a réparée. Jean a appelé le plombier pour qu’il vérifie (? si / que) la fuite est réparée.

There was a leakage, but somebody fixed it. Jean called the plumber so that he checks (whether / that) leak is fixed

Epistemic verbs that altern with a non presuppositional version

(13) a. [Mary has been cheating on John for years...]
b. *...and he believes it. 
c. ... and he knows it. (Chemla, 2008, ex(10))

1.3. Cleft constructions

(14) a. Someone fixed the dinner. It is John who did it.
b. Someone fixed the dinner. JOHN did it.
c. #Someone fixed the dinner. John did it.
(15) a. #Quelqu’un a préparé le dîner. Jean ne l’a pas fait.
b. Quelqu’un a préparé le dîner. Ce n’est pas Jean qui l’a fait

Someone fixed the dinner. Jean did not do it / It is not Jean who did it

1.4. Definite descriptions

(16) a. #A wife of John’s is intelligent 
b. The wife of John’s is intelligent 
c. #A father of the victim arrived at the scene 
d. The father of the victim arrived at the scene (Heim, 1991; Sauerland, 2003)

Class of triggers

• What do all these triggers have in common?

⇒ Presupposition triggers with no asserted content
(by contrast with presupposition trigger with asserted content, like regret, or only)

(17) a. Bob regrets that it is raining 
b. (It is raining),p & (Bob doesn’t like it when it rains),p 
c. It is raining. Bob doesn’t like it when it rains.
d. It is raining. Bob regrets that it’s raining.
(18) a. Only Max owns a red car
b. (No one else (than Max) owns a red car) \(_a \land \) (Max owns a red car) \(_p \)

c. Max owns a red car, and no one else does

d. Max owns a red car, and only Max does.

2. Proposed explanation

2.1. The role of implicatures

- Obligatoriness? Avoidance of (unwanted) inferences.

\[(19) \text{[The 5000 m race was won by Gianni Romme.]} \]

a. The 1500 m race was won by a Dutch skater.
   \[\therefore \text{G. Romme is not Dutch.} \]

b. The 1500 m race was won by a Dutch skater too.
   \[\therefore \text{G. Romme is Dutch.} \quad (Sæbø, 2004)\]

\[(20) \]

a. #Barb is seventeen, and WENDY is old enough to have a driver’s license

b. Barb is seventeen, and WENDY is old enough to have a driver’s license, too
   \[(Green, 1968)\]

- Instead of an explanation based on contrast (Kaplan, Krifka),

a new line of explication insists on presupposition (Sæbø, Amsili & Beyssade)

2.2. Maximize Presupposition!

- A principle has been proposed by Heim to account for examples like (16):

- **Maximize Presupposition!**

  *make your contribution presuppose as much as possible*

\[(21) \text{“Scalar alternatives”} \]

a. \(\{\text{some, all}\}\) assertion

b. \(\{\text{a, the}\}\) presupposition \( (Hawkins, 1978) \)

- “Maximize Presupposition!” has become a label for explanations based on

  - Maximize Presupposition ! (Heim, 1991)
  - Implicated Presuppositions (Sauerland, 2006)
  - Antipresuppositions (Percus, 2006; Chemla, 2008)

**Antipresupposition:**

\[(22) \text{Mary knows that Jane is pregnant.} \]

*presupposes that* Jane is pregnant

\[(23) \text{Mary believes that Jane is pregnant.} \]

\(\leadsto \text{Jane is not pregnant} \)

*antipresupposes that* Jane is pregnant

- \(\text{know (that) p (presupposition trigger)} : \text{“use me if}\)

3
you believe $p$, or $p$ is part of the common ground, or you believe you have enough authority to make the addressee accommodate $p$.

- The choice of believe, in contrast, says that the previous conditions are not met, namely
  - the speaker ($S$) does not believe $p$, or
  - $p$ is not part of the common ground, and
  - $S$ doesn’t have enough authority to make the addressee accommodate $p$.

most of the time, when $S$ has “competence” (knows whether $p$ or $\neg p$) and has “authority”, this leads to the conclusion that $p$ does not hold.

(24) Prediction of the Maximize Presupposition principle:

**Situation:** a speaker $s$ utters a sentence $S_1$. $S_2$ is an alternative sentence to $S_1$; $S_2$ asserts what $S_1$ asserts, but additionally presupposes $p$.

**Predicted inference:** $\neg B_s[p] \lor \neg B_s[\text{Auth}_s[p]]$  

(Chemla, 2008, (24))

(25) Competence Assumption:
The speaker $s$ is opinionated about $p$.
Technically: $B_s[p] \lor B_s[\neg p]$.

(26) Authority Assumption:
The speaker $S$ believes in her authority about $p$.
Technically: $B_s[\text{Auth}_s[p]]$.

2.3. Our proposal

- Extention of antipresupposition domain to new data:

  (27) a. ⟨a, the⟩, ⟨each, the⟩, ⟨all, both⟩  
  b. ⟨believe, know⟩, ⟨too, ∅⟩, ⟨again, ∅⟩, ⟨whether, that⟩ . . .

  (Percus, 2006)  
  (Amsili & Beyssade, 2010)

- Sketch of the reasoning:

(28) John is sick, Mary is sick (too).

<table>
<thead>
<tr>
<th>John is sick</th>
<th>∅</th>
<th>Mary is sick</th>
<th>∅</th>
<th>→ antipresupposition → rejected</th>
</tr>
</thead>
<tbody>
<tr>
<td>not available</td>
<td>too</td>
<td>available</td>
<td>too</td>
<td>→ expected form</td>
</tr>
</tbody>
</table>

2.4. Apparent exceptions

(29) Jean est malade, Marie est malade, Paul est malade, tout le monde est malade alors !

John is sick, Marie is sick, Paul is sick, everybody is sick then!

(30) Il était là hier, il est là aujourd’hui.

He was there yesterday, he is there today.
⇒ Role of discourse structure

- Similar findings in (Eckard & Frenkel, 2012): when asked to produce a narrative, subjects tend to produce many additive markers, whereas they don’t produce any when asked to produce a “spy report”.

3. An even wider class of items

3.1. Tense and temporal adjuncts

(31) a. A: Where’s John?
   b. B: He was at home an hour ago.
   c. C: He’s in his office #(now).

(Keshet, 2008)

(32) a. #The fugitive is in jail.
   b. #That bachelor is married.
   c. #The employees are unemployed.

(Keshet, 2008, ex(45))

(33) Some members of congress knew each other in college.

(34) a. The fugitive is back in jail.
   b. That bachelor is now married.
   c. The employees are currently unemployed.

(Keshet, 2008, ex(47))

3.2. Discourse particles

- Zeevat (2003) makes a list of what he call “discourse particles”:

(35) Again
   Indeed (≈ Dutch immers)
   Instead
   Doch / Toch (German/Dutch)
   Too

(36) A: Bill will come tonight.
    B: John will come *(too)

(37) A: Bill is ill.
    B: He is *( indeed ).

(Zeevat, 2003)

- “Corpus studies by Tim Kliphuis and myself suggest that omitting [discourse particles] nearly always lead to awkwardness, or to difference in implicature.”

(Zeevat, 2003)

(38) Jean est malade. Est-ce que Marie est malade (#∅ / aussi / elle)?
    John is sick. Is Marie sick (∅ / too / her)?

(39) a. #Jean est malade. Tu es malade?
    b. Jean est malade. Et toi, tu es malade?
    Jean is sick. (And you), you are sick?

(40) a. #J’ai mal dormi cette nuit. T’as bien dormi?
    b. J’ai mal dormi cette nuit. T’as bien dormi, toi (aussi)?
    I haven’t slept well this night. Did you sleep well (, you (too))?
3.3. Pronouns (vs. Definite NPs/Proper names)

- Once an entity has been introduced, it’s compulsory to refer to it by cohesive devices:

  (41)  
  a. #Jean a fait une erreur que Jean n’avait jamais faite.
  b. Jean a fait une erreur qu’il n’avait jamais faite.

  *Jean made a mistake that Jean/he never made.*

- Except when this would lead to ambiguity:

  (42)  
  a. #Léa introduced a guest to John, and he didn’t behave properly.
  b. Léa introduced a guest to Marie, and he didn’t behave properly.

⇒ The pronoun is obligatory when its conditions of optimal resolution are met
   [to avoid an unwanted inferential effect (43)],
⇒ a proper name (or a definite description) is required otherwise
   [to avoid an ambiguity (44)]

(43)  
Sam came in and Sam went out.
 ⇒ ‘There are two Sams
(44)  
Jo introduced Mo to Max, and he smiled.

3.4. Definite descriptions and novelty condition

- Novelty condition

  (45)  
  a. Richard heard the Beaux-Arts Trio last night and afterwards had a beer with
     the pianist.
  b. Richard heard the Beaux-Arts Trio last night and afterwards had a beer with
     a pianist.

(Heim, 1991)

- In situations of utterance where it is known that the presupposition of [the α] β is
  fulfilled, it is forbidden to utter [a α] β.

  Heim (1991); Grønn & Sæbø (2012)

⇒ Definite descriptions are obligatory since indefinites would lead to a novelty effect

4. Proposal

4.1. Taking stock

- **What’s obligatory**
  - (some) presupposition triggers
  - (some) discourse particles
  - (some) temporal adjuncts
  - pronouns (in some cases)
  - definite descriptions (in some cases)

- **What purpose do they serve?**
  ⇒ Anaphora (in a wide sense) i.e. reference to previously introduced discourse referent(s)

- **What do they have in common?**
  ⇒ They don’t bring new (asserted) content.
4.2. Identity and Difference

- So far, we’ve dealt only with elements which serve to indicate “co-reference”,
- Other cases: elements which indicate disjoined reference are (in a way) obligatory:

  (46) [Ordering a second coffee from the same waitress:]
  a. #I’d like a coffee.
  b. I’d like another coffee. \(\text{(Ippolito, 2004)}\)

  (47) a. Two days ago John was cooking. #He is cooking.
  b. Two days ago John was cooking. He is cooking again. \(\text{different}\)
  c. Two days ago John was cooking. He is still cooking. \(\text{identical}\)

- Competition is not (only) between a \(N\) and the \(N\), a third competitor has to be taken into account: another \(N\) \(\text{(Grønn & Sæbø, 2012)}\)

  (48) a. #A man ordered a coffee. A man paid the check.
  b. A man ordered a coffee. He/The (same) man paid the check.
  c. A man ordered a coffee. Another man paid the check.

- “(...) the narrative effects that arise when speakers refuse to use
  (non)identity marking for events (still, again, once more...)
  (non)identity marking for individuals (another, a second, the, this...)
  marking of shared properties (too, as well, stressed also)
  are surprisingly similar. For all these markers, there are proposals in the literature that their use is driven by the Maximize Presupposition principle.”
  \(\text{(Eckard & Frenkel, 2012)}\)

4.3. Conclusion: research program

- Linguistic items that establish identity or difference with previously introduced material, and serve only this purpose, are obligatory when their conditions of use are met.

- Maximize cohesion!
  Instead of saying that one must obey a “Maximize Presupposition!” principle in order to avoid unwanted antipresuppositions, we claim that one must obey a “Maximize Cohesion!” principle, in order to avoid a range of inferences which share with antipresuppositions a reasoning taking into account competition between alternative expressions that differ on their cohesion effect.

- Previous counterexamples solved: in (29) and (30) discourse cohesion is achieved by other means.

- Many open issues
  - List of relevant cohesive devices (anaphora, presupposition, repetition, hypo/hyperonymy, syntactic parallelism...)
– What does it mean to be obligatory, and how can we figure out what the competition is at one point?
– Should we generalize the notion of antipresupposition or are we in fact dealing with (varieties of) quantity implicatures?
– ...

References