Does enjoying a movie stimulate the incidental acquisition of language?

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Some facts from Belgium....

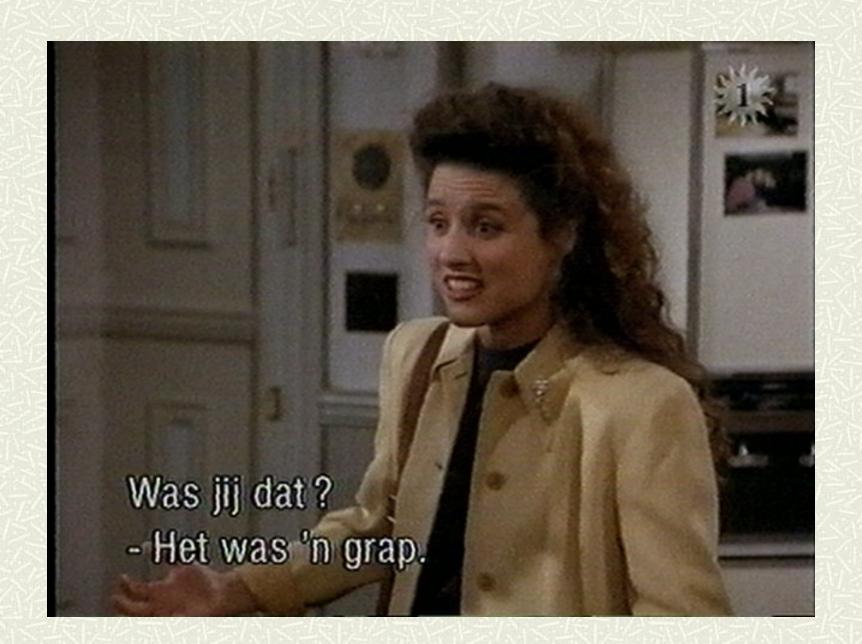
- □ Trilingual country: 60% Dutch (Flemish), 35% French (Walloon), and 5% German
- # 98% of the households have cable television
- # About 35 channels are available on cable
- **♯** About 50% of the programmes are subtitled
- # Preference subtitling vs. Dubbing:
 - 98% (Dutch and French) prefers subtitling
 - The further away from Belgium to France & Germany, the more the preference for dubbing
- **■** Do « you » read the subtitles? Most subjects don't know.....

Subtitling versus dubbing

- **♯** Subtitling cheaper than dubbing
- Subtitling, preferred in smaller language communities; dubbing, preferred in larger language communities
- **■** Subtitling strongly preferred by the « intellectuals »

Six Seconds Rule

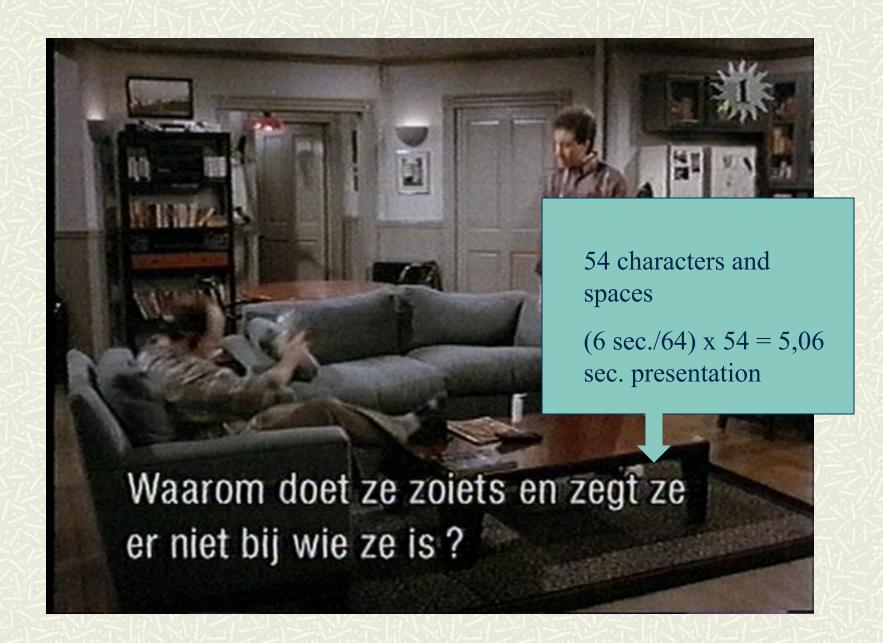
- ★ Max. 2 lines of text containing not more than 64 characters and spaces
- **■** Left justified (on cinema screen, central justified)
- **■** Very close translation
- **#** Timing:
 - Subtitle onset = voice onset
 - Duration: 6 seconds if 64 characters and spaces are used; shorter subtitles, proportionally to the 6 seconds











d'Ydewalle, Van Rensbergen, & Joris (1987)

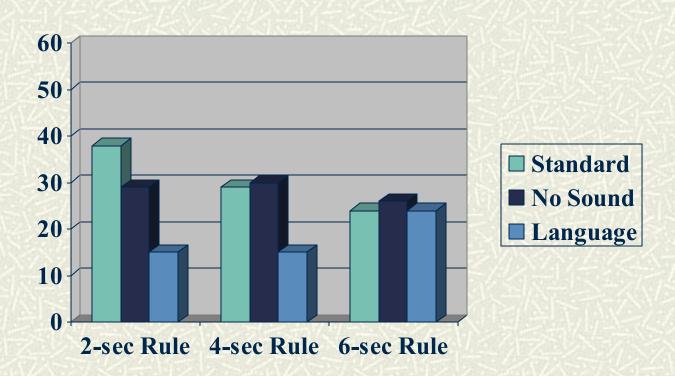
- **■** Independent variables:
 - Timing: 2-seconds, 4-seconds, and 6-seconds rules
 - Language availability:
 - Standard (sound+subtitles)
 - No Sound (only subtitles)
 - Language (sound+subtitles; proficiency in the foreign language)
- Dependent variable: measuring the eye position every 20 milliseconds

Design....

	STANDARD	NO SOUND	LANGUAGE
2-sec Rule			
4-sec Rule			
6-sec Rule			

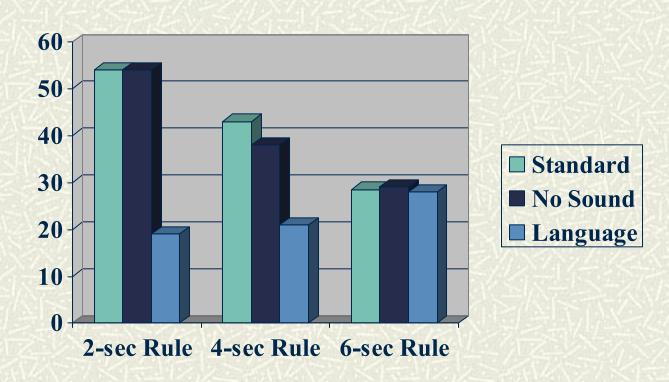
Percentage Time in the Subtitle (time in subtitle, divided by presentation time in the subtitle)

One Line Subtitle

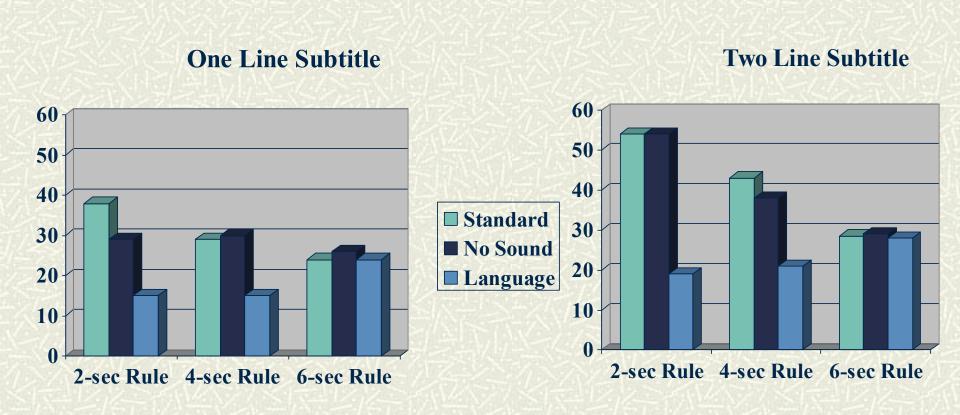


Percentage Time in the Subtitle (time in subtitle, divided by presentation time in the subtitle)

Two Line Subtitle



Percentage Time in the Subtitle (time in subtitle, divided by presentation time in the subtitle)



conclusions

- With 6-sec rule: no difference between standard, no sound and language conditions
- ★ With faster presentations (2-sec and 4 sec rules),
 subjects knowing the language no longer read the subtitles
- ★ While most subjects « claim » not to read the subtitles, they all do read: Reading subtitles is mandatory and automatic you cannot escape to read the subtitles

AUTOMATIC READING OF SUBTITLES

■ Reading more efficient than listening?

d'Ydewalle, Praet, Verfaillie & Van Rensbergen (1991)

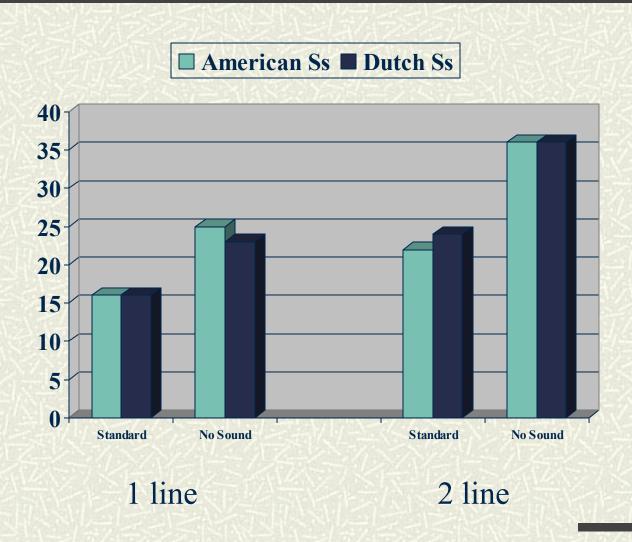
Two groups of subjects:

- American subjects with American movie (American sound track) and American subtitles
- Dutch subjects with Dutch movie (Dutch sound track) and Dutch subtitles

Two conditions:

- Standard (sound + subtitles)
- No sound (only subtitles)

Results



d'Ydewalle & Van Rensbergen (1989)

Experiments with children who are not yet used to follow subtitled programs: Grade 2, Grade 4 and Grade 6 children



Als dat zo is, moet ik je een goede raad geven --





d'Ydewalle & Van Rensbergen (1989)

★ Experiments with children who are not yet used to follow subtitled programs: Grade 2, Grade 4 and Grade 6 children

Results:

- Grade 4 and Grade 6 children, no difference with adults
- Grade 2 children: reading subtitles is not yet well established (Garfield vs. Popeye)

A few further experiments.....

- Hearing impaired (deaf) people: Lipreading vs. Sign language vs. Subtitles → strong preferences for subtitles
- # Older vs. Younger people: no difference
- ★ News vs. Movie: more subtitle reading with News

Conclusions:

Evidence:

- Grade 2 children not really reading → in favor of habit formation hypothesis
- No difference with Ss unfamiliar with subtitles → in favor of efficiency
- Preference for subtitle by deaf people → in favor of efficiency
- Dutch Ss with Dutch movie and Dutch subtitles, still reading subtitles → efficiency + habit formation?

DO SUBTITLED TELEVISION PROGRAMS ENHANCE INCIDENTALLY LANGUAGE ACQUISITION?

Are the Ss listening to the foreign language in the sound track?

Two experiments:

- Task: while watching a television program, Ss had to react to flashing lights as fast as possible
- Results: Slowest reaction times whenever both a speaker and subtitle are present

Experimental Design

	Subtitle: Native language	Subtitle: Foreign language	No subtitles
Sound: Native language			
Sound: Foreign Language			
No Sound			

Experimental Design

	Subtitle: Native language	Subtitle: Foreign language	No subtitles
Sound: Native language		(reversed subtitling)	
Sound: Foreign Language	(standard subtitling)		
No Sound			

Overview of the experiments

- # Foreign Language:
 - Indo-European: South African, German, Spanish, Italian, Russian
 - Ural-Altaic: Hungarian, Japanese
 - South-East: Thai, Chinese
- # Audio and printed tests on:
 - Vocabulary
 - Sentence Construction (syntax)
 - Comprehension

Conclusions

- **★** Vocabulary acquisition well established, particularly with reversed subtitling
- **■** No grammar (syntax) acquisition
- **★** Evidence of social context or prior knowledge

Children vs. Adults

Hypothesis:

- Language acquisition vs. Language learning
- Sensitive Period: Children (age 2-12) show easier language acquision than adults; adults show easier language learning
- Thus: more language acquisition with subtitles by children than with adults, to be predicted

Results

- # Children don't acquire more than adults
- # Standard vs. Reversed subtitling
 - Reversed subtitling → more language acquisition with adults; no difference with children
 - Adults process the two languages (native & foreign); children process only the native language

The end.....



THANK YOU