

Two grammars, one speaker: the case of Low German verbal clusters

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**small languages
big ideas**

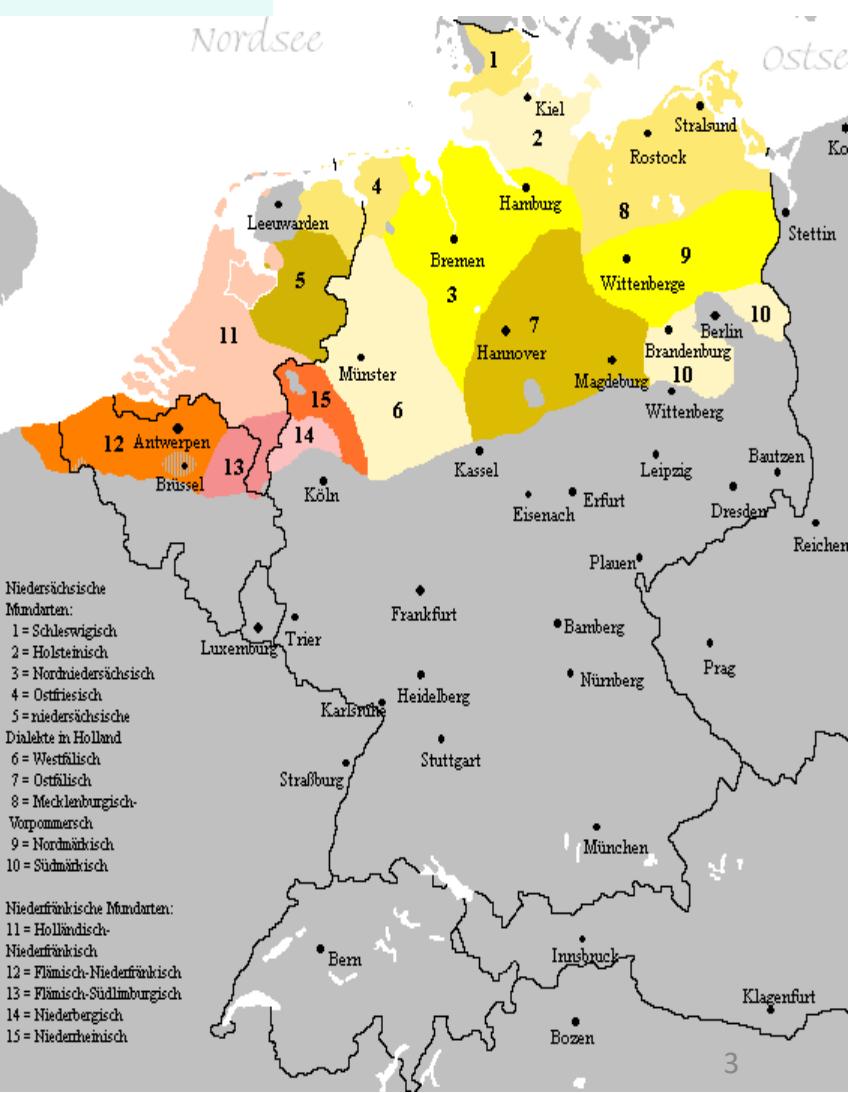
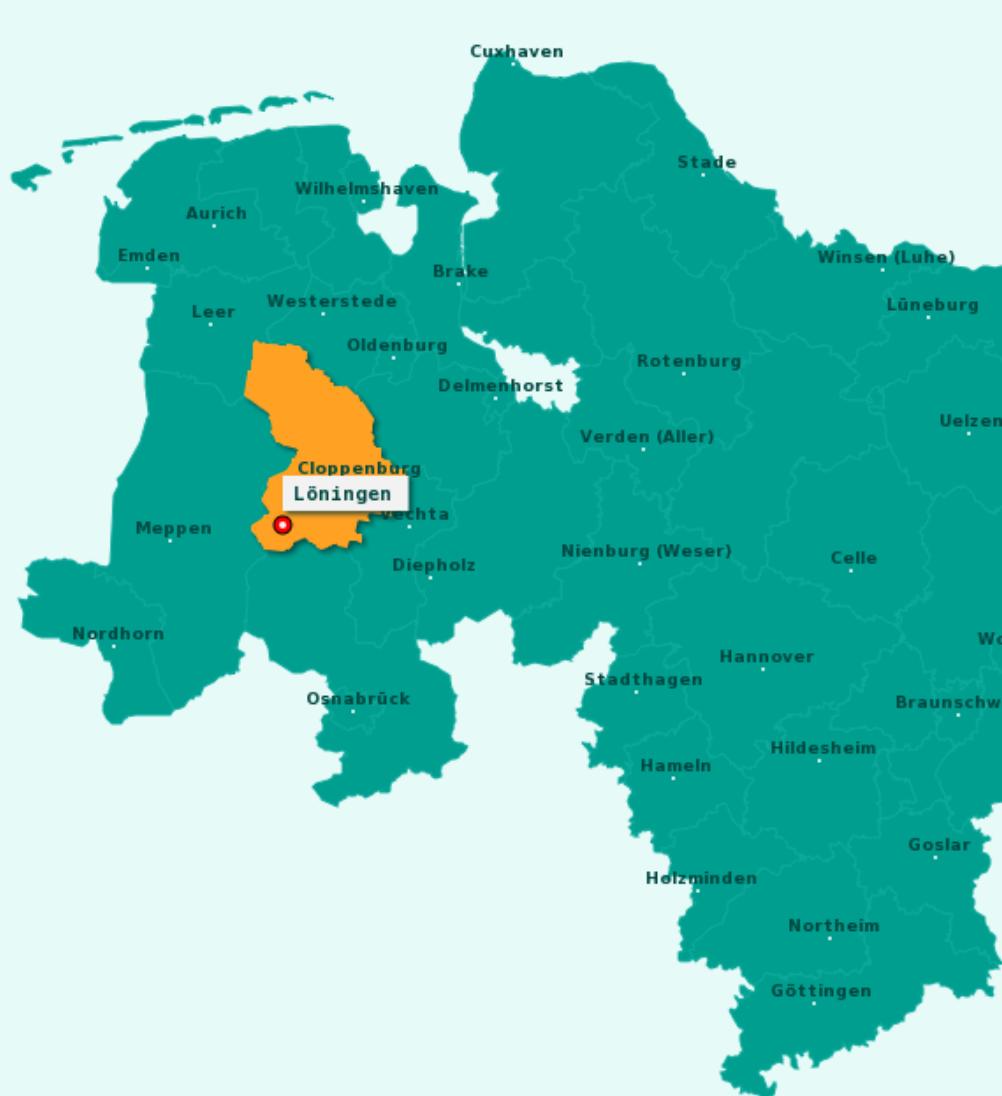
the smaller Germanic languages from a theoretical, general and comparative perspective

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Background

- West-Germanic: verbs cluster in clause-final position:
 1. ... dass Markus ein Buch *gelesen₂* *hat₁*
 2. ... dass Markus ein Buch *hat₁* *lesen₃* *müssen₂*
- Considerable variation in how verbs cluster in West-Germanic.
- What is the acceptability of various orders in Low vs. High German?





Constructions

- 2 verb clusters:
 - Auxiliary + V(participle)
 - Modal + V(infinitive)
- 3 verb clusters
 - Auxiliary – Modal(infinitive/participle) – V(infinitive)
- Modals in perfective constructions show up as infinitives, not as participles (Wurmbrand, 2017) -> Infinitivus Pro Participio



The Infinitivus Pro Participio effect

- IPP effect only in languages with circumfixal participles (*ge-V-en*) (Zwart, 2007).
- IPP effect more likely to be absent in languages with rigid Verb₃-Mod₂-Aux₁ order (e.g. Frisian) (Wurmbrand, 2017).
- Low German lacks ge-prefix. Prediction: no IPP, Verb₃-Mod₂-Aux₁ order.



2-verb clusters ‘standard’ varieties

Language	Clusters with auxiliaries	Clusters with modals
German	... dass M. ein Buch gelesen ₂ hat ₁	... dass M. ein Buch lesen ₂ muss ₁
Frisian	... dat M. in boek lêzen ₂ hat ₁	... dat M. in boek lêzen ₂ moat ₁
Afrikaans	... dat M. een boek gelees ₂ het ₁	... dat M. een boek moet ₁ gelees ₂
Dutch	... dat M. een boek gelezen ₂ heeft ₁ ... dat M. een boek heeft ₁ gelezen ₂	... dat M. een boek lezen ₂ moet ₁ ... dat M. een boek moet ₁ lezen ₂

Wurmbrand (2017):

- Clusters with auxiliaries: 2-1 order always possible, 1-2 orders always optional.
- If 1-2 order is possible with auxiliaries, it is also possible with modals, but not the other way round.

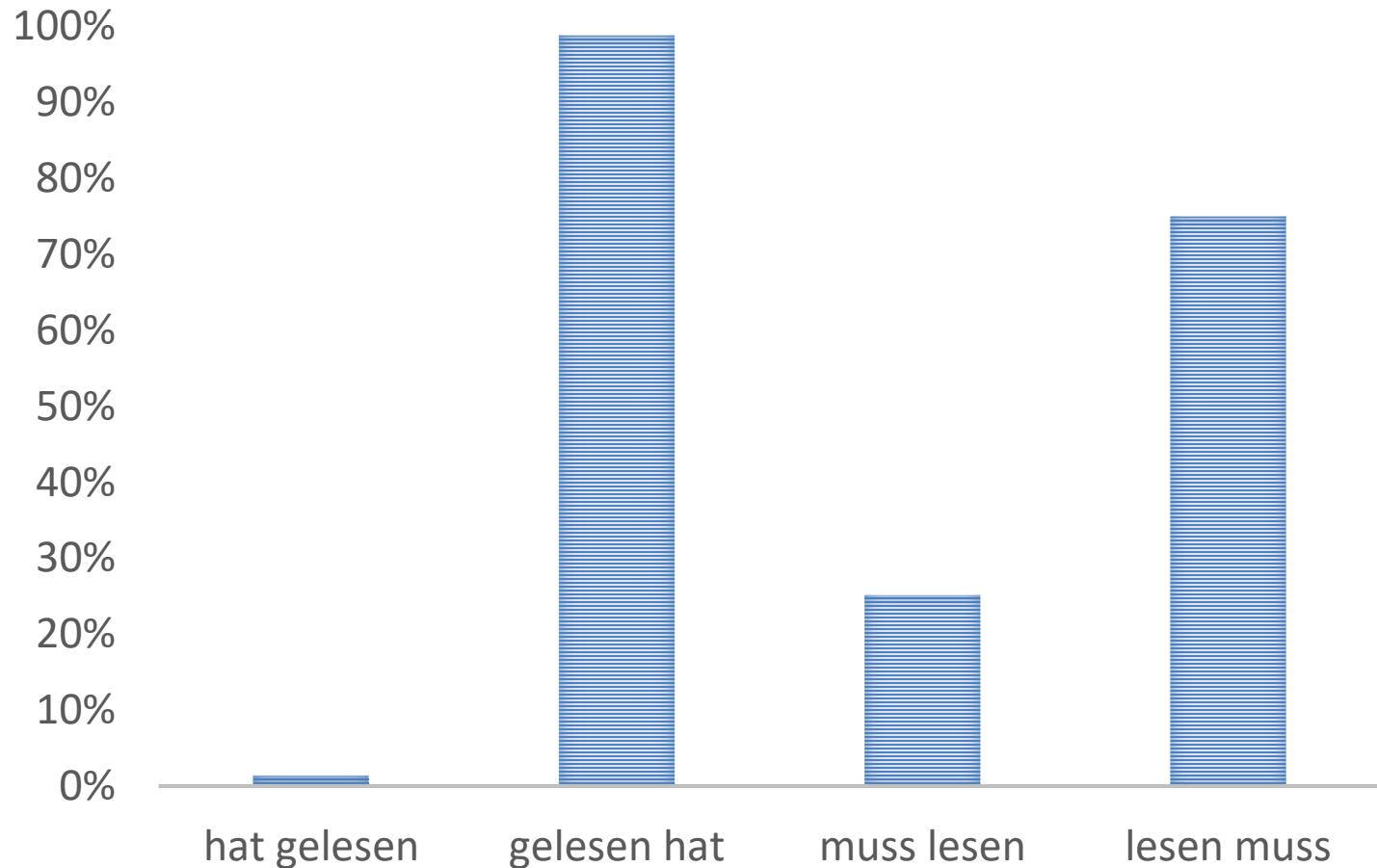


3-verb clusters ‘standard’ varieties

Language	Example
Dutch	... dat M. een boek heeft ₁ moeten ₂ lezen ₃
Frisian	... dat M. in boek lêzen ₃ moat ₂ hat ₁
German	... dass M. ein Buch hat ₁ lesen ₃ müssen ₂
Afrikaans	... dat M. een boek moet ₂ gelees ₃ het ₁

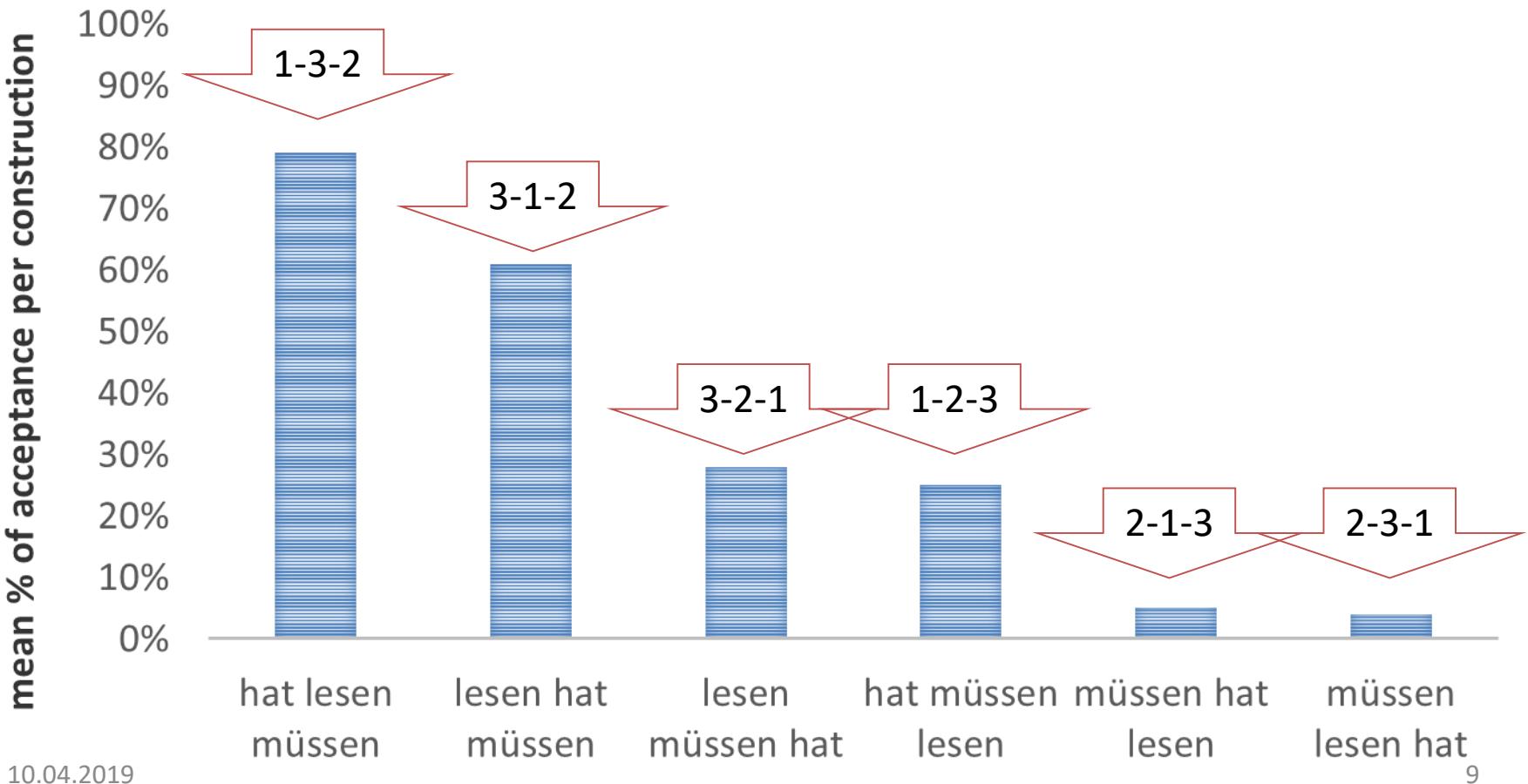


Previous empirical research on German 2-verb clusters (Dubenion-Smith, 2010)





Previous empirical research on German 3-verb clusters (Bader & Schmid, 2009)



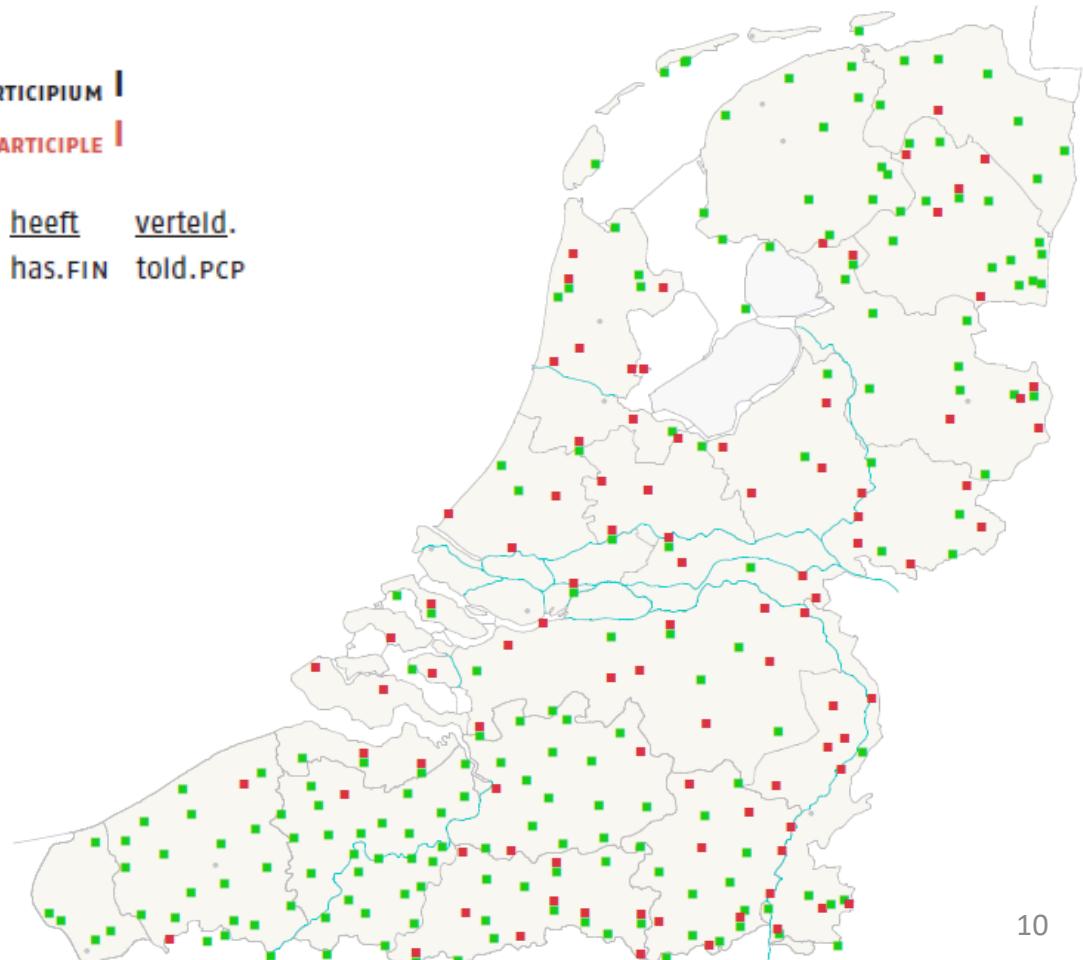


Previous empirical research: Dutch 2-verb Aux-V clusters

1.3.1.2 Hww *hebben_{FINIET}* • *V_{PARTICIPIUM}* I Auxiliary HAVE_{FINITE} • V_{PARTICIPLE} I

Dat is de man die het verhaal heeft verteld.
that is the man who the story has.FIN told.PCP
'That is the man who told the story.'

■ V1-V2	(heeft verteld)	93
■ V2-V1	(verteld heeft)	181



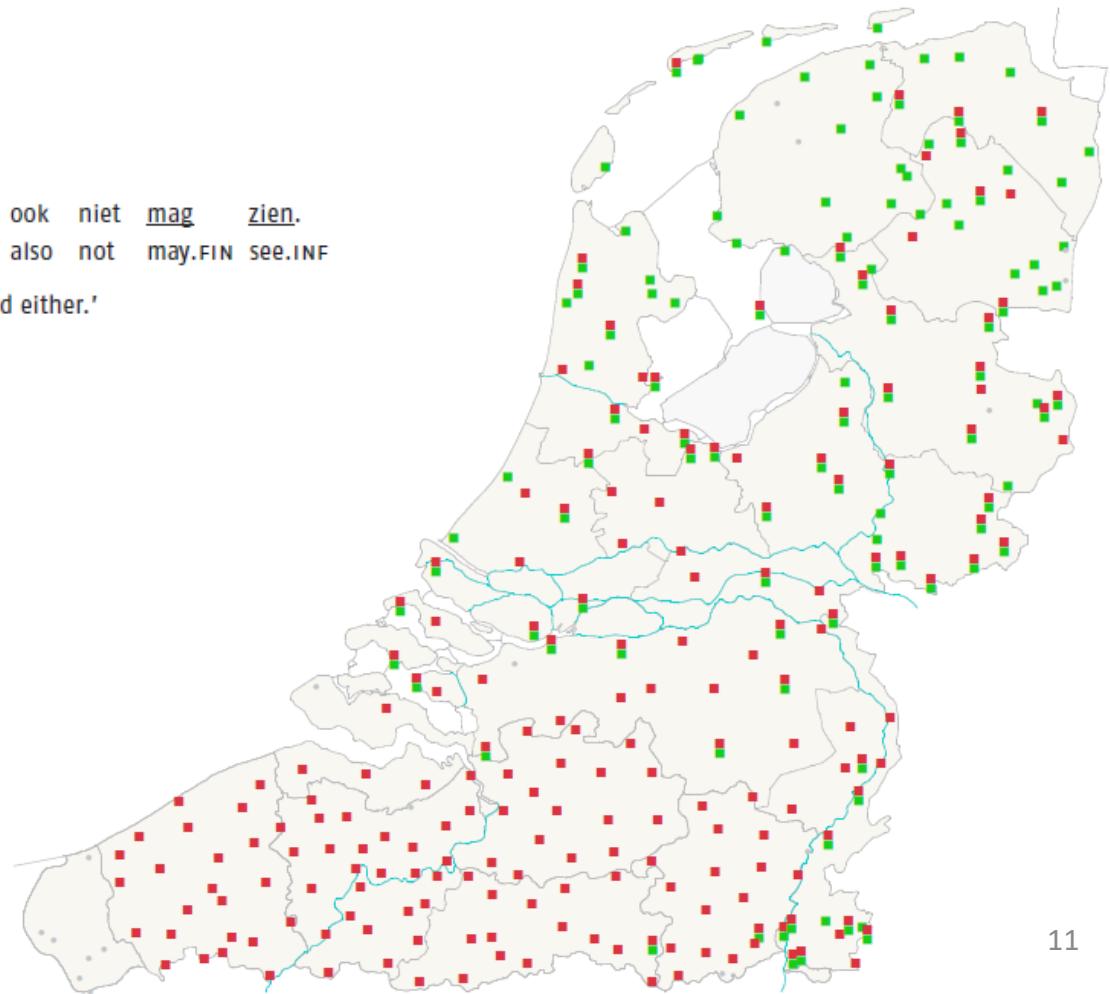


Previous empirical research: Dutch 2-verb Mod-V clusters

1.3.1.3 Modaal_{FINIET} • V_{INFINITIEF} Modal_{FINITE} • V_{INFINITIVE}

Niemand mag het zien, dus ik vind dat jij het ook niet mag zien.
nobody may it see, so I find that you it also not may.FIN see.INF
'Nobody is allowed to see it, so I think you are not allowed either.'

- V₁-V₂ (mag zien) 201
- V₂-V₁ (zien mag) 113





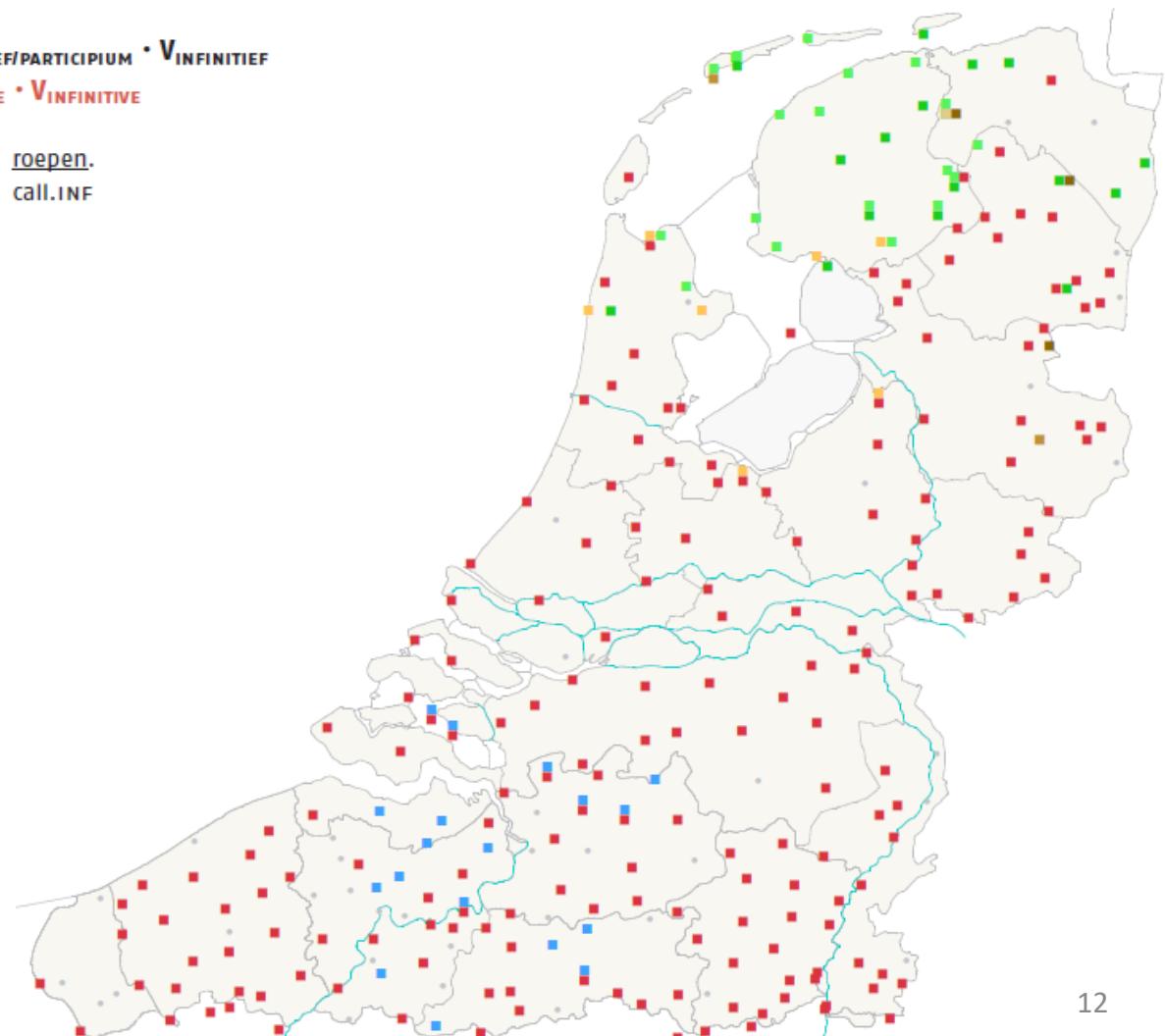
Previous empirical research: Dutch 3-verb- clusters

1.3.2.3.4 Hww *hebben_{FINIET}* • *Modaal_{INFINITIEF/PARTICIPIUM}* • *V_{INFINITIEF}* *HAVE_{FINITE}* • *Modal_{INFINITIVE/PARTICIPLE}* • *V_{INFINITIVE}*

Vertel mij eens wie zij had kunnen roepen.
 tell me just who she had.FIN can.INF/PCP call.INF

'Just tell me who she could have called.'

■ V1-V2 _{INF} -V3	(had kunnen roepen)	185
■ V1-V3-V2 _{INF}	(had roepen kunnen)	7
■ V1-V3-V2 _{PCP}	(had roepen gekund)	1
■ V2 _{INF} -V3-V1	(kunnen roepen had)	18
■ V3-V1-V2 _{INF}	(roepen had kunnen)	2
■ V3-V1-V2 _{PCP}	(roepen had gekund)	3
■ V3-V2 _{INF} -V1	(roepen kunnen had)	19
■ V3-V2 _{PCP} -V1	(roepen gekund had)	17





- Wurmbrand (2017):
 1. How are different orders derived?
 2. How does variation across languages and dialects arise?
- W.r.t (2): [...] *superregional possibilities could be seen as the sum of options found in several dialects* (Wurmbrand, 2017: 13)



Research questions

- What is the acceptability of different orders in 2 and 3 verb clusters in Low German vs. High German?
- 2 verb clusters: does the type of verb matter: auxiliary vs. modal.
- Are there different patterns for Low vs. High German?
- If there is any transfer, in which direction?



Method

- Variant of the speeded grammaticality judgement (SGJ) task (Bader & Schmid, 2009).
- Sentences presented auditorily, recorded with a native bilingual speaker.
- Participants had to judge whether sentence was grammatical or not within 3 seconds.
- Individual judgements are binary, the aggregated mean percentages of SGJs are not. (Bader & Häussler, 2010)



Example of recorded sentences

Low German



Lisa thinks that he the socks knit_{inf.} must
“Lisa thinks that he must knit the socks”

High German





Advantage SGJ

- Experiment can be run without native speaker present, and even online.
- Same procedure for each participant.
- Same level of finegrainedness compared to other measures (Likert scales, magnitude estimation).
- Easy and intuitive task, fast.
- No room for overthinking.
- Using multiple items and participants greatly increases representativeness.



Condition	Example	No. Items
Participle – Aux. 2 1	Hanna denkt, dass er die Socken gestrickt hat. Hanna thinks that he the socks knit _{ptc.} has _{3rd.per.sg.}	8
Aux. – Participle 1 2	Hanna denkt, dass er die Socken hat gestrickt. Hanna thinks that he the socks has _{3rd.per.sg.} knit _{ptc.}	8
Inf. – Mod. 2 1	Hanna denkt, dass er die Socken stricken kann. Hanna thinks that he the socks knit _{inf.} can _{3rd.per.sg.}	8
Mod. – Inf. 1 2	Hanna denkt, dass er die Socken kann stricken. Hanna thinks that he the socks can _{3rd.per.sg.} knit _{inf.}	8
Aux. – V. – Mod. 1 3 2	Peter denkt, dass sie die Pflanze hat gießen müssen. Peter thinks that she the plant has _{3rd.per.sg.} water must _{inf.}	8
Aux. – Mod. – V. 1 2 3	Peter denkt, dass sie die Pflanze hat müssen gießen. Peter thinks that she the plant has _{3rd.per.sg.} must _{inf.} water	8
V. – Aux. – Mod. 3 1 2	Peter denkt, dass sie die Pflanze gießen hat müssen. Peter thinks that she the plant water has _{3rd.per.sg.} must _{inf.}	8
V. – Mod. – Aux. 3 1	Peter denkt, dass sie die Pflanze gießen müssen hat. Peter thinks that she the plant water must _{inf.} has _{3rd.per.sg.}	18

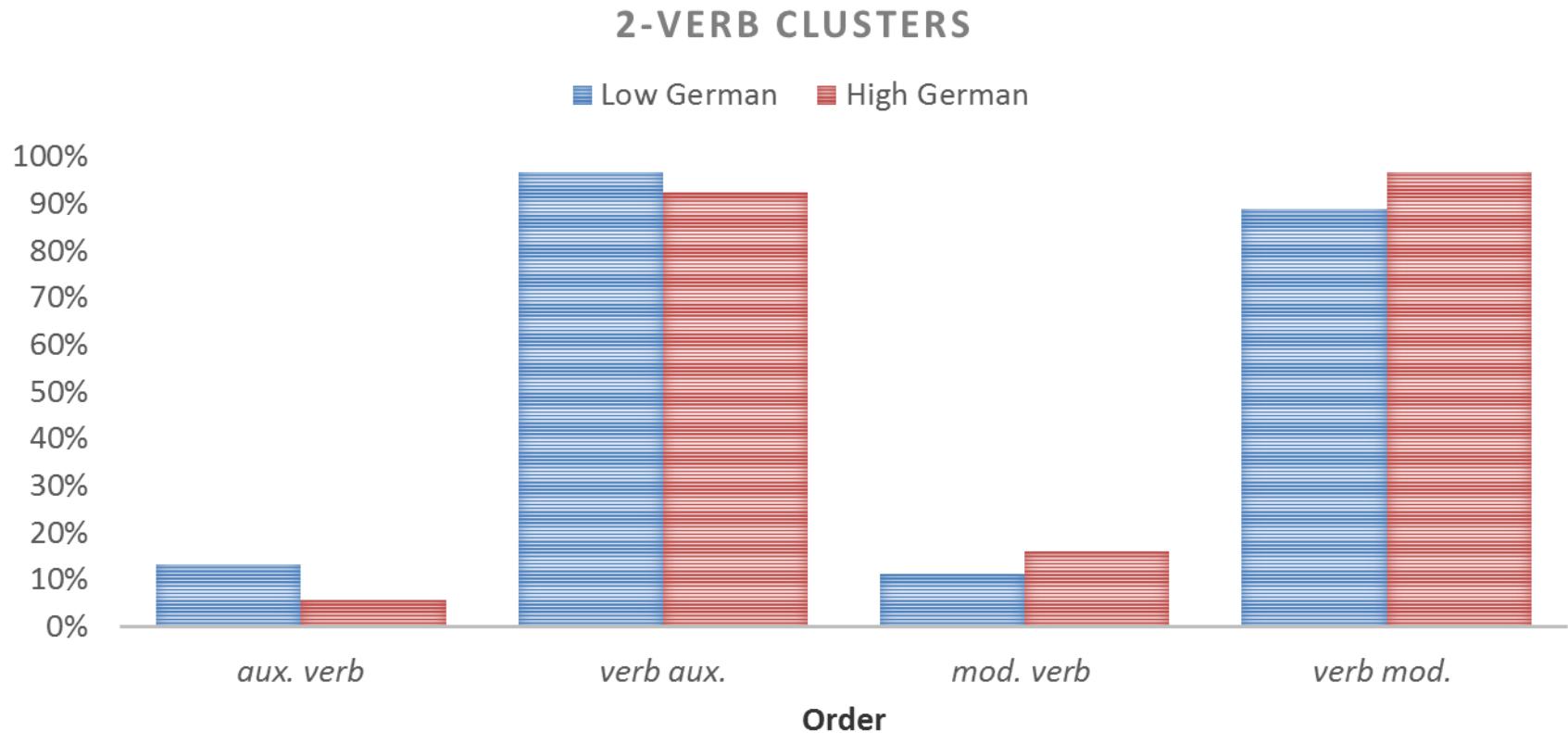


Participants

- 18 participants, aged between 43 – 83 years ($M = 64.5$); 10 female, 8 male.
- All Low German from birth, AoO High German ranged from 0 – 6.
- high/very high comprehension & production skills in both languages/ varieties (self-reported).
- Except for 2 participants, no higher education.

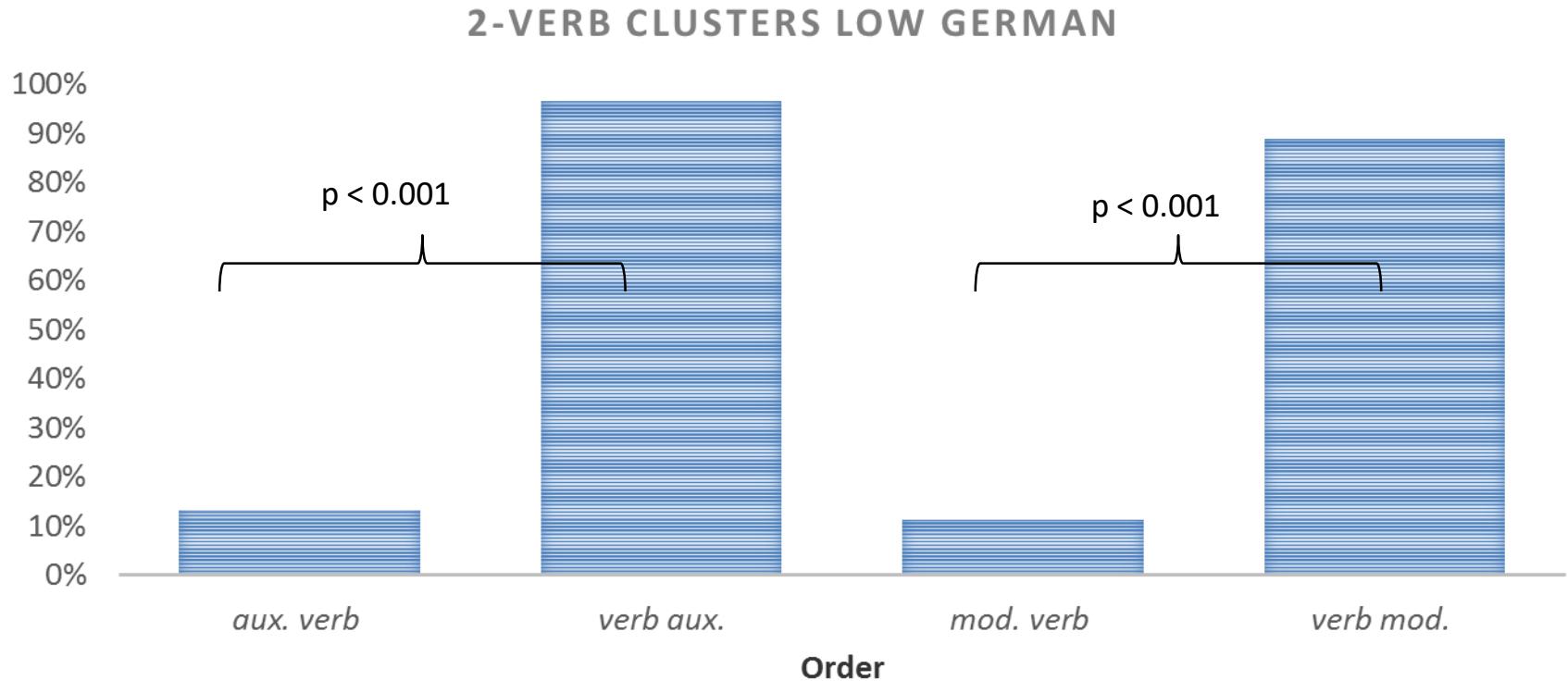


Results 2-verb clusters



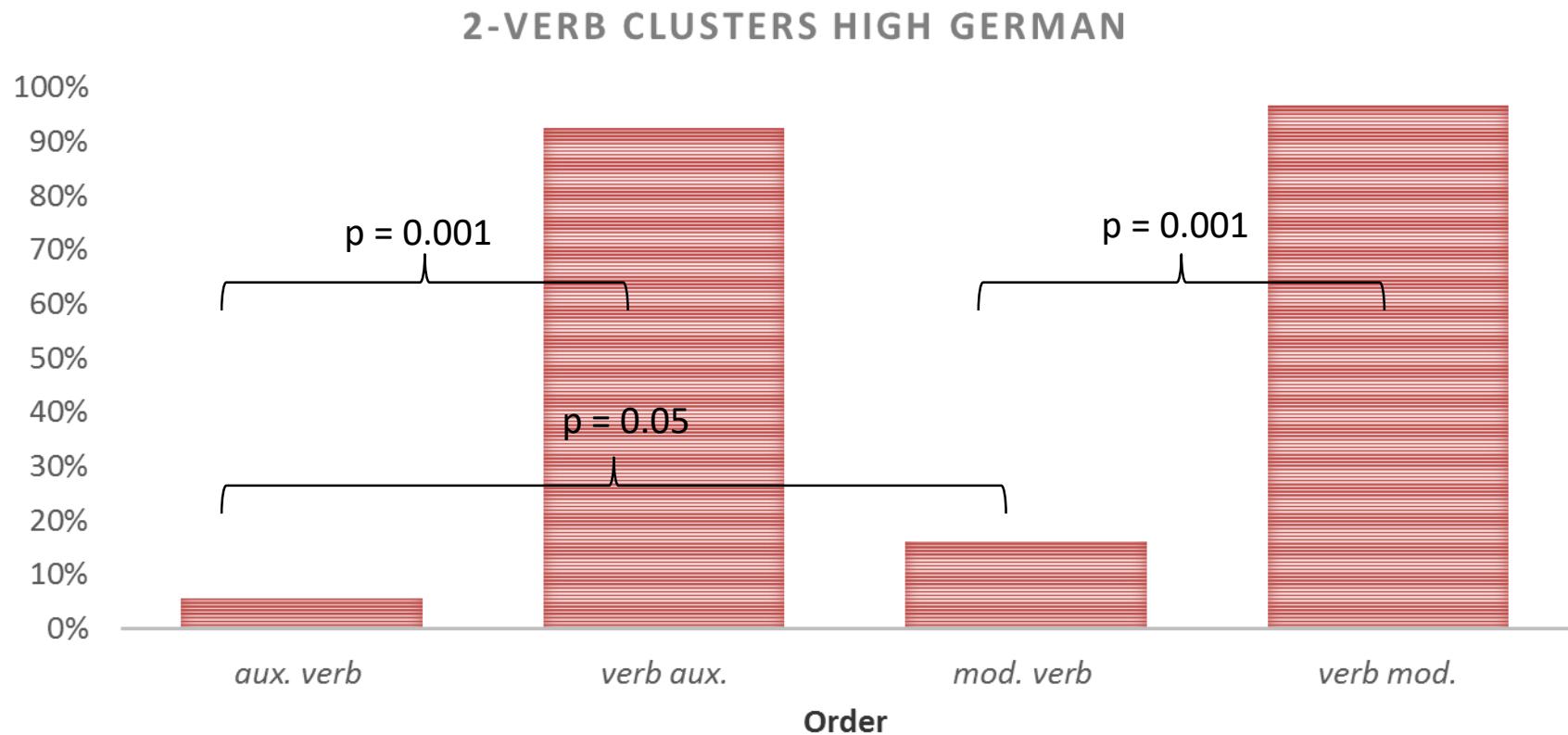


Results 2-verb clusters Low German



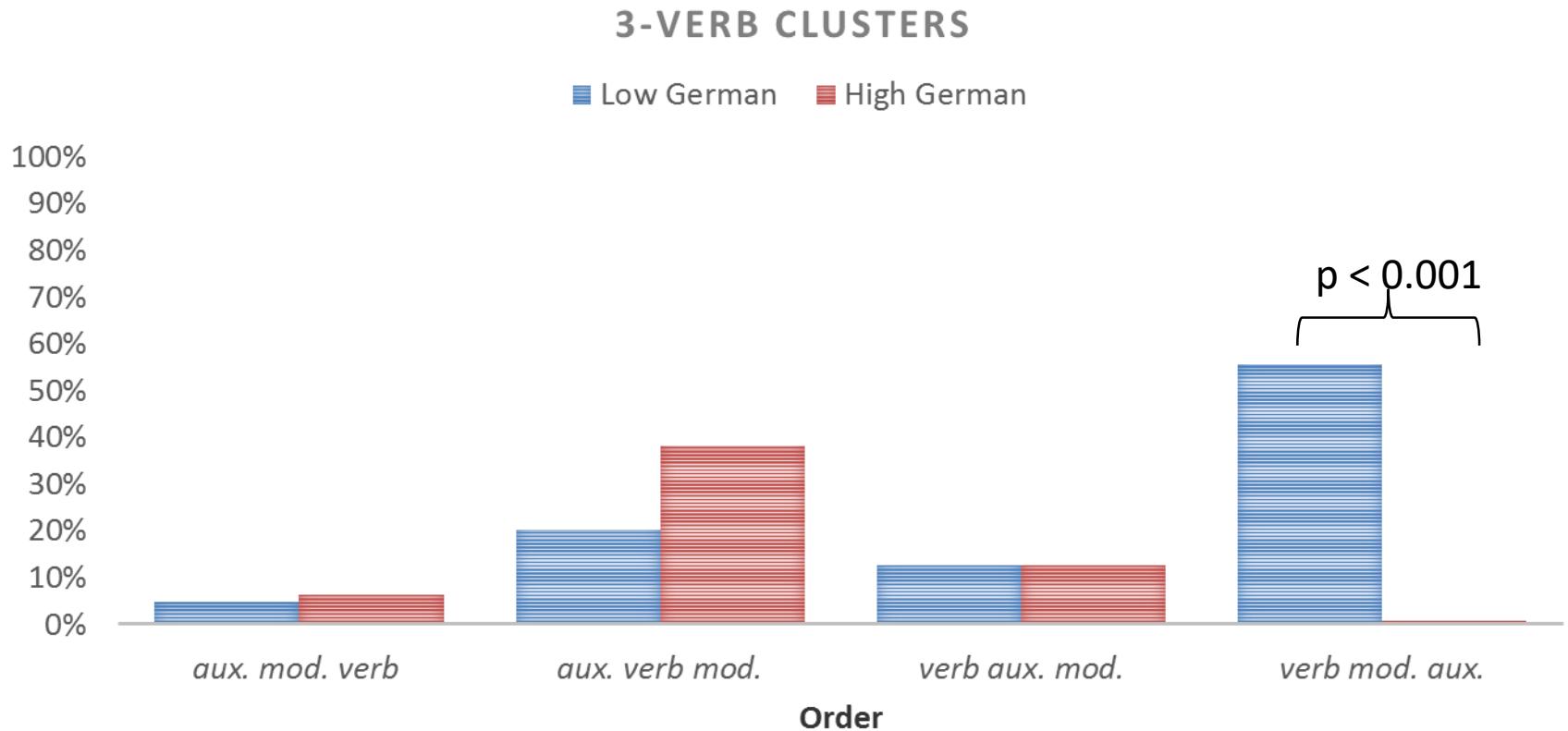


Results 2-verb clusters High German



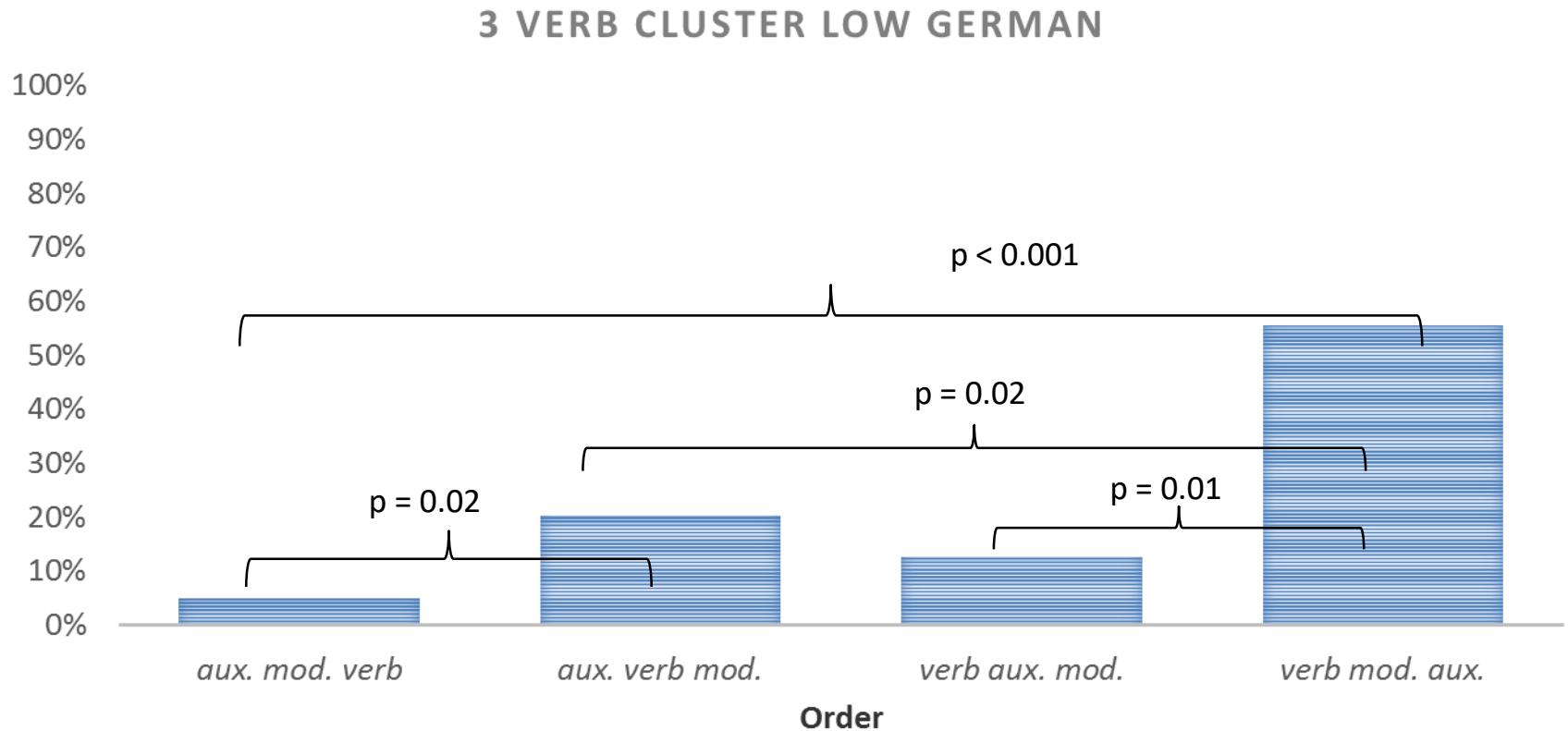


Results 3-verb clusters



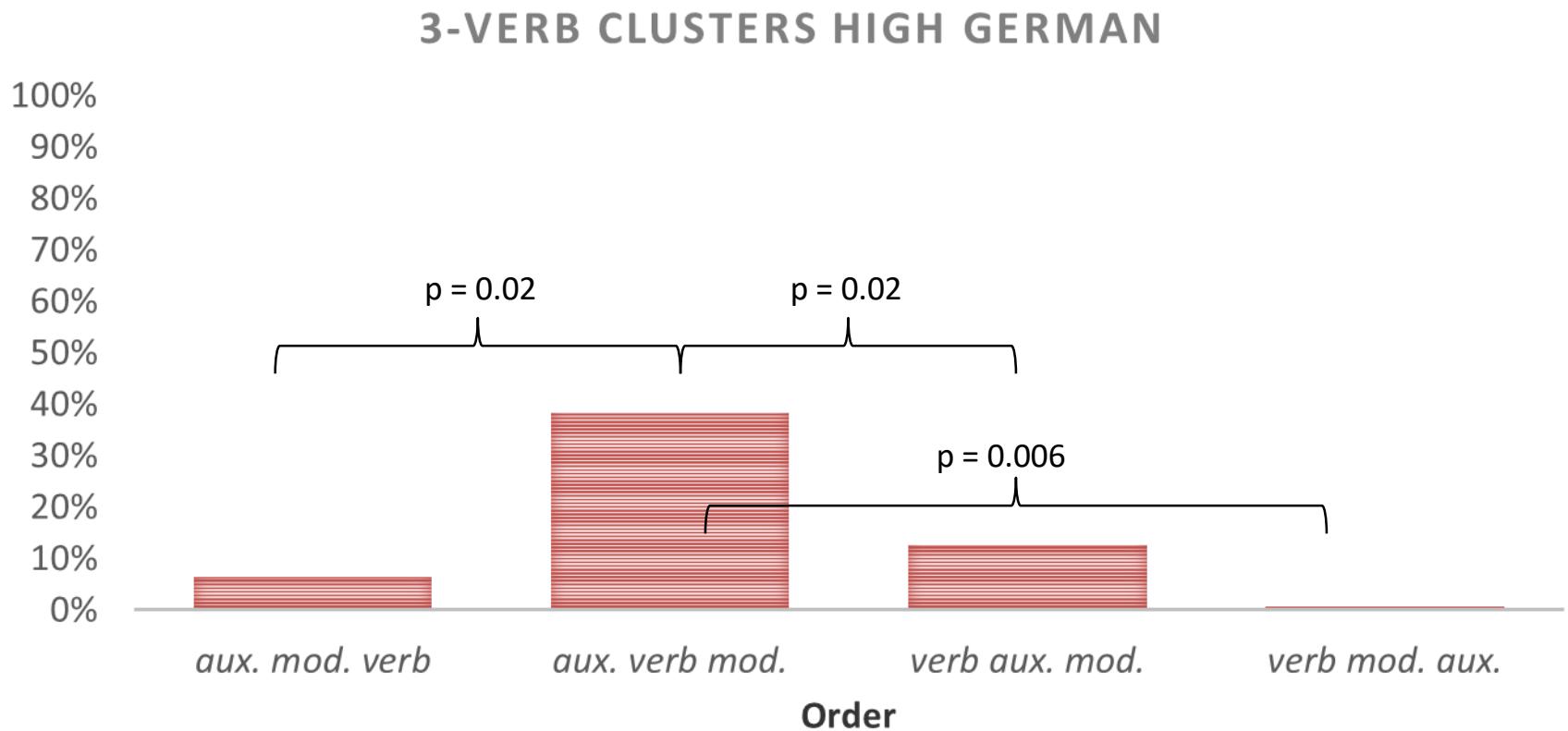


Results 3-verb clusters Low German





Results 3-verb clusters High German





Discussion – 2 verb clusters

- Both varieties: 2-1 orders preferred.
- 1-2 orders more acceptable with modals than with auxiliaries in High German-> in line with Dubenion-Smith (2010)
- No evidence for transfer from one variety into the other.



Discussion: 3-verb clusters

- Different patterns: preferred Low German Verb₃-Mod₂-Aux₁ order virtually unacceptable in High German → absence of *ge*-prefix/IPP in Low German.
- Aux₁-Verb₃-Mod₂ orders preferred in High German (Bader & Schmid 2009, Wurmbrand 2004), but also 2nd best in Low German -> Transfer?



3-verb clusters: complexity effect

- Lange (1981): Low German has a preference for using preterite instead of present perfect -> reducing 3-verb cluster to 2 verbs:
 - ... dass M. ein Buch hat lesen müssen →
 - ... dass M ein Buch lesen musste
- This transfers to High German.
- Open question what causes this.



IPP, absence of ge- and reordering

- For our speakers: Verb₃-Mod₂-Aux₁ orders not allowed in High German, contra Bader & Schmid (2009)
- Hypothesis: *ge*-prefix forces reordering.
- For non-dialect speakers of HG, this correlation between *ge*- and Verb₃-Mod₂-Aux₁ order is not transparent.



Conclusions

- 2-verb clusters:
 - High German: 1-2 orders more acceptable with modals than with auxiliaries.
 - This does not transfer to Low German.
- 3-verb clusters:
 - Clearly different patterns for Low vs. High German.
 - No transfer of order patterns.
 - Apparent transfer of cluster-reduction effect.
- Speeded grammaticality judgement task successful technique.



References

- Bader, M., & Schmid, T. (2009). Verb clusters in colloquial German. *The Journal of Comparative Germanic Linguistics*, 12(3), 175-228.
- Bader, M., & Häussler, J. (2010). Toward a model of grammaticality judgments. *Journal of Linguistics*, 46(2), 273-330.
- Barbiers, S., van der Auwera, J., Bennis, H., Boef, E., De Vogelaer, G., M. van der Ham (2008). *Syntactische Atlas van de Nederlandse Dialecten. Volume 2: Werkwoordsclusters, hulpwerkwoorden en negatie*. Amsterdam: Amsterdam University Press.
- Den Besten, H., & Edmondson, J. A. (1983). The verbal complex in continental West Germanic. *On the formal syntax of the Westgermania*, 3, 155-216.
- Besten, H. D., & Broekhuis, H. (1992). Verb projection raising in het Nederlands. *Spektator*, 21, 21-34.
- Den Dikken, M., & Hoekstra, E. (1997). Parasitic participles. *Linguistics*, 35(6), 1057-1090.
- Dubenion-Smith, S. A. (2010). Verbal complex phenomena in West Central German: Empirical domain and multi-causal account. *Journal of Germanic Linguistics*, 22(2), 99-191.
- Haegeman, L., & Van Riemsdijk, H. (1986). Verb projection raising, scope, and the typology of rules affecting verbs. *Linguistic inquiry*, 17(3), 417-466.
- Lange, K. P. (1981). Warum Ersatzinfinitiv?. *GAGL: Groninger Arbeiten zur germanistischen Linguistik*, (19), 62-81.
- Salzmann, M. (2013). Rule ordering in Verb Cluster Formation: On the extraposition paradox and the placement of the infinitival particle te/zu. *Rule interaction in grammar*, 65, 121.
- Wurmbrand, S. (2004). West Germanic verb clusters: The empirical domain. *Verb clusters: A study of Hungarian, German and Dutch*, 69, 43.
- Wurmbrand, S. (2017). Verb clusters, verb raising, and restructuring. *The Wiley Blackwell Companion to Syntax, Second Edition*, 1-109.
- Zwart, J. W. (2007). Some notes on the origin and distribution of the IPP-effect. *GAGL: Groninger Arbeiten zur germanistischen Linguistik*, (45), 77-99.

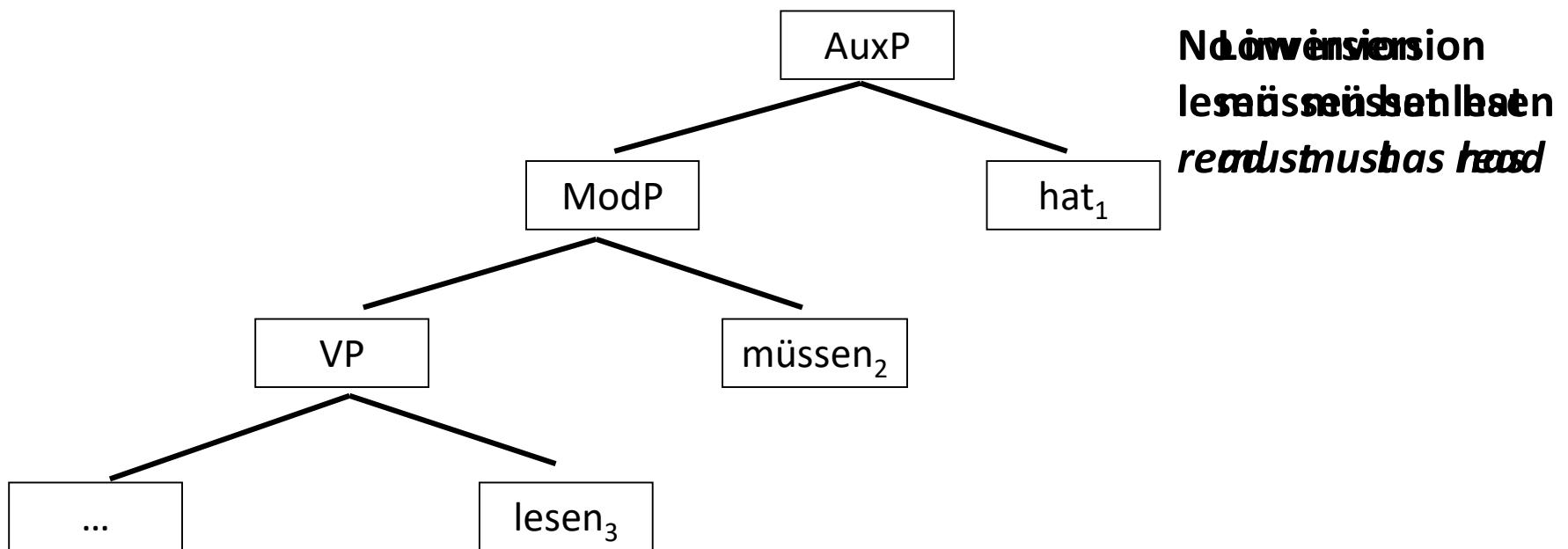


Deriving different orders

- Reanalysis approach (Haegeman & van Riemsdijk, 1986) also Wurmbrand (2004, 2017), Salzmann (2013)
- Syntactic approaches to variation within verbal clusters
 - Head-movement (e.g. den Besten & Edmondson, 1983), phrasal movement (e.g. den Besten & Broekhuis, 1992), mixed accounts (e.g. den Dikken & Hoekstra, 1997)

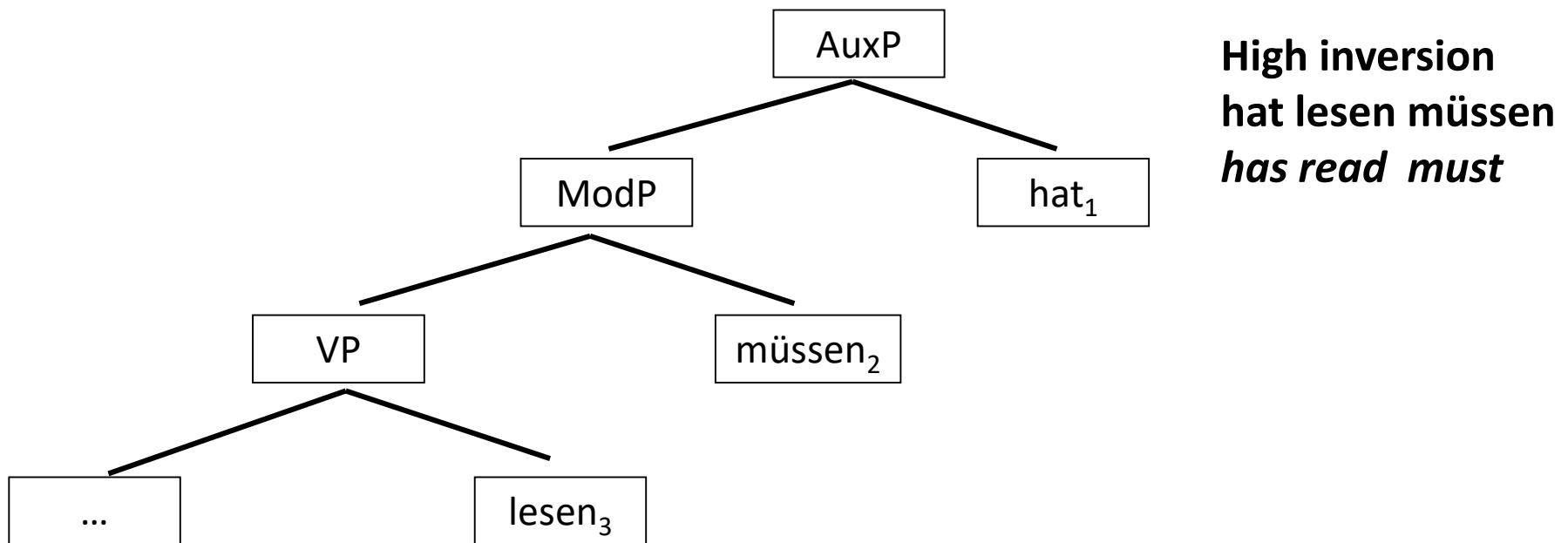


Deriving different orders Hageman & van Riemsdijk (1986)



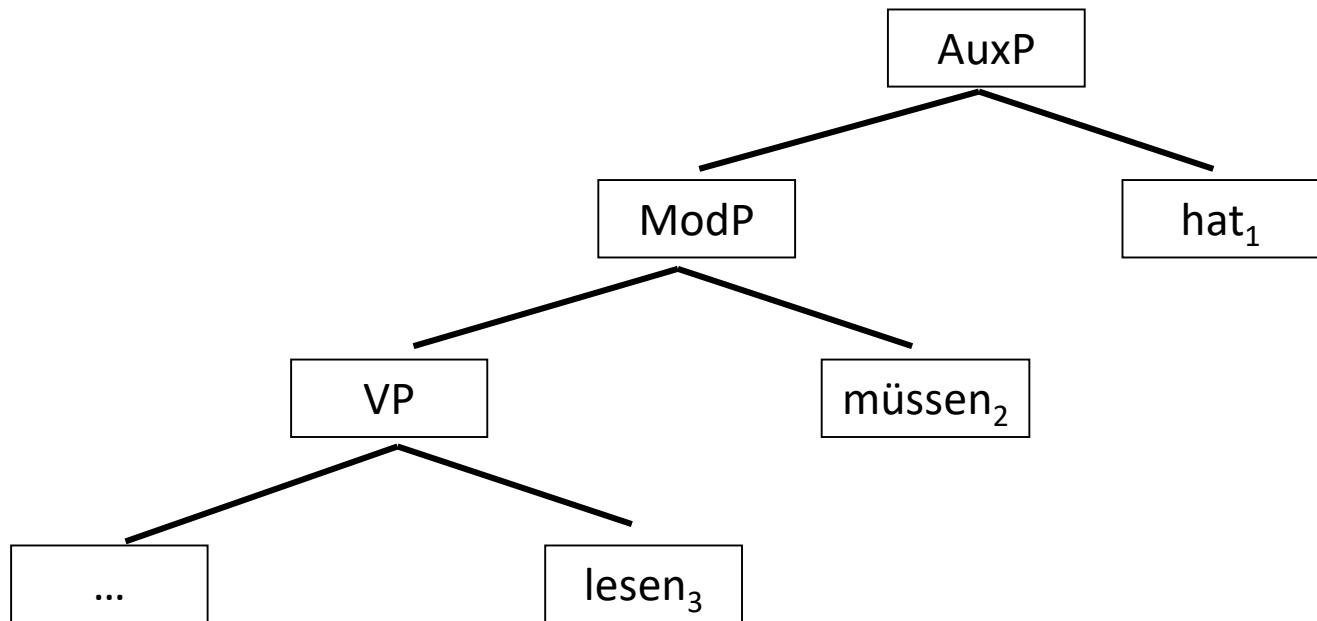


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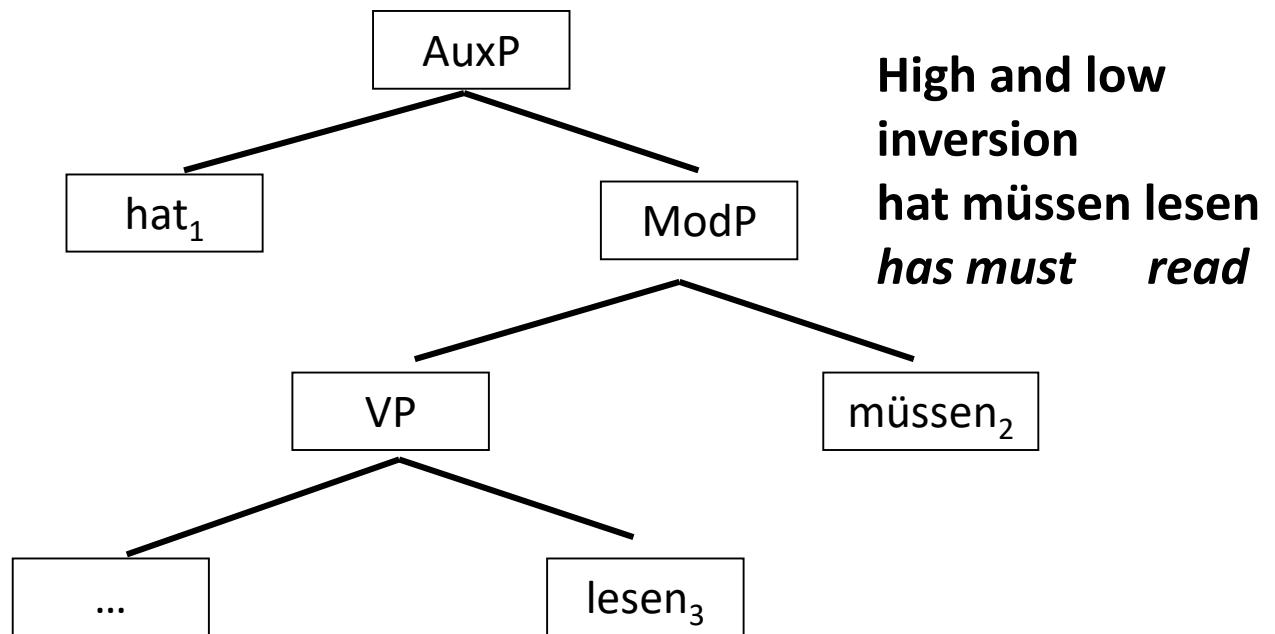


Deriving different orders Hageman & van Riemsdijk (1986)





Deriving different orders Hageman & van Riemsdijk (1986)





Deriving different orders Hageman & van Riemsdijk (1986)

3-LEFT and high
inversion
lesen müssen hat
read must has

