Aims

1. Compare the diachronic developments of conditional sollte and should.
2. Propose an account for their syntax and semantics.
3. Use this proposal to account for the diachronic development.

Background

- Conditionals can be classified according to the contiguity between protasis and apodosis into event-conditionals (6), premise-conditionals (7), and inferential conditionals (8).
- Semantic difference: degree of probability of protasis and apodosis depend on each other in event-conditionals, but are independent in premise and inferential conditionals.
- Syntactic difference: locus of adjunction of the protasis to the apodosis (Haegeman 2003).
(6) Event conditional
'If demand should level off and remain constant, net investment will fall to zero.'
(BNC:K92)

(7) Premise conditional
Should any further information be required then please contact the BMC office.
(BNC:CCP)

(8) Inferential conditional
Wenn das “Literarische” in Opulenz, Sinnlichkeit, Atmosphäre und Bildereichtum bestehen sollte, sind diese Texte nichts mehr als “unliterarisch”.
(R97/JUL.51677)
'If the ‘literary’ should consist of opulence, sensuality, atmosphere and rich imagery, then those texts are nothing but ‘unliterary’.

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Questions
Why?
How come?

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1. Background
2. Corpus study
3. The syntax of conditional *sollte/should*
4. The diachronic developments
5. Conclusion

**Corpus Study**

- MHG, ModG (until 1900) and present-day German – EME, MBE (until 1900) and PD(B)E
- only event conditionals – dependency between degrees of probability in protasis and apodosis (realis, hypothetical, counterfactual)
- tense mismatch = e.g. formally past tense modal (*should, sollte*) in protasis of realis conditional, or formally present tense modal (*shall, soll*) in protasis of hypothetical conditional (=irrelevance conditionals)

**The German developments**

- MHG (MHDBDB): 193 event conditionals 12.6% tense mismatches

<table>
<thead>
<tr>
<th>Tense</th>
<th>Mismatch</th>
<th>Realis</th>
<th>Hypothetical</th>
<th>Counterfactual</th>
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<tbody>
<tr>
<td>Pres</td>
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<tr>
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<td>Syndetic</td>
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<td>15</td>
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<tr>
<td></td>
<td>Asyndetic</td>
<td>0</td>
<td>0</td>
<td>14</td>
</tr>
</tbody>
</table>

(10) Dô sprach diu ellende: ‘wir solten waschen gân. (Kudrun, stanza 1197, l.1-4)
ez ensî, daz ez got wende, daz weter ist sô getân,
sul wir hiute waschen, vor âbendes stunden,
alsô barfüeze, wir werden gar lîhte tôte funden.’
‘Then said the miserable girl: ‘We were told to go wash. Unless God avert it, the weather is such that we will easily be found dead *should* we wash today before the evening, barefoot like this.’
The German developments

• (older) ModG (first 200 relevant clauses from hist. Archive of DeReKo): 54 event conditionals, 67.3% tense mismatches

<table>
<thead>
<tr>
<th>tense mismatch</th>
<th>realis</th>
<th>hypothetical</th>
</tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>pres asythetic</td>
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<td></td>
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<tr>
<td>past asythetic</td>
<td>11 0 2 6</td>
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</table>

• Present-Day German: (first 200 relevant clauses from ‘written’ archive of DeReKo): 133 event conditionals, 71.4% tense mismatches

• no more present tense conditional sollen, present → deontic

(13) **Sollten** wir tausend werden, stellen wir Forderungen. (A10/MAR.01716)

‘Should we become one thousand, we will make demands.’

(14) **Soll** das Vertrauen in die Finanzmärkte wieder hergestellt werden, müssen die Börsenaufsichter hart durchgreifen. (M02/JUN.48731)

‘If the trust in the financial markets is to be restored, the stock market supervisory authorities have to take drastic measures.’

⇝ It’s 100% mismatches in realis conditionals, where only past tense sollte(n) occurs with present tense apodoses due to the fact that present-tense sollen can no longer express ‘conditional’ modality!

<table>
<thead>
<tr>
<th>mismatch</th>
<th>realis</th>
<th>hypothetical</th>
</tr>
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<tbody>
<tr>
<td>pres (a)sythetic</td>
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<td></td>
</tr>
<tr>
<td>past asythetic</td>
<td>48 0 0 26</td>
<td></td>
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<tr>
<td>past sythetic</td>
<td>30 0 13 16</td>
<td></td>
</tr>
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</table>
Summary of the German developments

The English developments

- EME (PPCEME + PCEEC): 84 event conditionals, 25.4% tense mismatches, (15)

  - 'conditional' meaning of *shall* is almost exclusive in conditional clauses (1x deontic, 1x future; e.g. (16))
  - (older) MBE (PPCMBE): 88 event conditionals, 41% tense mismatches, (17)
  - *shall* in conditional clauses only has the 'conditional' meaning; no asyndetic clauses

(15) And lastly, if it should miscarry as it seldom doth it will be perceived by Midsummer (LANGF-E3-H,37.98)

(16) But if I should speake of those whiche already be dead, [...], I am very sure it is the farre greater parte of them that [...] thoughte in his case that waye that I thinck nowe. (ROPER-E1-H,95.123)
The English developments

- present-tense shall esp. in statutory texts, (18)

(17) and if the season should prove dry, it will be of great service to water them two or three times a week. (GRAFTING-1780,20.167)

(18) and if such Recruit shall declare his having voluntarily enlisted, the said Justice shall put to him the several Questions contained in the Schedule to this Act annexed (STATUTES-1835,75,9.77)

The English developments

- tense mismatches overall in event conditionals = 66.4%, but past tense should in realis conditionals: almost only mismatches (98.6%)!

<table>
<thead>
<tr>
<th></th>
<th>realis</th>
<th>hypothetical</th>
</tr>
</thead>
<tbody>
<tr>
<td>mismatch</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>pres syndetic</td>
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<td>30</td>
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<tr>
<td>past asyndetic</td>
<td>43</td>
<td>0</td>
</tr>
<tr>
<td>past syndetic</td>
<td>25</td>
<td>1</td>
</tr>
</tbody>
</table>

Summary of the English developments
Comparing diachronies

- changes in both German and English:
  1. deontic uses in conditionals become restricted (German: only with present tense sollen, English: lost in conditionals)
  2. present tense with 'conditional' meaning is lost in German, and 'conditional' shall has become virtually completely restricted to a very specific genre, statutory prose
  3. as a result, there is a diachronic increase in tense mismatches between protasis and apodosis in event conditionals, where the sequence of tenses normally expresses the degree of probability (realis, hypothetical or counterfactual)

Where we are

- in present-day German and present-day British English, formally past tense sollte/should occurs most frequently in protases of realis (event) conditionals.
  1. How did that happen?
  2. Why?
- in order to account for the rise of the tense mismatch, we first need to understand the syntax of conditional sollte/should today

Outline

1. Background
2. Corpus study
3. The syntax of conditional sollte/should
4. The diachronic developments
5. Conclusion
The syntax of conditional *sollte*/*should*  

Observations:

1. conditional *sollte*/*should* don’t express circumstantial/deontic modality in conditionals, though they can do in other clause types:

   (23) You *should* go to bed now  
       = 'It would be preferable if you went to bed now' / 'I order you to go to bed now'

   (24) *Should* we call a doctor?  
       = 'Do the circumstances require that we call a doctor?'

   (25) If you *should* go to bed now ...  
       ≠ 'If it were preferable for you to go to bed now...'  
       ≠ 'If the circumstances require that you go to bed now...'  
       = 'In case you go to bed now'

2. conditional *sollte*/*should* don’t express epistemic modality in conditionals, though they can do in other clause types:

   (26) John *should* be at home by now, unless the train was delayed again.

   (27) If John *should* be at home right now, #the train was on time / you could visit him.

   (28) Paul *sollte* inzwischen zu Hause sein, wenn nichts dazwischen gekommen ist.  
       'Paul should be home by now, if nothing kept him.'

   (29) *Sollte* Paul inzwischen zu Hause sein, #war der Zug pünktlich / kannst du ihn besuchen.  
       'Should Paul be home by now, the train was on time / you can visit him.'

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Observations

- epistemics are generally out in conditionals, cf. Leirbukt 1997, Haegeman 2010
- epistemic *should/sollte* assert that the proposition expressed is true in the most plausible epistemically accessible world, but that a more informative epistemic state is possible (Copley 2006: 10).
- conditional *should/sollte* make no such assertion. They make no reference to epistemic states (of the speaker) at all, but to states of the world

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Modals: syntax and semantics

- modal meanings outscope each other (epistemic > obligation > ability); cf. German:  
  Der Kandidat muss <span class="highlight" style="color:##333333">epist</span> Auto fahren können <span class="highlight" style="color:##333333">abil</span> müssen <span class="highlight" style="color:##333333">oblig</span>.  
  'It is a necessary assumption that the candidate must be able to drive.'
- compositionality: scope = hierarchy  
  ⇝ Cinque (1999): hierarchy of functional heads incl. modal heads  
  (Mod<sub>epist</sub> > Tense > Mood<sub>irrealis</sub>Mood<sub>irrealis</sub> > Mod<sub>vol</sub> > Mod<sub>vol</sub>)
Modals (in conditionals)

- Mood\_irrealis is also the ‘launching site’ of the conditional operator (Haegeman 2010) which moves to the left periphery in conditional clauses (Bhatt/Pancheva 2006)

(30) \[
\text{[CP OP } C \text{ [TP [Mood\_irrealisP tW \{Mood\_irrealis' (moest) \ldots \}] }}
\]
\text{Move}
\]
\text{(after Haegeman 2010: 608-609)}

Conditional/subjunctive

- structural similarity to subjunctives:
- Kempchinsky (2009): uninterpretable World-feature in the left periphery (selected) is licensed via Agree by the subjunctive morphology on the verb

(34) \[
V \ldots \{\text{ForceP Force}\_uW \text{ [FinP [Fin}\_uW \text{ OP] ... [MoodP [V+T+M}\_W \text{ [TP} \ldots \}]]} \]
\]
\text{selection checking/Agree}
\]
\text{(Kempchinsky 2009: 1800)}

Proposal: merging Kempchinsky & Haegeman

- both Fin and Force bear Kempchinsky’s \{uW\} in conditionals, though not selected by higher verb (\neq subjunctive clauses)
- following Haegeman: *should/sollte* merge in Mood\_irrealis, with \{W\} (~ Kempchinsky), check \{uW\} in the left periphery by agreeing with or moving to Fin
- in asyndetic conditionals, *should/sollte* can move on from Fin to Force, otherwise \{uW\} in Force is licensed via Agree/the conditional OP\_W

(35) \[
\{\text{ForceP [ Force}\_uW \text{ [FinP [Fin}\_uW \text{ OP] [TP [Mood\_irrealisP (should}\_uW\text{)]} \ldots \}]]}\}
\]
\text{Agree/Move}

One more observation

- the ‘conditional’ meaning is similar to the ‘subjunctive’ (31), ‘putative’ (32) (cf. also Leech 1971:111; Nieuwint 1989), and also the ‘potential’ meaning in (33)

(31) In 1937, [Baden-Powell] told the Scouts’ international commissioner that the Nazis were “most anxious that the Scouts *should* come into closer touch with the youth movement in Germany.” (http://tinyurl.com/co8kttl)

(32) It’s surprising that she *should* be so late (Bybee 1998: 268)

(33) *Sollte* sie wirklich krank sein? (Diewald 1999: 202, n.32) ‘Could she really/actually be ill?’
Proposal

• perhaps problematically, this means that German FinP is right-headed, in order to get the word order in syndetic conditional clauses right:

(36) Wenn die Fluglotsen streiken sollten, geht am deutschen Himmel praktisch nichts mehr. (M07/JAN.00521)
‘If the air traffic controllers should strike, nothing will move any longer in the German skies.’

(37) [ForceP [ Force wenn_1W] [ FinP [ [ TP [ Mood_1realisP (sollen_1W)] ] ] ] ]
  Agree/Move

Where we are

• With this analysis of the syntax of ‘modal’ conditionals, how can we account for the increase in tense mismatches?
• Claim: the rise of tense mismatches is the result of changes in the syntax of should / sollte.

Outline

1 Background
2 Corpus study
3 The syntax of conditional sollte/should
4 The diachronic developments
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The diachronic development

Claim:
• the diachronic rise in present tense apodoses with formally past tense conditional modals sollte/should in the protasis can (partly) be understood in terms of an ongoing upwards reanalysis of conditional sollte/should from Mood_1realis (below T) to Fin (above T) (cf. Roberts and Roussou 2003; Roberts 2010, 2012)
  more grammaticalised = higher in hierarchical structure
• 98-100% tense mismatches in realis conditionals point to sollte/should becoming pure conditional markers
Upwards reanalysis

- Roberts and Roussou’s (2003) syntactic approach to grammaticalisation + more fine-grained clause structure (e.g. Cinque 1999)
  - general pattern of grammaticalisation = ‘upwards reanalysis’ with loss of syntactic movement (Roberts and Roussou 2003)
  - upwards reanalysis as structural simplification, measured in the number of formal feature syncretisms
  - a moving element is merged with two features, one allowing it to merge in the lower position and one triggering it to move to the higher position, after reanalysis, that’s reduced to one (multiple) lexical splits (Roberts and Roussou 2003: 36)

Reanalysis of should/sollte

original stage: the modal licenses [uW] in the left periphery via Agree or Move

\[
\text{[ForceP \ [ Force_{uW} \ [ Fin_{uW} \ [ TP \ [ Mood_{irrealisP} (should_{uW}) \ldots ]]]]]} \]

Agree Agree/Move

→ interpretation above Tense ⇝ tense mismatches

Grammaticalisation of should/sollte

- Question of how ‘conditional’ should/sollte (in Mood_{irrealis}) arose (already most frequent in MHG/(E)ME)
  - Roberts (2010, 2012) for must: upwards reanalysis through Cinque’s hierarchy, polysemy = multiple lexical splits
    \(T_{future} = \) separate lexical split from Mod_{root}
  → input = (hypothetical) possibility, cf. ME (40) (also Nieuwint 1989: ‘theoretical possibility’)

  (lexical ‘owe’ →) Mod_{root} → Mod_{poss} → Mood_{irrealis}

→ input = (hypothetical) possibility, cf. ME (40) (also Nieuwint 1989: ‘theoretical possibility’)

(40) Hu sulde oninan [read: on man]. .. so manige sunes bigeten?
  ‘How could one man (possibly) beget so many sons?’
  (Gen.& Ex. [Corp-C 444] 2179; a1325[c1250])

(33) Sollte sie wirklich krank sein?
  ‘Could she really/actually be ill?’
should/sollte originate in Mood\textsubscript{irrealis}, like the OP\textsubscript{W} in conditionals (cf. Haegeman 2010 for Flemish moest); their \textsubscript{[IW]} feature licenses the \textsubscript{[uW]} features on Fin and Force in the CP (cf. Kempchinsky’s 2009 treatment of subjunctives), either via Agree or via Move

increasing tense mismatches = increasing loss of Move (\textsubscript{Fin} > \textsubscript{T})

reconstruction: should = ‘owe’ → Mod\textsubscript{root} → Mod\textsubscript{poss} → Mood\textsubscript{irrealis}

open questions: e.g. (a) loss of counterfactuals (possible in Flemish: moest ik dat geweten hebben...), (b) victory over ‘may’, ...

... Should you have any questions, you can ask them now.

Thank you!

grant FWO12/PDO/014

Sources

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[PPCMBE]: (1700-1914)
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[PPCMCE2]: (1150-1420)
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