

# Do Presuppositions Triggers Improve the Felicity of Mismatched Sentences?

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# Presupposition Triggers

- Words like *too*, *again*, *ook* and *toch*
- Their meaning is unaffected by logical operators, e.g.
  - *We got cake with our coffee again.*
  - *We didn't get cake with our coffee again.*
- Presuppositions are treated as background, accepted
- The above triggers in particular tend to be bound (anaphoric):
  - We got cake with our coffee on Thursday and we got cake with our coffee again today.

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## Influence of presupposition triggers?

- Very little work on how the presence or absence of presupposition triggers affects the felicity of sentences
- Arregui et al. (2006) VP-ellipsis: VP-ellipsis with ‘flawed’ antecedents are interpreted as better when a presupposition trigger is present

## Match vs. Mismatch

- Passive-active conjoined sentences are dispreferred to active-active sentences
  - When anaphoric devices (VP-ellipsis or pronouns) are involved, mismatches argued to be even worse
- (1) Ryan invited Harry to the party and John did too.
  - (2) ?Harry was invited to the party by Ryan and John did too.
  - (3) Ryan invited Harry to the party and John invited him too.
  - (4) ?Harry was invited to the party by Ryan and John invited him too.

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- (5) Ryan invited Harry to the party and John did **too**.
- (6) ?Harry was invited to the party by Ryan and John did **too**.
- (7) Ryan invited Harry to the party and John invited him **too**.
- (8) ?Harry was invited to the party by Ryan and John invited him **too**.

- Does the presence of a presupposition trigger improve the felicity of mismatched sentences?
  - Do passive-active mismatched sentences with pronouns become better when there is a presupposition trigger
- The presupposition triggers give the hearer an alternative way to recognize that there are two linked events.

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## Coherence relation type affects felicity of match-mismatch sentences

- Andrew Kehler (2002): Parallel relations are strongly affected by mismatch when anaphora are involved
- Cause-effect relations are not affected.

(9) ?Harry was invited to the party by Ryan and John did too.

(10) Harry was invited to the party by Ryan because John had.

(11) ?Harry was invited to the party by Ryan and John invited him too.

(12) Harry was invited to the party by Ryan and John had invited him.

## Small number of studies

- 1 Frazier & Clifton (2006)
- 2 Kehler et al. (2008)
- 3 Kertz (2008)
- 4 Arregui, Clifton, Frazier & Moulton (2006) (presupposition and VP-ellipsis)

## Frazier & Clifton

- Tested VP-ellipsis with parallel and cause-effect relations
  - (13) The problem was looked into by Kim even though Lee did.
  - (14) The problem was looked into by Kim just like Lee did.
  - (15) Kim looked into the problem even though Lee did.
  - (16) Kim looked into the problem just like Lee did.
- Result: mismatched sentences dispreferred to matched sentences, regardless of coherence type, against Kehler.
  - Suggestion: Kehler's Resemblance relation examples often have presupposition triggers like *too*
  - However: not clear how this would explain felicity of mismatched Cause-effect relations in Kehler's work

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# Research questions

- Is mismatch always bad, or only for parallel relations?
- What effect does including a presupposition trigger have?

# Experiment design

- 2 x 2 x 2 design
  - parallel vs. cause-effect (denial of expectation)
    - Dutch has presupp trigger *toch* which can be used with a denial of expectation
  - match: active-active vs. mismatch: passive-active
  - with or without presupposition trigger (*ook* or *toch*)
  - Sentence must sound equally as naturally with and without the presupposition trigger
- Two conjoined sentence, second sentence with object pronoun
- In match, object pronoun has object antecedent, in mismatch, object pronoun has subject antecedent
  - Pretest with 20 native Dutch speakers to confirm pronoun interpretation preferences

## Pattern: verb in denial of expectation relations is antonym of verb in parallel relations

- (17) Frank bestal Nick, en Petra bedroog hem.
- (18) Frank bestal Nick, en Petra bedroog hem ook.
- (19) Frank bestal Nick, maar Petra beschermde hem.
- (20) Frank bestal Nick, maar Petra beschermde hem toch.
- (21) Nick is door Frank bestolen, en Petra bedroog hem.
- (22) Nick is door Frank bestolen, en Petra bedroog hem ook.
- (23) Nick is door Frank bestolen, maar Petra beschermde hem.
- (24) Nick is door Frank bestolen, maar Petra beschermde hem toch.

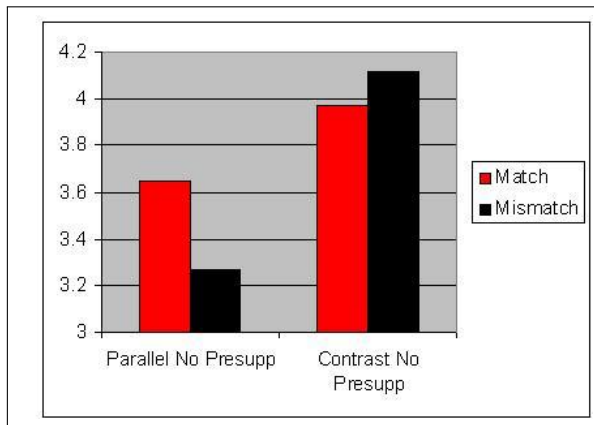
- 28 different sentences (plus fillers; total 60)
- repeated measures, within subject.
- 49 native Dutch speaking psychology students did the test online
- Each subject saw each of 8 condition sentences 2-4 times
- Felicity measured with 7-point likert scale

# Analysis

- 8 subjects removed because they did the test in four minutes or less
- Total, 41 subjects for analysis
- Within-subject ANOVA to find significant interaction:
  - Significant interaction ( $p \leq 0.05$ ):
    - Coherence, presupp and & match
    - presupp & match
    - presupp & coherence

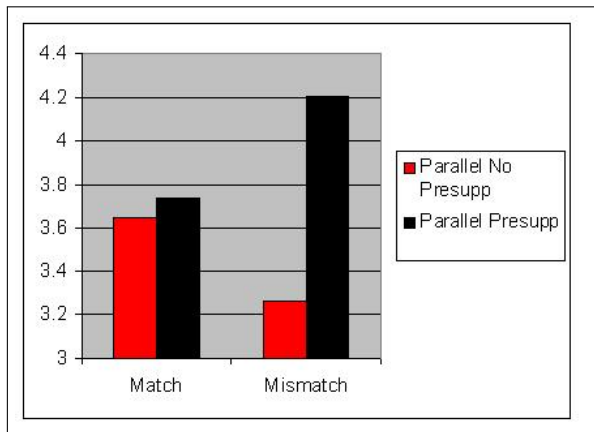
## Does coherence type affect mismatch felicity?

- Mismatched parallel relations (w/o triggers) were significantly worse than matched parallel relations (w/o triggers)



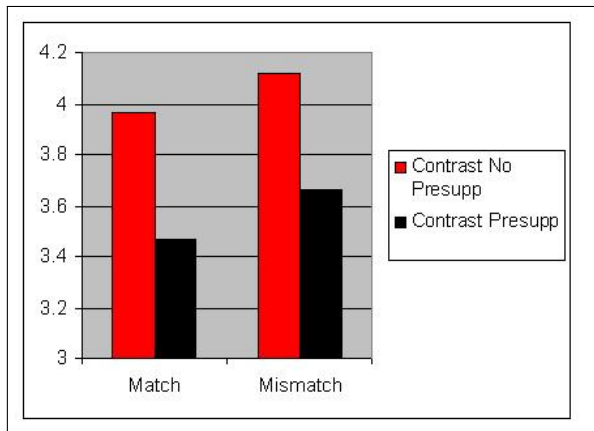
## Adding (*ook*) improve parallel mismatch?

- Adding a presupp doesn't affect matched parallel sentences, but significantly improves mismatched parallel sentences



## Effect of presupp trigger (*toch*) on contrast sentences?

- Adding a presupp makes Contrast sentences worse



## Summary of results

- Mismatched parallel sentences were worse than matched
- Mismatched and matched contrast sentences were equally as good, confirm's Kehler
- Presupposition does improve mismatched parallel sentences
  - no significant effect on matched parallel sentences
- Presupposition degrades contrast sentences regardless of coherence type

## Needs more study

- Why does the presence of a presupposition trigger degrade contrast sentences so much?
  - *toch* special? *toch* qualitatively different from *ook*?
- Why does the presence of a presupposition trigger in mismatched parallel relations improve it so much that is significantly better than matched parallel relations?

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- Parallel Match NoP is better than Parallel MMNoP (.033)
  - Matches are better than mismatches for parallel relations when no presupp is involved, and for Contrast relations, there is no difference (following Kehler's prediction, contrary Frazier & Clifton)
- Parallel MMPre better than Parallel MMNoP (.000)
  - *ook* improves mismatched parallel relations
- Parallel MMPre is better than Parallel MatchPre (.005)
  - presence of presupposition improves mismatch so much that it becomes better than parallel matches with presuppositions
- Contrast MMNoP better than Contrast MMPre (.036)
  - *toch* makes contrastive statements worse, regardless of match or mismatch
- Contrast MatchNoP better than Contrast Match Pre (.021)