## Obligatory presupposition

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## Contents

1 Data ..... 1
1.1 Additive particles ..... 1
1.1.1 ... are obligatory ..... 1
1.1.2 ... but not always ..... 3
1.1.3 Variability of obligatoriness ..... 5
1.2 Other presupposition triggers ..... 13
1.2.1 Additive, iterative and continuative triggers ..... 13
1.2.2 Factive verbs ..... 14
1.2.3 Cleft and prosody ..... 14
1.2.4 All presupposition triggers ? ..... 15
1.2.5 Class of triggers ..... 15
1.3 An even wider class? ..... 15
1.3.1 Discourse particles ..... 15
1.3.2 Tense and temporal adjuncts ..... 16
1.3.3 Pronouns vs. definite NP/proper names ..... 17
1.3.4 Indefinite NPs and novelty condition ..... 17
1.3.5 Identity and difference ..... 18
2 Explanations ..... 20

### 1.1 Additive particles

Paragon: too. But also also, and again, still...

- "Focus-sensitivity": the particle associates with one element in the sentence, this element is usually focus-marked (1).
- "Anaphoricity": It's been claimed (Kripke, 2009; van der Sandt \& Geurts, 2001) that too is a presupposition trigger that requires its antecedent to be present in the context. (2)
(1) a. John also introduced SUE to Max.
b. John also introduced Sue to MAX.
(2) \#Lucy also has dinner in New-York tonight.


### 1.1.1 ... are obligatory

### 1.1.1.1 Initial data

- The adverb too is obligatory in sentential conjunctions when there is exactly one meaning difference (Green, 1968).
(3) a. Jo had fish and Mo did too.
b. *Jo had fish and Mo did.
(4) a. *Jo had fish and Mo had soup too.
b. Jo had fish and Mo had soup.
(Kaplan, 1984)
(5) a. Jo likes syntax and Mo likes syntax too.
b. ?Jo likes syntax and Mo likes syntax.
(6) a. Jo had fish and Mo had soup also.
b. *Jo had fish and Mo had soup too.
(Kaplan, 1984)
- In some cases the absence of too gives rise to inferences:
(7) 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)
(8) [The 5000 m race was won by Gianni Romme.]
a. The 1500 m race was won by a Dutch skater.
$\therefore$ G. Romme is not Dutch.
b. The 1500 m race was won by a Dutch skater too.
$\therefore$ G. Romme is Dutch.
(Sæbø, 2004)


### 1.1.1.2 Generalization: additives without contrast

- "... too is obligatory when we need to emphasize what is important about the content of a two-clause text, when what is important is that the same thing is predicated about two contrasting items."
(Kaplan, 1984)
(9) a. What did Mo and Jo have ?
b. Mo had fish.
c. Mo and Jo had fish.
d. Mo had fish, and Jo had fish, too.
- According to Sæbø, there are plenty of examples where too is obligatory without there being a contrast situation.
(10) - 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 eyes open ( $\# \emptyset /$ too $)$.
(Sæbø, 2004, ex(7b))
(11) 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 ( $\# \emptyset /$ too ), but clay cannot be used over and over, because it can be broken up into smaller and smaller pieces.
(Sæbø, 2004, ex(8))
(12) 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 ( \# $\emptyset /$ too ) he could see mountains.
(13) When the gods arrive at Jotunheim, the giants prepare the wedding feast. But during the feast, the bride - Thor, that is - devours an entire ox and eight salmon. He also drinks three barrels of beer. This astonishes Thrym. But Loki averts the danger by explaining that Freyja has been looking forward to coming to Jotunheim so much that she has not eaten for a week. When Thrym lifts the bridal veil to kiss the bride, he is startled to find himself looking into Thor's burning eyes. This time, ( $\# \emptyset /$ too ), Loki saves the situation, explaining that the bride has not slept for a week for longing for Jotunheim. (Sæbø, 2004, ex(9))


### 1.1.1.3 Acquisition data (Dimroth et al. , 2010)

- Experiment of L1/L2 acquisition
- L1: children aged 4, 7 and 10 (French, German, Polish)
- L2: adults L1 German/Polish, L2 French
- Control: native speakers French (adults)
- Many research questions (incl. cross-language comparisons)
- Task: production of a narrative
-2 characters (Mr. Blue, Mr. Red)
- series of 30 images, spontaneous narrative asked
- at some point, a character performs an action that was performed earlier, by the same character, or by the other one.

| Type | Antecedent (1) and subsequent (2) predication | Information configuration of in utterance (2)- comparison to (1) |  |  |  | Example utterances with corresponding information structure marking |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Polarity | Topic situation |  | Comment |  |
|  |  |  | Time | Entity |  |  |
| I | 1: Mr. Red going to bed | $=$ | Shift | $\neq$ | $=$ | 1: Mr. Red goes to bed |
|  | 2: Mr. Blue going to bed |  |  |  |  | 2: Mr. Blue also goes to bed |
| II | 1: Mr. Green not jumping | $\neq$ | Shift | $\neq$ | $=$ | 1: Mr. Green doesn't jump |
|  | 2: Mr. Blue jumping |  |  |  |  | 2: Mr. Blue on the other hand does jump |
| III | 1: Mr. Red not jumping | $\neq$ | Shift | $=$ | $=$ | 1: Mr. Red doesn't jump |
|  | 2: Mr. Red jumping |  |  |  |  | 2: Mr. Red eventually jumps |

(Dimroth et al. , 2010)

- Results
- Additive particules are learned early but what is long to master is their association properties (focus-sensitivity)
- Frequent discourses produced without additives (where they're expected), but
- The observation of the productions of the control group (adult native speakers) shows remarquable tendencies:
* In a situation where a new character performs an action already performed by the other character ( 15 images earlier), $80 \%$ of the subjects use an additive marking.
* On the other hand, in a situation where one character leaves, then after one image, the other character leaves, the percentage of subjects marking the additivity is around $20-30 \%$ in the 3 languages.
Possible explanation: the sequence is appropriate for another relation, since the two character leave in opposite directions ;
* In a situation where the same character is in the same situation (sleeping on a bench) at two stages separated by images showing a change of state, between $90 \%$ and $100 \%$ of the French or German subjects mark the repetition of the state (with particles, verbal prefixes...), whereas the percentage is lower for Polish speakers.


### 1.1.2 ... but not always

### 1.1.2.1 Enumeration counterexamples

(14) Jean est malade, Marie est malade, Paul est malade, tout le monde est malade alors !
(15) Il était là hier, il est là aujourd'hui

### 1.1.2.2 Negation: (Bade, 2016)

(16) Lukas et Mélanie vont souvent au cinéma ensemble. Ils ont convenu d'y aller vendredi s'ils ont du temps. Finalement Lukas a du temps ce vendredi...
a. ... ce n'est pas le cas que Mélanie a aussi du temps +NEG+ADD
b. ... ce n'est pas le cas que Mélanie a du temps +NEG-ADD
c. ... c'est le cas que Mélanie a aussi du temps
$-\mathrm{NEG}+\mathrm{ADD}$
d. ... c'est le cas que Mélanie a du temps
$-\mathrm{NEG}-\mathrm{ADD}$


Figure 1.1 - Mean average acceptability for sentences with or without too in sentences with or without negation. Fig. 3.1 of (Bade, 2016)

### 1.1.2.3 Discourse role: (Eckardt \& Fränkel, 2012)

- Experimental verification of (Amsili \& Beyssade, 2010)'s claims
- Task: production of a narrative induced by a series of images
- Four images for each story
- Two characters (Otto \& Fred), easily identifiable
- The sequences may contain repetitions:
* the same character re-does the same action (with a visible interruption
* a same action is realized in sequence by the two characters
* Three series of $10: 10$ "again (same action, same character), 10 "too" (same action, different character), 10 "filler(s)" .


## - Two conditions:

1. Write a story, like in a children book
2. Report, like a secret agent, the activity of persons under watch. In this case the form to be filled has lines which start with an hour.

- Collection (post hoc) of a group of target words which have an additive value (auch, ebenfalls, erneut, nochmals...).
- Results
- Number of add-words :

| Group | N | mean |
| :--- | ---: | ---: |
| story | 25 | 10.96 |
| watch | 25 | 1 |

(Eckardt \& Fränkel, 2012)
$\Rightarrow$ Productivity of additive words very sensitive to discourse structure

### 1.1.3 Variability of obligatoriness

Jo tc sent Helen a note and Motc sent Helen a note

-     - Two coordinated sentences ;
- Connective: and, or but
- Two arguments that differ : contrastive topicstc CTS
- One repeated predicate : comment


### 1.1.3.1 Reduction of the comment

- Gradation of the "reduction" of the comment:
(18) a. sent Helen a note
b. sent her a note
c. sent her one
d. did so / it
e. did
(19) a. Jo sent Helen a note and Mo sent Helen a note too.
b. ?Jo sent Helen a note and Mo sent Helen a note.
(20) a. Jo sent Helen a note and Mo sent Helen one (too / $* \emptyset$ ).
b. Jo sent Helen a note and Mo $\overline{\operatorname{did}(\mathrm{so} / \mathrm{it} / \bar{\emptyset})}$ (too $/ * \emptyset)$.
$\Rightarrow$ The more the comment is reduced, the more too is obligatory.

Experimental verification preliminary data

- French doesn't allow pure repetition of identical comments:
a. *Max a offert des cadeaux à Léa et Luc a offert des cadeaux à Léa. Max gave gifts to Léa and Luc gave gifts to Léa
b. *Max a offert des cadeaux à Léa et Luc a offert des cadeaux à Léa aussi. Max gave gifts to Léa and Luc gave gifts to Léa too
(22) a. (Luc) a offert des cadeaux à Léa
b. (Luc) en a offert à Léa
c. (Luc) lui a offert des cadeaux
d. (Luc) lui en a offert
e. (Luc) l'a fait
f. (Luc) $\emptyset$
- Design
- Questionnaire experiment, on Internet. 80 subjects.
- Mixed with other experiments, so that our sentences serve as fillers for the others.
- Acceptability jugements, on a 10-point scale.
- 24 examples $\times 10$ conditions
(23) Un étudiant a démontré ce théorème à Stéphane, et son collègue... A student has proved this theorem to Stéphane, and his colleague...

| ... a démontré ce théorème à Stéphane | aussi | ful+ -obl |
| :---: | :---: | :---: |
| ... a démontré ce théorème à Stéphane |  | ful- |
| ... l'a démontré à Stéphane | aussi | cpt+ |
| ... l'a démontré à Stéphane |  | cpt- |
| ... lui a démontré ce théorème | aussi | obl+ |
| ... lui a démontré ce théorème |  | obl- |
| ... le lui a démontré | aussi | pro+ |
| ... le lui a démontré |  | pro- |
| ... l'a fait | aussi | vpe+ |
| ... l'a fait |  | vpe- |
|  | aussi | vid+ |
|  |  | vid- +obl |

- Expected results

```
ful+ not so good, because of repetition
ful- idem
cpt+
l}\begin{array}{l}{\mathrm{ cpt-}}\\{\mathrm{ vpe+}}\\{\mathrm{ vpe-}}\end{array}}\mathrm{ bigger and bigger contrast between + and -
vid+ highest acceptability
vid- lowest acceptability
```

- Results


Figure 1.2 - Mean Judgments of Acceptability normalized by participant: 0 denotes average answer, positive values indicate higher acceptability with 1 being one standard deviation better than the average sentence.


Figure 1.3 - Interaction degree of reduction/presence of aussi. Reduction is the numeric equivalent to the conditions above: we score 1 point of reduction for each pronominalisation and two points for a complete drop. The two conditions obl and cpt are both scored 1. The plot includes dots that indicate the mean answer (absolute) for this degree of reduction with aussi (top) and without aussi (bottom) in addition to the regression lines for the two groups.

- English replication: 40 subjects, collected through Amazon's Mechanical Turc, with the help of Ted Gibson (MIT)


Figure 1.4 - Normalized acceptability for the English version of the experiment

- Conclusions
- relatively bad acceptability of full repetition confirmed
- Kaplan's intuition confirmed (for French): there is a gradation of acceptability
- Chinese replication: 40 subjects, Ibex Farm (thanks to Jiaqi Guo)

- Sentences with ye 'too' are rated higher than their counterparts ( $\mathrm{p}=8.224 \mathrm{e}-16$ ).
- For the three sentence groups in terms of different degrees of reduction, complete sentences are rated higher than sentences with direct object reduced, which is higher than sentences with tow objects reduced. ( $\mathrm{p}=6.686 \mathrm{e}-16$ ).
- The interaction is not significant ( $\mathrm{p}=0.26$ ), namely the absence of the additive particle ye doesn't have a significantly higher negative effect on the acceptability of sentences in context of more reduced conditions compared to less reduced conditions.


### 1.1.3.2 Function of the CTs

(24) a. Jo showed the book to $\underline{\underline{F r e d}}_{t c}$ and she showed is to $\underline{\underline{\text { Bill }_{t c}}}$ ( too $/{ }^{*} \emptyset$ )
b. Jo caught ${ }_{\text {tc }}$ the fish and she $\underline{\text { cleaned }}_{\text {tc }}$ the fish ( too /? $\emptyset$ )
(25) a. Jo has lived in Philadelphia, and she has lived in San Diego (too / $\emptyset$ )
b. Jo sneezes because she has fever and because she's nervous ( too / $\emptyset$ )

- Kaplan: the more central the syntactic function of the CT, the more too is obligatory.
- ? Subject $>$ Direct Object $>\ldots>$ locative cpt $>$ causal subordinate clause
(26) a. * $\underline{\underline{M a x}}_{t c}$ was there yesterday, and $\underline{\text { Paul }}_{\mathrm{tc}}$ was there yesterday.
b. $\overline{\overline{M a x}}$ was there yesterday ${ }_{t c}$, and $\overline{\overline{h e} \text { was there this morning }}$ tc


### 1.1.3.3 Identity of senses $v s$. identity of references

- Sloppy vs. strict reading in ellipsis
(27) Paul loves his wife, and so does Max.
a. Sloppy: Max loves his own wife
b. Strict: Max loves Paul's wife
- too is (a lot more) obligatory when the identity of references is forced:
(28) [Jo wrote an article to debunk Chomsky's claim, ]
a. ... and she wrote $\left\{\begin{array}{l}\text { one } \\ \text { an article }\end{array}\right.$ to improve her tenure file (too / $\emptyset$ ).
b. $\quad .$. and she wrote $\left\{\begin{array}{l}\text { it } \\ \text { the article }\end{array}\right.$ to improve her tenure file (too / ${ }^{(\emptyset)}$ ).
- When too is optional, there is a reading difference:
(29) I bought a car so that I could stay out late, and I bought one so (that) I could get to school ( too / $\emptyset$ )
(Kaplan, 1984, ex(10))
- More on identity of the comment
(30) a. Paul est allé au MacDonald's, et Léa a sifflé.
b. \#Paul est allé au MacDonald's, et Léa a sifflé aussi.

Paul went to McDonald's, and Léa whistled (too)
(31) a. Paul est allé au MacDonald's, et Léa a fait un mauvais repas.
b. Paul est allé au MacDonald's, et Léa a fait un mauvais repas aussi. Paul went to McDonald's, and Léa had a bad meal (too)
(Pulman, 1997; Winterstein, 2010)
(32) a. Paul aime sa femme et Max est amoureux.
b. Paul aime sa femme et Max aussi est amoureux.

Paul loves his wife and Max (too) is in love
a. Paul est sorti pour voir et Max est sorti.
b. Paul est sorti pour voir et Max est sorti aussi. Paul is gone out to watch, and Max is gone out (too)

### 1.1.3.4 Role of the conjunction

- Kaplan: too is more obligatory when sentences are conjoined with but than when they are conjoined with and.
a. Jo hit a homer and Mo did too.
b. Jo hit a homer $\widehat{\text { AND MÓ did } \emptyset}$
c. Jo hit a homer but Mo did too.
d. *Jo hit a homer BUT MÓ did $\emptyset$
a. *Jean a mangé de la soupe mais il a mangé du dessert. Jean ate soup but he ate dessert
b. *Jean a mangé de la soupe mais Max en a mangé. Jean ate soup but Max ate some
c. Jean a mangé de la soupe mais Léa a mangé du dessert. Jean ate soup but Léa ate dessert
*Jo hit a homer but Mo did.
Jo hit a homer but Mo did too.
a. The administration wants to eliminate 50 faculty positions, but the faculty does too!
b. \#The administration wants to eliminate 50 faculty positions, but the state legislature does too!
- Further investigation needed


### 1.1.3.5 Taking stock

- Specific paradigm
- Obligatoriness $\Leftrightarrow$ Resemblance
- Role of discourse structure


### 1.1.3.6 Is too removable? (corpus study)

## A couple of examples from Zeevat

- A corpus study only alluded to in (Winterstein \& Zeevat, 2012):

Method Collect litterary samples with addtive particles, remove the additive ;
Corpus Oslo Parallel Corpus (English-Norwegian section)
Results "Half obligatory, half optional"

- "The obligation to put in too in the positions where one finds it in a corpus of utterances can be tested by trying to leave it out. A small probe of this kind by one of the authors on the English utterances of the Oslo Parallel Corpus gives obligatory cases and optional cases in roughly the same frequencies. The texts are literary in this corpus and only short pre-contexts were considered, though this never meant that an antecedent could not be identified. The optional cases all can be described as cases where it is optional to see the host as dealing with a question that was already addressed before."
(Winterstein \& Zeevat, 2012)
(39) a. Hartmann's joy was apparent in his beautifully cut hair, his expensive suit, his manicured hands, the faint aura of cologne that heralded his approach; in his mild and habitually smiling face, too, his expressive walk, in which the body, leaning slightly forward, seemed to indicate amiability.
b. To Yvette the story had no resonance except as a novelette, the kind of which she believed implicitly, despite her relative sophistication, and this too was a common position among women in the days that preceded enlightenment.
- Optional: cases where it is not obvious that there is a link between the host and the antecedent
- Salience plays a role


## Unpublished study (Amsili, 2012)

## Method

- collect all occurrences of additives ;
- remove the additive ;
- decide whether
- there is no difference
- it becomes agramatical
- it gives to new inferences

Corpus Novel from the French writer Jules Verne, Cinq semaines en ballon, published in 1863 (J. Hetzel et Compagnie), ( 259 p.). About 82000 words.
Results Roughly, $2 / 3$ obligatory, $1 / 3$ optional

- Total number of occurrences of (some) additive particles:
aussi (10), non plus (1) 11
également 7
de nouveau 9
ainsique 4

| de plus $\quad 3$ |
| :--- |
| 34 |

- Classification of the 27 occurrences studied:

| Optional | 9 | $33 \%$ |
| :--- | :--- | ---: |
| Obligatory | ill-formed <br> unwanted inference 7 | $66 \%$ |

## Optional

(40) d'une année à l'autre, ces marais, couverts de roseaux et de papyrus de quinze pieds, deviennent le lac lui-même ; souvent aussi, les villes étalées sur ses bords sont à demi submergées, (...)
(41) Il se munit de trois ancres en fer bien éprouvées, ainsi que d'une échelle de soie légère et résistante, longue d'une cinquantaine de pieds. Il calcula également le poids exact de ses vivres;

- distance between host and antecedent
- sloppy identity between host and antecedent
- discourse necessity: in (41), a discourse topic becomes salient "the preparation of the journey"


## Obligatory

- Real feeling of ill-formedness
(42) - Espérons que rien de semblable ne nous arrivera, dit le chasseur; jusqu'ici notre traversée ne me paraît pas dangereuse, et je ne vois pas de raison qui nous empêche d'arriver à notre but.
- Je n'en vois pas non plus, mon cher Dick;
(43) $\quad 1 \mathrm{~g}$ - Si nous étions à bonne portée, dit le chasseur, je m'amuserais à les démonter les uns après les autres.
- Oui-da! répondit Fergusson; mais ils seraient à bonne portée aussi, et notre Victoria offrirait un but trop facile aux balles de leurs longs mousquets ;
- identity of the forms (same words)
- Short distance
- Dialogic/contrastive effects


## Unwanted inferences

(44) Le gouvernement anglais a mis un transport à ma disposition; il a été convenu également que trois ou quatre navires iraient croiser sur la côte occidentale vers l'époque présumée de mon arrivée.
(45) Et il plongea rapidement, mais pas assez pour éviter le contact d'un corps énorme dont l'épiderme écailleux l'écorcha au passage; il se crut perdu, et se mit à nager avec une vitesse désespérée ; il revint à la surface de l'eau, respira et disparut de nouveau.

- (...) ces peuplades sont considérées comme anthropophages.
- Cela est-il certain?
- Très certain; on avait aussi prétendu que ces indigènes étaient pourvus d'une queue comme de simples quadrupèdes; mais on a bientôt reconnu que cet appendice appartenait aux peaux de bête dont ils sont revêtus.


## Annotation study 1

- 10 raters, 17 samples, 3 classes
- confidence score added
- poor inter-annotator agreement $\kappa=0.22$
- Since the overall agreement is so low, we don't get reliable figures for the distribution of the 17 samples into our 3 classes;
- however, there are cases where the inter-annotator agreement is reasonably high: it concerns about half of the items, and 6 of them are labelled optional, while 3 are labelled obligatory.
- Our category inferential is clearly the most problematic one, and this is confirmed by the confidence scores: there is a significant difference between the means for this category and the means for the other two, strongly suggesting that the annotators were not at ease with this category.


## Annotation study 2

- 15 raters (undergrad students), 47 samples extracted from 3 novels.
- Two categories (optional/obligatory).
- Very poor inter-annotator agreement $(\kappa=0.24)$. the inferential case may not have been the issue.
- Three cases of complete agreement, all of them obligatory.
$\Rightarrow$ Main conclusions
- Too is not always perceived as being obligatory, a significant number of its uses appear optional to speakers.
- The task appears hard: indirect methods should be favored in this domain.


## Additive particles

- are obligatory in a well-formed discourse when an element has already been introduced.
- may be repeated
(47) Luc a fait une erreur qu'il ne refera plus.

Luc made a mistake he won't re-do any more

- form classes : new individual too, another NP, also... new event too, again, still
- have a gradient of obligatoriness, depending on distance and formal identity
- may be less necessary in some types of discourse
- induce inferences with regards to identity/difference


### 1.2 Other presupposition triggers

- Most of the work on obligatoriness is concerned only with additives.
- (Amsili \& Beyssade, 2010) have shown that a much larger class of particles are concerned:
$\Rightarrow$ All presupposition triggers with no asserted content


### 1.2.1 Additive, iterative and continuative triggers

(48) 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 ?
(Chemla, 2008)
(49) Jean est malade, Marie est malade ( $\# \emptyset /$ aussi $)$

John is sick, Mary is sick ( $\emptyset$ / too )
(50) Il était là hier, il est (\# $\#$ / encore ) là.

He was there yesterday, he is ( $\emptyset$ / still) there
(51) Paul est parti en Turquie l'an dernier, il ira (\# $\quad$ / de nouveau ) cette année. Paul went to Turkey last year, he will go ( $\emptyset /$ again ) this year
(52) Jean est allé il y a deux ans au Canada. Il n'ira (\# pas / plus ) là-bas.

John went to Canada two years ago. He won't go there ( $\emptyset /$ anymore )
(53) Léa a fait une bêtise. Elle ne la ( $\# \emptyset /$ re- ) fera pas.

Lea did a silly thing. She won't ( $\emptyset / r e-$ ) do it.

### 1.2.2 Factive verbs

### 1.2.2.1 Factive verbs that subcategorize propositions and questions

(54) a. Paul knows that the earth is flat.
b. Paul knows whether the earth is flat.

- In French: savoir (to know) ignorer (not to know/be unaware), vérifier (check), comprendre (understand)
- ... but not : découvrir (discover), réaliser (realize)
$\Rightarrow$ possibly a different list in English
(55) [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
(56) 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.
(57) 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


### 1.2.2.2 Factive verbs that altern with a non presuppositional version

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

### 1.2.3 Cleft and prosody

(59) a. Someone fixed the dinner. It is John who did it.
b. Someone fixed the dinner. John did it.
(60) \#Someone fixed the dinner. John did it.
a. Quelqu'un a préparé le dîner. Ce n'est pas Jean qui l'a fait/\# Jean ne l'a pas fait.
Someone fixed the dinner. It is not Jean who did it / Jean did not do it
a. Quelqu'un a préparé le dîner. (C'est Jean qui / Jean / \# Jean ) l'a fait. Someone fixed the dinner. (It is Jean who /Jean / Jean ) did it.
b. Paul n'a pas préparé le dîner. ( C'est Jean qui / Jean / \# Jean ) l'a fait. Paul hasn't fixed the dinner. (It is Jean who /JEan/ Jean) did it

### 1.2.4 All presupposition triggers ?

(63) a. Bob regrets that it is raining
b. It is raining
c. Bob doesn't like it when it rains
d. It is raining. Bob doesn't like it when it rains.
e. It is raining. Bob regrets that it's raining.
a. Only Max owns a red car
b. Max owns a red car
c. No one else (than Max) owns a red car
d. Max owns a red car, and no one else does
e. Max owns a red car, and only Max does.

### 1.2.5 Class of triggers

presupposition assertion
too $[S(f)] \quad \approx \exists f^{\prime} f^{\prime} \neq f \& S\left(f^{\prime}\right) \quad+S(f)$
cleft $[S(f)] \quad \approx \exists f S(f) \quad+S(f)$
again $[\exists e S(e)] \quad \approx \exists e^{\prime} e^{\prime}<e \& S\left(e^{\prime}\right) \quad+\exists e S(e)$
anymore $[\operatorname{neg} S(e)] \quad \approx \exists e^{\prime} e^{\prime}<e \& S\left(e^{\prime}\right) \quad+\operatorname{neg} S(e)$
that [s knows whether $P] \approx P \quad+$ s knows whether $P$
$\Rightarrow$ Presupposition triggers with no asserted content

### 1.3 An even wider class?

### 1.3.1 Discourse particles

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

Again
Indeed ( $\approx$ Dutch immers)
Instead
Doch / Toch (German/Dutch)
Too

- ... they are not optional [optional being taken] in the sense that if one finds them in a body of natural text or dialogue they can just as well be omitted.
(Zeevat, 2003)
(65) A: Bill will come tonight.

B: John will come *(too)
(66) A: Bill is ill.

B: He is *(indeed ).
(Zeevat, 2003)

- "Corpus studies by Tim Kliphuis and myself suggest that omitting them [discourse particles] nearly always lead to awkwardness, or to difference in implicature."
(Zeevat, 2003)


### 1.3.2 Tense and temporal adjuncts

(67) a. A: Where's John?
b. B: He was at home an hour ago.
c. C: He's in his office \#(now).
(Keshet, 2008)

- now as a presupposition trigger?
(68) a. Mary is here.
b. Mary is here now.
c. There was/will be a relevant time where Mary wasn't/won't be here.
(69) a. Mary is not here.
b. Mary is not here now.
c. There was/will be a relevant time where Mary was/will be here.
(70) a. Mary has been asked to leave.
b. Mary has been asked to leave now.
c. $\quad \%$ There was/will be a relevant time where Mary left/will leave.
- The utterance (68b) contains an element which is redundant: it's contribution is already brought by (68a).
- The version (68a) is shorter, and as informative. Choosing the longer version is a violation of the manner maxim.
- Tense is obligatory, whereas the temporal adverbial is syntactically optional.
- The adjunction of the adverbial is thus motivated by a reason the addressee has to find.
- On possible reason: the localisation time of the eventuality is relevant; it is because the eventuality must not hold at other relevant times.
a. \#The fugitive is in jail.
b. \#That bachelor is married.
c. \#The employees are unemployed.
(Keshet, 2008, ex(45))
(72) Some members of congress knew each other in college. In fact, ...
a. ... three U.S. Senators were attending Harvard together in 1964.
b. \#... there were three U.S. Senators attending Harvard together in 1964.
(Keshet, 2008, ex(9)), adapted from Musan
- Some kind of temporal adjunct is "obligatory":
(73) a. The fugitive is back in jail.
b. That bachelor is now married.
c. The employees are currently unemployed.
(Keshet, 2008, ex(47))
a. Every tuesday, I fasted.
b. Every tuesday, I fast.
(Sauerland, 2008, ex(42))
- Present tense $=$ semantically vacuous $\rightarrow$ non-pastness implicated presupposition: (74b) talks about present and non present tuedays, (74a) talks only about past tuesdays
(75) Context: The 26th is the last Tuesday of the month. The utterance time is, say, the 27th:
a. \#Every Tuesday this month, I fast.
b. Every Tuesday this month, I fasted.
(Singh, 2011, ex(5))


### 1.3.3 Pronouns vs. definite NP/proper names

- Once an entity has been introduced, it's compulsory to refer to it by the most economical means
(76) a. *Jean est entré, et peu après Jean est sorti.
b. Jean est entré, et peu après il est sorti.

Jean came in, and soon after Jean/he went out
(77) a. \#Jean a fait une erreur que Jean n'avait jamais faite.
b. $\mathrm{Jean}_{i}$ a fait une erreur qu'il $l_{i}$ n'avait jamais faite.

Jean made a mistake that Jean/he never made.
(78) 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.
c. Léa introduced a lady to John, but he didn't behave properly.
(79) a. Léa a présenté un invité à Jean, et Jean ne s'est pas bien comporté.
b. Léa a présenté un invité à Jean, et ce dernier ne s'est pas bien comporté. Léa introduced a guest to John, and John/the latter didn't behave properly.
(80) a. Jean a présenté un invité à Max, et il s'est mal comporté.
b. ?Jean a présenté un invité à Max, et Jean s'est mal comporté.

Jean introduced a guest to Max, and he/Jean didn't behave properly
$\Rightarrow$ The pronoun is obligatory when its conditions of optimal resolution are met,
$\Rightarrow$ a proper name (or a definite description) is obligatory otherwise

- First part : to avoid an unwanted inferential effect (81);
- Second part: to avoid an ambiguity (82)
(81) Sam came in and Sam went out.
$\therefore$ There are two Sams
(82) $\mathrm{Jo}_{i}$ introduced $\mathrm{Mo}_{j}$ to $\mathrm{Max}_{k}$, and he ${ }_{i / j / k}$ smiled.


### 1.3.4 Indefinite NPs and novelty condition

- Novelty condition (Heim, 1982, p. 369ss)
(83) 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 $\alpha] \beta$ is fulfilled, it is forbidden to utter [a $\alpha$ ] $\beta$.

Heim (1991); Grønn \& Sæbø (2012)

### 1.3.5 Identity and difference

(84) [Ordering a second coffee from the same waitress:]
a. \#I'd like a coffee.
b. I'd like another coffee.
(Ippolito, 2004)
(85) a. \#A man ordered a coffee. A man paid the check.
b. A man ordered a coffee. Another man paid the check.
(Ippolito, 2004)
(86) a. A man ordered a coffee. He paid the check.
b. A man ordered a coffee. The (same) man paid the check.
(87) a. Two days ago John was cooking. \#He is cooking.
b. Two days ago John was cooking. He is cooking again. different
c. Two days ago John was cooking. He is still cooking. identical

- Competition is not (only) between $a N$ and the $N$, a third competitor has to be taken into account : another $N$
- How many competitors?
(88) a. Un homme est entré, un homme est sorti.
b. Un homme est entré, l'homme est sorti.
c. Un homme est entré, un autre homme est sorti.
d. Un homme est entré, il est sorti.

A man came in, a man/the man/another man/he went out
(89) a. Léa a présenté un invité à Paul, et un invité est tombé dans la piscine.
b. Léa a présenté un invité à Paul, et l'invité est tombé dans la piscine.
c. Léa a présenté un invité à Paul, et un autre invité est tombé dans la piscine.
d. Léa a présenté [un invité $]_{i}$ à $[\operatorname{Paul}]_{j}$, et il $i_{i / j}$ est tombé dans la piscine. Léa introduced a guest to Paul, and a guest/the guest/another guest/he fell into the pool

- Three different situations have to be distinguished (Grønn \& Sæbø, 2012, p. 87):

Let's suppose that a discourse referent $y$ has been introduced by a similar (or more specific) description as the one that introduces $x$ :
(90) A tall man $(=y)$ ordered a coffee. (A/The/Another) man $(=x)$ drank it.

1. the context leaves open whether $x=y$ or $x \neq y$

- Competition: the
another
* 

(91) \#A tall man ordered a coffee. A man paid the check.
2. the context makes it (relatively) clear that $x=y$

- Competition: the another
$a$ dispreferred
(92) a. ?Richard heard the Beaux-Arts Trio with its new cellist and its new violinist last night and afterwards had a beer with a cellist. (Grønn \& Sæbø, 2012, ex.(5))
b. The First Lady addressed the group of girls and asked one of them to sing a song. \#A girl refused.
(Grønn \& Sæbø, 2012, ex.(19))

3. the context makes it (relatively) clear that $x \neq y$
$\Rightarrow$ Novelty condition (see also (83))
(93) a. A Roxbury man has admitted to a rape that wrongfully sent a man to prison 15 years ago.
(Grønn \& Sæbø, 2012, ex.(24))

- "(...) 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. Hence, the circumstances which allow to give up MP should likewise be similar in all cases."
(Eckardt \& Fränkel, 2012)


## Summary

- Linguistic elements that establish identity or difference with previously introduced material ${ }^{1}$
are obligatory
when their conditions of use are met.
- The degree of pressure (obligatoriness)
- varies along with the degree of perceived identity between the two elements
- is sensitive to discourse structure
- Violations of the obligation leads most often to awkwardness, because of unwanted implicatures

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[^0]:    ${ }^{1} \ldots$ and serve only this purpose.

