

Agreement with disjointed subjects in Russian

THE FIRST THEORETICAL AND EXPERIMENTAL LINGUISTICS WORKSHOP

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introduction

- ❖ Agreement with disjunction: slightly contradictory facts
- ❖ [Smith et al. 2018]: In the case of disjunction, unlike conjunction, there is no resolution strategy for the number feature:
 - (1) *Either an owl or an elephant is / *are playing with a bee.*
- ❖ [Smith et al. 2018]: But resolution strategy is possible with inclusive disjunction
- ❖ However, these facts not supported by experimental research

introduction

- ❖ [Keung, Staub 2018]: English data
 - disjunction of different NPs (SG-SG, SG-PL, PL-SG, PL-PL)
 - speeded choice
- ❖ In 20% of cases with singular noun disjunction, respondents chose plural agreement, which cannot be considered an error, as cases of attraction and clearly erroneous agreement received much fewer percentages

introduction

- ❖ [Foppolo, Staub 2020]: Experiments conducted in English and Italian
 - singular noun disjunction
 - acceptability judgements and eyetracking
- ❖ In Italian, no differences in acceptability ratings were found between singular and plural agreement
- ❖ In English, both agreements are also possible, but the ratings for plural agreement are slightly lower than for singular agreement
- ❖ No explicit eye movement disruptions were observed when reading sentences with plural agreement

introduction

- ❖ [Foppolo, Staub 2020]: Two of their experiments were aimed at investigating the influence on agreement of exclusive and inclusive disjunction
 - agreement in contexts that elicit an inclusive interpretation of disjunction (in the antecedent of a conditional and in the scope of negation)
 - agreement with predicates that rule out an inclusive interpretation of disjunction (*like to become the next CEO of the company*)
- ❖ No influence of disjunction interpretation on agreement was detected (Only a slight increase in the acceptability of plural was observed in the first contexts, while the acceptability of singular remained at the same level)

introduction

- ❖ [Marušič, Shen 2021]: Slovenian data
 - exclusive disjunction (*ali ... ali pa* 'either ... or')
 - disjunction of subjects with matching and mismatching gender
 - guided elicitation
- ❖ Three agreement patterns are possible: closest disjunct agreement, resolved agreement, highest disjunct agreement

introduction

- ❖ [Himmelreich, Hartmann 2023]: German data
 - disjunction of different NPs (SG-SG, SG-PL, PL-SG, PL-PL)
 - disjunction of subjects with mismatching person (1 SG-3SG, 2SG-3SG)
 - different word order
 - acceptability judgements
- ❖ When using SG-SG disjunction, both singular and plural agreement are possible
- ❖ In cases of person feature mismatch, plural agreement, specifically the 3rd person plural agreement, is preferred, and closest disjunct agreement is also possible

introduction

- ❖ [Himmelreich, Hartmann 2023]: mention an experiment investigating the influence of disjunction interpretation on agreement (they compared verbs that prohibited inclusive disjunction and other verbs), but this influence was not confirmed

Russian

- ❖ Person (1-2-3) and number (SG-PL) agreement in non-past tenses
- ❖ Focus on constructions with mismatching person
- ❖ Russian grammars and style guides [Shvedova (ed.) 1980; Rozental' et al. 1994] mention only resolved agreement and cite examples only with conjunction

Russian

- ❖ [Belova, Davidyuk 2023]: Experiments conducted in Russian
 - conjunction of subjects with mismatching person (e.g. *ya i Vasya* ‘I and Vasya’, *ya i ty* ‘I and you’), different word order and conjunct order
 - acceptability judgements
- ❖ The most preferred strategy is the resolved agreement (1st person plural)
- ❖ The closest conjunct agreement is only possible with the word order VS
- ❖ The 3rd person plural agreement is rated slightly higher (but significantly) than ungrammatical fillers, even when there is no 3rd person conjunct; such agreement can be found in the corpus

experimental study

- ❖ Two experiments
 - acceptability judgements, Likert scale 1-7
 - PCIbex
 - The respondents were recruited through the Yandex.Toloka website

experimental study

❖ Two experiments

- disjunction of subjects with mismatching person
- The first experiment: the first disjunct is the personal pronoun *ya* 'I', the second disjunct is a masculine proper name
- The second experiment: the first disjunct is a masculine proper name, the second disjunct is the personal pronoun *ya* 'I'

experimental study

❖ Two experiments

- 2x4 design: type of disjunction (*il'i* 'or' / *il'i ... il'i* 'either or'), agreement (1sg, 1pl, 3sg, 3pl)
- SV word order
- transitive verbs, perfective aspect, non-past tense

experimental study

(2)

Я или Вася
'I or Vasya'

Или я, или Вася
'Either I or Vasya'

выполню (1sg)

выполним (1pl)

выполнит (3sg)

выполнят (3pl)
'will complete'

это сложное задание.
this difficult task

'I or Vasya / Either I or Vasya will complete this difficult task'.

experimental study

(3)

Вася или я
'Vasya or I'

Или Вася, или я
'Either Vasya or I'

выполню (1sg)

выполним (1pl)

выполнит (3sg)

выполнят (3pl)
'will complete'

это сложное задание.
this difficult task

'Vasya or I / Either Vasya or I will complete this difficult task'.

experimental study

❖ Two experiments

- In each experiment, there were 4 lexicalizations per condition → 32 experimental sentences
- The ratio of fillers to experimental sentences was 1:1 → 16 grammatical and 16 ungrammatical fillers (4 grammatical fillers had comprehension questions)
- There were 3 training sentences
- 67 sentences in each experiment

experimental study

❖ Two experiments

- Grammatical fillers: 1) sentences without disjunction; 2) sentences with disjunction in the direct object position (in Russian, there is no predicate agreement with the object)
- Ungrammatical fillers: 1) sentences with disjunction of subjects with matching person (masculine proper names) but with an error in predicate agreement (1st person plural); 2) sentences without disjunction but with an error in agreement within the direct object group between the demonstrative pronoun, adjective, and noun

participants

	'I or X' / 'either I or X'	'X or I' / 'either X or I'
The number of respondents	84 (-10)	84 (-8)
Gender distribution	43 males 29 females 2 didn't respond	44 males 32 females
The average age of respondents	40 y.o. (sd \approx 14)	36 y.o. (sd \approx 11)

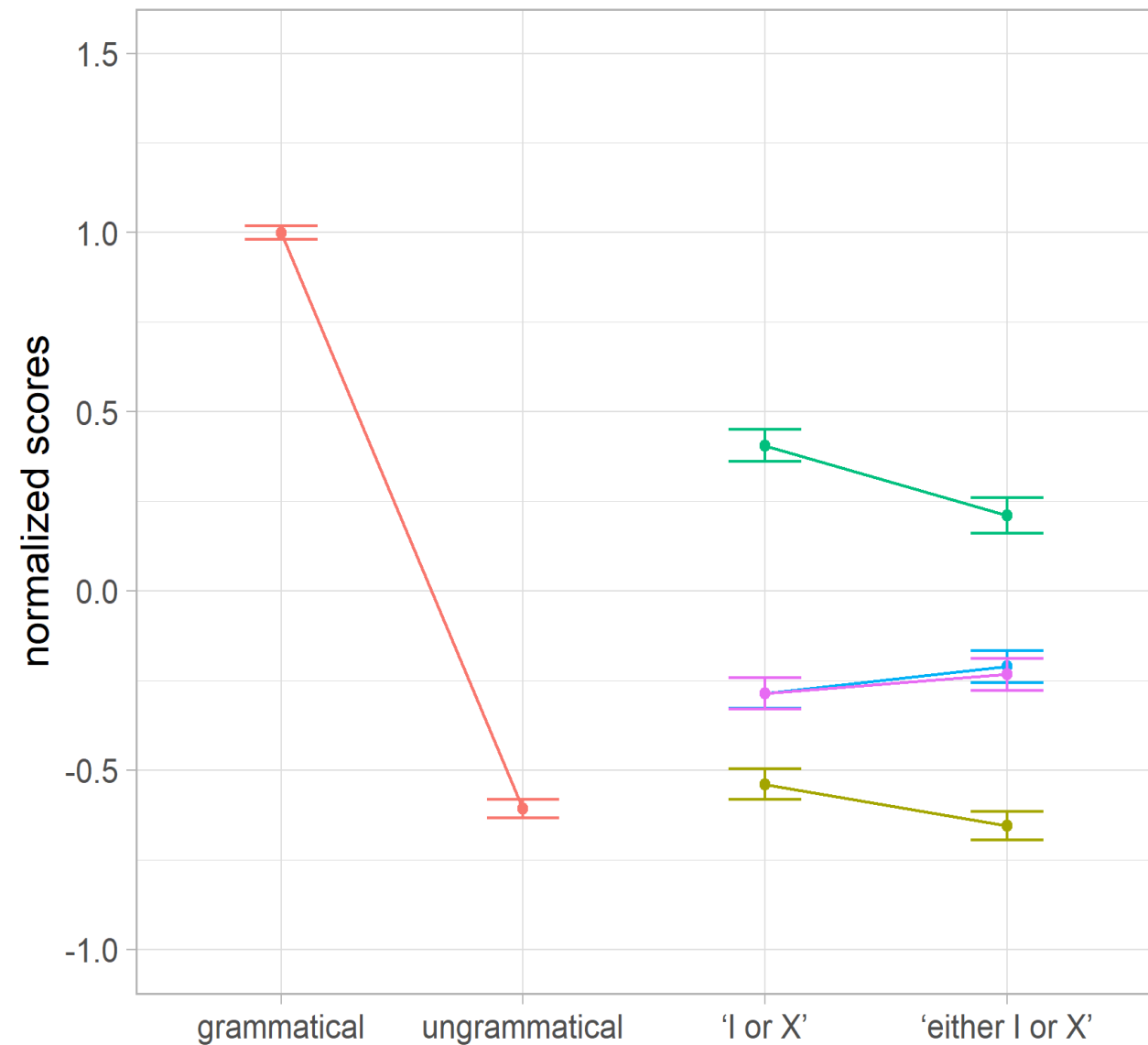
experimental study

❖ Statistical analysis:

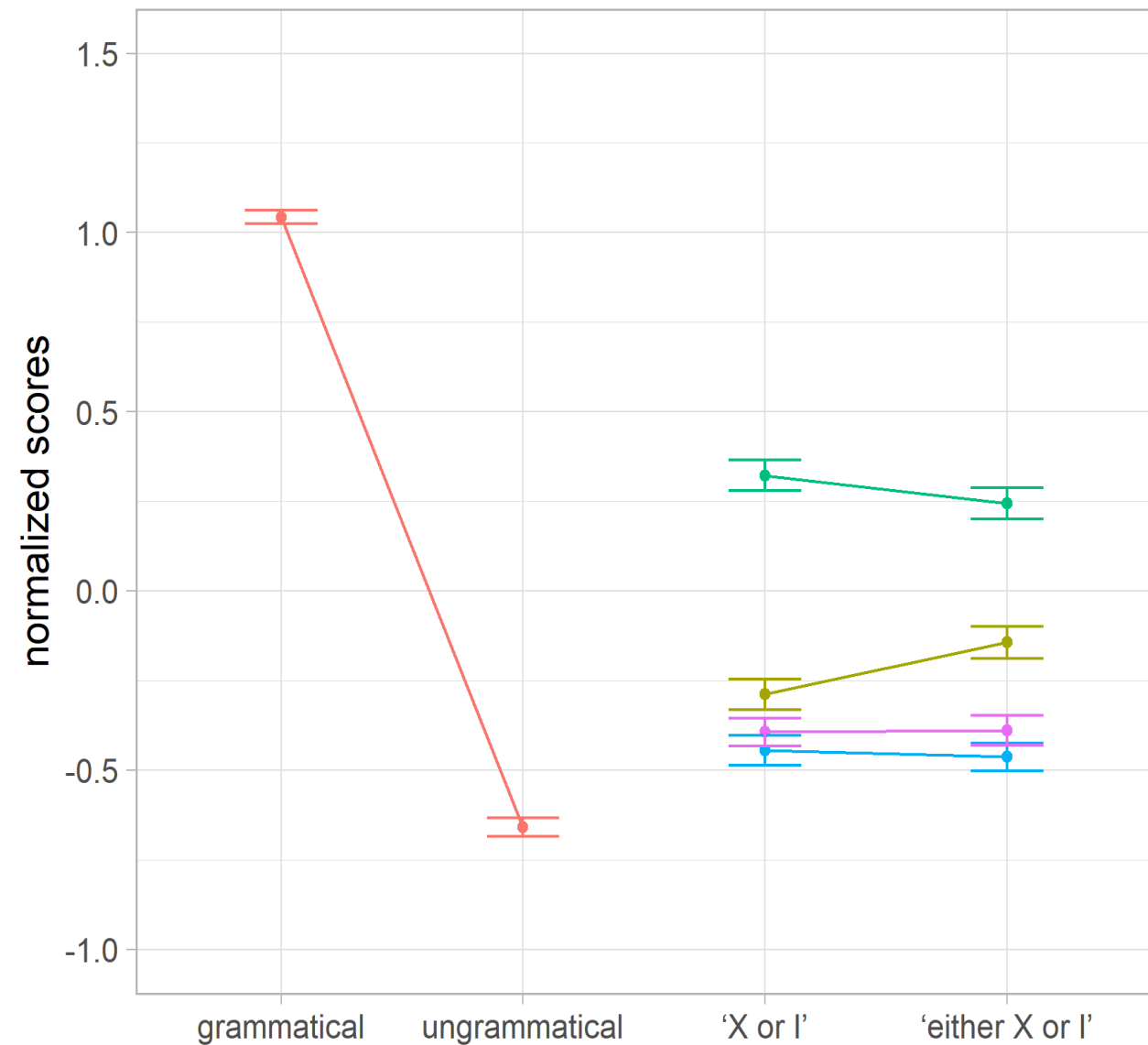
- z-score normalization
- filtering out some participants: inattentive respondents (based on fillers with comprehension questions), respondents with quick responses, respondents with divergent evaluations of grammatical and ungrammatical fillers
- linear mixed models and Tukey's method for multiple comparisons



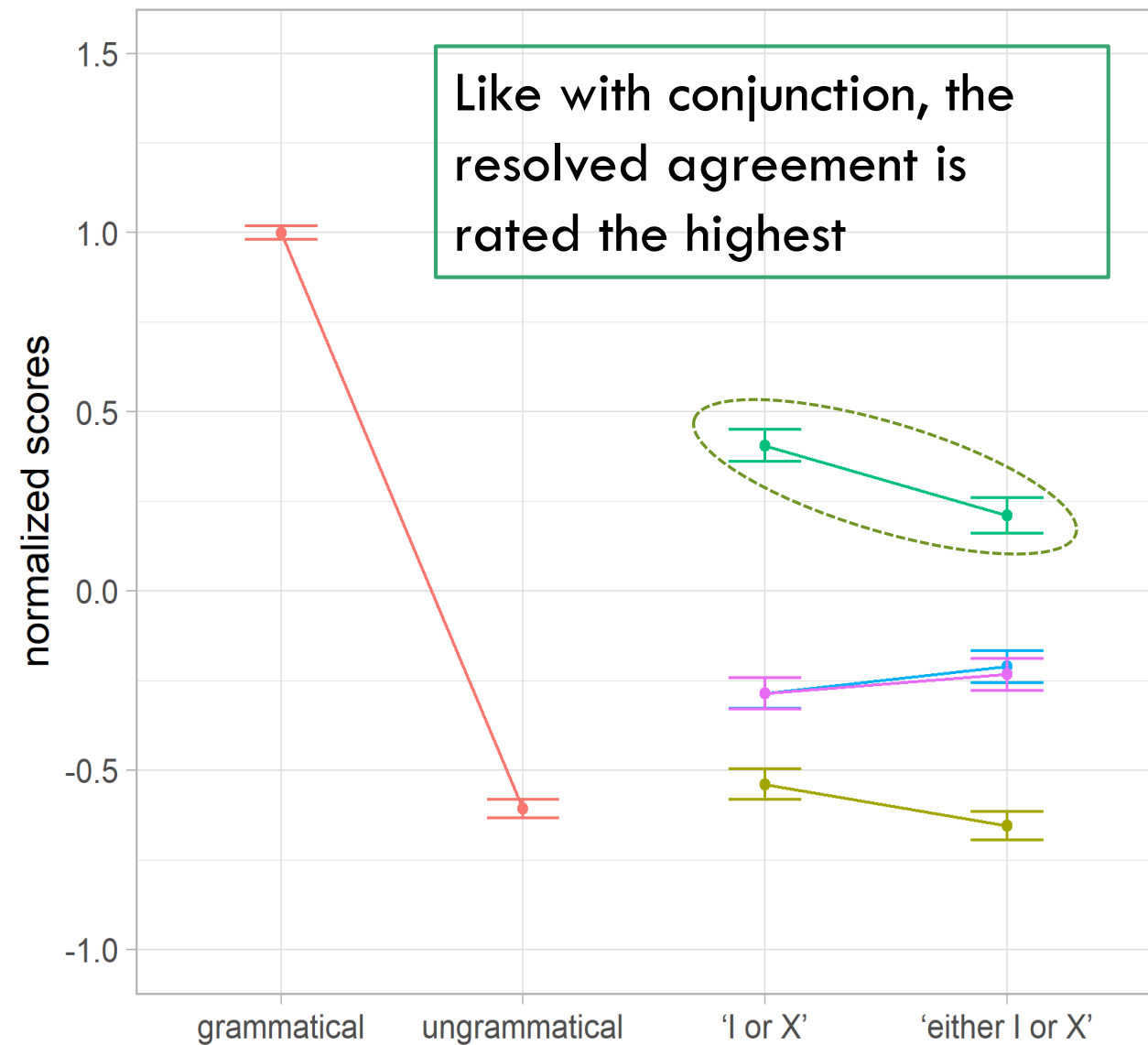
results



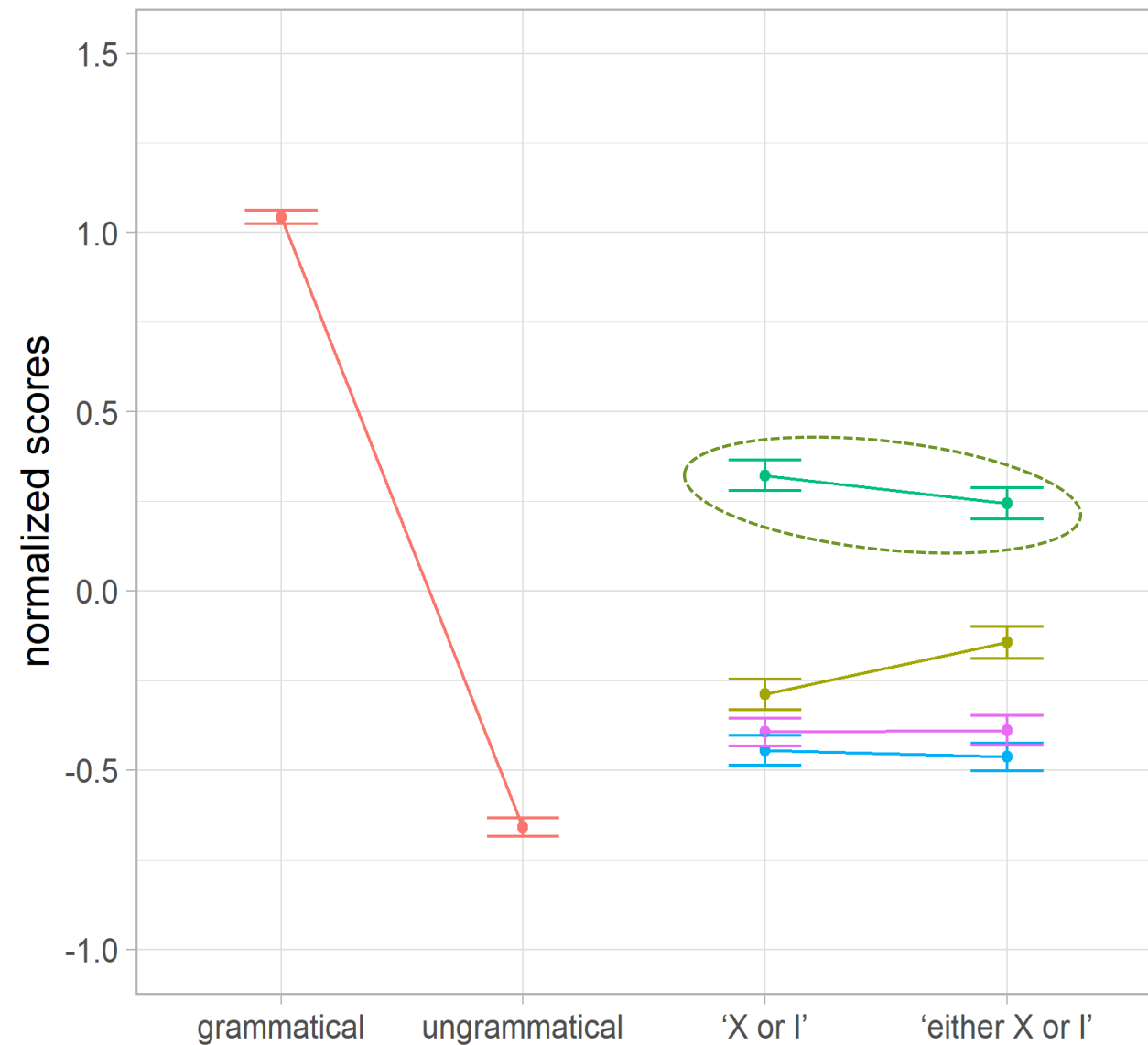
Verb form fillers 1sg 1pl 3sg 3pl



Verb form fillers 1sg 1pl 3sg 3pl

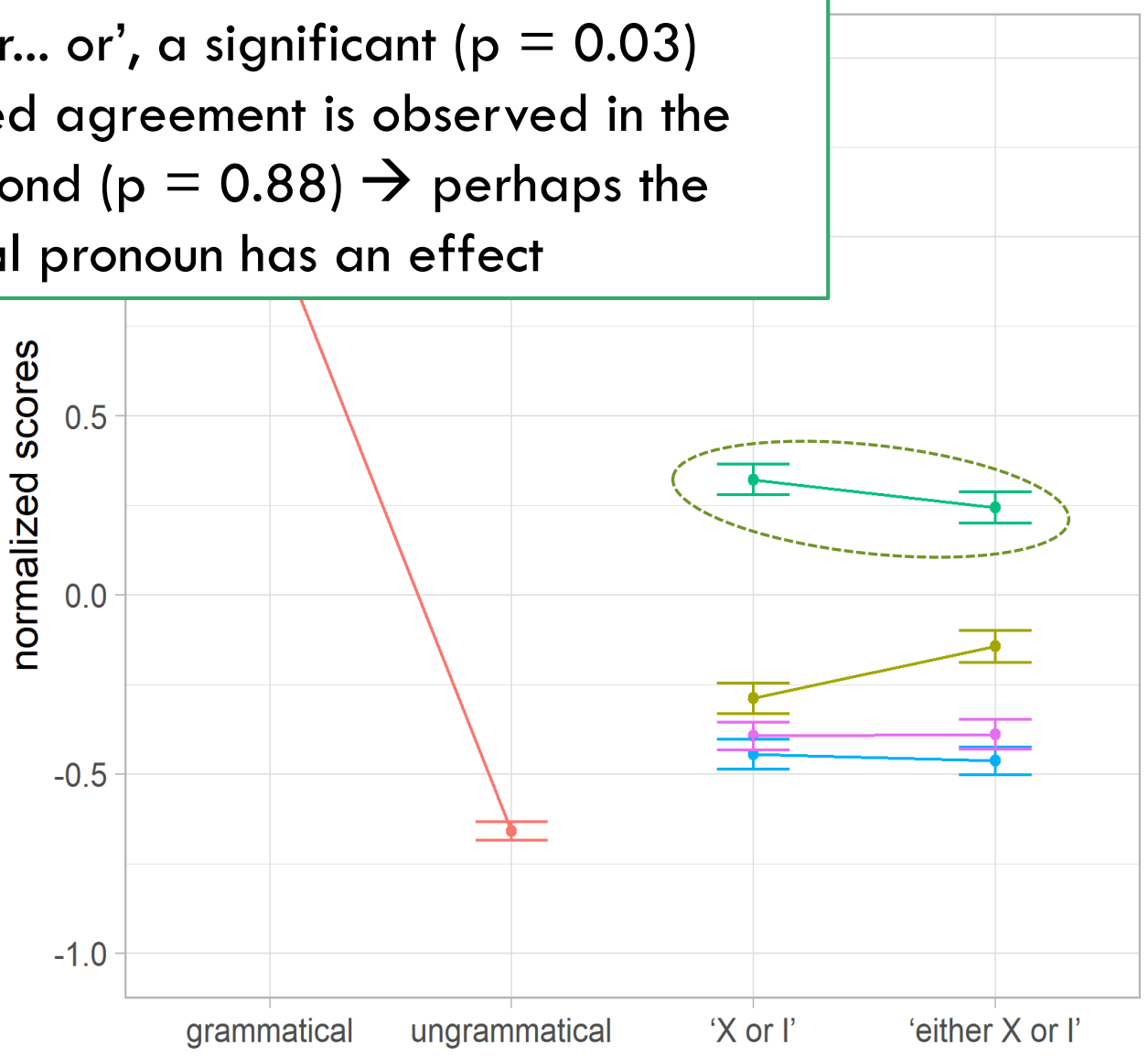
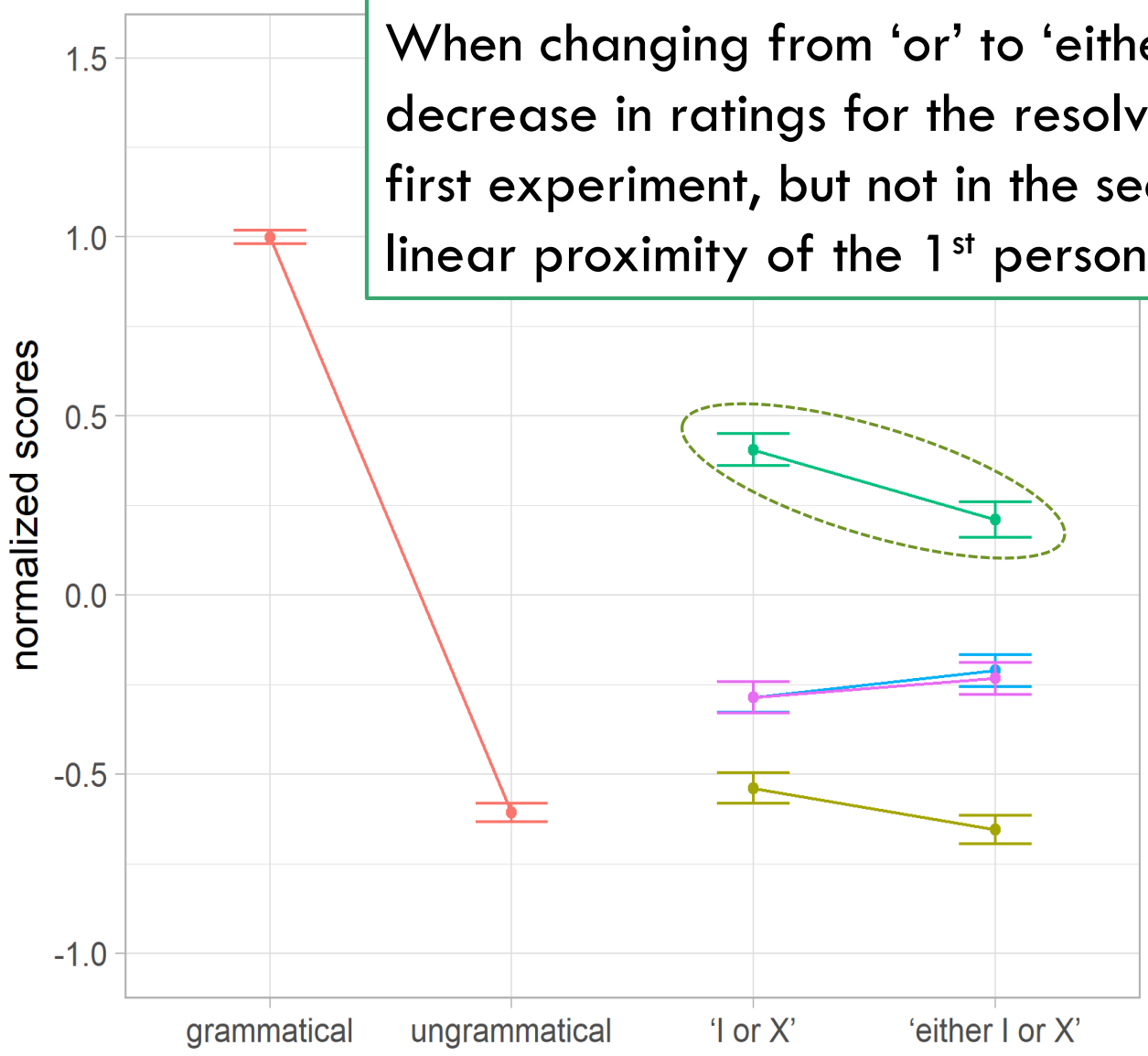


Verb form — fillers — 1sg — 1pl — 3sg — 3pl



Verb form — fillers — 1sg — 1pl — 3sg — 3pl

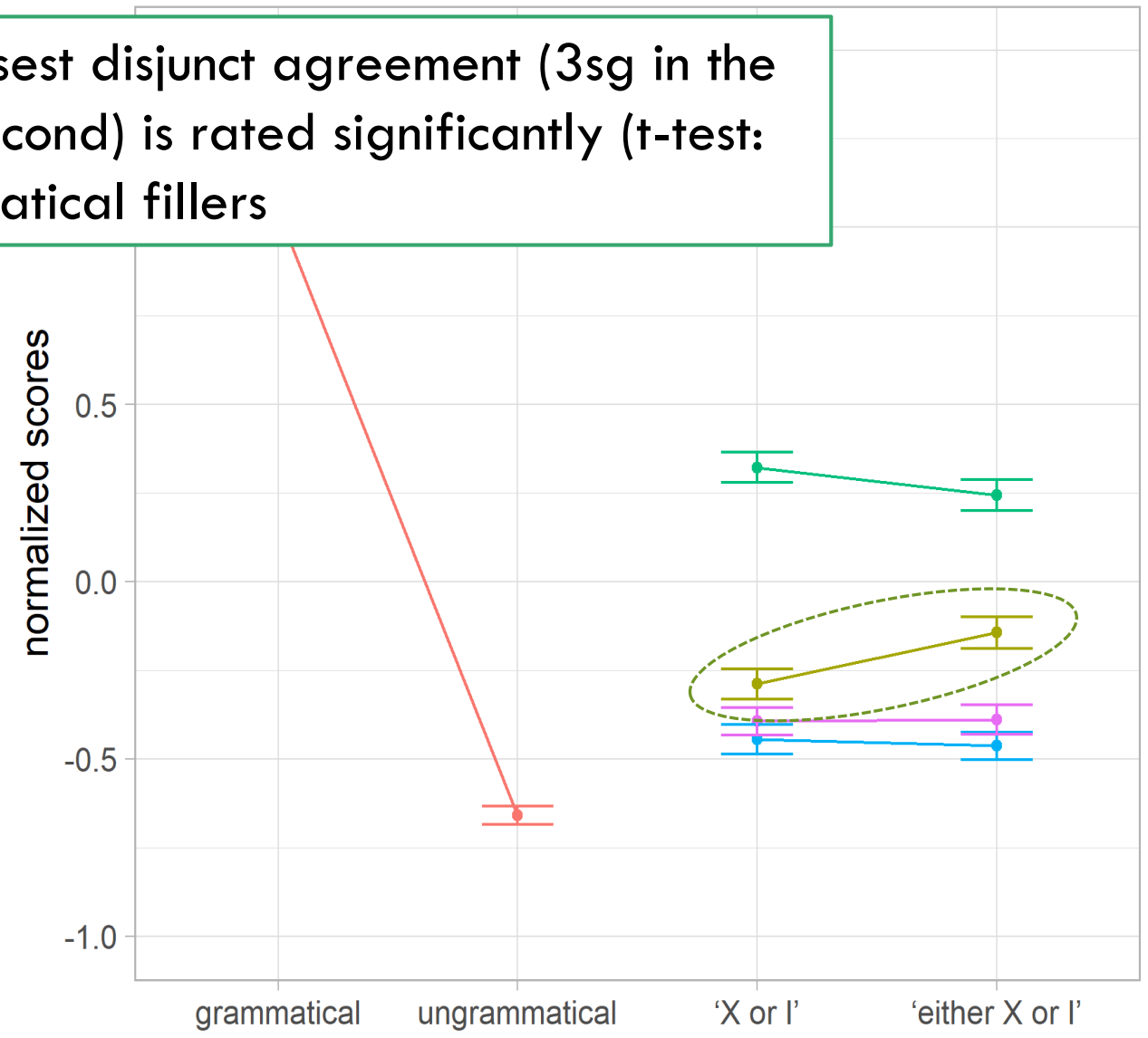
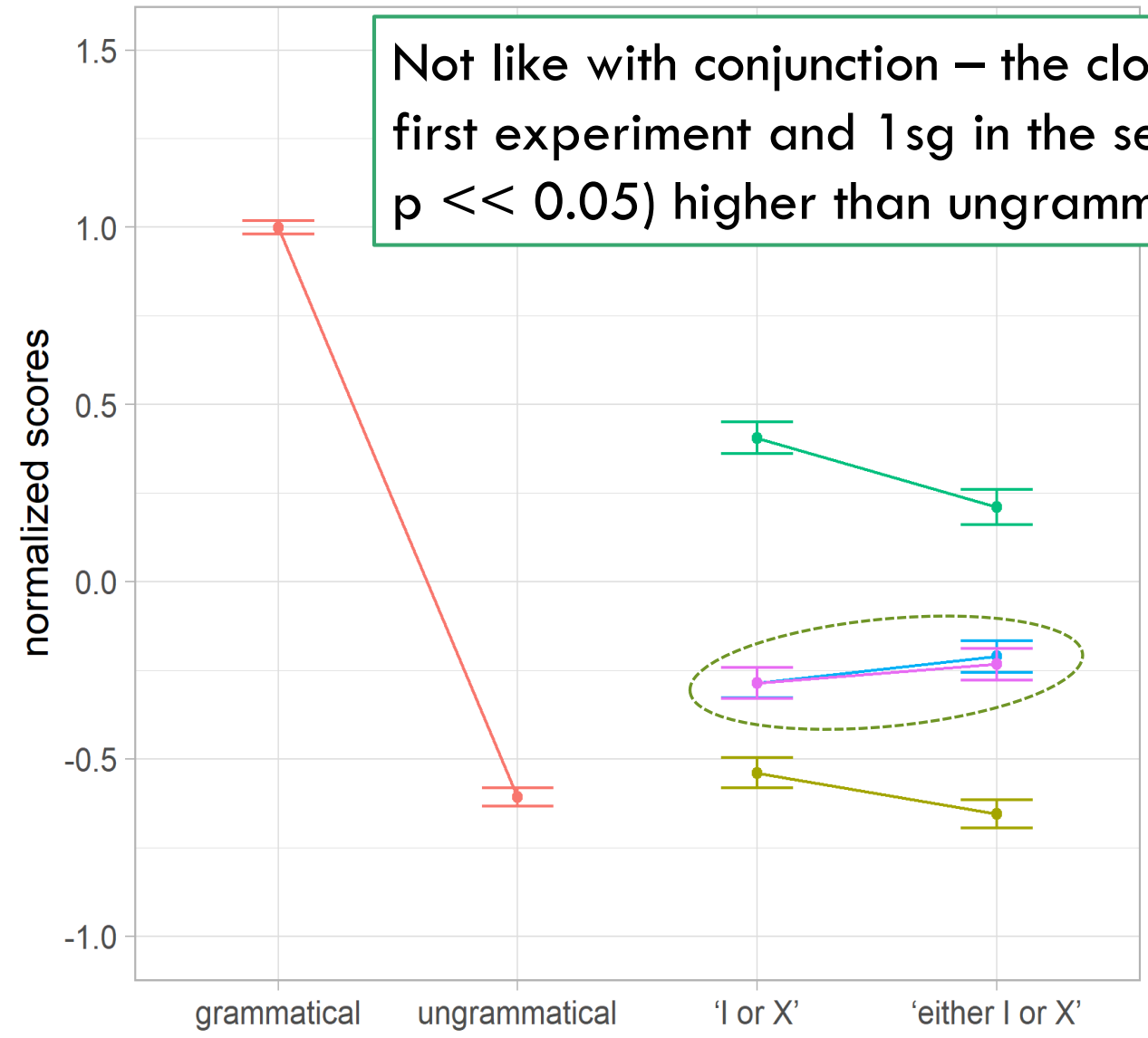
When changing from 'or' to 'either... or', a significant ($p = 0.03$) decrease in ratings for the resolved agreement is observed in the first experiment, but not in the second ($p = 0.88$) \rightarrow perhaps the linear proximity of the 1st personal pronoun has an effect



Verb form — fillers — 1sg — 1pl — 3sg — 3pl

Verb form — fillers — 1sg — 1pl — 3sg — 3pl

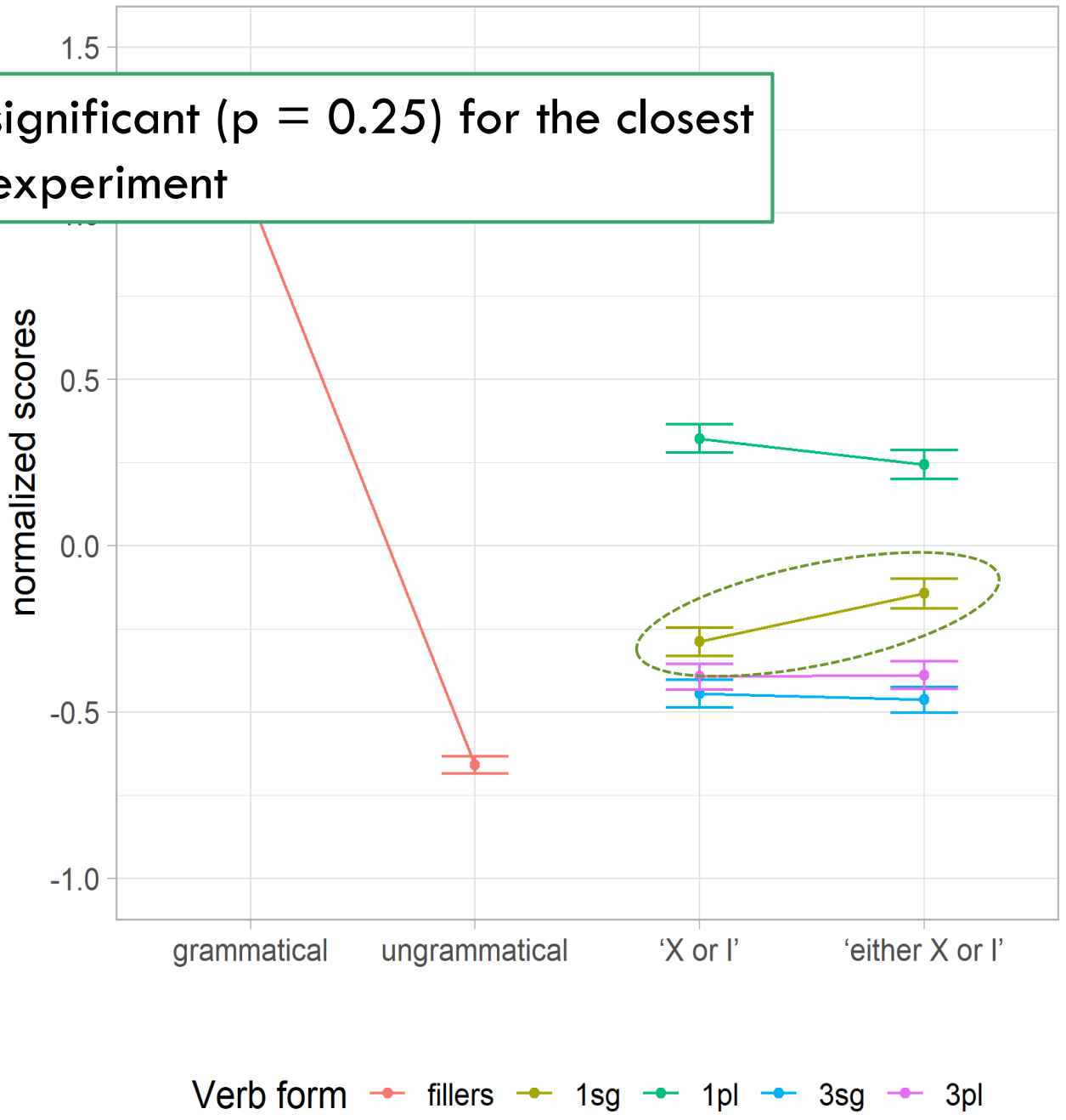
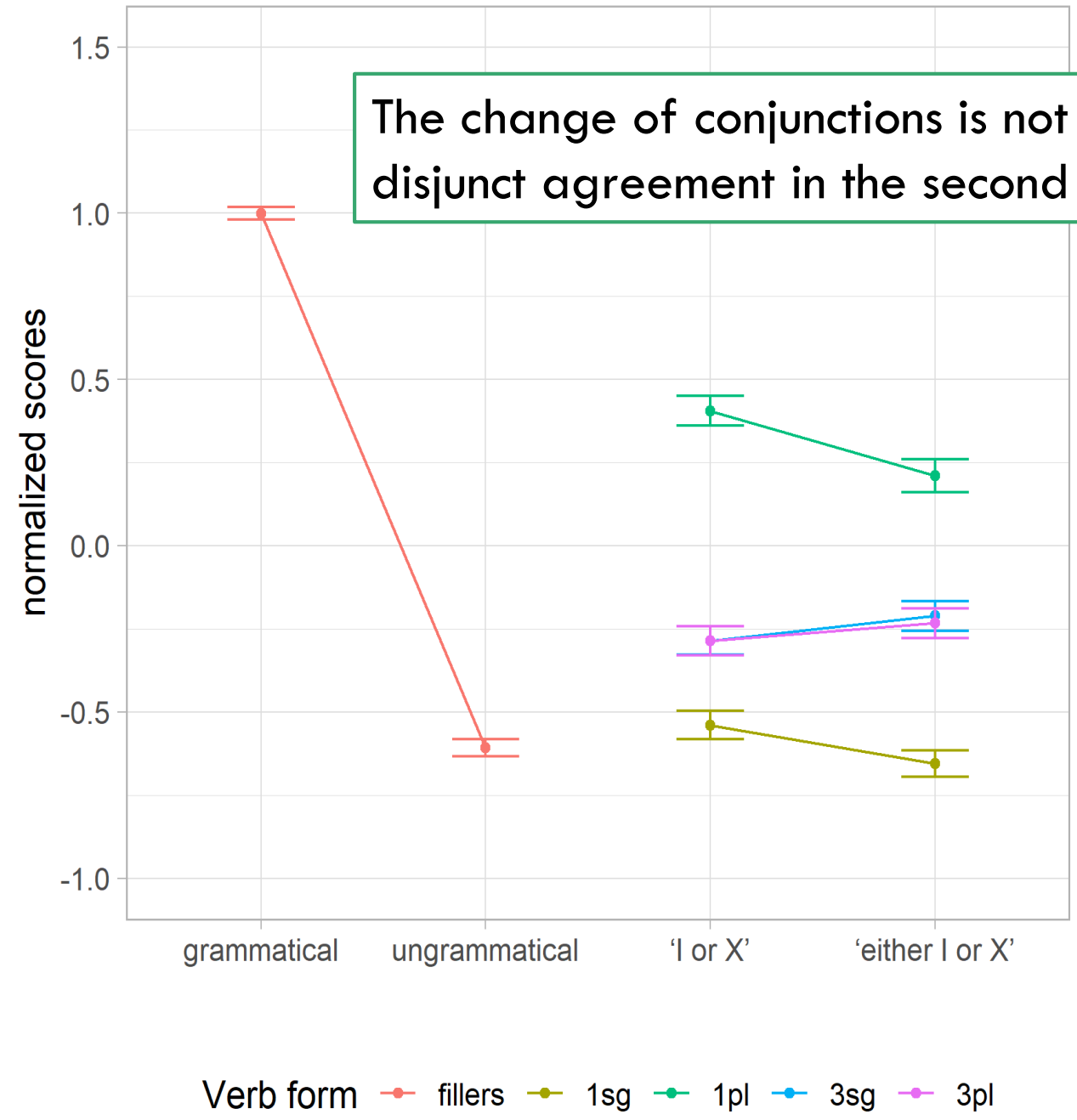
Not like with conjunction – the closest disjunct agreement (3sg in the first experiment and 1sg in the second) is rated significantly (t-test: $p \ll 0.05$) higher than ungrammatical fillers



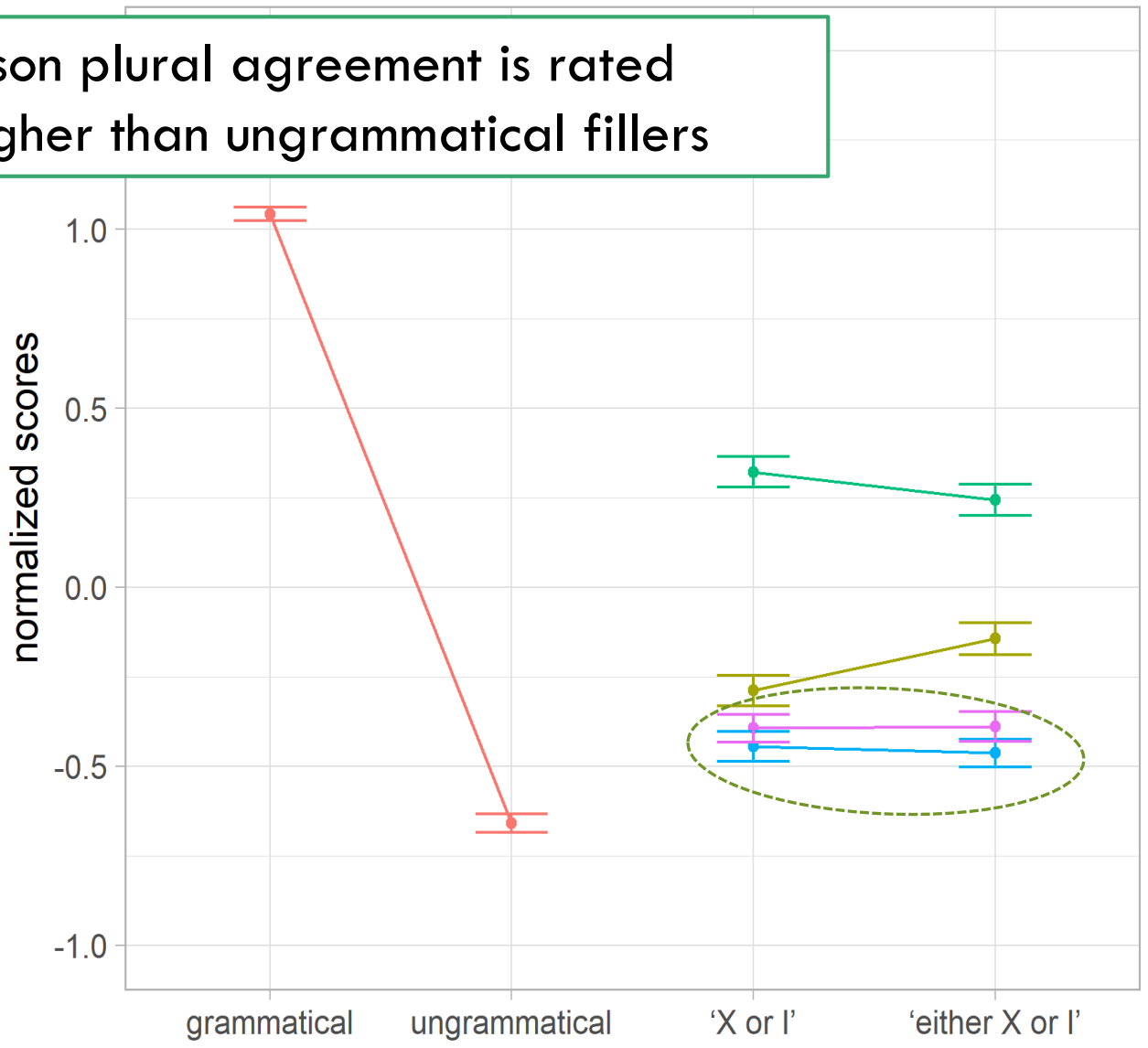
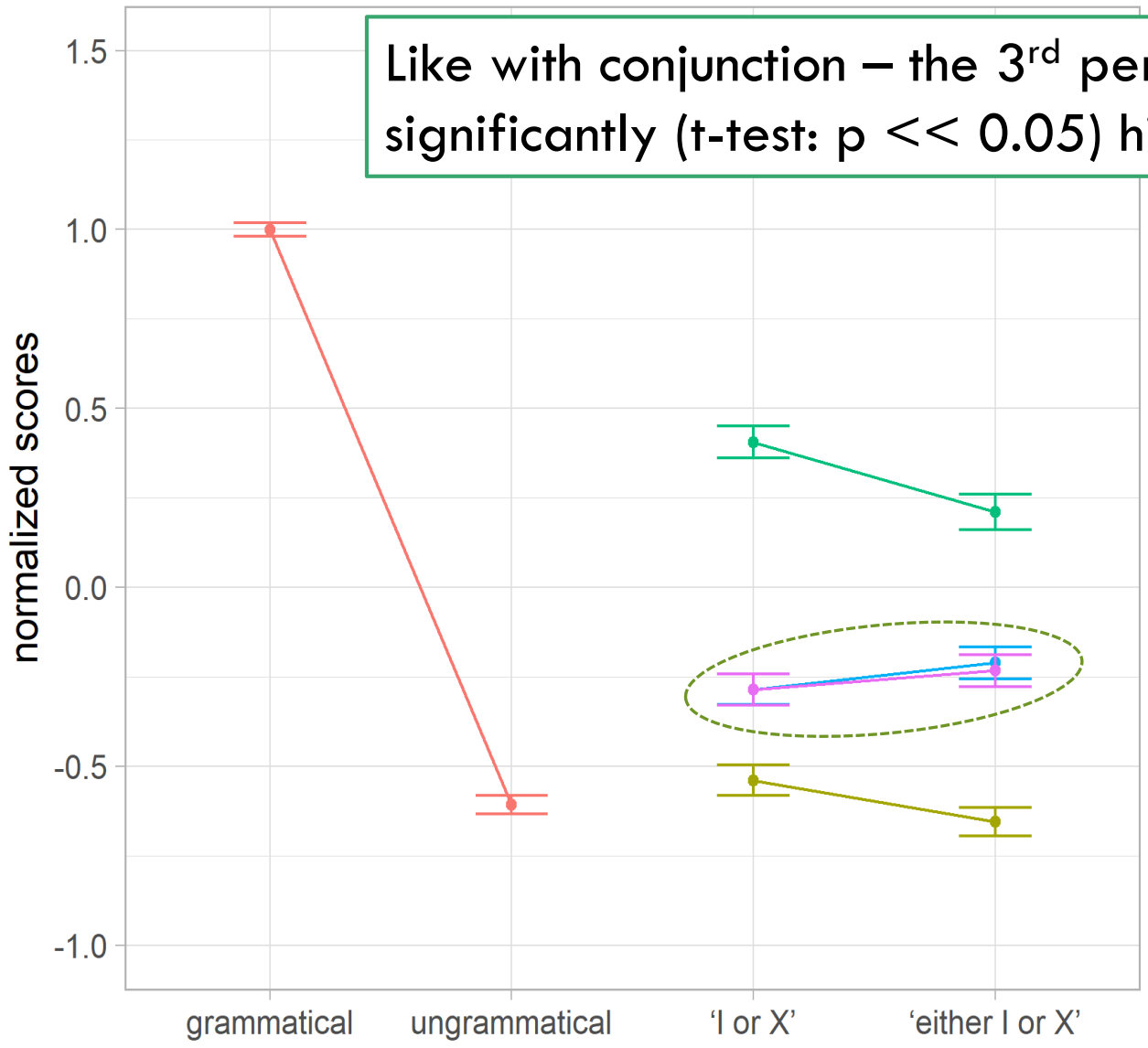
Verb form — fillers — 1sg — 1pl — 3sg — 3pl

Verb form — fillers — 1sg — 1pl — 3sg — 3pl

The change of conjunctions is not significant ($p = 0.25$) for the closest disjunct agreement in the second experiment



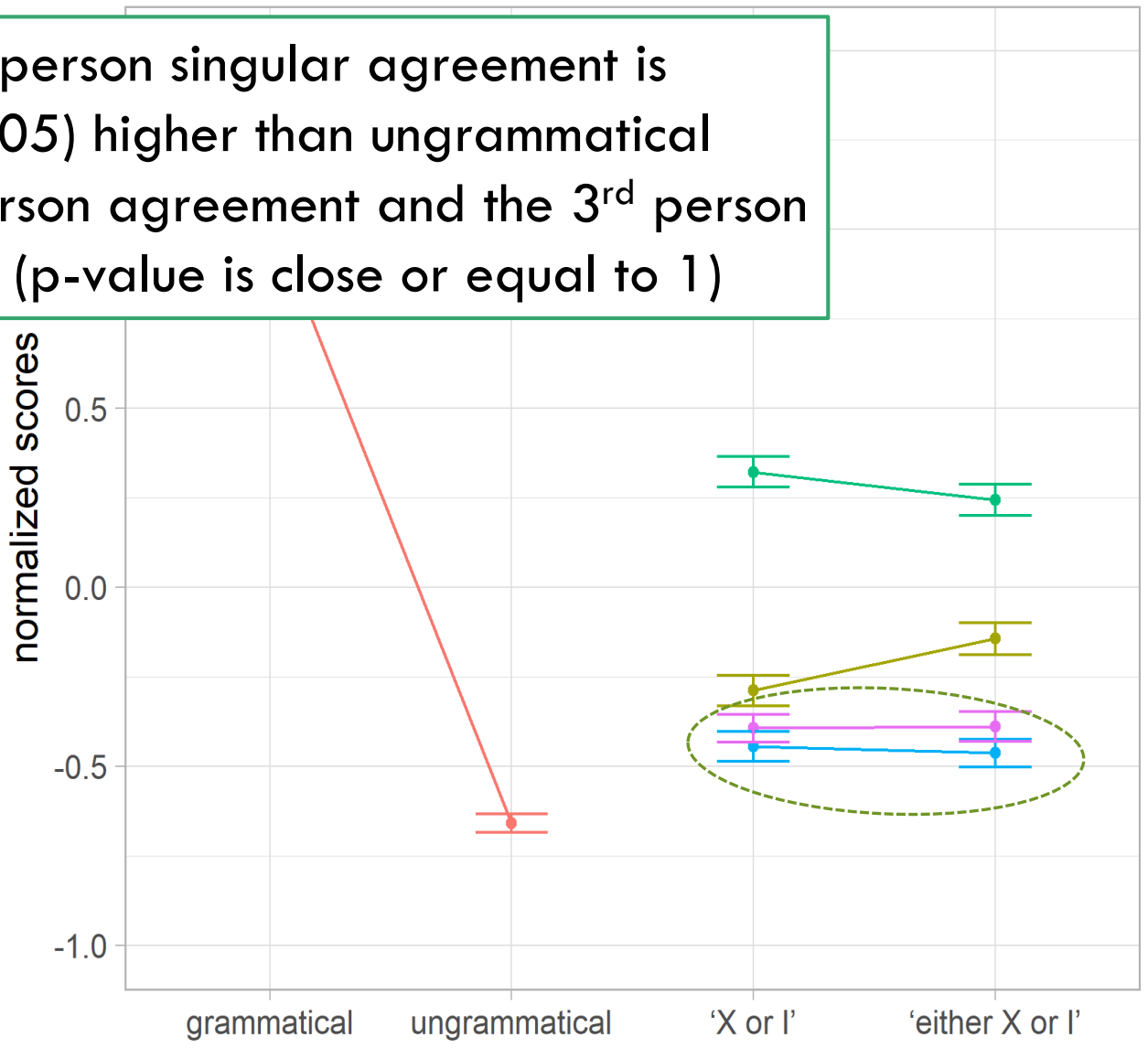
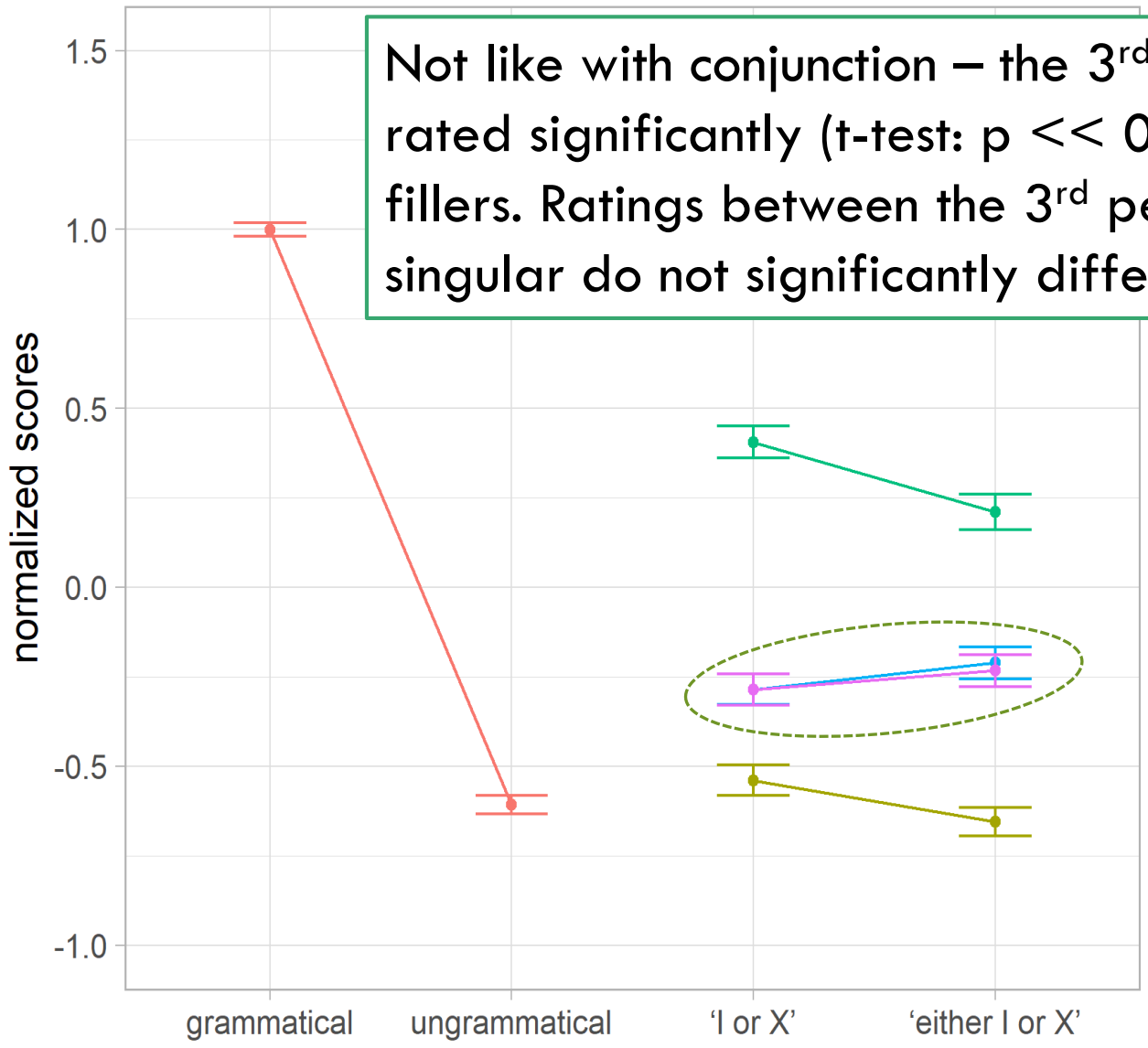
Like with conjunction – the 3rd person plural agreement is rated significantly (t-test: $p \ll 0.05$) higher than ungrammatical fillers



Verb form — fillers — 1sg — 1pl — 3sg — 3pl

Verb form — fillers — 1sg — 1pl — 3sg — 3pl

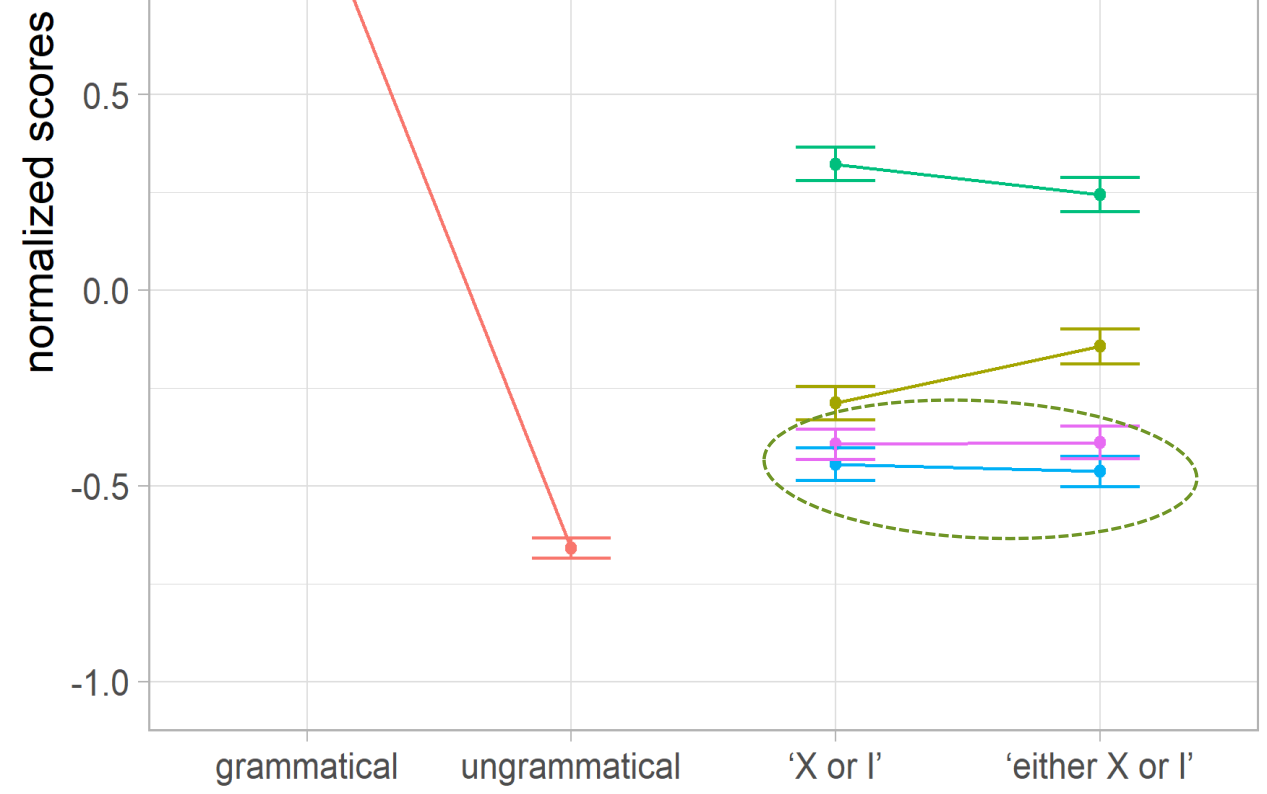
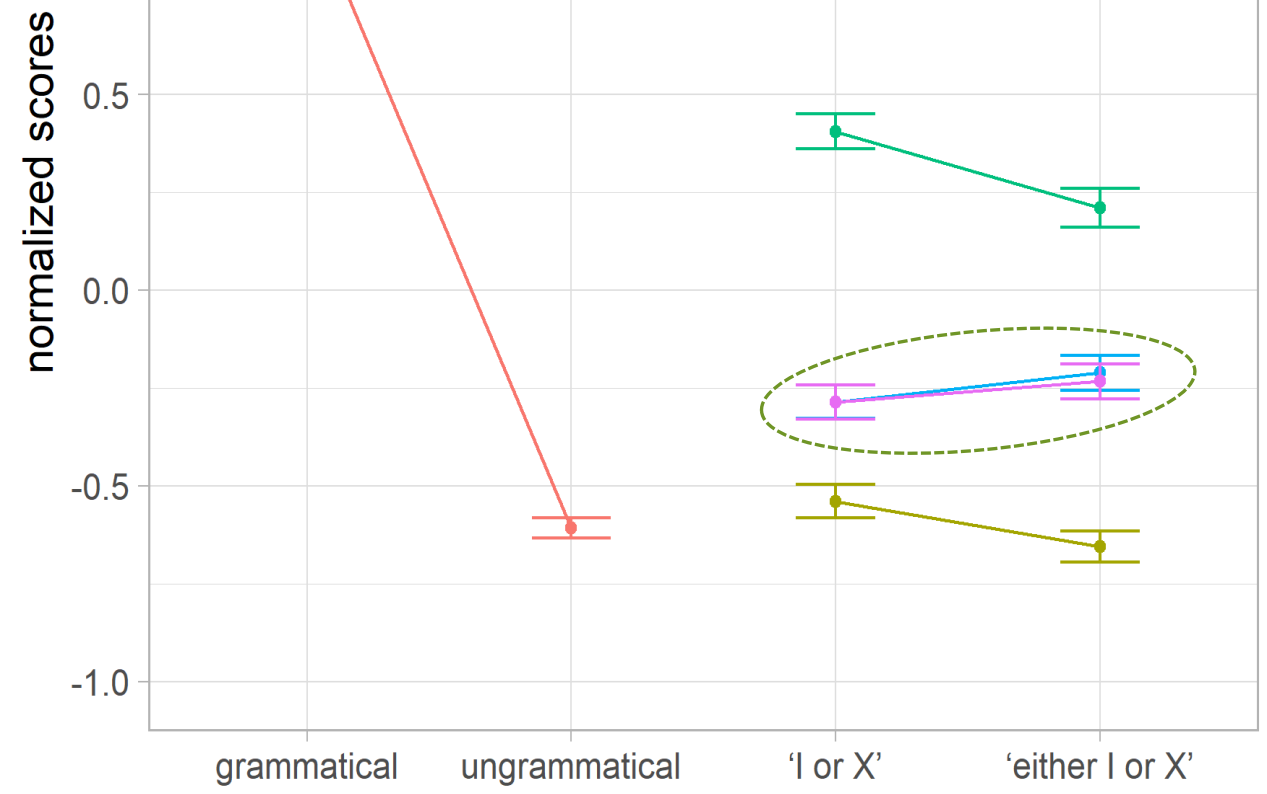
Not like with conjunction – the 3rd person singular agreement is rated significantly (t-test: $p \ll 0.05$) higher than ungrammatical fillers. Ratings between the 3rd person agreement and the 3rd person singular do not significantly differ (p-value is close or equal to 1)



Verb form — fillers — 1sg — 1pl — 3sg — 3pl

Verb form — fillers — 1sg — 1pl — 3sg — 3pl

The 3rd person singular agreement in the second experiment is not a case of the first disjunct agreement, as the first disjunct agreement in the first experiment is rated at the level of ungrammatical fillers (t-test: $p = 0.18$ for 'or' and $p = 0.33$ for 'either ... or')



Verb form — fillers — 1sg — 1pl — 3sg — 3pl

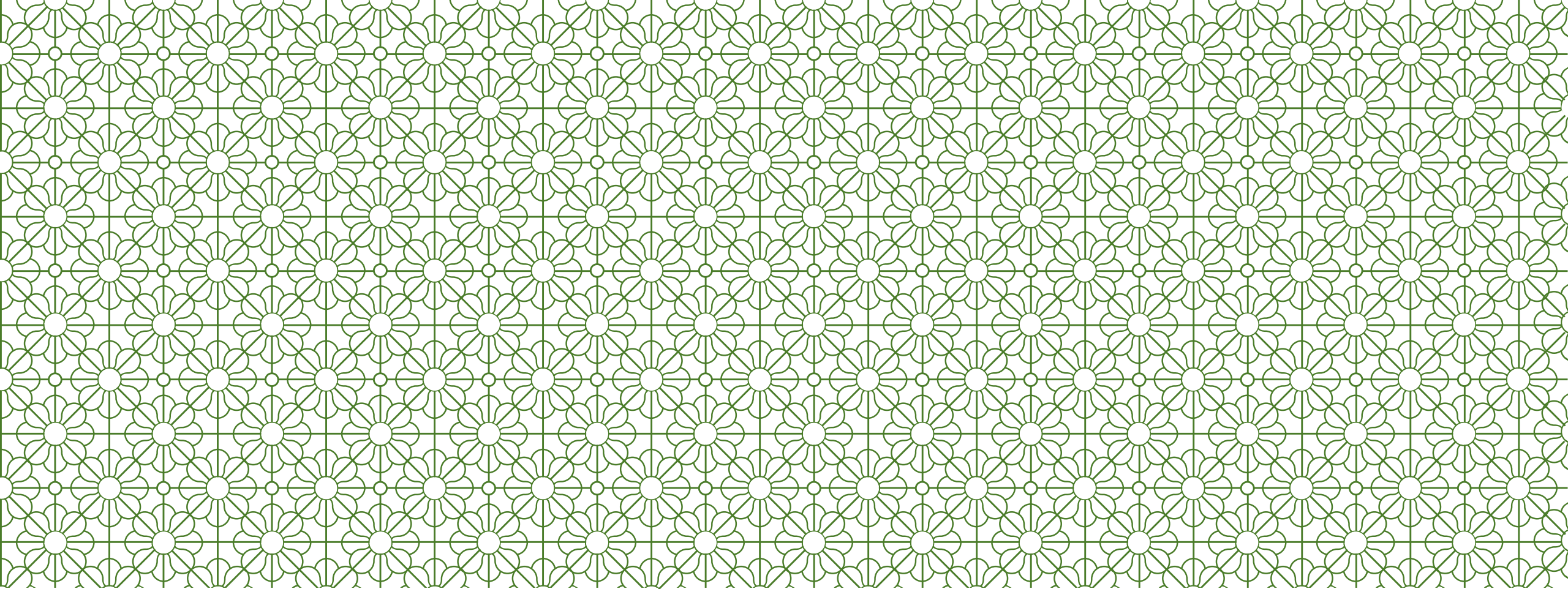
Verb form — fillers — 1sg — 1pl — 3sg — 3pl

conclusion

- ❖ The interpretation of disjunction does not influence the possible agreement patterns in Russian
- ❖ For disjunction in Russian, the resolved agreement is the most acceptable, just like for coordination
- ❖ But unlike with conjunction, with disjunction the closest disjunct agreement is possible in the SV word order
 - Does this indicate the possibility of different structures between conjunction and disjunction, or we are observing some agreement attraction effect – it is still unclear for now

conclusion

- ❖ Just like with conjunction, with disjunction it becomes possible to have the 3rd person plural agreement
- ❖ But unlike with conjunction, with disjunction it is also possible to have the 3rd person singular agreement
 - Are both of these agreements default? → It is necessary to check the agreement with disjunction of the 1st and 2nd personal pronouns
 - If so, then the fact that conjunction allows the 3rd person plural agreement, while disjunction allows both the 3rd person plural and 3rd person singular agreement, may confirm the hypothesis of A. Himmelreich and K. Hartmann [2023] that coordinate and disjunctive DPs have different number features: disjunction doesn't have [#ind: PL]



KÖSZÖNÖM! |
THANK YOU!

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