

What are themes for?

Laia Mayol

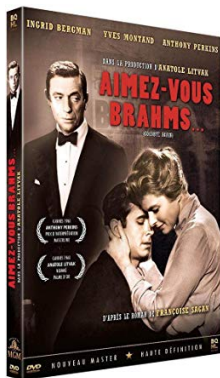
UPF

ConSOLE 28 – Barcelona
January 29th, 2020

Today's goal

- ⊙ Explore the pragmatic notion of **theme**
 - ⊕ how it affects the Question Under Discussion
 - ⊕ how it affects how conditionals are interpreted

Today's goal



- (1) **Brahms**, oui.
Brahms yes.

What's a theme?

- ⊙ Question under Discussion (**QUD**)-model of discourse: any utterance is answering a specific (and possibly implicit) QUD (Ginzburg 1994, Roberts 1996).

(2) Example from Westera (2019)

A: So, there's this party tonight...

B: August, no!

A: But it's perfect! It's my last night in Aberdeen! I'll never be in this town again!

B: No, we can't.

What's a theme?

- ◎ Vallduví (2016): Any utterance
 - elaborates on the most prominent QUD in the context and
 - introduces a new QUD, which will be maximally prominent in the output context
- (3) A: What are we having for dinner?
B: Fish
C: No, that's not true!

What's a theme?

- ⊙ Vallduví (2016): Any utterance
 - elaborates on the most prominent QUD in the context and
 - introduces a new QUD, which will be maximally prominent in the output context

- (4) A: What are we having for dinner?
B: Fish
QUD: Are we having fish?
C: No, that's not true!

What's a theme?

Vallduví (2016): An utterance

- ⊕ must contain a **rheme**: utterance fragment which elaborates on the QUD, its actual update potential.
- ⊕ and may contain a **theme**, which replicates content already present in the QUD.

(5) A: What are we having for dinner?

B: FISH_{rheme}.

B': [We are having_{theme}] [FISH_{rheme}] [for dinner_{theme}].

- ⊕ Theme vs. topic (discourse referent)
- ⊕ Rheme vs. focus (subutterance that generates alternatives)

What's a theme?

Vallduví (2016): An utterance

- ⊕ must contain a **rheme**: utterance fragment which elaborates on the QUD, its actual update potential.
- ⊕ and may contain a **theme**, which replicates content already present in the QUD.

(6) A: What are we having for dinner?

B: FISH_{rheme}.

B': [We are having_{theme}] [FISH_{rheme}] [for dinner_{theme}].

- ⊕ When is it natural to utter themes?

If themes copy content already present in the QUD, why are they uttered at all?

Case study 1: themes as a way to manipulate the maximally prominent QUD

Joint work with Enric Vallduví
(Mayol & Vallduví, 2019; in prep)

What are themes for?

- ⊙ Vallduví (2016):
 - themes signal that the QUD update will have an intermediate step;
 - because what is being addressed is not the maximal QUD, but a related one.
 - Related how?
 - ⊙ Themes can signal that the maximal QUD is split into several subQUDs (Büring, 2003).
- (7) A: How was the concert?
B: **The sound** was awful, but **the audience** was enthusiastic, and **the band** was fantastic.

What are themes for?

- ⊙ Vallduví (2016):
 - themes signal that the QUD update will have an intermediate step;
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 - Related how?
- ⊙ Themes can signal that the maximal QUD is split into several subQUDs (Büring, 2003).

(8) A: How was the concert?
 B: **The sound** was awful, but [sQ₁: *How was the sound?*]
the audience was enthusiastic, [sQ₂: *How was the audience?*]
 and **the band** was fantastic. [sQ₃: *How was the band?*]

What are themes for?

Research questions:

- ⊙ Can themes also signal that the question being addressed is a broader QUD than the maximal one?
- ⊙ Are they necessary in this context?

(9) A: Does Eva eat salmon?

B: Eva HATES fish.

How does Eva feel about fish?

[Broader QUD]

Themes in Catalan

⊙ Explicit preverbal subjects and dislocated phrases:

- (10) **El Pep** no beu vi.
the Pep not drinks wine
- (11) No en beu, **de vi**.
not *part*; drinks, of wine;

Experiment 1

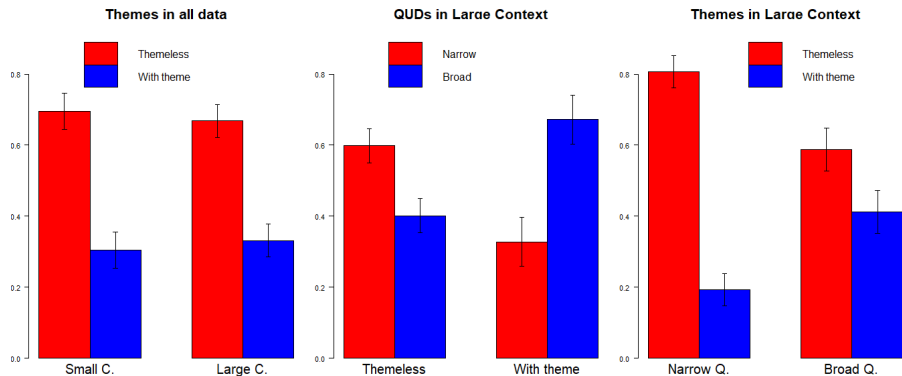
⊙ Discourse-completion study

(12) Large Context Condition: Albert likes classical music.
Small Context Condition: Albert likes Beethoven.

(13) a. Question: Would Albert like to go to a Beethoven concert?
b. Answer: Yes, ...

- 560 answers (35 participants * 16 items) coded as follows:
 - Is there a theme?
 - In the Large Context, does it address the Broad Question (Does Albert like classical music?) or a Narrow Question?

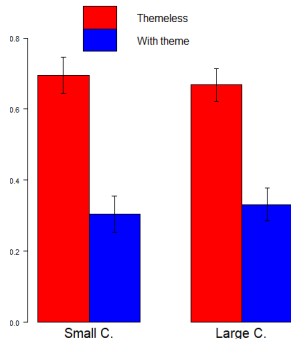
Experiment 1: Results



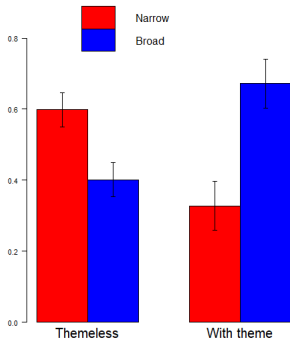
- When themes are used, more Broad QUDs are addressed.
- When themes are used, **most** addressed QUDs are Broad.

Experiment 1: Results

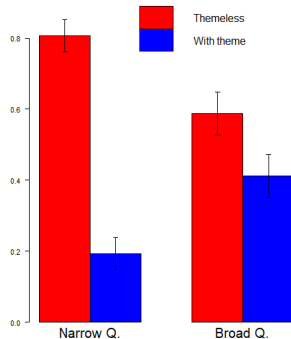
Themes in all data



QUDs in Laræ Context



Themes in Laræ Context



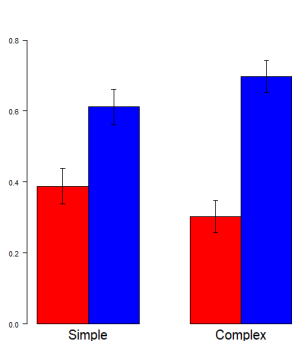
- When Broad QUDs are addressed, more themes are used.
- When Broad QUDs are addressed, **most** utterances do **not** contain a theme.

Experiment 2

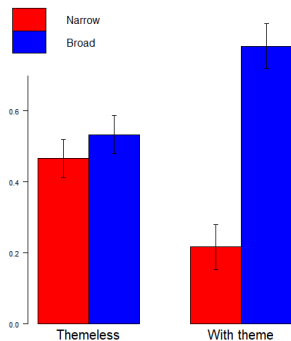
- (14) Large Context: Albert likes classical music.
Question: Would Albert like to go to a Beethoven concert?
- (15) Simple Answer Condition: Yes, ...
Complex Answer Condition: Yes, Albert ...
- 528 answers (33 participants * 16 items) coded as follows:
 - Which QUD do they address?
 - In the Simple Answer, is there a theme?

Experiment 2: Results

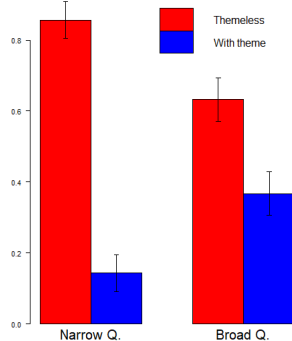
QUDs in all data



QUDs in Simple Answer



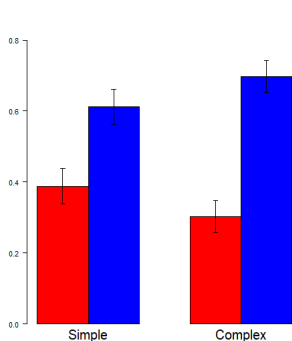
Themes in Simple Answer



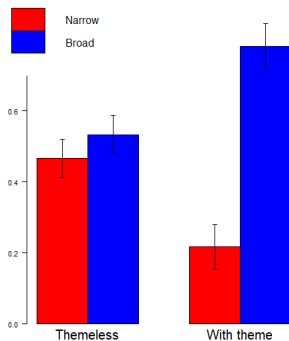
- When themes are used, more Broad QUDs are addressed.
- When themes are used, **most** addressed QUDs are Broad.

Experiment 2: Results

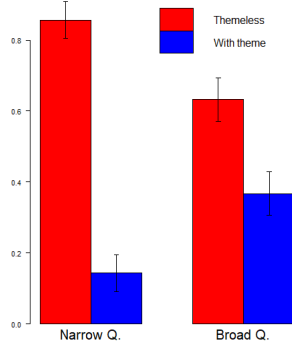
QUDs in all data



QUDs in Simple Answer



Themes in Simple Answer



- When Broad QUDs are addressed, more themes are used.
- When Broad QUDs are addressed, **most** utterances do **not** contain a theme.

What are themes for?

- ⊙ Can themes also signal that the question being addressed is a broader QUD than the maximal one? **Yes**.
- ⊙ Are they necessary in this context? **No**; shift to a non-maximal QUD may be deemed obvious by speakers so that a theme is not needed.

Case study 2: themes in conditionals

Joint work with Elena Castroviejo
(Mayol & Castroviejo, 2017; under review)

Types of conditionals

- ⊙ What is the difference between hypothetical conditionals (HCs) and the so-called **premise conditionals** (PCs)?

(16) Adapted from Haegeman (2003), example (1)

- HC**: If it rains a lot, we will all get terribly wet and miserable.
- PC**: If indeed it is going to rain so much, we should stay at home.

Our claims

- (17) From Haegeman (2003), example (1)
- a. **HC**: If it rains a lot, we will all get terribly wet and miserable.
 - b. **PC**: If indeed it is going to rain so much, we should stay at home.
-
- ⊙ PCs and HCs are **semantically identical**.
 - ⊙ Differences between them follow from the fact that antecedents of PCs must be **echoic** and **thematic**.

Two types of conditionals

- ⊙ Previous work: **syntactic** differences between PCs and HCs (Iatridou 1991, Haegeman 2003).

Echoicity

The antecedent (p) must echo the words of another participant of the conversation in a PC; this is not necessarily the case in an HP.

- (18) A: Bill is very unhappy here.
B: If he's so unhappy, he should leave.
- (19) A: My friend Joe, whom you haven't met, is very smart.
B: Oh, yeah, if he's so smart why isn't he rich?

Examples from Iatridou (1991)

Question answering

While HCs can serve as answers to questions, PCs cannot.

(20) A: How can John get any fitter?

B1: If he takes more exercise in the future.

(21) A: How can John get any fitter?

B2: # If he is already taking so much exercise right now.

Only

Focus particles, such as *only*, can associate with p in a HC, but cannot do so in a PC.

- (22)
- a. John will **only** finish the book if there is a lot of PRESSURE on him. [HC]
 - b. #John will **only** finish the book if there is already such a lot of PRESSURE on him. [PC]
 - c. John will **only** finish the BOOK, if there is already such a lot of pressure on him. [PC]

Bound pronouns

A pronoun in p of a HC may be bound by a quantifier in q , while this is not the case in a PC.

- (23) a. No **one** _{i} will answer the phone **if he** _{i} **thinks it's his** _{i} **supervisor**. [HC]
- b. #No **one** _{i} will answer the phone, **if, as you say, he** _{i} **probably thinks it's his** _{i} **supervisor**. [PC]

Negation

Ambiguity with p-final conditionals:

(24) Mary doesn't yell at Bill if she's hungry.

(25) a. Mary doesn't yell at Bill **if she's hungry**,
since hunger keeps her quiet.

$(p \rightarrow \neg q)$

b. Mary doesn't yell at Bill **if she's hungry**,
but if she's sleepy.

$\neg(p \rightarrow q)$

The ambiguity disappears in p-fronted conditionals (negation must remain under the conditional):

(26) a. **If Mary is hungry**, she doesn't yell at Bill,
since hunger keeps her quiet.

b. **#If Mary is hungry**, she doesn't yell at Bill, but if she's sleepy.

Negation

Ambiguity with p-final conditionals:

- (27) a. Mary doesn't yell at Bill **if she's hungry**,
since hunger keeps her quiet. $(p \rightarrow \neg q)$
- b. Mary doesn't yell at Bill **if she's hungry**,
but if she's sleepy. $\neg(p \rightarrow q)$

The ambiguity also disappears in PCs (negation must remain under the conditional):

- (28) a. You shouldn't remain quiet **if you're so unhappy**
because remaining quiet will only make you unhappier.
- b. #You shouldn't remain quiet **if you're so unhappy**,
but if you're respected.

The IS of conditionals

- ⊙ The information structure of PCs is more restricted than that of HCs, which explains their restrictions regarding question answering, focus particles, negation and bound pronouns.

The IS of conditionals

In PCs,

- ⊙ p has been uttered by another participant in the conversation.
- ⊙ The speaker addresses the QUD 'what happens if p?' (QUD1).
- ⊙ Therefore, **p must be echoic and thematic** (and q rhematic).

In HCs,

- ⊙ QUD1 = 'what happens if p?'
q as rheme
- ⊙ QUD2 = 'Under which circumstances, q?'
p as rheme
- ⊙ QUD3 = 'if p, will q?' (conditional question; Isaacs and Rawlins (2008))
polarity of q as rheme

Cf. Biezma and Goebel (2017), von Stechow (2009) and Ippolito (2016).

Question answering

- (29) a. How can John get any fitter?
b. If he takes more exercise in the future.
- (30) a. How can John get any fitter?
b. #If he is already taking so much exercise right now.

→ **Themes cannot answer questions**; answers by definition map to rhematic items.

- ⊙ The answer in (29) is congruent.
QUD2 = 'Under which circumstances q?'
- ⊙ The answer in (30) is not congruent.
QUD1 = 'What will happen if p?'

Only

- (31) a. QUD2 = 'Under which circumstances will John finish the book?'
- b. John will only finish the book if there is a lot of PRESSURE on him.
- (32) a. QUD1 = 'What happens if there is such a lot of pressure on John?'
- b. #John will **only** finish the book if there is already such a lot of PRESSURE on him. [PC]
- (33) a. QUD1 = 'What happens if there is such a lot of pressure on John?'
- b. John will only finish the BOOK, if there is already such a lot of pressure on him.

Bound pronouns

- (34)
- a. No **one**_i will answer the phone **if he**_i **thinks it's his**_i **supervisor**.
 - b. #No **one**_i will answer the phone, **if, as you say, he**_i **probably thinks it's his**_i **supervisor**.

Bound pronouns

- (35) a. Under which circumstances will no one answer the phone?
(QUD2)
- b. No **one**_i will answer the phone **if he**_i **thinks it's his**_i **supervisor**.
- (36) a. What happens if he thinks it's his supervisor? (QUD1)
- b. #No **one**_i will answer the phone, **if, as you say, he**_i **probably thinks it's his**_i **supervisor**.
- ⊙ Since p is thematic, the pronouns in it are already bound to salient discourse referents and cannot be bound by quantifiers in q.

Negation

(37) Mary doesn't yell at Bill if she's hungry.

(38) a. Mary doesn't yell at Bill if she's hungry,
since hunger keeps her quiet.

$(p \rightarrow \neg q)$

b. Mary doesn't yell at Bill if she's hungry,
but if she's sleepy.

$\neg(p \rightarrow q)$

Negation

- (39) a. QUD1: What happens if Mary is hungry?
b. Mary doesn't yell at Bill if she's hungry,
since hunger keeps her quiet. $(p \rightarrow \neg q)$
- (40) a. QUD2: Under which circumstances does Mary yell at Bill?
b. Mary doesn't yell at Bill if she's hungry,
but if she's sleepy. $\neg(p \rightarrow q)$

Negation

The ambiguity disappears in PCs (negation must remain under the conditional):

- (41) a. What happens if you are unhappy? (QUD1)
b. You shouldn't remain quiet **if you're so unhappy**, because remaining quiet will only make you unhappier.
- (42) a. What happens if you are unhappy? (QUD1)
b. #You shouldn't remain quiet **if you're so unhappy**, but if you're respected.

Negation

The ambiguity also disappears in p-fronted conditionals (negation must remain under the conditional):

- (43) a. If Mary is hungry, she doesn't yell at Bill,
since hunger keeps her quiet.
b. #If Mary is hungry, she doesn't yell at Bill, but if she's sleepy.

In a p-fronted conditional, p cannot be rhematic.

Echoicity and thematicity

- ⊙ PCs are **echoic** and **thematic**.
- ⊙ What is the relationship between echoicity and thematicity?
 - (44) A: John is here.
 - B: Good, because we can only start the meeting if he's here.
 - c. **QUD2**: Under which circumstances can we start the meeting?
- ⊙ Echoic material tends (but does not have) to be thematic, just like pronouns.

Not all antecedents are themes

- Connection between thematicity and antecedents has been noted before (Haiman 1978, Ebert et al. 2008).
- ⊙ Antecedents are often thematic
 - ⊕ If the conditional is a PC, p will be thematic.
 - ⊕ If p is fronted, it will be thematic.
 - ⊕ If p is echoic, it will tend to be thematic.
- ⊙ Antecedents can also be rhematic.
- ⊙ Conditionals with rhematic p behave differently from conditionals with thematic p (premise or not).

Why bother uttering a PC?

(45) A: It is raining really hard.

B: If it's raining so hard, we should stay at home.

B': We should stay at home.

- ⊙ Uttering a **theme-containing** utterance **manipulates** the QUD in a particular way.

Why bother uttering a PC?

- ⊙ Uttering a **theme-containing** utterance **manipulates** the QUD in a particular way.

(46) A: It is raining really hard.
QUD: Is it raining really hard?

Why bother uttering a PC?

- ⊙ Uttering a **theme-containing** utterance **manipulates** the QUD in a particular way.

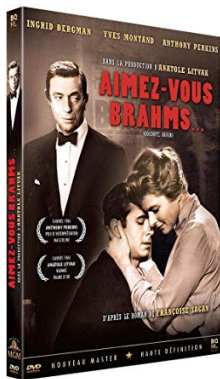
- (47) A: It is raining really hard.
QUD: ~~Is it raining really hard?~~ What happens if it is raining really hard?
B: If it's raining so hard, we should stay at home.
B: In this case/then, we should stay at home.
B': We should stay at home.

Why bother uttering a PC?

PCs can also be used to **challenge** the truth of p:

- (48) A: My friend Joe, whom you haven't met, is very smart.
B: Oh, yeah, if he's so smart why isn't he rich?

What are themes for?



- (49) **Brahms**, oui.
Brahms yes.
- (50) a. QUD: Do you like the movie 'Do you like Brahms?'
 b. QUD: Do you like Brahms?

What are themes for?

Themes manipulate the QUD: they replace the default QUD by some other related QUD.

What are themes for?

Thank you!

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References I

- Biezma, M. and Goebel, A.: 2017, The pragmatic ingredients to get perfect biscuits, *Sinn und Bedeutung*, Vol. 21.
- Ebert, C., Endriss, C. and Hinterwimmer, S.: 2008, A unified analysis of indicative and biscuit conditionals as topics, *Semantics and Linguistic Theory*, Vol. 18, pp. 266–283.
- Ginzburg, J.: 1994, An update semantics for dialogue, *Proceedings of the first International Workshop on Computational Semantics, Tilburg, The Netherlands*.
- Haegeman, L.: 2003, Conditional clauses: External and internal syntax, *Mind & Language* **18**(4), 317–339.
- Haiman, J.: 1978, Conditionals are topics, *Language* pp. 564–589.
- Iatridou, S.: 1991, *Topics in conditionals*, PhD thesis, Massachusetts Institute of Technology.
- Ippolito, M.: 2016, How similar is similar enough?, *Semantics and Pragmatics* **9**, 6–1.

References II

- Isaacs, J. and Rawlins, K.: 2008, Conditional questions, *Journal of Semantics* **25**(3), 269–319.
- Roberts, C.: 1996, Information structure in discourse: Towards an integrated formal theory of pragmatics, *OSUWPL Volume 49: Papers in Semantics* pp. 91–136.
- Vallduví, E.: 2016, Information structure, *Cambridge Handbook of Formal Semantics*, Cambridge University Press, Cambridge.
- von Stechow, K.: 2009, Conditional strengthening, again, Invited talk at XPRAG 2009, Lyon.
- Westera, M.: 2019, Predicting explicit and implicit questionse. COLT kick-off workshop, Barcelona, February 2019.