

Contrastive utterances make alternatives salient: Evidence from cross-modal priming

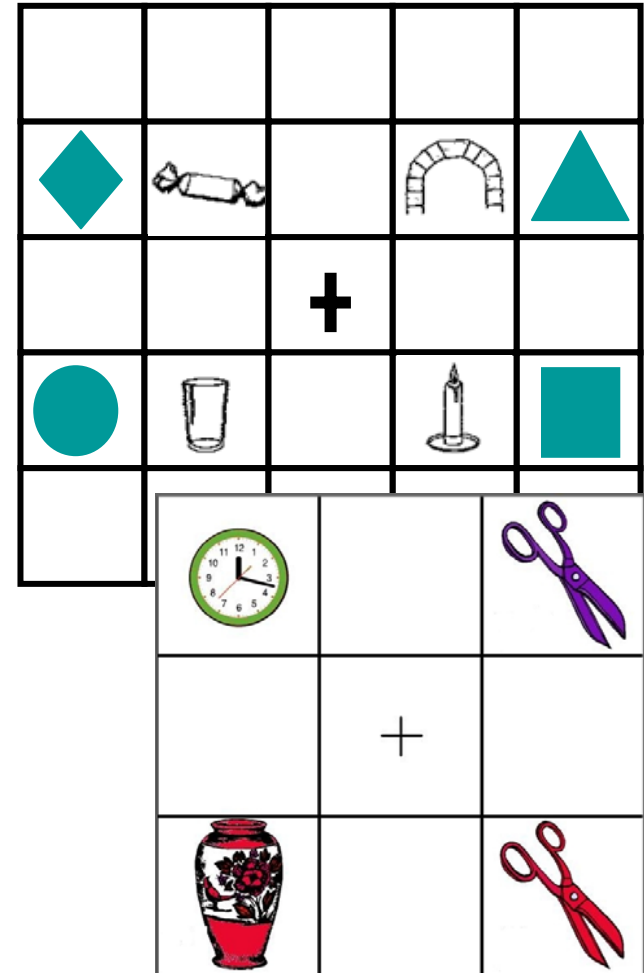
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Intonation in online comprehension: the role of accentuation

- Accent on referent
Move the candy above the triangle.
Now move the {CAN/can}dle above...
- Accent on adjective
Click on the purple scissors.
Now click on the {RED/red} scissors



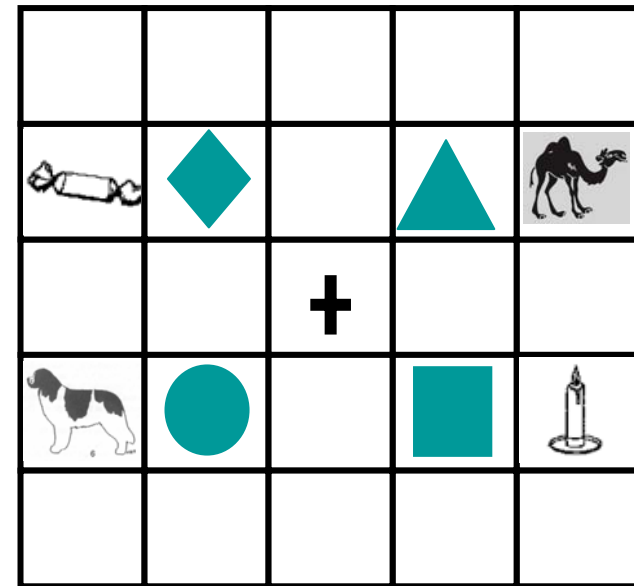
Intonation in online comprehension: the role of pitch accent type

- Interpretation of H* (newness accent) and L+H* (contrastive accent)

Click on the camel and the dog.

Move the dog to the right of the square.

Now, move the *camel/candle* below ...



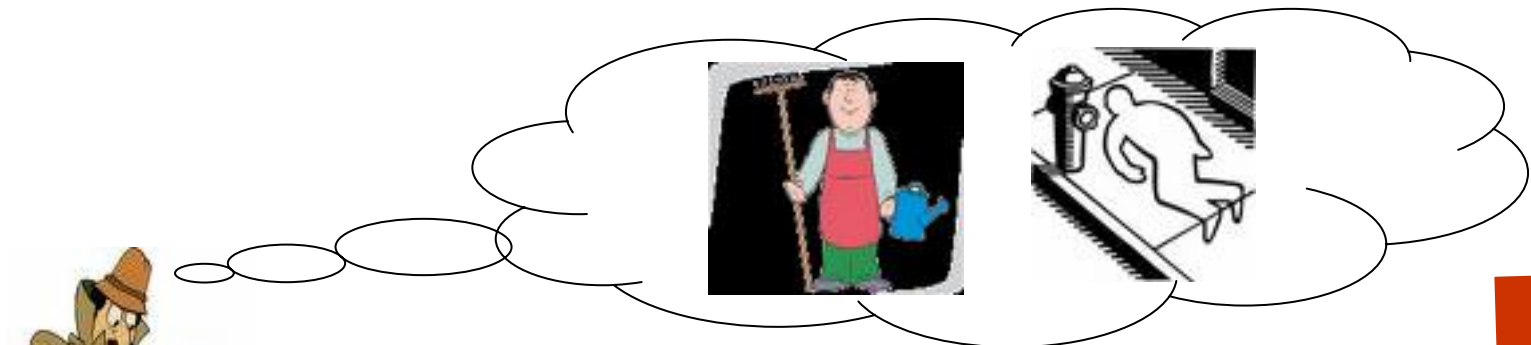
L+H*/H*

Bias towards
camel (contrast)

Bias towards
candle (new)

Motivation

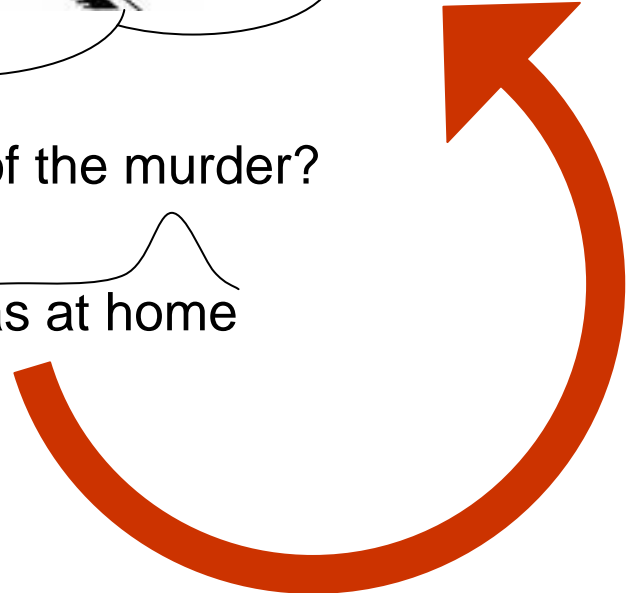
- Contrastive utterances – out of context



Where were you at the time of the murder?

I was at home

I was at home



Motivation

- Semantically, accentuation is formalized via alternative-sets (Rooth, 1992)
- Accented element can be replaced by contextually available alternative



“The pink panther was at home!”

{
in a bar
at the gallery
in Paris
}

- Do these alternatives become immediately salient to the listener?

General paradigm: cross-modal associative priming

- Priming from isolated words
 - lexical decision to visual target faster after hearing related than unrelated auditory prime (priming)



- Priming from sentences
 - for sentence-final primes
 - for sentences with syntactic or lexical focusing operators (it-clefts, focus particles) and contrastive accents

Research questions

- Are alternatives primed more by a contrastive intonation than by a non-contrastive intonation?

Contrastive intonation


De jongens bezochten een casino
'The guys visited a casino'


DISCO ✓

non-contrastive intonation


De jongens bezochten een casino

DISCO ?

- Is priming specific to contrastive alternatives or does contrastive intonation prime all kinds of associates more?



De jongens bezochten een casino

DISCO ✓ **GOKKEN** ?
'gamble'

Cross-modal associative priming



Dirk fotografeerde een flamingo




Dirk fotografeerde een flamingo

Cross-modal associative priming



Dirk fotografeerde een flamingo



Dirk fotografeerde een flamingo

Cross-modal associative priming



prime



Contrastive
target

Non-contrastive
target

Dirk fotografeerde een flamingo

PELIKAAN

ROZE
(*pink*)

Dirk fotografeerde een flamingo

Cross-modal associative priming



prime



Contrastive target

Non-contrastive target

RELATED

Dirk fotografeerde een flamingo

PELIKAAN

ROZE
(*'pink'*)

Dirk fotografeerde een flamingo

UNRELATED

Dirk fotografeerde een beroemdheid



EXP 1



EXP 2

Dirk fotografeerde een beroemdheid
'celebrity'

Materials

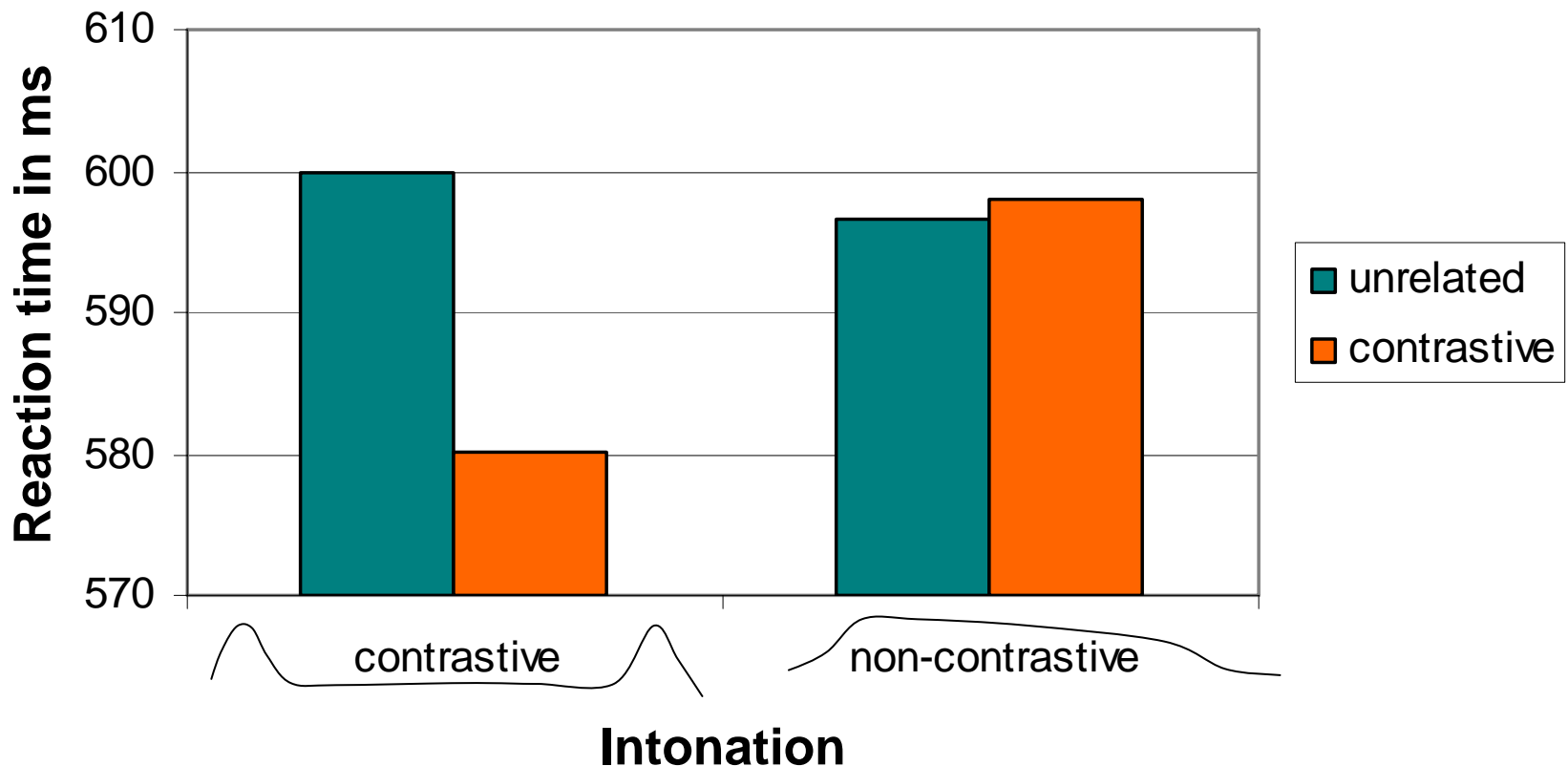
- **Participants:** 40 in both experiments
- **Primes:** 36 trisyllabic words with stress on 2nd syllable
- **Targets**
 - contrastive: chosen with help from informants, contextual alternatives
 - non-contrastive: collected in web experiment, most frequent, non-contrastive response
 - association strength between targets and primes (1-7): 5.5 for contrastive and 6.2 for non-contrastive targets
- **Recording** (trained speaker)
 - contrastive intonation cued by contrastive precursor

Exp1: contrastive visual targets (**PELIKAAN**)



Dirk fotografeerde een beroemdheit ('celebrity')

Dirk fotografeerde een flamingo

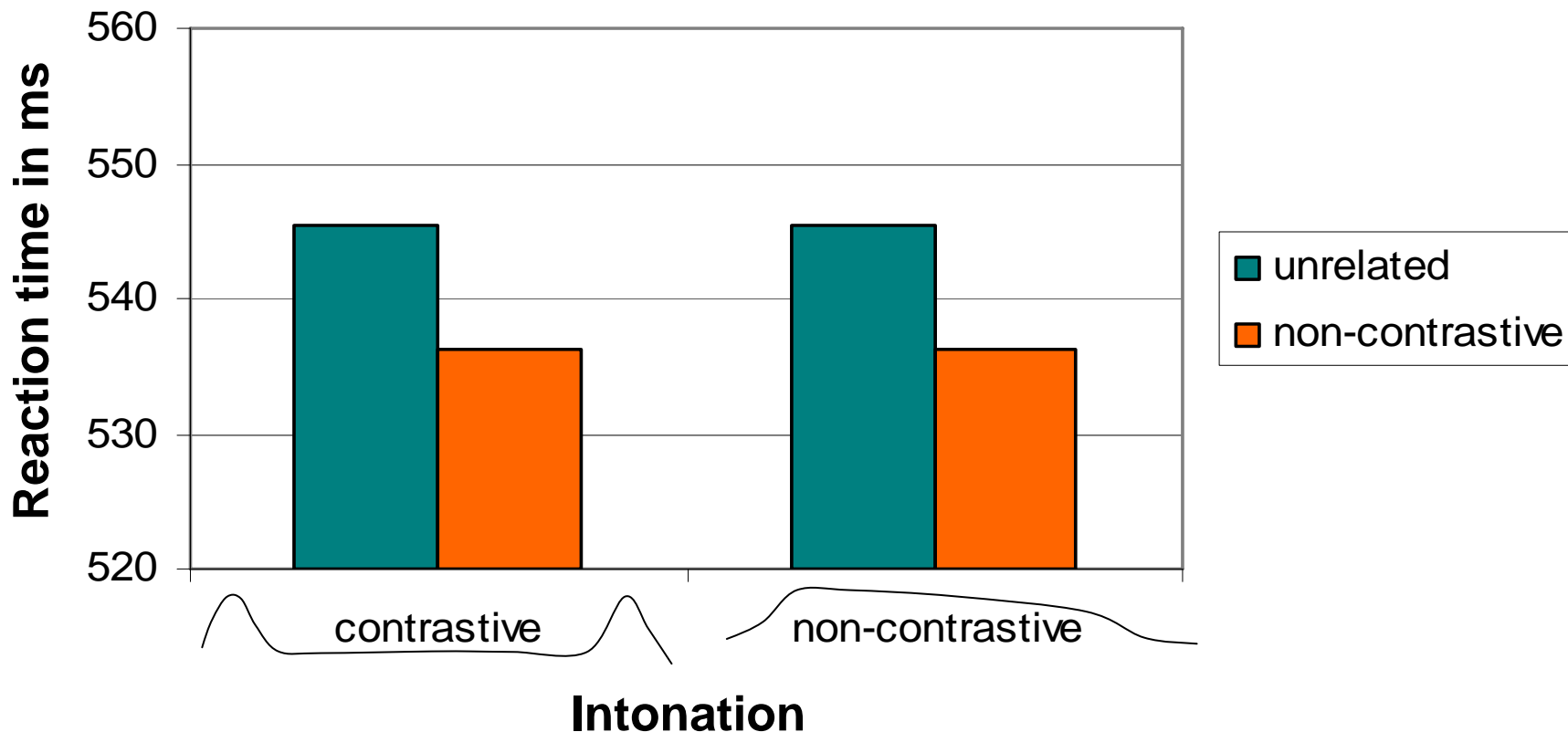


Exp2: non-contrastive visual targets (ROZE) *'pink'*



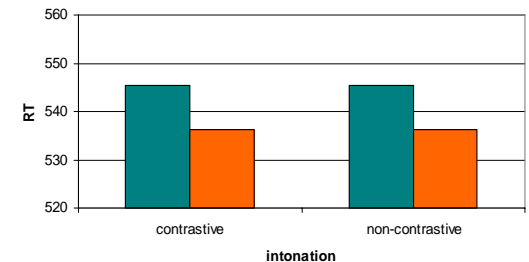
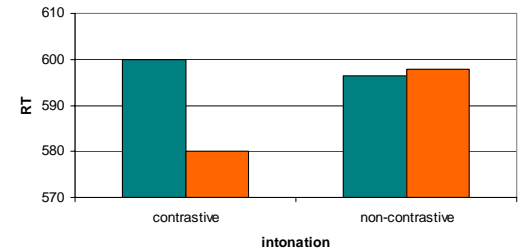
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Dirk fotografeerde een flamingo

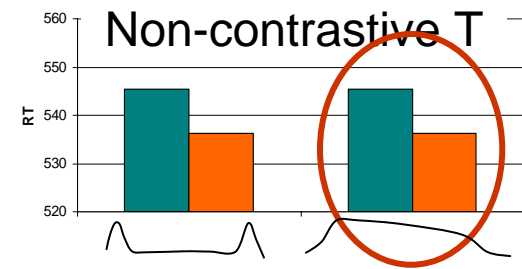
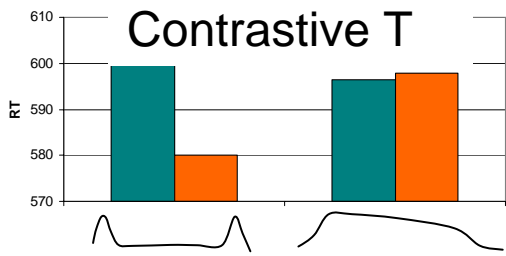


Conclusion

- **Contrastive associates**
 - i.e. contextual alternatives –
are facilitated only when the primes
are realized in sentences with contrastive intonation
- **Non-contrastive associates**
 - i.e. generic associates, no contextual alternatives –
are weakly facilitated independent of intonation
contour

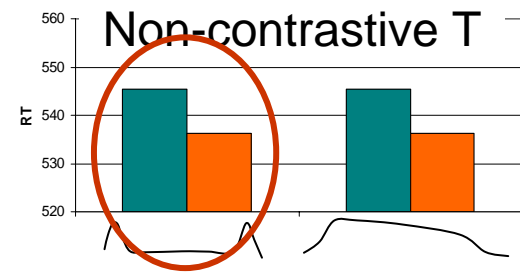


Discussion



- Processing of utterances with **non-contrastive intonation**
 - only highly related associates became accessible (e.g., flamingo – pink)

Discussion



- Processing of utterances with **non-contrastive intonation**
 - only highly related associates became accessible (e.g., flamingo – pink)
- Processing of utterances with **contrastive intonation**
 - both highly related and contrastive associates became accessible (e.g., flamingo – pelican)
 - contrastive intonation attracts more attention and makes less strongly related associates accessible
 - “presupposition resolution mechanism” makes alternatives to accented elements salient

Discussion

- Contrastive intonation modulates sentence interpretation
 - only a contrastive interpretation makes contextual alternatives more salient, hence more easily recognizable
- Sentences with a contrastive intonation make conceptual alternatives salient
 - *even* when sentences are syntactically neutral
 - *even* in the absence of other linguistic context (e.g., discourse context)



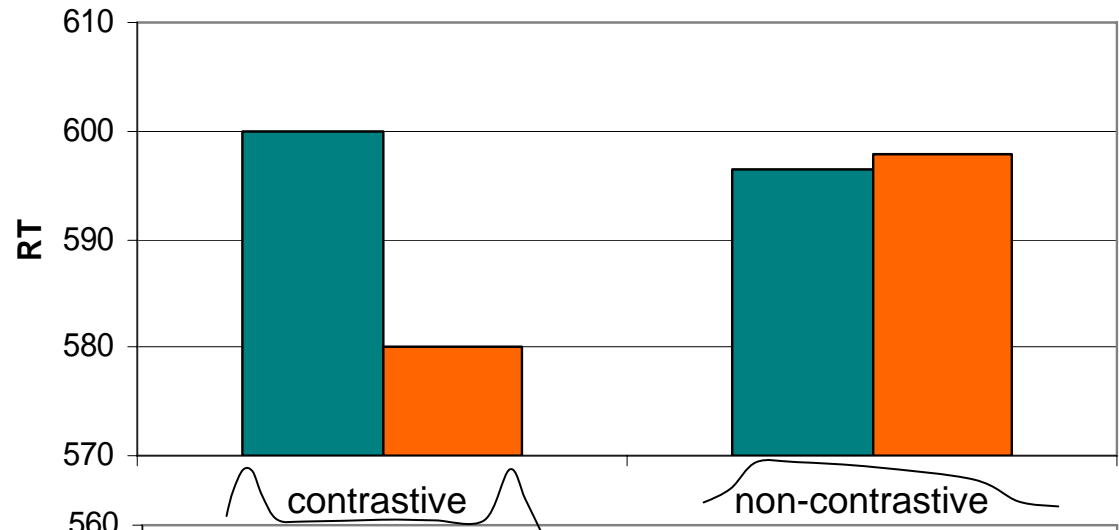
Thank you for your attention



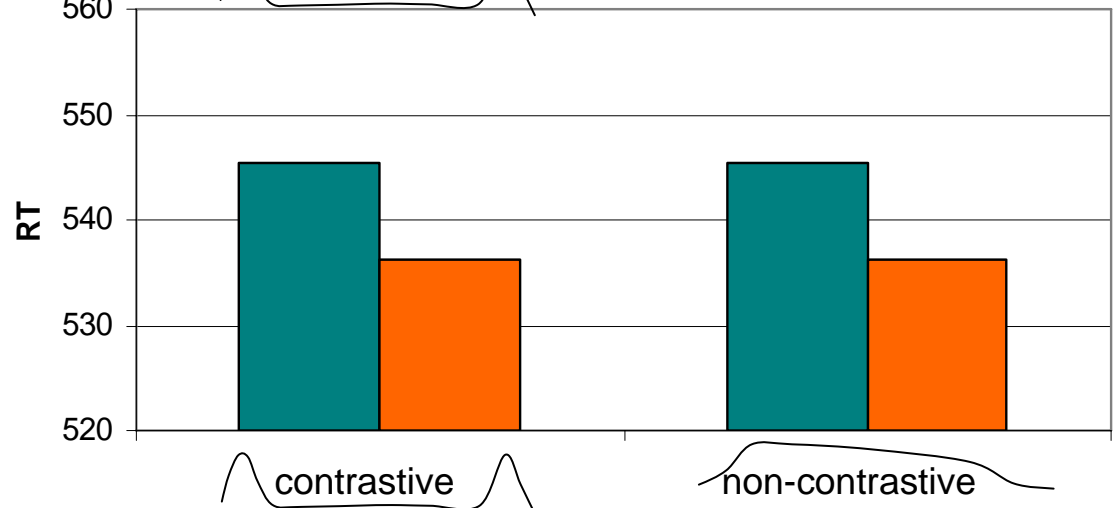
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**Contrastive targets
(pelikaan)**

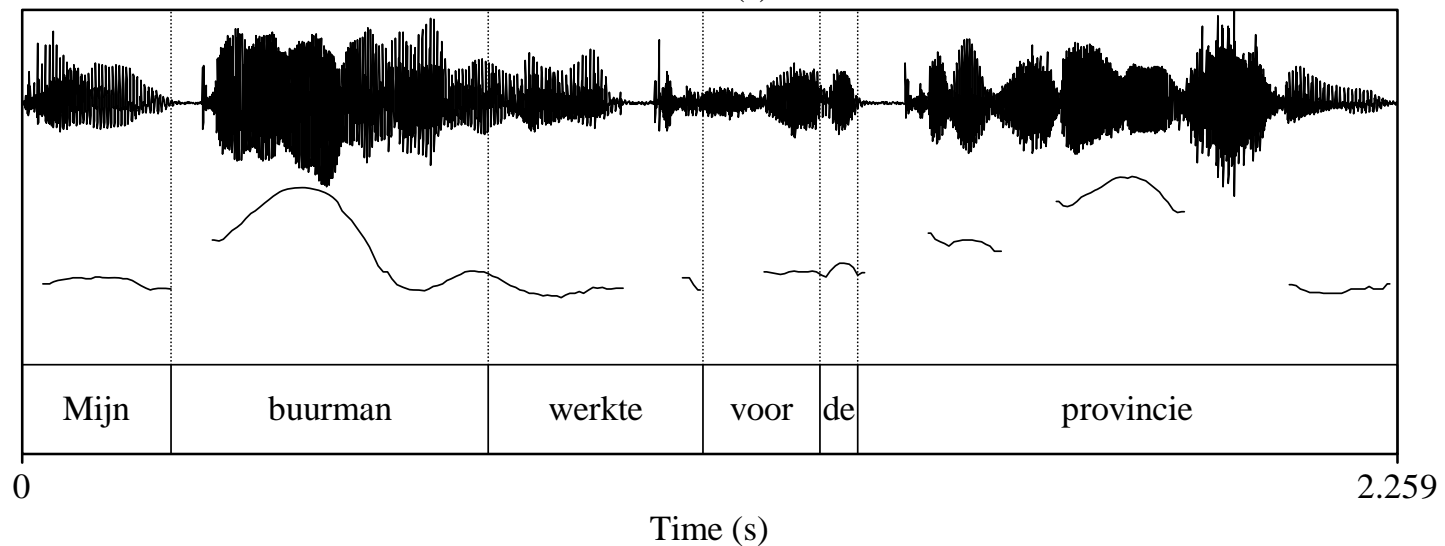
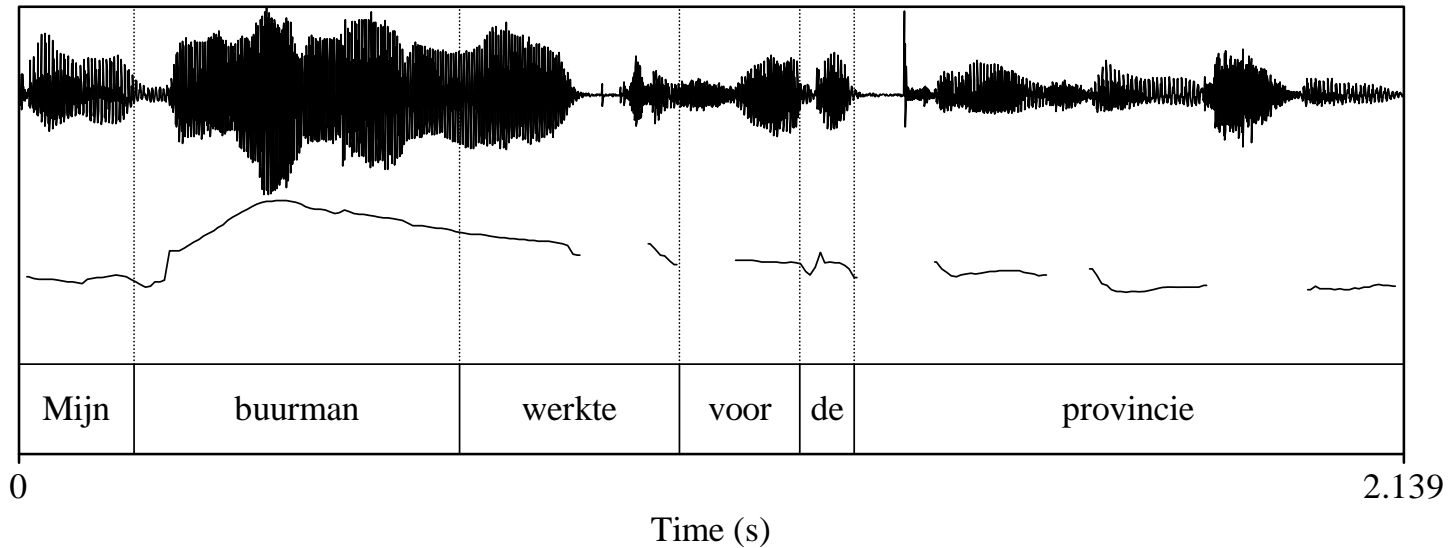


**Non-contrastive targets
(roze, 'pink')**

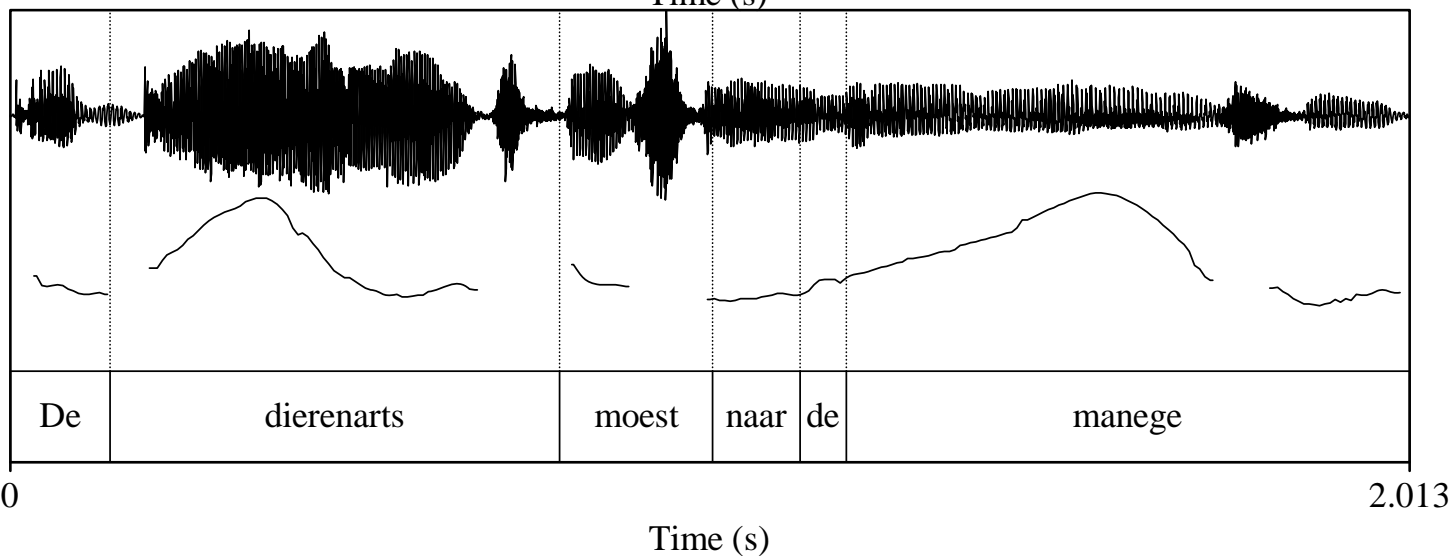
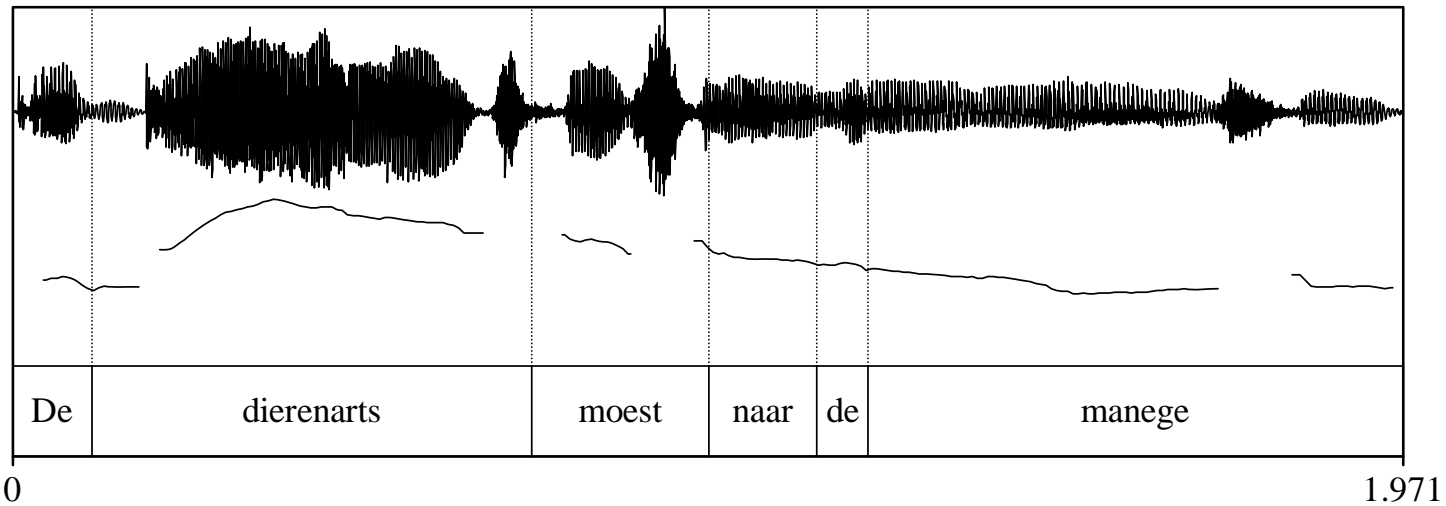


Intonation

Realization of intonation contours: Examples



Realization of intonation contours: Examples



Realization of intonation contours: pitch values

