French *bien que* as a scalar subordinator

Karoliina Lohiniva

Université de Genève, University of Delaware

LSRL, University of Delaware: April 21, 2017

Concessivity

Concessivity is a discourse relation that holds between two segments P (subordinate) and Q (matrix):

(1) **Although** [$_P$ Max is sad], [$_Q$ he is smiling]

(2) **Bien que** [$_P$ Max soit well that Max is.SBJV triste] sad, [$_Q$ il he sourit] smiles

- When you have P, you normally expect not-Q, but P and Q hold
- "Concessive constructions [...] are used to assert two propositions against the background assumption that the relevant situations do not normally go together, i.e. [...] *if p, then normally not-q*" (Haspelmath & König 1998: 566)

Concessivity and conditionality

We distinguish **concessives** from (scalar) **conditional concessives** (Haspelmath & König 1998):

(3) **Bien que** [$_P$ Max soit triste], [$_Q$ il sourit]
well that Max is.SBJV sad he smiles.IND
'Although Max is sad, he is smiling'

(4) **Même si** [$_P$ Max était triste], [$_Q$ il sourirait]
even if Max was.IND sad he smiles.COND
'Even if Max was sad, he would be smiling'

- Concessives are said to entail both P and Q, while conditional concessives only sometimes entail Q
- I will have not much to say about the mood (or its fluctuation) in concessives

The gist

I will propose that *bien que* involves scalarity and cg-imposition

- There is **scalarity** like with *even* and *même*:
  - Its presupposition compares the relative likelihood or noteworthiness of two alternatives (cf. Rooth 1985, et seq.)
  - However, the alternatives are polar, and come from the matrix segment Q (contra work on concessive conditionals; Haspelmath & König 1998, Guerzoni & Lim 2006)

- We are dealing with an **impositive complementizer** in the sense that
  - the meaning does not involve conjunction: the content of the subordinate clause is not at-issue
  - we have an impositive update of the common ground, much like appositive relative clauses (AnderBois et al. 2015)

The gist

I will suggest a decompositional account where

- ***que*** is a complementizer in the left periphery of the subordinate clause, and responsible for the impositive update of the common ground with $[\![P]\!]$, while
- ***bien*** takes two CP-complements, and introduces a scalar presupposition which compares the relative likelihoods of the polar alternatives of the second, given a cg updated with the first

The proposal is couched in dynamic semantics, and I use the modelisation of discourse context of Farkas & Bruce (2010)

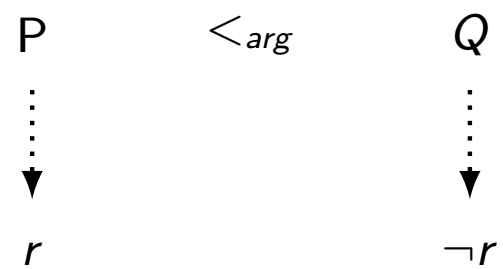
Argumentation-theoretic analysis of concessivity

In argumentation theory, concessive markers may be of different syntactic categories, but they all reject the argumentative value of the first segment in favour of the argumentative value of the second segment (Ansombre & Ducrot 1977)

- The argumentative square for *mais* 'but' (Moeschler & de Spiegler 1982, based on Anscombre & Ducrot 1977):

(5) a. [$_P$ Jean est malin], **mais** [$_Q$ il ne travaille pas] (il passe)
Jean is clever, but he NEG work NEG he passes

b. [$_P$ Jean ne travaille pas], **mais** [$_Q$ il est malin] (il ne passe pas)
Jean NEG work NEG but he is clever he NEG passes NEG



Concessivity and causality

Other work on (non-conditional) concessivity mainly focus on explaining the relationship between concessivity and causality (König 1988, 1991, 1994):

> "There is a clear intuition that concessive clauses and complex sentences with such clauses are rarely, if ever, used for the speech act or speech activity of conceding, and that **they should rather be analysed as standing in opposition to causal constructions**"
>
> (König & Siemund 2000: p. 343)

Tripartite conceptual structure (eg. di Meola 2004):

1. both $[\![P]\!]$ and $[\![Q]\!]$ hold (simultaneity)
2. normally, $[\![P]\!]$ leads to $[\![\neg Q]\!]$ (conditionality)
3. the default conditional relationship does not hold (negation)

Softening the causal relation

The relevant causal relation can only be modelled as a material implication if the content of the two segments is "generalised" or made "fuzzier" ("something like *p*..")

- This much is obvious from the paraphrases, which almost always use the word 'normally'
- König & Siemund 2000 (scare quotes signal "fuzziness"):

type:	**causal**	**concessive**
example:	because(p), q	although(p), q
conditional presupposition:	$p \rightarrow q$	"p" $\rightarrow \neg$ "q"
assertion:	$p \wedge q$	$p \wedge q$

Correlation

The necessity to soften causality is actually a useful hint:

- Concessivity cares about "general tendencies [. . . and] express[es] a dissonance with general regularities of co-occurrence" (König & Siemund 2000: p. 342)
  $\Rightarrow$ the right notion is **correlation**, not causation
- Examples where the use of a concessive connective is natural in the absence of direct causation:

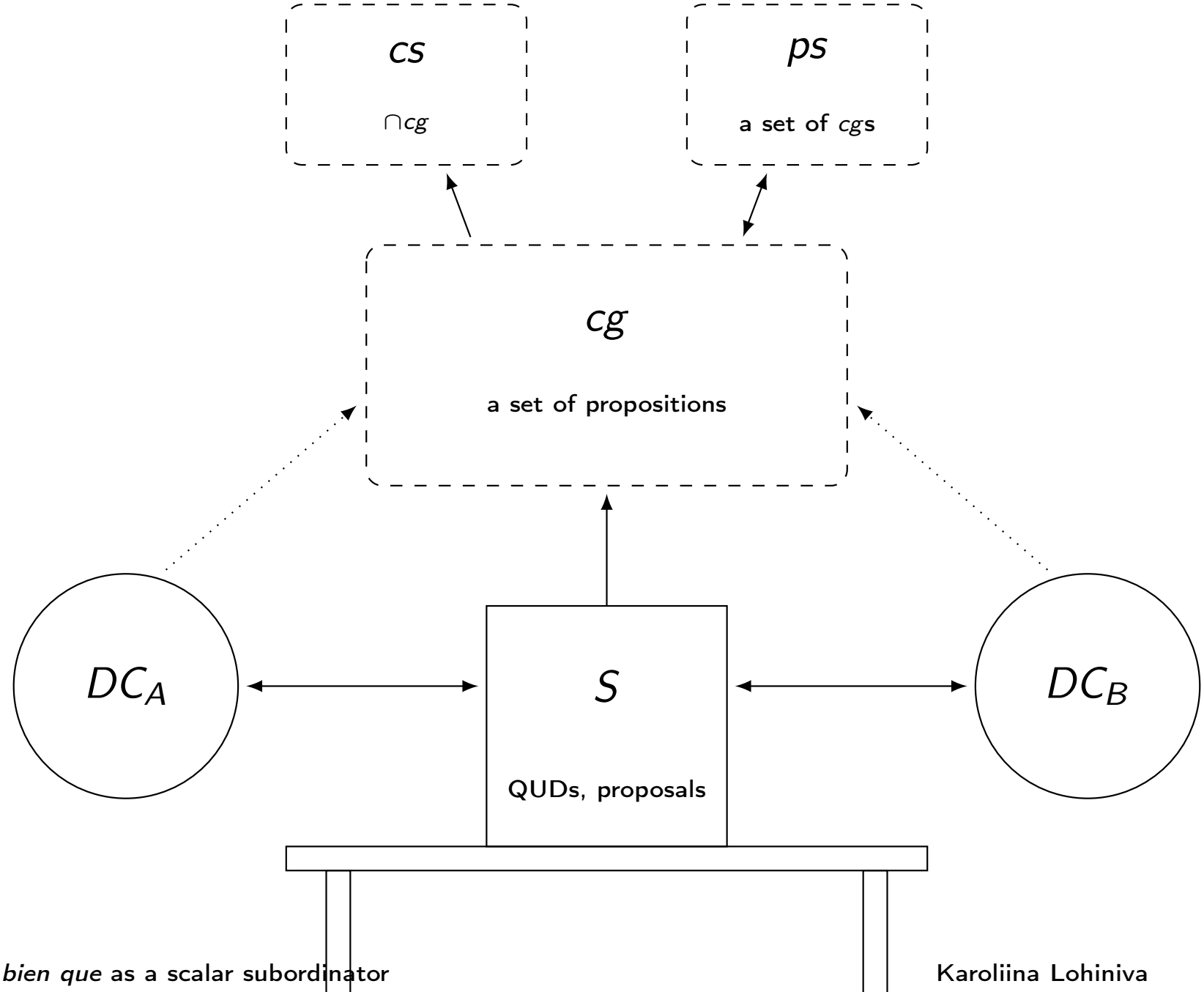
(6) Although [$_P$ her hair is red], [$_Q$ her eyes are brown]

Translation of earlier paraphrase:

- "$[\![P]\!]$ correlates with $[\![\neg Q]\!]$. However, $[\![P]\!]$ and $[\![Q]\!]$ obtain"

First: Discourse context structure in Farkas & Bruce 2010

- the **common ground**, or **cg**; contains all propositions that all participants have agreed on being true of the world of the conversation, and the propositions that represent the participants' shared background/world knowledge
- the set of **participant X's discourse commitments**, or $\mathbf{DC_X}$; contains all propositions that a participant X has publicly committed to as being true of the world of the conversation
- the **Table**, or **S**; a stack that stores all Questions Under Discussion (QUD) and proposals to update the cg
- the **context set**, or **cs**; a component that represents the intersection of the current cg and tracks all live options for the actual world
- the **projected set**, or **ps**; a component that takes the current cg and the upmost item on S and projects a set of future cgs in which the upmost item on S is decided (it follows from the cg that the proposition is true, or it follows that it is false)


cs
∩cg
ps
a set of cgs
cg
a set of propositions
DC_A
S
QUDs, proposals
DC_B

Second: Scalarity and concessivity

Haspelmath & König 1998, Guerzoni & Lim 2006:

- Conditional concessives across the world often involve a scalar focus-sensitive particle (e.g. *even*)
- Scalar particles are standardly assumed to contribute a presupposition that compares the relative likelihoods of two or more alternatives (Karttunen & Peters 1979; Rooth 1985)
- With concessive conditionals, these alternatives are argued to be **polar**, and they come from the subordinate segment P (cf. verum focus, Höhle 1992):

(7) Even [if it was funny, I would not laugh]

a. Domain of *even*: {(if it was funny, I would not laugh), (if it was not funny, I would not laugh)}

b. Presupposition: (if it was funny, I would not laugh) $<_{likely}$ (if it was not funny, I would not laugh)

The special status of P

In the case of (non-conditional) concessives, the status of the subordinate P-segment is special. We will see that

- it is **not at-issue**, and
- it is **imposed** on the cg (in the sense of AnderBois et al. 2015)

Hence, it is more natural to take the polar alternatives from the Q-segment, which is what the paraphrases of concessivity do

Impositive updates

- Impositive updates are not a good way for introducing new QUDs or for answering existing QUDs (AnderBois et al. 2015)

(8) a. Who had prostate cancer?
b. ??Tammy's husband, who had prostate cancer, was being treated at the Dominican Hospital

- Utterance-medial impositive updates resist direct challenging (Farkas & Bruce 2010, AnderBois et al. 2015, Roberts et al. 2009)

(9) a. His husband, who had prostate cancer, was being treated at the Dominican Hospital
b. ??No, he had lung cancer
c. No, he was being treated at the Stanford Hospital

- Impositive updates are non at-issue and thus project (cf. Roberts et al 2009)

QUD-answering and direct challenging

(10) a. Qui est triste?
who is sad
"Who is sad?"

b. ??Bien que Max soit triste, il sourit
well that Max is.SBJV sad he smiles
"Although Max is sad, he is smiling"

(11) a. Bien que Marie soit rousse, elle a les yeux bruns
well that Marie is.SBJV redhead she has the eyes brown
"Although Marie is a redhead, her eyes are brown"

b. Non! Elle a les yeux verts
no she has the eyes green
"No! Her eyes are green"

c. ??Non! Elle est blonde
no she is blonde
"No! She is blonde"

Projection

(12) a. Est-ce qu'elle a vraiment les yeux bruns bien qu'elle
is-it that-she has really the eyes brown well that-she
soit rousse?
is.SBJV redhead
"Does she really have brown eyes although she has red hair?"

b. Max n'est pas content bien qu'il sourit
Max NEG-is NEG happy well that-he smiles.SBJV
"Max is not happy although he is smiling"

Sidenote: Information status of P

The content of P may be **new** or **old**

- When it is (discourse) new, it is simply imposed on the cg
- When it is (discourse) old – i.e., when it is already on the Table – using the structure is a non-default way of accepting ⟦P⟧ to the common ground
  - Concessive in the sense of conceding
  - Think of the reticence of "yeah yeah yeah", which could be paraphrased with "I concede that you are right but I'd rather not talk about it"
- Cf. concessivity in argumentation theory (Anscombre & Ducrot 1977)

Back to scalarity

Previous work on concessive conditionals makes use of the semantics proposed for *even*

- Concessives also have a scalar meaning component
- As we assigned P the status of an imposed cg-update, we should take our polar alternatives from Q

We can model the scalar component using **conditional probability**:

- the probability that event B will occur given the knowledge that event A occurred
- P(B|A)
- The presupposition compares the conditional probabilities of ⟦Q⟧ given the cg updated with ⟦P⟧, and ⟦¬Q⟧ given the cg updated with ⟦P⟧

Alternatives, in the style of Farkas & Bruce (2010)

We can borrow the **projected set** (ps) component for alternatives:

- If a pair $\langle Q, [\![Q]\!] \rangle$, where Q is declarative, is put on the Table, Farkas & Bruce propose that the ps determined by the assertive speech act operator is a singleton set in which Q is accepted
  $\Rightarrow$ ps = $\{\{cg \cup [\![Q]\!]\}\}$
- If Q had been a polar interrogative, the projected set would be a non-singleton set, containing one union of the cg with $[\![Q]\!]$, and another of the cg with $[\![\neg Q]\!]$
  $\Rightarrow$ ps = $\{\{cg \cup [\![Q]\!]\}, \{cg \cup [\![\neg Q]\!]\}\}$
- We can use the latter non-singleton ps for polar alternatives

Scalar presupposition: A cardinality comparison

The scalar presupposition of *bien que* P, Q is satisfied iff

$$P([\![Q]\!]|cg \cup [\![P]\!]) < P([\![\neg Q]\!]|cg \cup [\![P]\!])$$

If you take all those worlds in which all propositions in the cg (including $[\![P]\!]$) are true, and you pick a world at random, you are **less likely** to pick a $[\![Q]\!]$-world than a $[\![\neg Q]\!]$-world

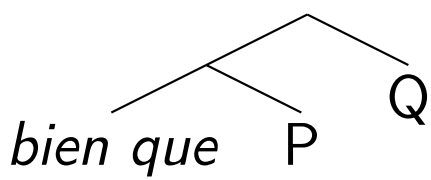
- This is the case if in $\cap(cg \cup [\![P]\!])$, there are **less** $[\![Q]\!]$-worlds than $[\![\neg Q]\!]$-worlds

$$|\cap(cg \cup [\![P]\!] \cup [\![Q]\!])| < |\cap(cg \cup [\![P]\!] \cup [\![\neg Q]\!])|$$

A subordinator chunk?

An immediate question that arises concerns the unity of *bien que* (or any other concessive connective)

- If *bien que* as a whole is a subordinator, it surely only c-commands the subordinate P, not the matrix Q
- Subordinate adverbial clauses have been argued to be able to adjoin to CP (Haegeman 2003)
- However, focus-sensitive operators are standardly assumed to c-command their associate



Independent evidence for decomposition?

French *bien* is used as a degree modifier that comes to mean a **high degree** of a **gradable** property (equivalent to *très* 'very'). English also uses *well* as a degree modifier with certain predicates (Bolinger 1972, Kennedy 2005)

(13) Je suis bien contente!
I am well happy
"I am very happy!"

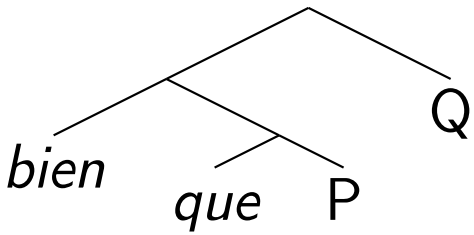
French uses the *que*+SBJV combination to express orders and wishes (**jussive** or **optative**):

(14) Que nous partions tout de suite!
that we leave.SBJV right away
"May we leave right away! Let us leave right away!"

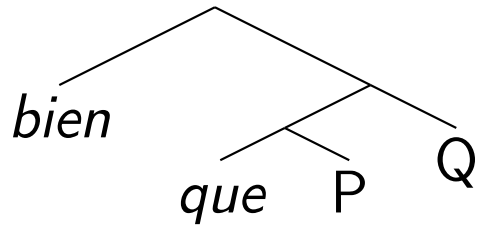
Cf. Anna Kocher's work on Ibero-Romance AdvC (forthcoming)

Options

1.



2.



With Option 1, *bien* must be able to refer to the (perhaps still) unknown Q, and the c-command requirement must be relaxed. *Bien* would take two arguments (CPs): it would be the subordinator, in one way. The order P>Q could involve late merge

With Option 2, we get c-command. *Que* could preclude *bien* from affecting P. *Bien* would be some type of adverb. The order Q>P might involve movement of Q, and *bien* would use its copy

A possible counter-argument for Option 2?

To derive Q>P with Option 2, we could propose that Q moves above *bien*: with a declarative Q, IP-topicalization is an option

- One possible counterargument comes from weak cross-over and its obviation with topicalization: *His$_i$ mother talked to John$_i$, **but** ^{ok}His$_i$ mother, John$_i$ loves
- Out of the four logically possible combinations, Q>P with a pronoun in Q that is coreferential with a proper noun in P is the only ungrammatical one (in both English and French):

(15)
a. *He$_i$ is smiling although Max$_i$ is sad (Q>P)
b. Max$_i$ is smiling although he$_i$ is sad (Q>P)
c. Although Max$_i$ is sad, he$_i$ is smiling (P>Q)
d. Although he$_i$ is sad, Max$_i$ is smiling (P>Q)

A possible semantics in the style of Farkas & Bruce 2010

The impositive C: *que* (**new context!**)

- *que*(P[D], *a*, K_i) = K_o, where P[D] is a declarative sentence radical; a is the author of the assertion; $K_{i/o}$ is an input/output context; such that
  1. $DC_{a,o} = DC_{a,i} \cup [\![P]\!]$
  2. $cg_o = cg_i \cup [\![P]\!]$

The scalar component: *bien* (**presupposition!**)

- *bien*(K_i, $[\![P]\!]$, $[\![Q]\!]$), where K_i is an input context, $[\![P]\!]$ is the first argument, $[\![Q]\!]$ is the second argument;
  1. verify that $[\![P]\!] \in cg_i$
  2. verify that $ps_i = \{\{w \mid Q(w)\}, \{w \mid \neg Q(w)\}\}$; if yes, $ps_o = ps_i$; verify presupposition in (4) with ps_o
  3. otherwise calculate $ps_o = cg_i \cup \{[\![Q]\!], [\![\neg Q]\!]\}$; verify presupposition in (4) with ps_o
  4. $|\cap(cg_i \cup [\![Q]\!])| < |\cap(cg_i \cup [\![\neg Q]\!])|$

Conclusion

I proposed a decompositional analysis of French *bien que* where

- *que* is an impositive complementizer, adding $[\![\mathrm{P}]\!]$ directly to the cg, and
- *bien* takes two CP complements; the denotation of the first must be in the cg, and the second complement is subject to a presuppositional cardinality comparison between the projected sets (cf. Farkas & Bruce 2010)

I abandoned causation in favour of correlation. An essential difference to previous accounts of concessive conditionals is the use of polar Q-alternatives instead of P-alternatives. In the account, *bien* does not c-command Q.

Thank you!

Adverbial concessive expressions

The decompositional account (Option 1) would make *bien* an almost-vanilla CP-adverb (Option 2, a real vanilla CP-adverb)

- It is somewhat like other adverbial concessives (*cependant*, *pourtant*, *néanmoins*, *quand même*; Moeschler & de Spiegler 1981, 1982; Moeschler 1983; Rivara 1981, 2008)
- The difference is arguably syntactic and semantic: *cependant*, for example, would take a context K_i and evaluate its sole propositional argument $[\![P]\!]$ against that K (updated with a previous utterance)
- The necessary presence of *que* with *bien* could be considered as a way to ensure point (1) for *bien* on the previous slide; with *cependant*, either the clause boundary would have to suffice, or the first utterance would always need to be conceding (hence accepting another participant's proposal)

At-issueness with *mais* 'but'

Quid coordinating concessives such as *mais* 'but' (Anscombre & Ducrot 1977)? The difference between *bien que* and *mais* is that with the latter, both segments are **at issue**:

(16) a. Est-ce que Max est triste?
is-it that Max is sad
"Is Max sad?"

b. Max est triste, mais il sourit
Max is sad but he smiles

c. Max sourit, mais il est triste

(17) a. Marie est rousse, mais elle a les yeux bruns
Marie is redhead but she has the eyes brown
"Marie is a redhead, but her eyes are brown"

b. Non! Elle a les yeux verts
no she has the eyes green

c. Non! Elle est blonde
no she is blonde

Source of alternatives in concessive conditionals

If we adopt Option 1, we could assume that concessive conditionals also involve Q-alternatives, not P-alternatives

- The role of *si* 'if' could by analogy also be cg-related: perhaps it could lead to a "temporary imposition" (requiring the temporary suspension of any previous contradictory belief)
- The Ramsey test (Ramsey 1990), cf. Stalnaker 1968

(18) a. Même si Max était triste, il sourirait
b. P(Max smiles | Max is sad) < P(Max does not smile | Max is sad)