

# On the Word Order of Early Old French

SinFonIJA VII  
Graz

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[www.ling.upenn.edu/~kroch/handouts/sinfonija7.pdf](http://www.ling.upenn.edu/~kroch/handouts/sinfonija7.pdf)

I. Statistical independence in word  
order patterns in Yiddish  
(Santorini 1993)

# Noun Phrase Extraposition in Yiddish

(1) ven der vatr nurt doyts leyen kan  
if the father only German read can

(2) ven der vatr leyen kan nurt doyts  
if the father read can only German

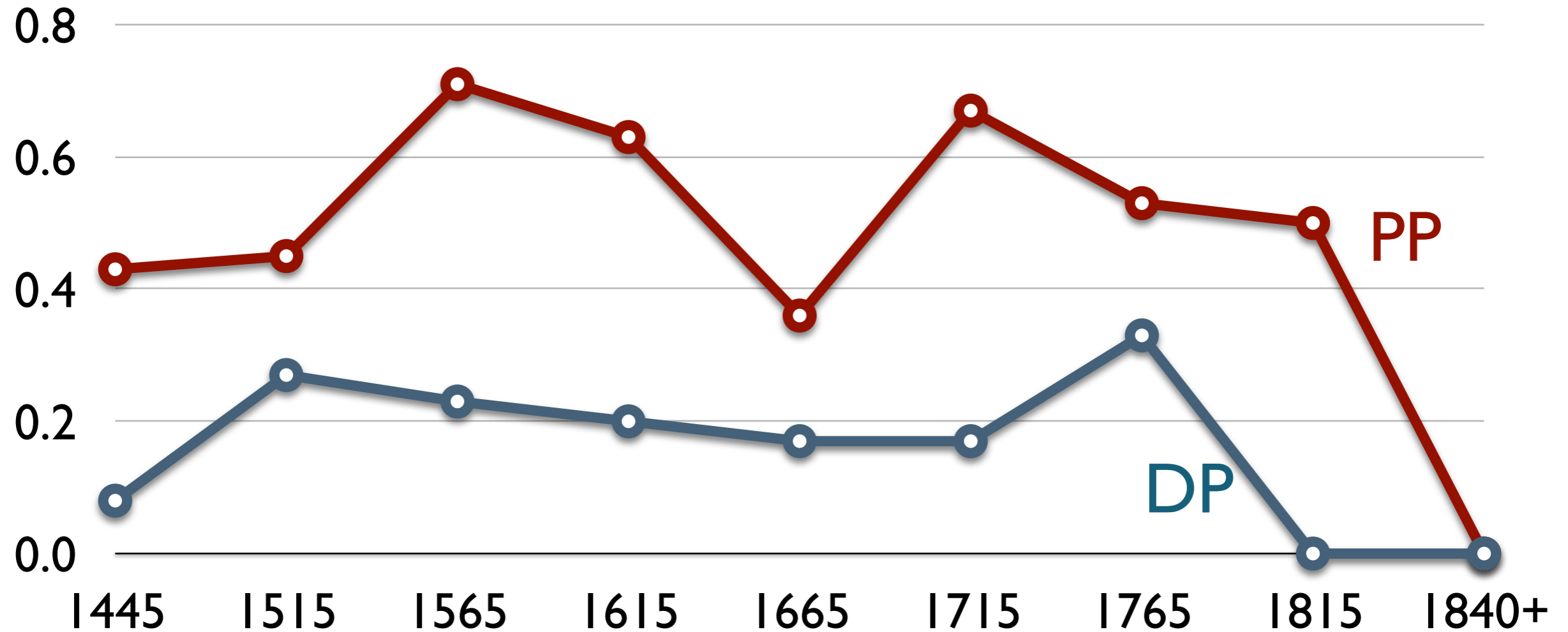
# Prepositional Phrase Extraposition in Yiddish

- (3) dz ikh reyn **fun der ashin** verde  
that I clean from the ashes become
- (4) dz ikh reyn verde **fun der ashin**  
that I clean become from the ashes

# Frequency of DP and PP Postposing in the History of Yiddish (Santorini 1993)

Date	DP postposing			PP postposing		
	Postposed	Not postposed	freq.	Postposed	Not postposed	freq.
1400-1489	1	12	<b>.08</b>	9	12	<b>.43</b>
1490-1539	7	19	<b>.27</b>	13	16	<b>.45</b>
1540-1589	7	24	<b>.23</b>	52	21	<b>.71</b>
1590-1639	10	40	<b>.20</b>	39	23	<b>.63</b>
1640-1689	4	19	<b>.17</b>	17	30	<b>.36</b>
1690-1739	1	5	<b>.17</b>	6	3	<b>.67</b>
1740-1789	1	2	<b>.33</b>	8	7	<b>.53</b>
1790-1839	0	1	<b>.00</b>	1	1	<b>.50</b>
1840-1950	no INFL-final data		—	no INFL-final data		—

# Graph of DP and PP Postposing in the History of Yiddish



## II. Statistical independence in word order patterns in Ancient Greek (Taylor 1994)



# “Free” Word Order in Ancient Greek

SXV: Καμβύσης τὰ δῶρα ἐδέξατο

Kambuses the gifts received

SVX: Καμβύσης ἐδέξατο τὰ δῶρα

VSX: ἐδέξατο Καμβύσης τὰ δῶρα

VXS: ἐδέξατο τὰ δῶρα Καμβύσης

XSV: τὰ δῶρα Καμβύσης ἐδέξατο

XVS: τὰ δῶρα ἐδέξατο Καμβύσης

pattern	formula
S , X v	$(1-s)(1-p)$
X , Y v	$(1-p)^2$
S v X	$p(1-s)$
X v S	$s(1-p)$
X v Y	$2p(1-p)$
v S , X	$sp$
v X , Y	$p^2$

Formula for calculating distribution of clause types based on the probability of postposing of subjects and complements

pattern	formula	observed distribution	expected distribution
S X v	$(1-s)(1-p)$	41	41
X Y v	$(1-p)^2$	7	5
S v X	$p(1-s)$	31	31
X v S	$s(1-p)$	13	12
X v Y	$2p(1-p)$	4	8
v S X	$sp$	8	9
v X Y	$p^2$	5	3
Total N = 109      s = .23      p = .43 N for clauses with subjects = 93 N for clauses without subjects = 16 $\chi^2 = 4.12, p > .8$			

Best fit of observed and expected distribution of clauses with 2 arguments in Homer

pattern	formula	observed distribution	expected distribution
S X Y v	$(1-s)(1-p)^2$	4	5
S X v Y	$2p(1-s)(1-p)$	10	7
X Y v S	$s(1-p)^2$	2	2
S v X Y	$p^2(1-s)$	1	3
X v S Y	$2p(1-p)(1-s)$	4	3
v S X Y	$s(p^2)$	0	1
Total N = 21      s = .29      p = .41			
$\chi^2 = 3.66, p > .8$			

Best fit of observed and expected distribution of clauses with 3 arguments in Homer

	subject postposing	NP compl. postposing	N
1 NP argument	.27	.44	112
2 NP arguments	.23	.48	109
3 NP arguments	.29	.41	21
1 NP/1 PP argument	.28	.48	58

Probability of subject and NP complement postposing in four  
Homeric data sets

# III. The evolution of VX and XV in Old French

# Preliminaries, I

- In tensed sentences only non-finite VPs are considered to avoid interference from  $V_{fin}$ -to-C and  $V_{fin}$ -to-T movement.
- Sentences in which a target clausal complement or adjunct moves further left than T are excluded since their “underlying” position relative to the non-finite verb is not recoverable.
- Sentences in which a target complement or adjunct is a clitic or empty category are excluded since their position is fixed or undeterminable.

## Preliminaries, II

Old French texts contain occasional examples of OVT(ense) word order, superficially similar to the word order in German subordinate clauses:

(1) ...weil Maria das Brot gegessen hat  
because Maria the bread eaten has

(2) Quant l'ostes ce escouté eut  
when the army that heard had

(1190-BORON-R,38.579)



# Preliminaries, III

However, in Old French, OVT(ense) word order is always due to leftward movement of a VP to an A-bar position.

This conclusion is supported by two facts:

- Pre-Tense VPs always occur to left of any clitics associated with the finite verb.
- Pre-Tense VPs may be either OV or VO, superficially violating in the Final-Over-Final Constraint.

- (1) des que vos tant dit m'an avez  
since that you so-much told me of-it have  
(1170-YVAIN-R,151.5230)
- (2) Seignur servir bien deit l'um tel  
lord serve well owes one such  
(1120-BRENDAN-R,55.666)
- (3) Ainz que trovét nule rien ait.  
before that found any thing has  
(1120-BRENDAN-R,70.1085)

## Excluded finite clause types I

(I) (Subject) > Finite V > Object

Nostres Sires savoit tout bien

'Our Lord knew everything well.'

(1190-BORON-R,9.110)

si avroiz molt grant aventage

'So you would have a very great advantage.'

(1170-YVAIN-R,41.1361)

## Excluded finite clause types 2

(2) (Subject) > Object > Finite V

Uns viels prestre la porte garde

'An old priest was guarding the door'

(116X-MARIE-DE-FRANCE-R, 16.276)

et vos enor et joie rande

'and God give you honor and joy'

(1170-YVAIN-R, 162.5687)

## Excluded finite clause types 3

(1) Object > (Subject) > Finite V > Nonfinite V

Sa grant honor a grant dol ad turnede (f. sg.)

'He has turned his great honor to great sorrow.'

(10XX-ALEXIS-V,29.282)

(2) (Subject) > Object > Finite V > Nonfinite V

Li amiralz .X.escheles ad justedes (f. pl.)

'The admiral arranged ten batallions.'

(1100-ROLAND-V,234.3228)

## VO & OV word order: *avoir*+participle

- (1) Rollant ad mis l' olifan a sa buche  
'Roland raised the ivory horn to his mouth.'  
(1100-ROLAND-V,133.1772)
- (2) Li reis Marsilie out sun cunseill finet  
'King Marsilla had adjourned his council.'  
(1100-ROLAND-V,5.53)

*Avoir*+participle: auxiliary+verb or  
resultative?

- (1) Mult lungament *pro ai* a lui *conversét*  
'A very long time (I) have with him stayed.'  
(1050-ALEXIS-V,69.625)
- (2) *Ki ad peché*t bien s'en pot recorder  
'Who has sinned well of it can recall.'  
(1050-ALEXIS-V,110.995)

## VO & OV word order: modal+infinitive

(1) Je veul avoir mon loier

'I want to have my pay.'

(127X-CASSIDORUS-P, 164.1546)

(2) Kar ne poeit le jur choisir

'For he cannot choose the day.'

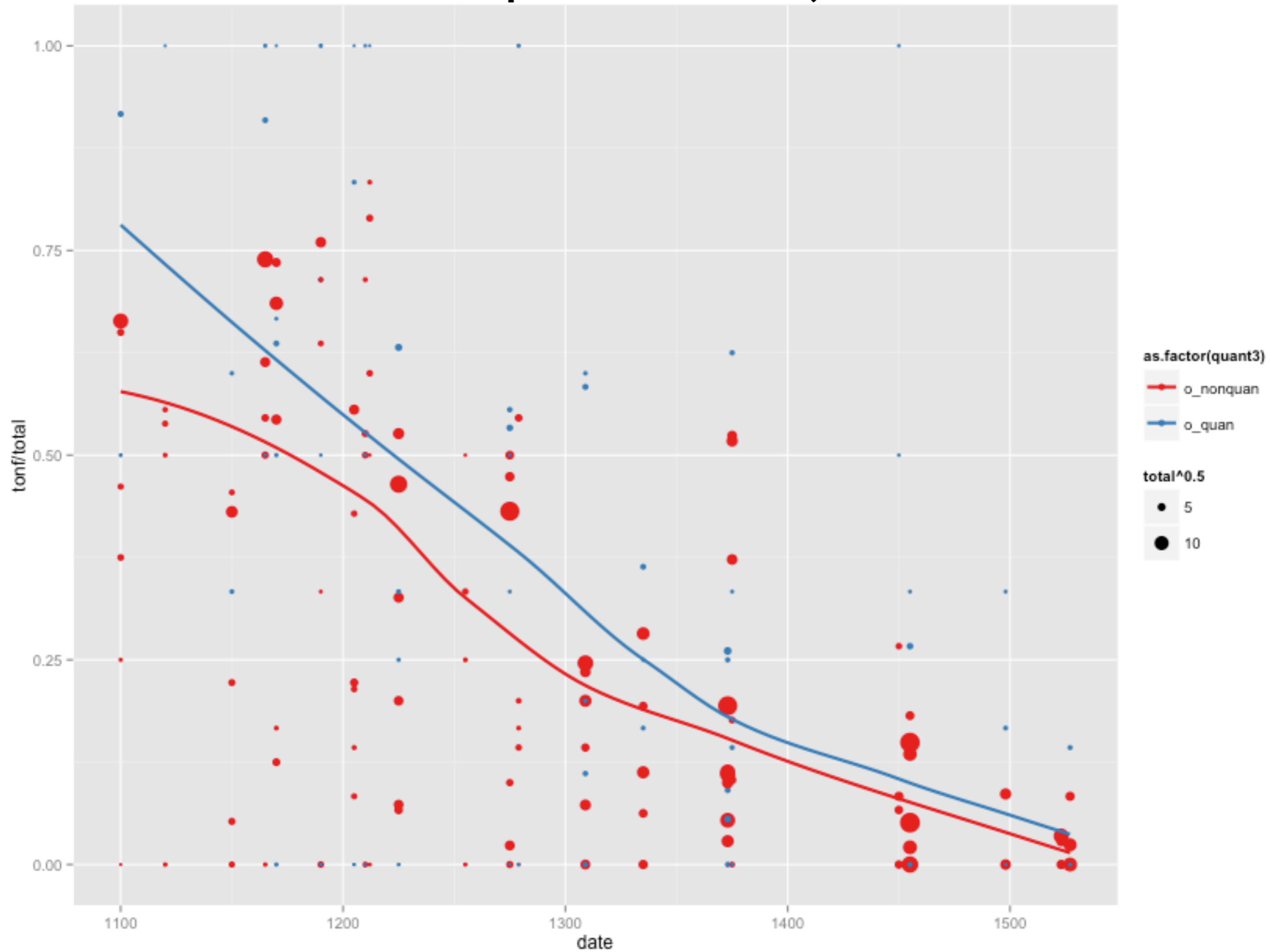
(116X-MARIE-DE-FRANCE-R, 111.2262)



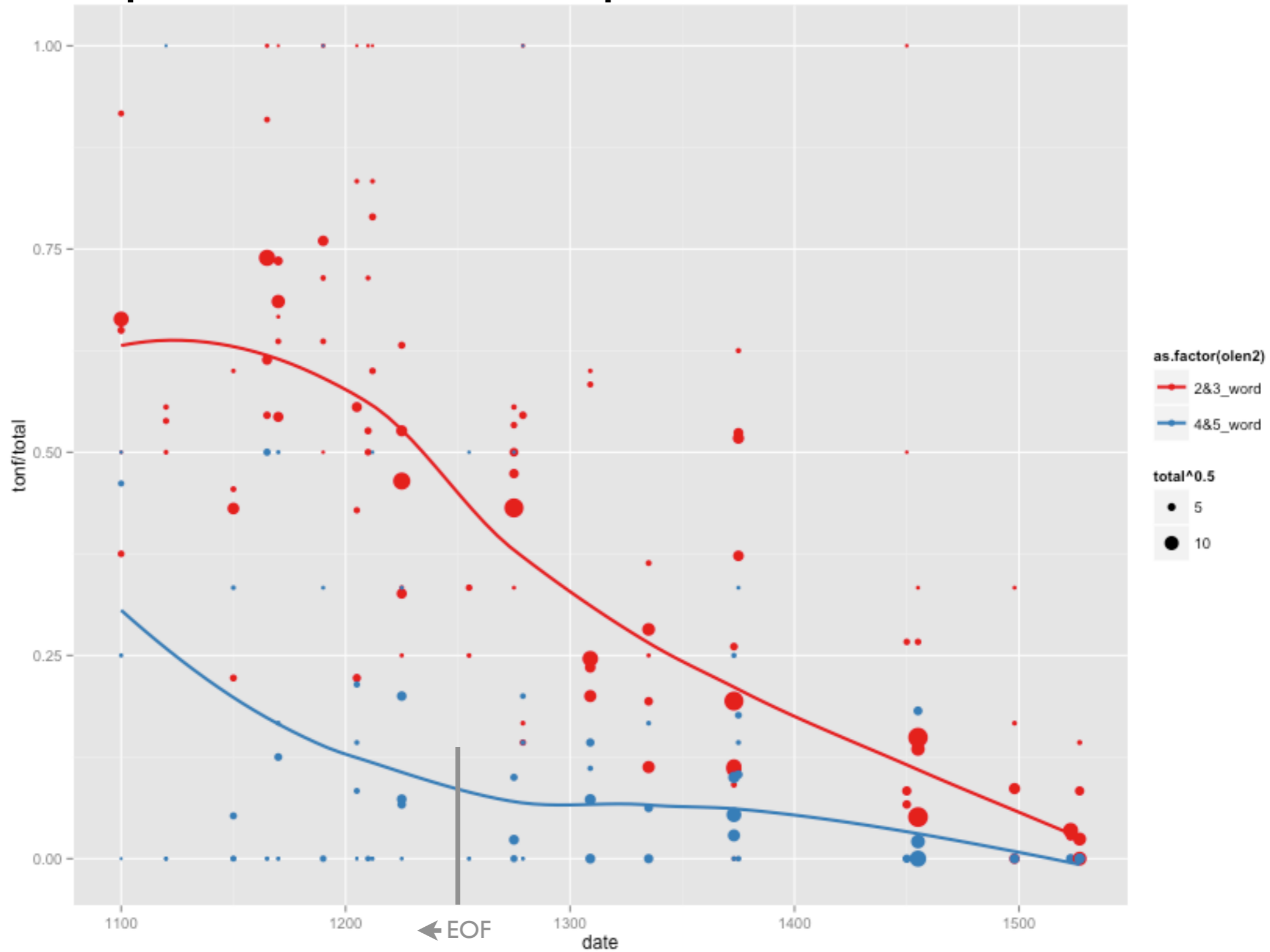
## VO & OV word order: other nonfinite clauses

- (1) **é pursievre David cessad**  
'and he ceased to pursue David'  
(I 150-QUATRELIVRE-P,47.1793)
- (2) **Le abét e tuz baiser enprent**  
'He begins to kiss the abbot and everyone.'  
(I 120-BRENDAN-R,47.464)

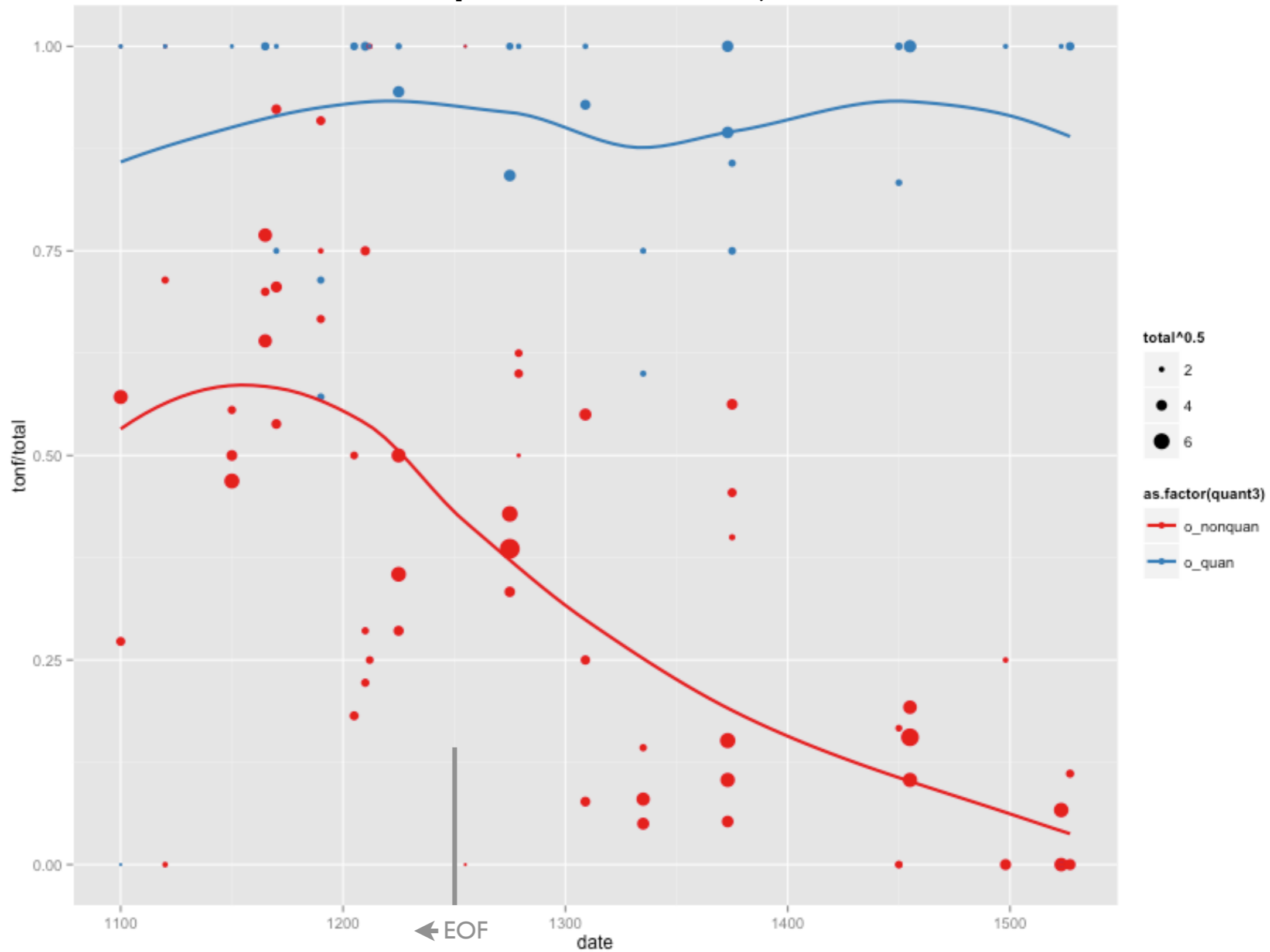
# OV decline with multi-word quantified and non-quantified objects



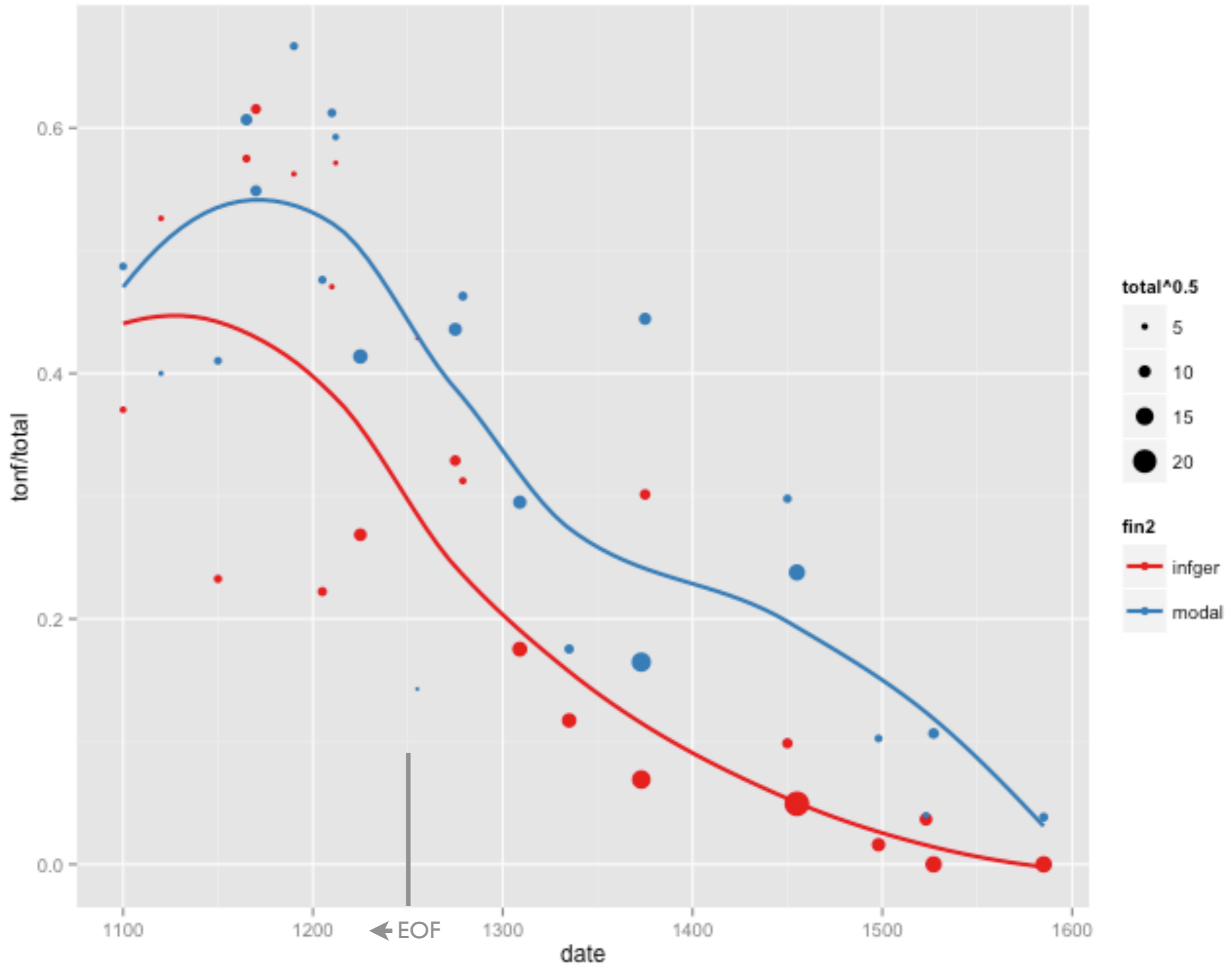
# OV decline by multi-word object length, quantified and non-quantified combined



# OV decline with one word quantified and non-quantified objects



# Decline of OV word order by clause type



*avoir*+participle with object agreement

(1) **Li emperere ad prise** sa herberge (f. sg.)

'The emperor has taken his lodging.'

(1100-ROLAND-V, 182.2486)

(2) **Vos li avez tuz ses castels toluz** (m. pl.)

'You have taken all his castles from him.'

(1100-ROLAND-V, 16.208)

*avoir*+participle with object **dis**agreement

- (1) **Li nostre deu i unt fait<sub>u</sub> felonie** (m. sg. - f. sg.)  
'Our gods have committed a felony there.'  
(I 100-ROLAND-V, 188.2595)
- (2) ... **avoit tous les autres vaincu<sub>u</sub>** (m. sg. - m. pl.)  
'... (the emperor) had vanquished all the others.'  
(I 37X-PRISE-R,.639)

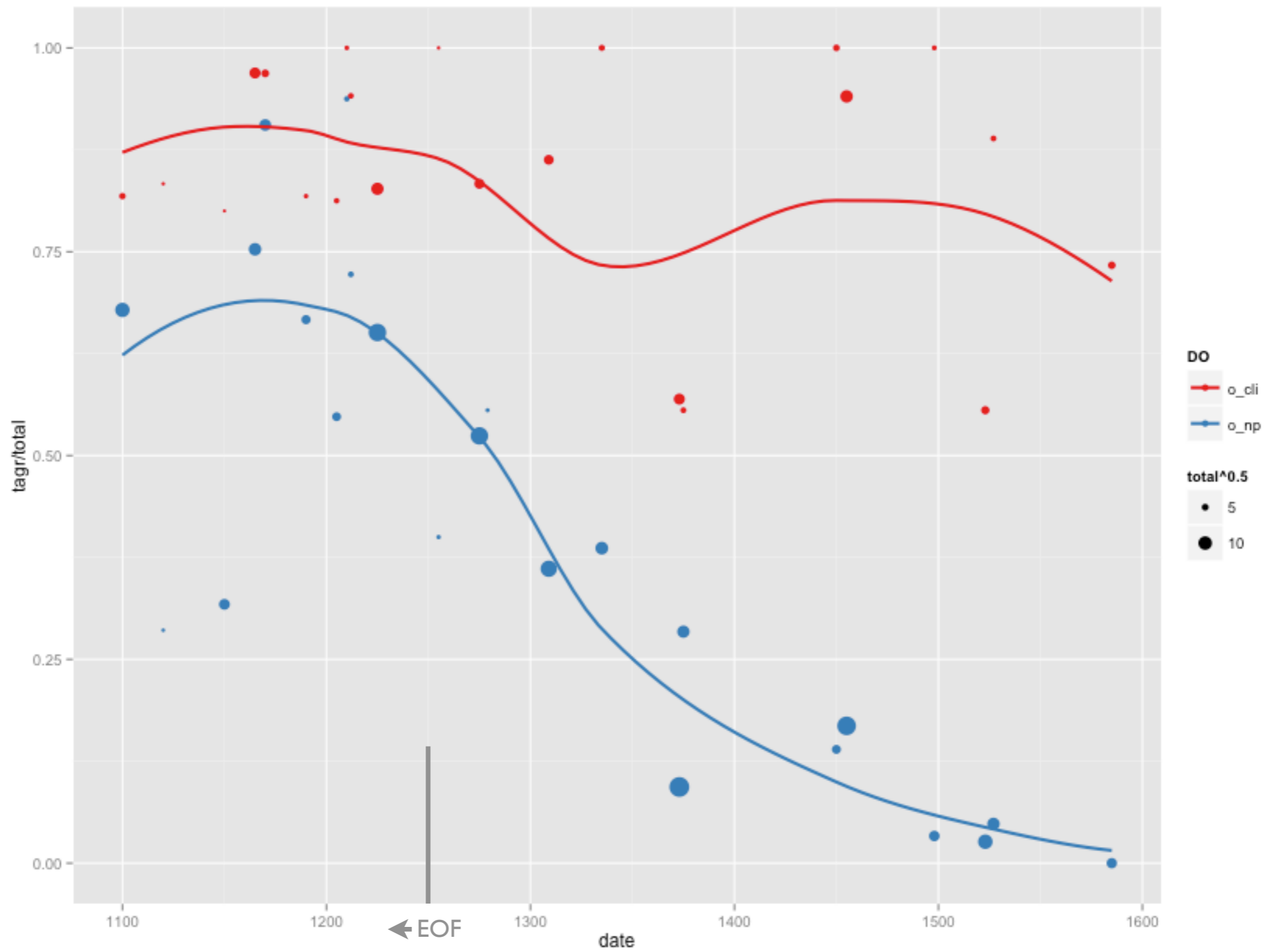
*avoir*+participle with agreeing and disagreeing clitic objects

(1) Forment l' (= la prison) ont fermee et serree (f. sg.)  
'They closed and sealed it securely.'  
(1190-BORON-R, 25.398)

(2) tuz les i ad perdut (m. pl. - m. sg.)  
'He lost them all there.'  
(1100-ROLAND-V, 152.2053)



# Object-participle agreement by DP type



*avoir* + participial small clause

- (1) *s'avoient les espees traites* desos les capes (f. pl.)  
'So they had their swords drawn under their capes.'  
(122X-AUCASSIN-14-P,21)
- (2) *N'ot drap vestu* fors la chemise.  
'He had no clothes on except for his shirt.'  
(116X-MARIE-DE-FRANCE-R,99.2003)

Possible cases of *avoir* + participial small clause with postposed DP

(1) **out** **vestue**e **sa brunie** (f. sg.)

'He had put on his body armor.'

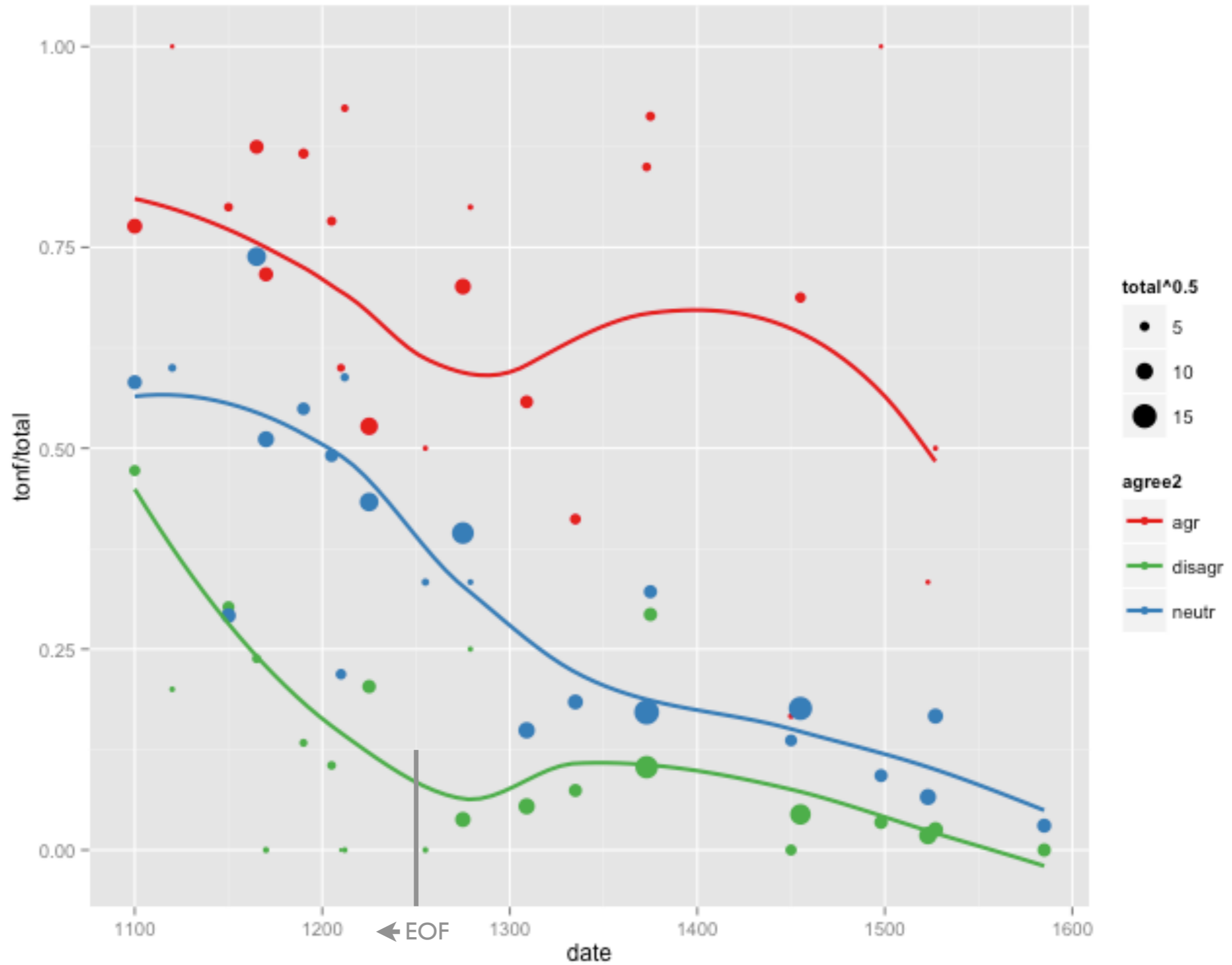
(1100-ROLAND-V,29.364)

(2) **s'** **avoient** bien **liez** de cordes **les piez** (m. pl.)

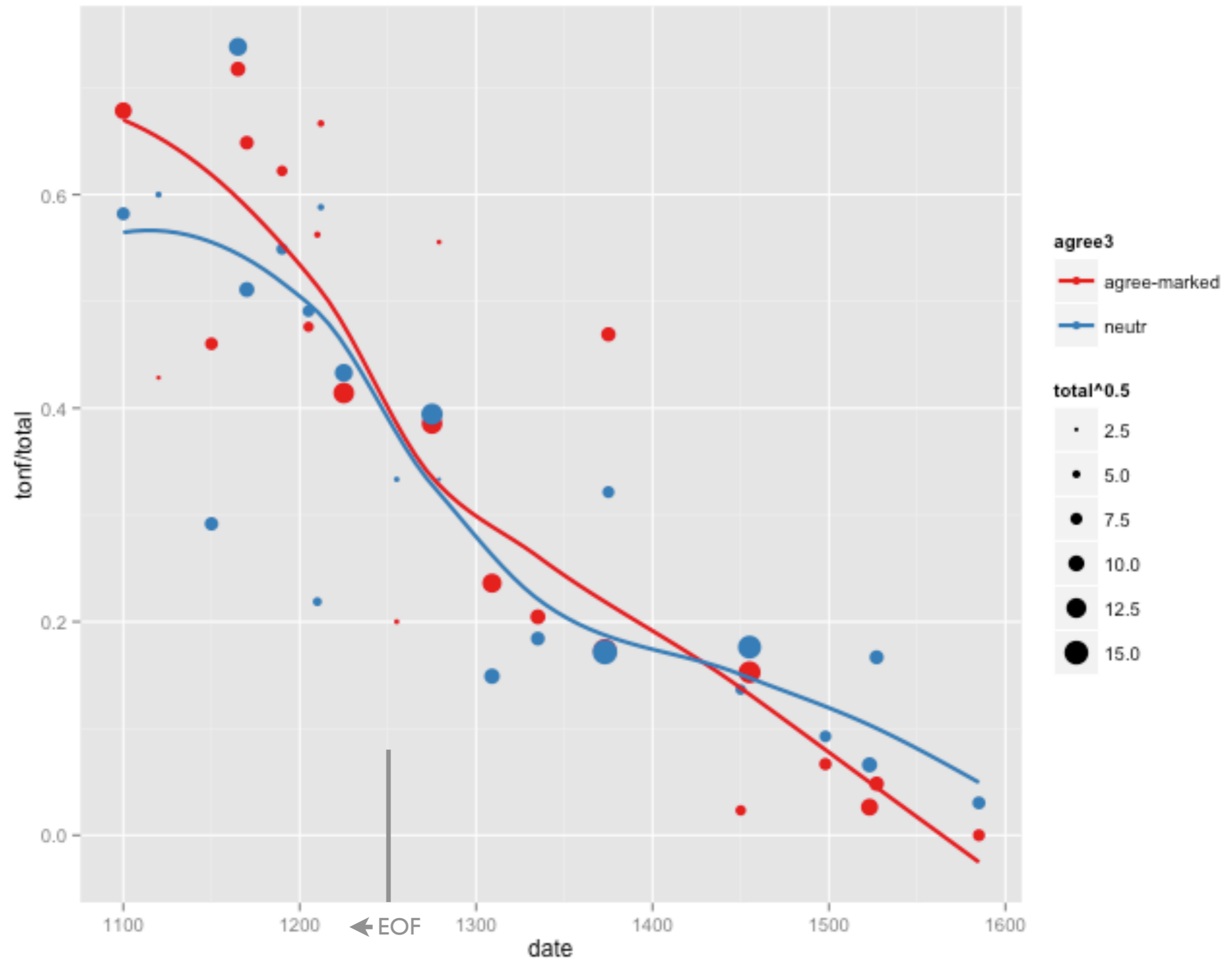
'So they had their feet tightly bound with cords.'

(1170-YVAIN-R,125.4314)

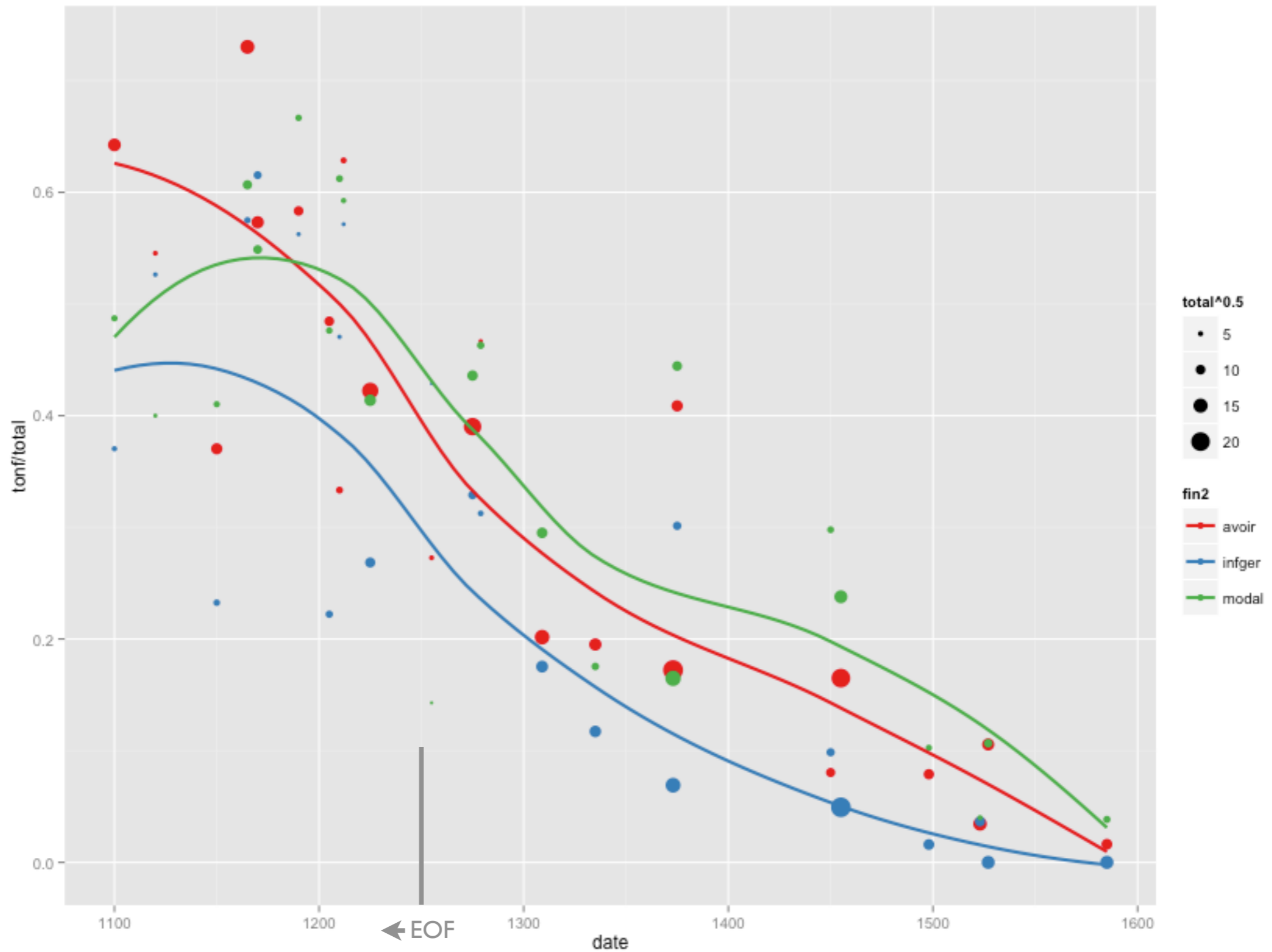
# Decline of OV word order in clauses with *avoir*+participle



# Decline of OV word order: agree-marked versus neutralized *avoir*+participle



# Decline of OV word order by clause type: all *avoir*+participle versus others



## Cases of raising of a nonfinite verb across an adverb

(1) En celui temps **Bruthus** **avoit** **congneue**e  
**charnement** **Ynogen** **sa femme** (f. sg.)

'During this time Brutus had had intercourse  
with his wife Ynogen.'

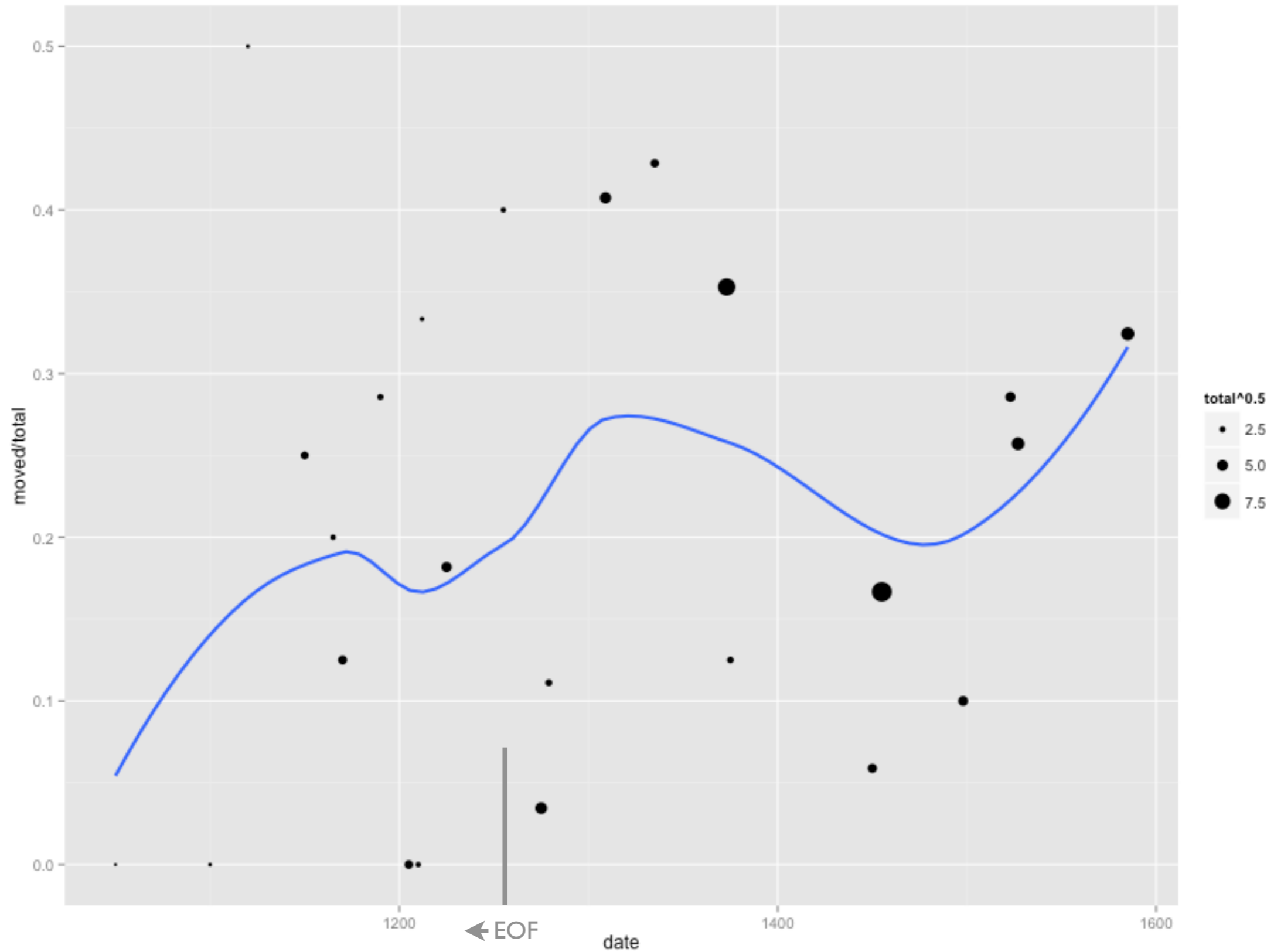
(133X-PERCEFOREST-P,87.443)

(2) **il** **n'** **avoit** **pas** **mis** **encores** **son conseil** ensamble

'He had not yet assembled his council.'

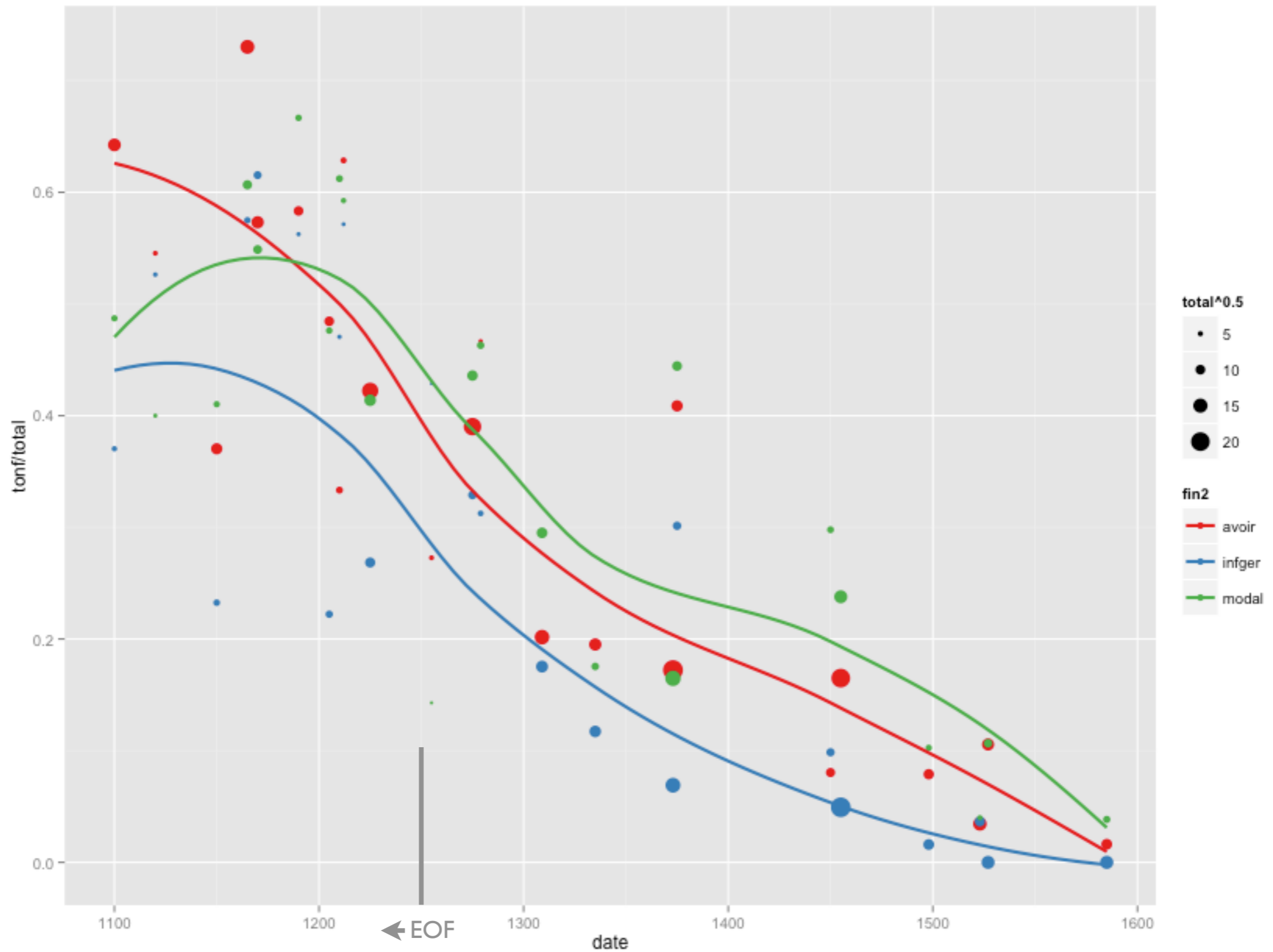
(1373-FROISSART-P,402.8059)

# Frequency of the raising of nonfinite verbs over adverbs by date





# Decline of OV word order by clause type: all *avoir*+participle versus others



## VX↔XV word orders in clauses with full DP direct and indirect objects in Early Old French

	V > DO	DO > V	Row Totals	Estimated DO scrambling
V > IO	40	2	42	.048
IO > V	5	5	10	
Column Totals	45	7	52	
Estimated IO scrambling	.11			

Expected DO,IO > V order =  $.11 * .048 * 52 = .28$

Observed DO,IO > V order = 5

Chi-square = 81.14

VX↔XV word orders in clauses with a full DP  
 direct object and a clausal level PP in Early Old French

	V > DO	DO > V	Row totals	Estimated DO scrambling
V > PP	237	54	291	.19
PP > V	24	38	62	
Column totals	261	92	353	
Estimated PP scrambling	.092			

Expected DO,PP > V order =  $.092 * .19 * 353 = 6.0$

Observed DO,PP > V order = 38

Chi-square = 169.8

VX↔XV word orders in clauses with full DP  
 direct and indirect objects in later Old French

	V > DO	DO > V	Row totals	Estimated DO scrambling
V > IO	41	3	44	.068
IO > V	6	1	7	
Column totals	47	4	51	
Estimated IO scrambling	.13			

Expected DO,IO > V order =  $.13 * .068 * 51 = .44$

Observed DO,IO > V order = 1

Chi-square = 0.6966

VX↔XV word orders in clauses with a full DP  
 direct object and a clausal level PP in later Old French

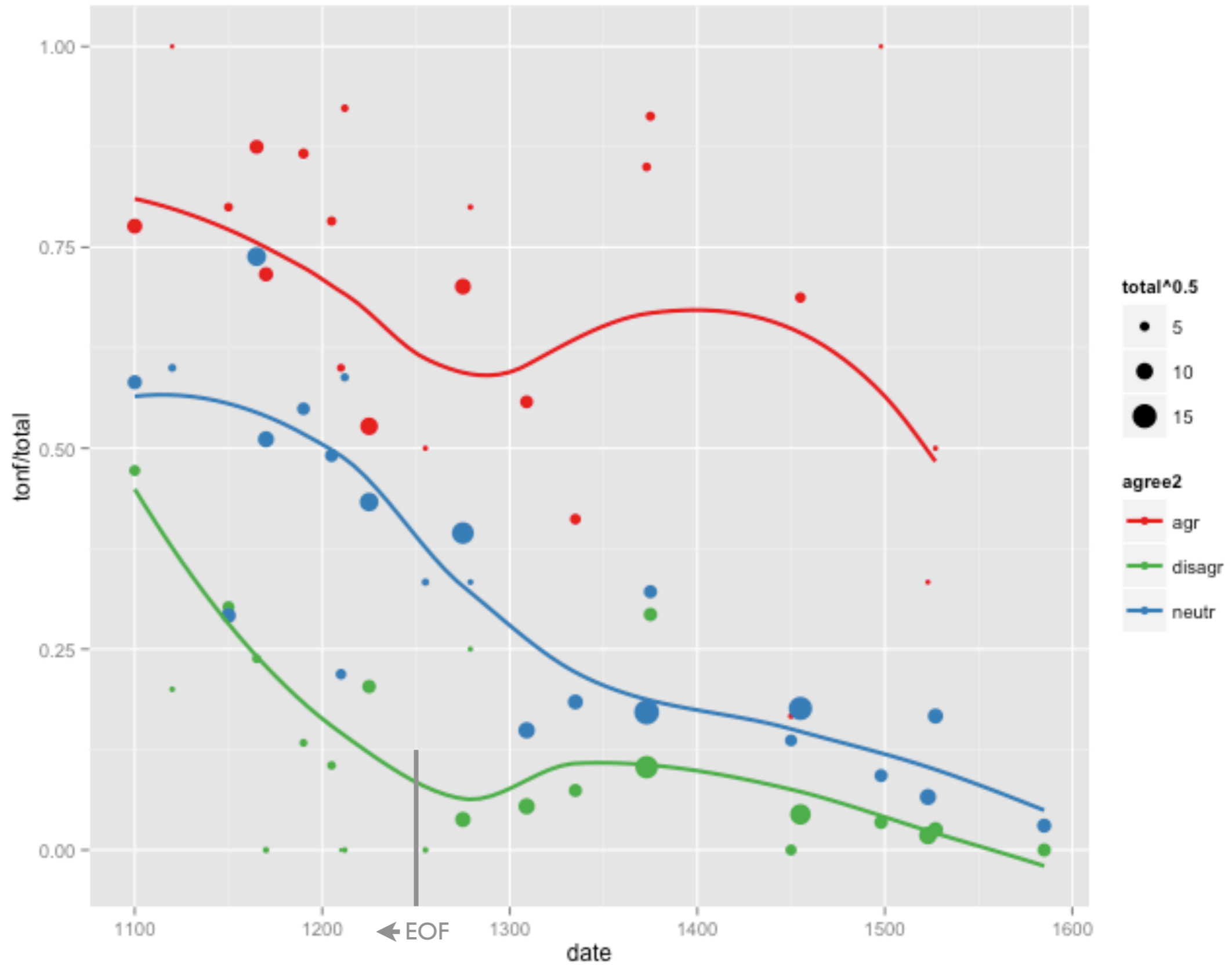
	V > DO	DO > V	Row totals	Estimated DO scrambling
V > PP	200	58	258	.22
PP > V	3	3	6	
Column totals	203	61	264	
Estimated PP scrambling	.015			

Expected DO,PP > V order =  $.015 * .22 * 264 = .88$

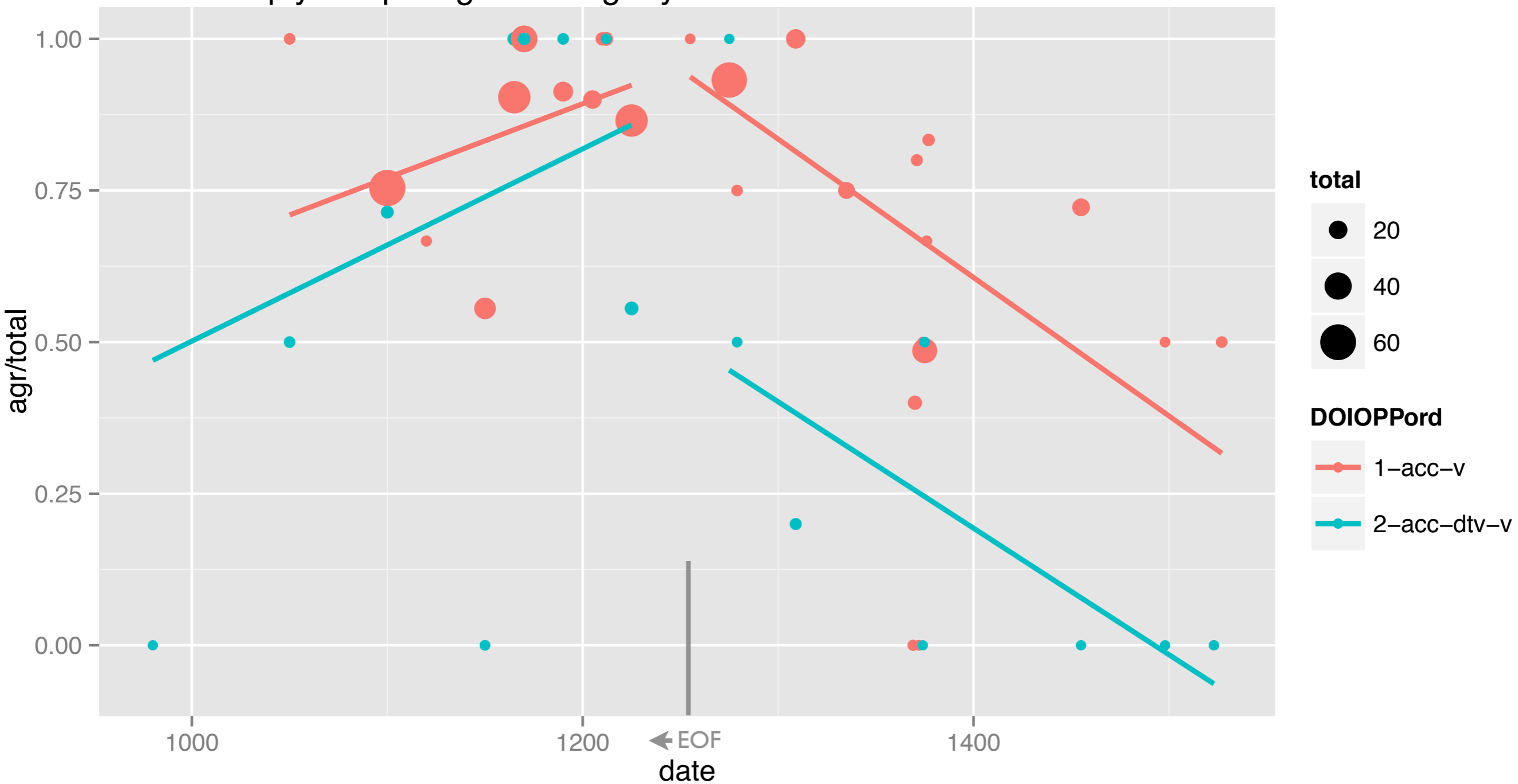
Observed DO,PP > V order = 3

Chi-square = 5.21

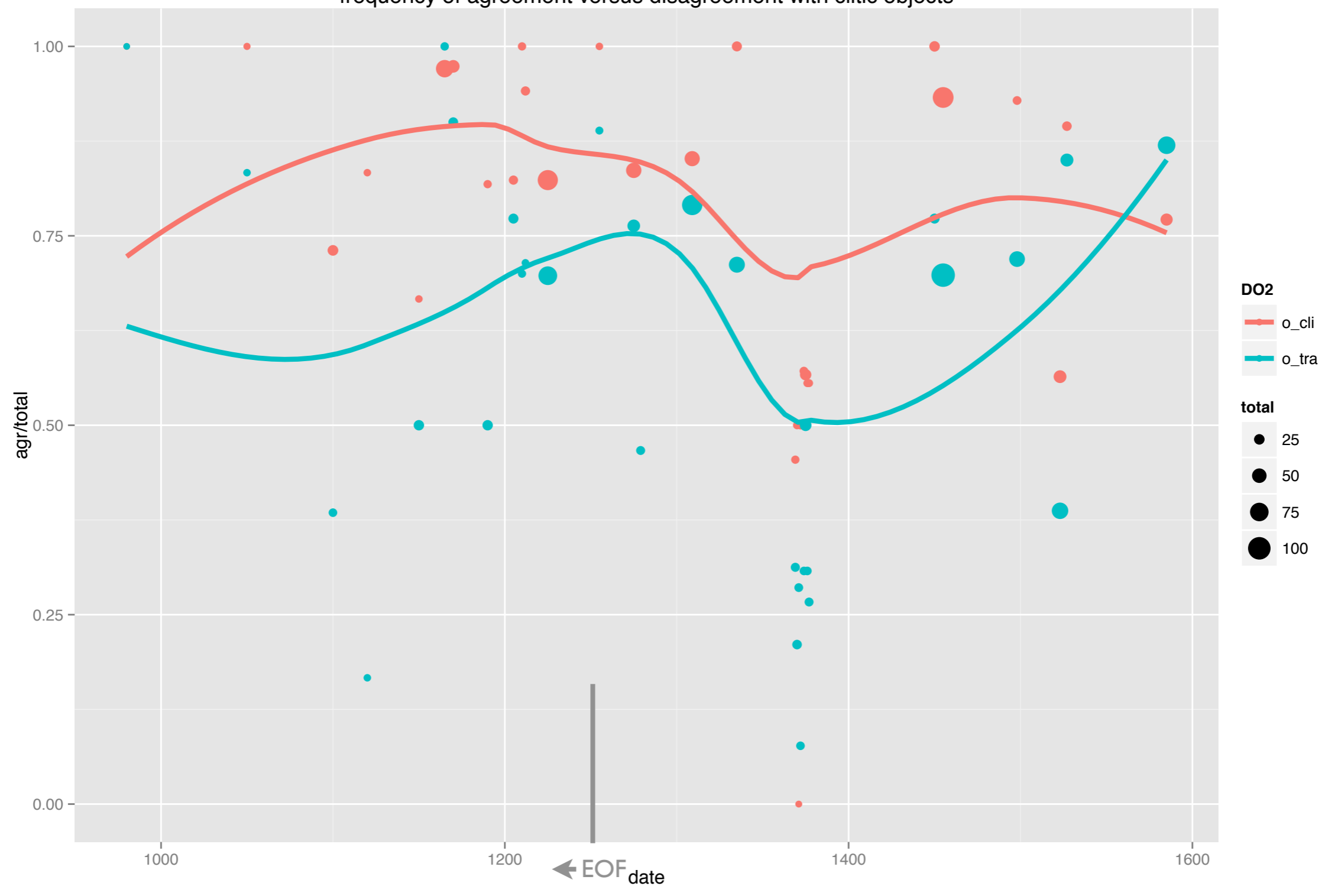
# Decline of OV word order in clauses with *avoir*+participle



"DOIOord.3.ply: freq of agr vs disagr by word order – clitics and traces removed"



"frequency of agreement versus disagreement with clitic objects"





**Finis**