



# 'Conditional' sollte and should

Anne Breitbarth Ghent University

CGSW 29 York 2014







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





#### 'Conditional' modals in West Germanic

- (1) But it shows the immediate chaos that could be triggered if Greece should leave the eurozone. (http://tinyurl.com/7gcb6a8)
- (2) Sollte Griechenland den Euro verlassen, könnte dies zu einem Zusammenbruch der Währungsgemeinschaft führen.
   'Should Greece leave the Euro, this could lead to a break-up of the monetary union.' (http://tinyurl.com/p268csp)
- (3) Mocht hij verdwijnen, zo ziet hij d'r uit. (http://tinyurl.com/nvhfbnz) 'Should it disappear, this is what it looks like.'
- (4) Moest het regenen, dan komen we niet. (http://tinyurl.com/l7c5qgj) 'Should it rain, we won't come.'
- (5) Sou u hulp nodig he, skakel my gerus. (László Molnárfi, p.c.) 'Should you need help, feel free to call'

2/49





## 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 eachother in event-conditionals, but are independent in premise and inferential conditionals
  - syntactic difference: locus of adjunction of the protasis to the apodosis (Haegeman 2003)









### Background

- semantic difference: degree of probability of protasis and apodosis depend on eachother in event-conditionals, but are independent in premise and inferential conditionals
- syntactic difference: locus of adjunction of the protasis to the apodosis (Haegeman 2003)
- because of the dependency of the degrees of probability, there is typically a sequence of tenses between protasis and apodosis:

	protasis	apodosis
realis	present	present / future
hypothetical	past subjn.	past subjn.
counterfactual	past perfect subjn.	past perfect subjn.

6/49

### Background

- (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
  Bilderreichtum 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'.'







### Questions

- Background
- this is different in sollte-/should-conditionals: in present-day German and present-day British English, formally past tense sollte/should occurs most frequently in protases of realis (event) conditionals
- despite not normally expressing tense anymore (certainly in English), other modals do still observe the sequence of tenses in conditionals (9)
- (9) a. If I could help him, I would do it./\*If I could help him, I will do it.
  - b. If I can help him, I will do it./\*If I can help him, I would do it.

- Why?
- How come?









#### Outline

- Background
- 2 Corpus study
- 3 The syntax of conditional sollte/should
- The diachronic developments
- 6 Conclusion

9/49

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)

10/49





### The German developments

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

		realis		hypothetical		counterfactual	
tense	mismatch	-	+	-	+	-	+
pres	syndetic	0	39	3	2	1	1
	asyndetic	0	4	0	0	0	0
past	syndetic	3	7	15	96	0	8
	asyndetic	0	0	0	14	0	0





### The German developments

- present tense form can be used with conditional meaning
- Dô sprach diu ellende: "wir solten waschen gân. (Kudrun, stanza 1197, (10)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'."

11/49 12/49



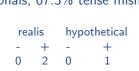




### The German developments

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

		realis		hyp	hypothetical		
tense	mismatch	-	+	-	+		
pres	syndetic	0	2	0	1		
	asyndetic	0	0	0	0		
past	syndetic	22	1	0	10		
	asyndetic	11	0	2	6		



13/49





### The German developments

- present tense *soll(en)* is virtually exclusively used as deontic (12)
- sollte er der an ihn ergehenden Aufforderung nicht freiwillig Genüge leisten, so ist derselbe zwangsweise über die Grenze zu bringen. (mew/WAE.03398)

'Should he not follow the instruction given to him voluntarily, he is to be brought across the border using force.'

(12)Wenn ich nicht wahnsinnig werden soll, so berühre mich nicht! (HK3/E32.00001) 'If I am not to go crazy, don't touch me!'

14/49





### The German developments

- 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  $\rightarrow$  deontic
- (13)Sollten wir tausend werden, stellen wir Forderungen. (A10/MAR.01716) 'Should we become one thousand, we will make demands."
- Soll das Vertrauen in die Finanzmärkte wieder hergestellt werden, (14)müssen die Börsenaufseher 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.





### The German developments

→ 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!

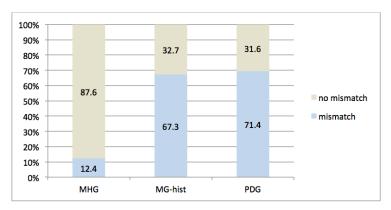
> hypothetical mismatch (a)syndetic 0 asyndetic 0 26 30 0 13 16 syndetic

15/49 16/49









17/49





### The English developments

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

		realis		hypothetical		counterfactua	
tense	mismatch	-	+	-	+	-	+
pres	syndetic	0	19	1	1	0	0
past	syndetic	13	0	2	37	0	1
	asyndetic	1	0	0	9	0	0

18/49





### The English developments

- 'conditional' meaning of *shall* is almost exclusive in conditional clauses (1x deontic, 1x future; e.g. (16))
- (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

- (older) MBE (PPCMBE): 88 event conditionals, 41% tense mismatches, (17)
- *shall* in conditional clauses only has the 'conditional' meaning; no asyndetic clauses

		realis		hypothetical		counterfactual	
tense	mismatch	-	+	-	+	-	+
pres	syndetic	0	49	0	0	0	0
past	syndetic	16	0	0	20	0	3





### 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)

21/49





### The English developments

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

		rea	alis	hyp	hypothetical		
	mismatch	+	_	+	_		
pres	syndetic	0	30	0	1		
past	asyndetic	43	0	1	23		
	syndetic	25	1	2	12		





### The English developments

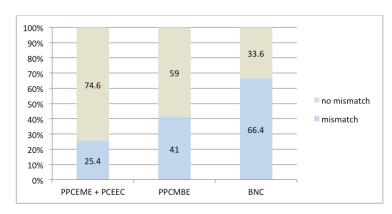
- present-day British English (40 *if..shall*, 100 *if..should*, 100 *should*. from BNC): 138 event conditionals, 66.4% tense mismatches
- *shall* in conditional clauses virtually only 'conditional' (one possible future (20))
- 19) If the Buyer shall fail to pay for any delivery in accordance with the terms of this contract, the Seller shall be entitled to withhold future deliveries until such payment is made (BNC: J7C)
- (20) If I can't have her, he thought, I'm damned if he shall, either. (BNC: EWH)

22/49





### Summary of the English developments



23/49 24/49







- changes in both German and English:
  - 1 deontic uses in conditionals become restricted (German: only with present tense *sollen*, English: lost in conditionals)
  - 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, hypthetical or counterfactual)

25/49





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.
  - 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





### **Comparing diachronies**

- further development in both languages: originally competition between two modals with a 'conditional' meaning; mügen (MHG) and mouen (ME)
  - MHG: 37.3% mügen (173), 62.7% suln (291)
  - ME: 57.1% mouen (8), 42.9% shulen (6)
  - EME: 5.1% may (6), 94.9% shall (112)
- in both languages: 'shall' modal won out as the 'conditional' modal
- (21) möhten aber wir in gewinnen, dû müestest uns bringen innen (Daniel von dem blühenden Tal 7087-7088, 13th c.)
  'should we win it, however, you would have to take us inside'
- (22) and migtest dou lacke synne, den schuldest dou haue God. (CMCLOUD,79.370)

26/49





**Outline** 

- Background
- 2 Corpus study
- 3 The syntax of conditional sollte/should
- 4 The diachronic developments
- 6 Conclusion

27/49 28/49





### 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'
- Should we call a doctor? (24)= '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...' \neq 'If the circumstances require that you go to bed now...' = 'In case you go to bed now'

29/49





#### 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





#### **Observations**

- (2) conditional sollte/should don't express epistimic 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.'
- 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.' 30/49





### Modals: syntax and semantics

 modal meanings outscope each other (epistemic > obligation > ability); cf. German:

Der Kandidat mussenst Auto fahren könnenabil müssensblig

'It is a necessary assumption that the candidate must be able to drive.'

- compositionality: scope = hierarchy
- $(Mod_{epist} > Tense > Mood_{irrealis} Mood_{irrealis} > Mod_{nec/poss} >$  $Mod_{vol} > Mod_{root}$ )

31/49 32/49





### Modals (in conditionals)

- Haegeman (2010): the (dialectal) Dutch equivalents of should, mocht/moest, originate in Cinque's (1999) Mood<sub>irrealis</sub>
- Mood<sub>irrealis</sub> is also the 'launching site' of the conditional operator (Haegeman 2010) which moves to the left periphery in conditional clauses (Bhatt/Pancheva 2006)

(30) 
$$[CP OP_W C [TP [MoodirrealisP t_W [Moodirrealis' (moest) ...]]]]]$$

Move

(after Haegeman 2010: 608-609)

33/49

35/49



### 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) 
$$V_W...$$
 [Force Force Force Fine [Fine [Fine [Fine [W]]]]] [Fine [Fine [W]]] OP] ... [MoodP [V+T+M $_W$ ] [TP...]]]] selection checking/Agree (Kempchinsky 2009: 1800)





#### One more observation

- (3) 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?
  'Could she really/actually be ill?'

(Diewald 1999: 202, n.32)

34/49

36/49





### Proposal: merging Kempchinsky & Haegeman

- both Fin and Force bear Kempchinsky's [uW] in conditionals, though not selected by higher verb (≠ subjunctive clauses)
- following Haegeman: should/sollte merge in Mood<sub>irrealis</sub>, with [iW] (~ 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<sub>W</sub>
- [35] [ForceP [ Force<sub>[uW]</sub> [Fin<sub>P</sub> [ Fin<sub>[uW]</sub> [TP [MoodirrealisP (should<sub>[iW]</sub>)... ]]]]]]]

  Agree/Move

6 14









### **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.'

37/49

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*.

38/49







### The diachronic development

### Outline

- Background
- 2 Corpus study
- 3 The syntax of conditional sollte/should
- 4 The diachronic developments
- 6 Conclusion

#### 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<sub>irrealis</sub> (below T) to Fin (above T) (cf. Roberts and Roussou 2003; Roberts 2010, 2012)
- ightharpoonup more grammaticalised = higher in hierarchical structure
- 98-100% tense mismatches in realis conditionals point to sollte/should becoming pure conditional markers

39/49 40/49







- 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)

41/49



### Reanalysis of should/sollte

- original stage: the modal licenses [uW] in the left periphery via Agree or Move
- (38) [Force [ Force [uW] [FinP [ Fin[uW] [TP [MoodirrealisP (should [iW]) ... ]]]]]]]]

  Agree Agree/Move
  - ullet upwards reanalysis: loss of movement to Fin o direct Merge
- ightarrow interpretation above Tense ightsquigarrow tense mismatches

42/49





### Grammaticalisation of should/sollte

- Question of how 'conditional' should/sollte (in Mood<sub>irrealis</sub>) arose (already most frequent in MHG/(E)ME)
- Roberts (2010, 2012) for *must*: upwards reanalysis through Cinque's hierarchy, polysemy = multiple lexical splits

 $(\mathsf{T}_{\mathsf{future}} = \mathsf{separate} \; \mathsf{lexical} \; \mathsf{split} \; \mathsf{from} \; \mathsf{Mod}_{\mathsf{root}})$ 

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

 $(\mathsf{lexical} \; \mathsf{'owe'} \; \rightarrow) \; \mathsf{Mod}_{\mathsf{root}} \; \rightarrow \; \mathsf{Mod}_{\mathsf{poss}} \; \rightarrow \; \mathsf{Mood}_{\mathsf{irrealis}}$ 





### Grammaticalisation of should/sollte

- $\rightarrow$  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? (Diewald 1999: 202, n.32) 'Could she really/actually be ill?'









Outline

- Background
- 2 The diachronic developments
- 3 The syntax of conditional sollte/should
- 4 Accounting for the diachronic development
- 6 Conclusion

45/49



- $\bullet$  should/sollte originate in Mood<sub>irrealis</sub>, like the OP<sub>W</sub> in conditionals (cf. Haegeman 2010 for Flemish moest); their [iW] feature licenses the [uW] features on Fin and Force in the CP (cf. Kempchinsky's 2009 treatment of subjunctives), either via Agree or via Move
- 2 increasing tense mismatches = increasing loss of Move (Fin>T)
- 3 reconstruction:  $should = \text{'owe'} \rightarrow \text{Mod}_{root} \rightarrow \text{Mod}_{poss} \rightarrow$ Moodirrealis

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

46/49







Thank you!



grant FWO12/PDO/014





#### Sources

[BNC]; (1980s-1993)

The British National Corpus, version 3 (BNC XML Edition). 2007. Distributed by Oxford University Computing Services on behalf of the BNC Consortium. http://www.natcorp.ox.ac.uk/ [Searched with the web interface of Brigham Young University: http://corpus.byu.edu/bnc/] [DeReKo]; 1750-now

Deutsches Referenzkorpus (German reference corpus). http://www1.ids-mannheim.de/kl/projekte/korpora/ [Searched with http://www.ids-mannheim.de/cosmas2/]

[MED]; (1100-1500)

Middle English Dictionary, online version. http://quod.lib.umich.edu/m/med/

[MHGBDB]; (1150-1450)

Mittelhochdeutsche Begriffsdatenbank (MHG conceptual database).

http://mhdbdb.sbg.ac.at/index.en.html

[PCEEC]; (ca. 1410-1681)

Parsed Corpus of Early English Correspondence, parsed version. 2006. Annotated by Ann Taylor, Arja Nurmi, Anthony Warner, Susan Pintzuk & Terttu Nevalainen. Compiled by the CEEC Project Team. York: University of York & Helsinki: University of Helsinki. Distributed through the Oxford Text Archive. http://www-users.york.ac.uk/ lang22/PCEEC-manual/

[PPCEME]; (1500-1710)

Kroch, Anthony, Beatrice Santorini & Ariel Diertani. 2004. Penn-Helsinki Parsed Corpus of Early Modern English. http://www.ling.upenn.edu/hist-corpora/PPCEME-RELEASE-2/index.html [PPCMBEl: (1700-1914)

Kroch, Anthony, Beatrice Santorini & Ariel Diertani. 2010. Penn Parsed Corpus of Modern British English. http://www.ling.upenn.edu/hist-corpora/PPCMBE-RELEASE-1/index.html [PPCME2]; (1150-1420)

Kroch, Anthony & Ann Taylor. 2000. Penn-Helsinki Parsed Corpus of Middle English, second edition. 48/49 http://www.ling.upenn.edu/histcorpora/PPCME2-RELEASE-3/index.html





### References

- Bhatt, Rajesh & Roumyana Pancheva. 2006. Conditionals. In Martin Everaert & Henk van Riemsdijk (eds.), The Blackwell companion to syntax, vol. 1, 638-687. Oxford: Blackwell.
- Cinque, Guglielmo. 1999. Adverbs and functional heads. Oxford: Oxford University Press.
- Copley, Bridget . 2006. What should mean? Ms., CNRS, Université Paris VIII.
- http://copley.free.fr/copley.should.pdf (accessed 13 January 2014).
- Haegeman, Liliane. 2010. The movement derivation of conditional clauses. Linguistic Inquiry 41. 595-621.
- Kempchinsky, Paula. 2009. What can the subjunctive disjoint reference effect tell us about the subjunctive? Lingua 119: 1788-1810.
- Leech, Geoffrey. 1971. Meaning and the English verb. London: Longman.
- Leirbukt, Oddleif. 1997. Dimensions of epistemicity in English, German and Norwegian conditionals. In Toril Swan & Olaf Jansen Westvik (eds.), Modality in Germanic languages: Historical and comparative perspectives, 49-74. Berlin & New York: Mouton de Gruyter.
- Nieuwint, Pieter. 1989. Should in conditional protases. Linguistics 27: 305-318.
- Roberts, Ian. 2010. Grammaticalization, the clausal hierarchy and semantic bleaching. In Elizabeth Traugott & Graeme Trousdale (eds.), *Gradience, gradualness, and grammaticalization*, 45-73. Amsterdam & Philadelphia: John Benjamins.
- Roberts, Ian. 2012. Diachrony and cartography: Paths of grammaticalization and the clausal hierarchy. In Laura Brugé, Anna Cardinaletti, Giuliana Giusti, Nicola Munaro & Cecilia Poletto (eds.), Functional heads. The cartography of syntactic structures, vol. 7, 351-367. Oxford: Oxford University Press.
- Roberts, Ian & Anna Roussou. 2003. Syntactic change. A minimalist approach to grammaticalization. Cambridge: Cambridge University Press.