

Topics in Conditional Conjunctions

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- 1 Introduction
 - Types of CCs
 - Side remarks on types of IaDs
 - Semantics of CCs
- 2 Analyzing CCs
 - Existing Accounts
 - A Topic Analysis of CCs
- 3 The Missing Modal Puzzle
 - Basic Facts
 - Proposing an Answer
- 4 In Favor of PI
 - Correlating IaDs. . .

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 - Evaluate existing and novel findings and recent proposals
 - Identify desiderata based on a (natural) family of constructions
 - Argue for a prosody-driven topic theory
 - Further motivation and questions

Conditional Conjunctions (CCs)

Clausal conjunctions (C1 *and* C2) can express conditionals

(Jespersen 1924, Bolinger 1967, Culicover 1970,
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Unlike ordinary conjunctions, (1) entails neither conjunct.

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- require particular 'integrated' prosody

C1 ends with phrase accent H, Pierrehumbert & Hirschberg 1990;

Krifka 2004, Keshet 2013

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≈ regular hypothetical conditional:

'If you sing one more song, I'm out of here.'

(NPaD: context dependent, Culicover 1970)

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Assertive commitment to **C2** only **conditional on** state of affairs mentioned in **C1**.

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Txurruka 2003, Starr 2017

(15) a. Just do the dishes, and I will do the shopping before the
 kids get back. ✓ *laD*, ✓ *regular conjunction*

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Conditional interpretation doesn't follow from syntactic messiness like \nexists Coordination-of-Likes (Chomsky 1957).

Aside: IaDs can maintain imperativity

e(ndorsing) IaDs vs. n(on endorsing) IaDs

(Clark 1993, Kaufmann 2012, von Stechow & Iatridou 2017)

- (16) Study hard and you'll pass the test.
incentive to study hard e-IaD
- (17) Goof off and you'll fail the test.
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 (or: *if failing doesn't matter - no incentive either way*)

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To show: e-IaDs are an inhomogeneous class

(Russell 2007, Kaufmann 2012, Scontras & Gibson 2011,
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- Analysis:
Speech act conjunction + modal subordination (SC IaDs).
(Russell 2007, Kaufmann 2012, Keshet & Medeiros 2018, Starr 2018)

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What kinds of conditionals are CCs?

- Generics:

- (21) a. Macy's advertises a sale, and the whole town goes crazy.
Bolinger (1967)
- b. Something happens in this town, and John knows about it.
Keshet 2013:(6)

CCs and (non-)epistemicity

(Bolinger 1967, Kaufmann 2012, Keshet 2013, ...)

(24) #John left work at six, and he {is, must be} home by now.

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Epistemic CCs improve (somewhat) in list environments [List Effect](#)

(✓ German equivalent; English: 4:y/2:better/2:n):

(25) A: Oh no, look, John forgot his phone. We can probably find out when he left the office, but I have no clue where he is now. - Do you think we can reach him somehow?
 B: Come on, it's not that hard, you know him! . . .
 He left around 5 and {he's, he must be} home by now; he left around 6 and he {still will be, must still be} exercising at the gym.

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- **Left-subordinating and**

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CCs are ordinary hypothetical conditionals derived from a special (Starr: left-topicalizing) variant of *and*:

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Two types of approaches: **preview of my choices**

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Issues for Restricting Quantificational Operator

- ✓ DaDs, IaDs: surface scope, non-directive

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- Q-adverbs: extracted from C2, rather than C1 as in regular conjunctions (Keshet 2013:225); embedding within C2, (32)

- (31) a. You come on time and you **usually** get a seat.
 ≈ **Usually**, you come on time, and you get a seat.
 b. She **probably** left and you just didn't notice. (his ii-a)
- (32) You come on time and you can be sure that you'll **always** get a seat.

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(33) SMaDs:

You **only have to** come on time and you will get a seat.

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FUT [**One more song** and I'm out of here.]

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MOD_{Imp} [(you) come on time and you'll **usually** get a seat.]

An issue for *LS-and*

- Hypothetical readings for 'C1. C2':

- (34)
- a. Stand up. I'll break your arm. I.D
 - b. You call the cops, I break her legs.
D.D, Klinedinst & Rotschild 2015:(21)
 - c. U drive. U text. U pay.
D.D.D, US Dept. of Transportation

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- At least in list contexts,
hypothetical readings for 'C1. *Then* C2.':

(35) a. Sing one more song, then I'm out of here. */%|*then*D

b. Say yes, then you have to pay. Say no, then he comes
again and again. ✓|*then*D

c. #Say yes, and then you have to pay. Say no, and then he
comes again and again. *|*and then*D

Desideratum for an analysis

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- Shared property **pending intonation** for X ('Conjunct 1')

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Proposal: Hypotheticality is driven by prosody.

- Limited role for *and*: ordinary clausal conjunction, constrains discourse relations, which in turn constrains resolution of anaphora (e.g. domain restrictions of modals).

(Asher 1993, Txurruka 2003, Stojnic 2016)

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- List Effect suggests: epistemic conditionals are possible in principle but, out of the blue, fail certain discourse requirements (imposed by coordinating relation? - Asher 1993: 'common discourse topic')

More on CCs and their quantificational domain

- Generic conditionals should look outside of the belief state:
(using a DaD from Keshet 2013:5a):

(37) A guy owns a Ferrari, and he's going to rack up a few speeding tickets. John's no exception to this.
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CC-'Antecedent' can, but need not, be a subset of epistemic possibilities.

Core idea of an analysis for CCs

- C1 sets an aboutness topic, C2 is interpreted with respect to that (Starr 2018)
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(Keshet & Medeiros 2018)

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Context $c = \langle \text{Speaker, Addressee, World, Time, PC, QUD, G} \rangle$,
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(building on Ggunlogson 2003, Farkas-Bruce 2009, Kaufmann 2012, Lauer 2013, ...)

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- (38) COMMIT(p) updates a context c by adding p to PC(Speaker) (the public commitments of the speaker).

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(COMMIT, REFERENT modeled after Ebert, Endriss, Hinterwimmer 2014, adding ranking for REFERENT)

Context update principles

- (FI) *Falling Intonation* A linguistic object that expresses a proposition p that is uttered with commitment marking is integrated into the context with $\text{COMMIT}(p)$.
In English, commitment is marked by final H* L-L%, Rudin 2018.

(modeled after Gunlogson 2003, Lauer 2013, Rudin 2018)

- (PI) *Pending Intonation* A linguistic object ϕ uttered with pending intonation is integrated into the context by $\text{REFERENT}_{\vec{X}}(\phi)$.
Tentatively, in German, Pending Intonation as L* H-.

Context update principles at work

Adjusted from Ebert, Endriss & Hinterwimmer 2014

German Left-Dislocated Topic:

- (40) [Den Pfarrer]_x, [den_x kann keiner leiden.]
 The-ACC pastor RP-ACC can nobody like
 'The pastor nobody likes.'
- (41) REFERENT_x(ιy pastor(y)) \wedge COMMIT(λw .nobody likes x in w)

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Regular hypothetical conditional:

(42) [If you study hard]_x, (then_x) you will pass the exam.

(43) $\text{REFERENT}_x(\lambda w. \text{Addressee studies hard in } w \wedge w \in \text{CS}) \wedge$
 $\text{COMMIT}(\lambda w. \forall w' \in X[\text{Addressee passes the exam } w'])$

Context update principles at work in CCs

DaD with future metaphysical *will*:

(44) [You study hard]_X [and you will_C pass the exam.]

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- Binding into C1: $\langle e, \langle s, t \rangle \rangle$ -topic to constrain QP-domain in C2

- 1 Introduction
 - Types of CCs
 - Side remarks on types of IaDs
 - Semantics of CCs

- 2 Analyzing CCs
 - Existing Accounts
 - A Topic Analysis of CCs

- 3 The Missing Modal Puzzle**
 - Basic Facts
 - Proposing an Answer

- 4 In Favor of PI
 - Correlating IaDs. . .

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- for IaDs and SMaDs, only part of the first conjunct

(49) (*OP_{Imp}*) *Sing one more song* and I'm out of here.

(50) *You only have to sing one more song* and I'm out of here.

Imperatives and sufficiency modals vs. other modals

- IaDs and SMaDs...

- (51) If you sing one more song, I'm out of here.
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Imperatives and sufficiency modals vs. other modals

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- a. (*OP_{Imp}*) *Sing one more song* and I'm out of here.
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- ... differ from regular modals in DaDs:

(Kaufmann 2012, von Stechow & Iatridou 2017, Starr 2018)

(52) #*You have to/should/must sing one more song* and I'm out of here.

≈ 'If *you have to/should/must sing one more song*, then I'm out of here.'

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The Missing Modal Puzzle (MMP)

- Imperatives, sufficiency modals: the modal meaning does not feed into the antecedent
- For all other modals, it does

Borrowing from *LS-and*

Klinedinst & Rothschild (2015) for DaDs

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 ≈ John must pay alimony. If **John does not pay alimony**, he will be arrested.

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- **Why can IaD CCs and SMaD CCs use a proper part of C1?**

Modifying the Idleness Constraint

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⇒ In CCs, 'regular' modals have to be part of the antecedent referent.

- *only have to* and OP_{Imp} contribute non-at-issue meaning (presuppositions) that render the modal layer not idle even if the modal quantification does not become part of the antecedent referent.

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(Kaufmann 2012, 2016)

- Imperatives contain a modal operator OP_{imp}
 - interpreted as a standard (necessity) modal (Kratzer 1991)
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 - R is considered *decisive* (‘guides choice’)

(Kaufmann & Kaufmann 2014, Kaufmann 2016)

CC IaDs in the Prosody-Driven Topic Theory

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- There is a **salient deontic, bouletic, or teleological modality** that guides the addressee's choice (\neq *the modal flavor of the conditional operator WILL/GEN/usually,...*) and that the speaker is knowledgeable about.

Evidence for active imperative meaning in IaDs

Keshet & Medeiros (2018): experimental evidence that DaDs are preferred over IaDs in CCs that do not contribute to choice of action:

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- Present Context:

- (54) *An exasperated parent is searching the cluttered attic for a mischievous child and shouts:*
- a. You're hiding from me again and you're in big trouble.
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- Future Context:

(55) *An exasperated parent wants a mischievous child to stop hiding before some visitors arrive. She exclaims:*

- a. You're hiding from me when grandma arrives and you'll be in big trouble.
- b. Be hiding from me when grandma arrives and you'll be in big trouble.

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- von Stechow & Iatridou (2007) observe that crosslinguistically *only have to* alternates with NEG MUST EXCEPTIVE (Greek, French, ...)

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- ‘easiness implicature when they appear in the SMC[onstruction], by picking out an element low on a scale—let us say, a scale of effort.’ (their p. 476)
- To work out: Diminishing effect counts as contribution of *only have to/not have to do more than*.

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- **Option 1:** (≈ Starr 2018)

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- **Option 2:**
 - They all introduce both referents, but these are ranked differently for salience, top-most referent selected in CCs.
- Tentatively: in favor of Option 2. . .

Referents for the entire family

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- Maybe even imperatives do (Kaufmann 2012)

(59) A: How do I get to Harlem?

B: Take the A-train.

A: *That*[\approx *that taking the A-train is a good option*]'s right.

- 1 Introduction
 - Types of CCs
 - Side remarks on types of IaDs
 - Semantics of CCs

- 2 Analyzing CCs
 - Existing Accounts
 - A Topic Analysis of CCs

- 3 The Missing Modal Puzzle
 - Basic Facts
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- 4 In Favor of PI
 - Correlating IaDs. . .

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Get up! COMMAND
- (61) A: Can I get up?
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- (62) Get up, don't get up - what do I care.
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- Some suppletive imperatives have to be commands (strong directives)

Correlations for IaDs?

- One-way correlation based on 'weakness' -?

(63) von Stechow & Iatridou's (2017:(86)):

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(See Appendix)
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- INDIFFERENCE and CCs share non-commitment intonation (German: end in high phrase accent; possibly same L* H-, Carline Féry, p.c.)
- Hypothesis: Strong directives need Pending Intonation to be ‘imperative-like’ (even for CC and INDIFFERENCE-purposes)

INDIFFERENCE ⇔ “I” aD?

(from von Fintel & Iatridou 2017, Oikonomou 2016; added: Germ., Serb., Slov., Alb.)

Types	COMMAND	ACQU.	INDIFF.	CC	Examples
Imperatives	✓	✓	✓	✓	Engl., Ger. imp; Slov. imp, <i>naj</i> -subj Hebr. imp, fut Greek imp
Strong dir.	✓	–	–	–	Ger. infinitivals, Hebr. infinitivals, Balkan <i>da</i> -clauses, Ger. <i>dass</i> ‘that’-clauses
Actual dir.	✓	✓	–	–	Greek <i>na</i> root subj. Pal. Arabic nega. imp. Bulg. root subj. Alb. root subj.
Opin. Imps	✓	✓	–	✓	Serb.: imp;
PAPA directives	✓	✓	–	✓	Ger. PAPA

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- Absence of connective or *then* allow for similar effects (–differences to be investigated)
- Pending Intonation suggest assimilating CCs to Indifference Sequences
- Open issues: tense/aspect, List Effect, Languages without CCs (Japanese *to*-conditionals seem to have the meaning of CCs), intonational patterns in CCs crosslinguistically, . . .

The End

Thank you!

German Participles

- (64) Jetzt aber! Aufgestanden!
 now but get.up.PAPA
 roughly: 'Hurry up, get up right away!' COMMAND
- (65) (*A and B are working together on something for which they normally sit. - A: My legs are falling asleep. Can I stand up for a moment?*)
 a. B: Klar, steh auf. Mich stört's nicht.
 sure, get.IMP up. Me.DAT disturb-it not
 'Sure, get up. I don't mind.'
 b. B': Klar, #aufgestanden. Mich stört's nicht.
 sure, get.up.PAPA Me.DAT disturb-it not
ACQUIESCENCE
- (66) Einmal nicht aufgepasst, und schon hat man eine
 one.time not be-attentive.PAPA and already has one an
 Eintragung ins Klassenbuch abkassiert!
 entry into class register gotten
 'Don't pay attention just one time and you've earned yourself an entry
 into the class register.' PAPAAaD

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