Topics in Conditional Conjunctions

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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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$\approx$ 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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  (15) a. Just do the dishes, and I will do the shopping before the kids get back. ✓ *IaD*, ✓ *regular conjunction*
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Conditional interpretation doesn't follow from syntactic messiness like ↯Coordination-of-Likes (Chomsky 1957).

Aside: IaDs can maintain imperativity

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

(Clark 1993, Kaufmann 2012, von Fintel & 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,
Keshet & Medeiros 2018, Starr 2018,. . .)

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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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C1 provides the restrictor for a quantificational operator within C2

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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(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)

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(33) Q-adverbs in IaDs:
MOD_{Imp} [(you) come on time and you'll usually get a seat.]

An issue for LS-*and*

- Hypothetical readings for '$\mathrm{C1}$. $\mathrm{C2}$':

(34) a. Stand up. I'll break your arm. I.D

b. You call the cops, I break her legs.
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- At least in list contexts, hypothetical readings for '$\mathrm{C1}$. *Then* $\mathrm{C2}$.':

(35) a. Sing one more song, then I'm out of here. */%I*then*D
b. Say yes, then you have to pay. Say no, then he comes again and again. ✓I*then*D
c. #Say yes, and then you have to pay. Say no, and then he comes again and again. *Ia*then*D

Desideratum for an analysis

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- 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)

Back to epistemic conditionals

CCs are infelicitous for epistemic conditionals (%: modulo lists)

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$\not\approx$ If John went to work in some way, he must have driven to work.

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- Existing LS-*and* theories: hypothetical update of belief state ($\Rightarrow$ amounts to epistemic conditional - overgenerates)
- 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.

a. If he were to own a Ferrari, he'd rack up a few speeding tickets.

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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)
  Similar to referential analyses of regular hypothetical conditionals (Schlenker 2003, Ebert, Endriss & Hinterwimmer 2014)

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- XaD contribute X-specific non-at-issue meaning
  (Keshet & Medeiros 2018)

Contexts

Context c = ⟨Speaker, Addressee, World, Time, PC, QUD,G⟩, where

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(building on Ggunlogson 2003,Farkas-Bruce 2009, Kaufmann 2012, Lauer 2013,. . .)

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a. storing in $X_1, \ldots, X_n$ what is made salient by ϕ, with $n \geq 1$ and $[\![\phi]\!]^c = X_m$ for some $1 \leq m \leq n$, and

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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 intergrated into the context with $\textsc{Commit}(p)$.

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 $\textsc{Referent}_{\vec{X}}(\phi)$.

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) $\textsc{Referent}_x(\iota y\ \text{pastor}(y)) \wedge \textsc{Commit}(\lambda w.\text{nobody likes } x \text{ in } w)$

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Regular hypothetical conditional:

(42) [If you study hard]$_X$, (then$_X$) you will pass the exam.

(43) $\textsc{Referent}_X(\lambda w.\text{Addressee studies hard in } w \wedge w \in \text{CS}) \wedge$
$\textsc{Commit}(\lambda w.\forall w' \in X[\text{Addressee passes the exam } w'])$

Context update principles at work in CCs

DaD with future metaphysical *will*:

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

CCs are semantically messy conjunctions

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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.

a. (OP_{Imp}) Sing one more song and 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 Fintel & 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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≈ 'If you have to/should/must sing one more song, then I'm out of here.'

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*

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- Disjunctions with related effects always endorse C1, ok to use only part of C1 as context of C2

(53) John must pay alimony, or he will be arrested.
$\approx$ John must pay alimony. If John does not pay alimony, he will be arrested.

Klinedinst & Rothschild 2015:(89)

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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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Modifying the Idleness Constraint

- If only part of C1 were used as the referent w.r.t. which C2 gets interpreted, the rest risks idling.

  $\Rightarrow$ 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.

Imperative semantics (Kaufmann 2012, 2016)

- Imperatives contain a modal operator OP_{imp}
  - interpreted as a standard (necessity) modal (Kratzer 1991)
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  - Speaker has perfect knowledge of what follows from R
  - QUD_c is of the form 'What will Addressee do?'
  - R is considered *decisive* ('guides choice')

(Kaufmann & Kaufmann 2014, Kaufmann 2016)

CC IaDs in the Prosody-Driven Topic Theory

Role for imperative C1 'OP_{imp} ϕ'

- $[\![\phi]\!]^c$ is stored as the topmost propositional referent X_1 ($\approx$ aboutness topic).

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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

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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.

SMaDs in the Prosody-Driven Topic Theory

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

(56) a. *you only have to p* ≈
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- To work out: Diminishing effect counts as contribution of *only have to/not have to do more than*.

Overgenerating for IaDs and SMaDs?

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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[≈*that taking the A-train is a good option*]'s right.

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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. INDIFFERENCE
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- Some suppletive imperatives have to be commands (strong directives)

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

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- Hypothesis: Strong directives need Commitment Intonation to be 'imperative-like' (incompatible with Pending Intonation needed 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, *naj*-subj Hebr. imp, fut Greek imp
Strong dir.	✓	–	–	–	Ger. infinitivals, Hebr. infinitivals, Balkan *da*-clauses, Ger. *dass*'that'-clauses
Actual dir.	✓	✓	–	–	Greek *na* 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.' PaPaaD

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