Compulsory Presupposition in Discourse

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Introduction

- (1) a. Jean est allé il y a deux ans au Canada. Il n'ira <u>plus</u> là-bas.
 John went to Canada two years ago. He won't go there anymore
 - b. # Jean est allé il y a deux ans au Canada. Il n'ira pas là-bas. John went to Canada two years ago. He won't go there
 - c. John made a mistake. He won't do it (# \emptyset / again)
- (2) Presupposition + anaphoric binding [van der Sandt, 1992]
 - Compulsory redundancy

(3) **Overview**

- 1. Data (generalization)
- 2. Pragmatic explanation
- 3. Interaction with discourse (+ SDRT implementation)

1 Data

1.1 Background : obligatoriness of *too* and other additives

(4) a. Jo had fish and Mo did toob. * Jo had fish and Mo did

[Green, 1968, Kaplan, 1984, p. 510]

(5) **[Kaplan, 1984]**

- *too* "emphasize the similarity between members of a pair of contrasting items" (discourse function)
- degree of obligatoriness \approx degree of prominence of the pair
- (6) [Krifka, 1999]
 - Additive particles (under <u>stress</u>)
 - too is used when an implicature (distinctiveness constraint) is violated
- (7) a. A: What did Peter and Pia eat ?
 - b. B: * Péter ate pàsta, and Pía ate pàsta
 - c. B': Peter and Pia ate pàsta

d. B": Péter ate pàsta, and Pía ate pasta, tòo

[Krifka, 1999]

(8) Distinctiveness constraint

If $[\dots T \dots C \dots]$ is a contrastive answer to a question, then there is no alternative T' of T such that the speaker is willing to assert $[\dots T' \dots C \dots]$.

If the speaker could have asserted $[\ldots T'_F \ldots C_F \ldots]$, he would have asserted it right away by conjoining T and T', as the answer $[\ldots T \wedge T' \ldots C \ldots]$ is shorter than $[\ldots T \ldots C \ldots] \wedge [\ldots T' \ldots C \ldots]$. Derives from Grice's maxim of manner.

- (9) [Sæbø, 2004] Objections to Krifka
 - importance of presupposition
 - examples where no contrastive topic is present
- (10) a. 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. To the north lay the yellow-brown desert, a low belt of green cactus-covered ridges and distant blue mountain ranges with sharp peaks. To the south ($\# \emptyset /$ too) he could see mountains.
 - b. I want to see Son-of-Thunder. Fetch him. So Good Care rose, fetched the newborn boy and held him out before his dying father. Swift Deer opened his eyes for the very last time, and Son-of-Thunder had his yes open ($\# \emptyset / \text{too}$).
 - c. So now you see what I meant about Lego blocks. They have more or less the same properties as those which Democritus ascribed to atoms. And that is what makes them so much fun to build with. They are first and foremost indivisible. Then they have different shapes and sizes. They are solid and impermeable. They also have 'hooks' and 'barbs' so that they can be connected to form every conceivable figure. These connections can later be broken so that new figures can be constructed from the same blocks. [...]

We can form things out of clay (# Ø / too), but clay cannot be used over and over, because it can be broken up into smaller and smaller pieces.

1.2 Generalization

- (11) a. Jean est allé il y a deux ans au Canada. Il n'ira (# pas / plus) là-bas.
 b. Jean est malade, Marie est malade (# Ø / aussi)
 - John is sick, Mary is sick (\emptyset / too)
 - c. Lea a fait une bêtise. Elle ne la (# Ø / re-)fera pas. Lea did a silly thing. She won't (Ø / re-)do it
 - d. Il était là hier, il est (# Ø / encore) là.
 He was there yesterday, he is (Ø / still) there
 - e. Jean n'est pas malade. Marie n'est pas malade (# ∅ / non plus) Jean is not sick. Mary is not sick (∅ / either)

- f. [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
- (12) a. Quelqu'un a préparé le dîner. (C'est Jean qui / ?? Jean) l'a fait. Someone fixed the dinner. (It is Jean who / Jean) did it.
 - b. Paul n'a pas préparé le dîner. (C'est Jean qui / ??Jean) l'a fait. Paul hasn't fixed the dinner. (It is Jean who / Jean) did it

• Presupposition-like properties

- (13) a. Jean est malade. Paul croit que Marie est malade (# Ø / aussi)
 John is sick. Paul believes that Marie is sick (Ø / too)
 - b. Jean est malade. Est-ce que Marie est malade (# ∅ / aussi) ? John is sick. Is Marie sick (∅ / too)?
 - c. [Léa est partie en Afrique.] Jean la cherche partout, car il ne sait pas (# si / que) elle est partie là-bas.
 [Lea's gone to Africa.] John is looking for her everywhere, for he doesn't know (whether / that) she's gone there

• Are all presupposition triggers concerned?

- (14) a. It is raining. Bob regrets that it's raining.
 - b. It is raining. Bob doesn't like it when it rains.
 - c. Max owns a car. He is the only one.
 - d. Max owns a car. No one else does.

1.3 Triggers without asserted content

(15) Additivity $[ADD \ [\dots F \dots]] : \underbrace{[\dots F \dots]}_{asserted} \underbrace{(\exists F' \neq F \ [\dots F' \dots])}_{presupposed}$

[Krifka, 1999, p. 1]

(16) aussi, non plus, encore, de nouveau, toujours... too, neither, again, still...

• *plus* may be seen as an additive...

(17) a. Il n'ira plus là-bas He won't go there anymore
b. = non (il ira encore là-bas) = not(he will go there again)

[Muller, 1975]

• it is harder with cleft constructions...

- (18) a. C'est Jean qui est venu It is Jean who came
 - b. = Jean est venu + quelqu'un $(\neq$ Jean) est venu Jean came + somebody $(\neq$ Jean) came

• and even less clear for si/que...

- (19) a. Jean sait qu'il pleut = Jean sait s'il pleut + il pleut Jean knows that it's raining = Jean knows whether it's raining + it is raining
 b. → que = si + ADD
- (20) Triggers with no asserted content $[\operatorname{TR} [\dots F \dots]] : \underbrace{[\dots F \dots]}_{\operatorname{asserted}} \underbrace{}_{\operatorname{presupposed}}$

• sub-class of presupposition triggers (not restricted to particles, neither to additive triggers) ... obligatory as soon as their conditions of use (presupposition) are (linguistically) fulfilled

2 Pragmatic Explanation

(21) a. Mary used to beat her husband. She has now stopped doing so.
b. # Mary has now stopped beating her husband. She used to beat him.

[van der Sandt, 1988, p. 161]

• Implicated presuppositions

(22)	 a. # A wife of John's b. The wife of John's c. # A father of the v d. The father of the v 	is intelligent is intelligent victim arrived at the scene ictim arrived at the scene	[Heim, 1991], [Sauerland, 2003]
(23)	a. \langle some, all \rangle	assertion	
	b. \langle a, the \rangle	presupposition	[Hawkins, 1978]
(24)	Maximize presuppo Make your contribution	osition on presuppose as much as possi	ble [Heim, 1991]

(25) a. Mary is sick too → Mary is sick Ø
b. (A ∧ P) → A
c. A ~ ¬(A ∧ P)
d. ¬P = No one else than Mary (in the appropriate context) is sick
e. implicature incompatible with context

- (26) a. \langle pas, plus \rangle
 - b. \langle Ø, too \rangle
 - c. $\langle si/whether, que/that \rangle$
- (27) 2 lines of explanation

3 Interaction with Discourse Structure

3.1 Discourse sensitivity

• (Apparent) exceptions

- (28) a. 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!
 - b. Il était là hier, il est là aujourd'hui He was there yesterday, he is there today
- (29) a. Jean est malade, Marie aussi, Paul aussi, tout le monde est malade alors ! John is sick, Marie too, Paul too, everybody is sick then!

• But it's not enough to add an explicit discourse relation...

- (30) a. Jean est allé il y a deux ans au Canada. C'est pourquoi il n'ira plus là-bas. John went to Canada two years ago. That's why he won't go there anymore
 - b. ?# Jean est allé il y a deux ans au Canada. C'est pourquoi il n'ira pas là-bas. John went to Canada two years ago. That's why he won't go there

3.2 Preliminary "implementation" in SDRT

- (31) Lea a fait une bêtise. Elle ne la refera plus. Lea made a mistake. She won't re-do it again
- (32) $\langle p \mid p + re = p + again = p + re + again \rangle$

(33) Implementation

A trigger (with no asserted content) is compulsory only if it brings <u>strictly more</u> **linked** presuppositions than the sentence without the trigger

• What does "Enumeration" do?

(34) John is sick + contour \rightsquigarrow "Enumeration" $\rightsquigarrow \exists x (x \neq j \land \operatorname{sick}(x))$ "cataphoric presupposition"

• Update rule

- (35) When trying to attach a DRS K_{β} to a context K_{τ} :
 - Let s be the sentence corresponding with K_{β} ; let $\{a_1, a_2, \ldots a_k\}$ be the set of *presupposition triggers without asserted content* that can be adjoined to s.
 - For each pair $\langle \emptyset, a_i \rangle$, compare the number of linked presuppositions of the two members: to this effect, try to link/accommodate $psp(a_i)$ against the context K_{τ} via the usual procedure [Asher and Lascarides, 1998].
 - If psp(a_i) is linked
 there is a difference in the pair ⟨∅, a_i⟩ in the number of presuppositions
 Then the choice of ∅ gives rise to the implicature

4 Conclusion

- sub class of triggers: presupposition triggers without asserted content
- a general principle from which [Heim, 1982]'s novelty condition can be derived
- Avoid asserted redundancy
- Maximize redundancy via presupposition binding

Examples for discussion

- (36) a. The 5000 m race was won by Gianni Romme. The 1500 m race was won by a Dutch skater.
 - b. The 5000 m race was won by Gianni Romme. The 1500 m race was won by a Dutch skater too. [Sæbø, 2004]

- (37) Barb is seventeen, and WENDY is old enough to have a driver's license *(, too) [Green, 1968]
- (38) a. Dans toutes les classes il y a de bons élèves, et il y en a aussi de mauvais
 b. Dans toutes les classes il y a de bons élèves, et il y en a de mauvais In every class there are good pupils, and there are (also) bad ones
- (39) a. Qui a bu boira He who has drunk will drink
 - b. Bien qu'elle ait fait des bêtises, elle en *(re-)fera
 Even though she did silly things, she will (re-)do some (more)
- (40) a. * Jean est malade, Marie aussi, Paul est malade, tout le monde est malade alors ! John is sick, Marie too, Paul is sick, everybody is sick then!

References

- [Asher and Lascarides, 1998] Nicholas Asher and Alex Lascarides. The semantics and pragmatics of presupposition. *Journal of Semantics*, 15:239–299, 1998.
- [Green, 1968] Georgia M. Green. On too and either, and not just too and either, either. In CLS (Chicago Linguistics Society), volume 4, pages 22–39, 1968.
- [Hawkins, 1978] John A Hawkins. Definiteness and Indefiniteness: A Study in Reference and Grammaticality Production. Croom Helm, London, 1978.
- [Heim, 1982] Irene Heim. The Semantics of Indefinite and Definite Noun Phrases. Ph.D. dissertation, University of Massachussetts, Amherst, 1982.
- [Heim, 1991] Irene Heim. Artikel und Definitheit. In Arnim von Stechow and Dieter Wunderlich, editors, Semantik: Ein internationales Handbuch des zeitgenössischen Forschung, pages 487– 535. de Gruyter, Berlin, 1991.
- [Kaplan, 1984] Jeff Kaplan. Obligatory too in english. Language, 60(3):510–518, 1984.
- [Krifka, 1999] Manfred Krifka. Additive particles under stress. In Proceedings of SALT 8, pages 111–128, Cornell, 1999. CLC Publications.
- [Muller, 1975] Claude Muller. Remarques syntactico-sémantiques sur certains adverbes de temps. Français Moderne, 1, 1975.
- [Sauerland, 2003] Uli Sauerland. Implicated presuppositions. Hand-out for a talk given at the Polarity, Scalar Phenomena, Implicatures Workshop, University of Milan Bicocca, Milan, Italy, jun 2003.
- [Sæbø, 2004] Kjell Johan Sæbø. Conversational contrast and conventional parallel: Topic implicatures and additive presuppositions. *Journal of Semantics*, 21(2):199–217, 2004.
- [van der Sandt and Geurts, 2001] Rob A. van der Sandt and Bart Geurts. Too. In *Proceedings* of the 13th Amsterdam Colloquium, 2001.
- [van der Sandt, 1988] Rob A. van der Sandt. Context and Presupposition. Croom Helm, London, 1988.
- [van der Sandt, 1992] Rob A. van der Sandt. Presupposition projection as anaphora resolution. Journal of Semantics, 9(4):333–378, 1992.