

Event duration and pace in fictional narrative: An experimental study

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- Fictionality, truth and reference in real vs. fictional worlds: Searle 1975, Maier 2017, Stokke 2023, ...
- Perspective and Free Indirect Discourse: Eckardt 2014, Maier 2015, Hinterwimmer 2017, ...
- Suspense: Köppe & Onea 2023
- Temporal order: Kamp & Rohrer 1983, Dowty 1986, Altshuler & Melkonian 2014, Cumming 2021
- Temporal metalepsis: Bücking 2024, Haug & Altshuler 2024
- Pace ?

- 1. Pace in fictional narrative**
- 2. Temporal iconicity and the Live Report Hypothesis**
- 3. The duration of utterances: an experimental study**

Pace in fictional narrative

Narrative summary: discourse time < story time

Harry had the best morning he'd had in a long time. He was careful to walk a little way apart from the Dursleys so that Dudley and Piers, who were starting to get bored with the animals by lunch-time, wouldn't fall back on their favourite hobby of hitting him. They ate in the zoo restaurant, and when Dudley had a tantrum because his knickerbocker glory wasn't big enough, Uncle Vernon bought him another one and Harry was allowed to finish the first.

From J.K. Rowling's *Harry Potter and the Philosopher's Stone*

G. Genette 1980. *Narrative Discourse: An Essay in Method*

Scene: discourse time \approx story time

“Confuse it!” Harry said desperately to Ron, and, seizing a tap, he threw it as hard as he could against the wall.

The troll stopped a few feet from Hermione. It lumbered around, blinking stupidly, to see what had made the noise. Its mean little eyes saw Harry. It hesitated, then made for him instead, lifting its club as it went.

“Oy, pea-brain!” yelled Ron from the other side of the chamber, and he threw a metal pipe at it.

From J.K. Rowling’s *Harry Potter and the Philosopher’s Stone*

G. Genette 1980. *Narrative Discourse: An Essay in Method*

In scenes, shorter sentences create the impression of faster pace.

- (1) He waved his double-barrelled revolver, drawn in a hurry from wherever in the folds of his greatcoat he kept it.
- (2) He whipped a revolver from the folds of his greatcoat.

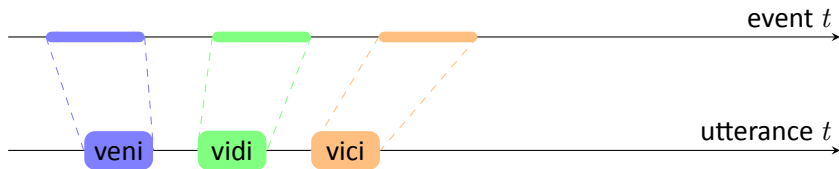
R. Hall 2019. *Fiction Pacing: Professional Techniques for Slow and Fast Pace Effects*
(p. 13)

Iconic representation of duration: The effect of sentence length on the narrative pace is the result of the iconic representation of time in narrative discourse, in particular, the iconic representation of duration.

The Live Report Hypothesis: ...

Temporal iconicity and the Live Report Hypothesis

Iconic representation of temporal order



The chain of verbs—Veni, vidi, vici—informs us about the order of Caesar's deeds first and foremost because the sequence of co-ordinate preterits is used to reproduce the succession of reported occurrences. The temporal order of speech events tends to mirror the order of narrated events in time...

Roman Jakobson 1965. *Quest for the Essence of Language*, pp. 26–27

US Women's National Team vs. New Zealand, April 4, 2015:

<https://www.youtube.com/clip/Ugkx58OH0EVJ1ipD8dyT033FPE1J8IPz4D4s>

- (3)
- a. Rapinoe
 - b. looking to make a move
 - c. Rapinoe trying to cross
 - d. she does
 - e. [it] gets all the way through
 - f. the shot goes high



	she	does	gets	all	the	way	through		the	shot	goes	high	
	Rapinoe passes, the ball gets through						Press shoots, the shot goes high						

Perlman 2010. *Talking fast: The use of speech rate as iconic gesture.*

The Live Report Hypothesis: The narrator relates the events of the story *as if* the perspectival centre (the POV character) gives a live report of those events.

Consequences for duration:

- If the event happens quickly, the narrator/PC does not have time to produce a long utterance.
- If the event takes longer to happen, the narrator/PC does have time to produce a long utterance.
- Descriptive detail inflates sentence and utterance length.
- A more detailed event description will be interpreted as presenting an event that has longer duration.

The duration of utterances: an experimental study

Descriptive detail and duration:

- Descriptive detail inflates sentence and utterance length.
- A more detailed event description will be interpreted as presenting an event that has longer duration.

short A passenger put his bag on the seat.

long A restless sweaty passenger with a bushy moustache put his bag on the empty seat.

Descriptive detail and duration:

- If an event has inherent long duration, i.e. substantially longer than the duration of an utterance, then the narrator has all the time in the world to add descriptive detail.
- A more detailed description of an inherently longer event will not affect its perceived duration.
- Only the perceived duration of inherently short events, commensurate with the duration of an utterance, will be affected by the amount of descriptive detail.

short	A passenger put his bag on the seat.	instant
long	A restless sweaty passenger with a bushy moustache put his bag on the empty seat.	1–5 sec
short	A patient spread jam over her toast.	short
long	A cheerful curly-haired patient in polka-dotted pyjamas spread apricot jam over her toast.	5–60 sec
short	An employee watered the flowers in the lobby.	medium
long	A slender elegant employee with a short haircut watered the flowers in the deserted lobby.	1–60 min
short	A contractor built a fence around the plot.	long
long	An inconspicuous local contractor in a grey overall built a fence around the square plot.	>1 hour

The bearded greengrocer in a red Adidas jacket counted the money

- Participants were asked to read the sentences and imagine the situation as vividly as they could.
- How long did that take?

- Attention questions targeting descriptive detail after some trials



Photo by Taha Loukil on Unsplash



Wittenberg & Levy 2017. *If you want a quick kiss, make it count: How choice of syntactic construction affects event construal*

Duration items: 4×2 , 8 items per condition, 64 items total

4 inherent durations: instant, short, medium, long.

2 sentence lengths: short (6–10 w), long (12–18 w).

difference between short and long: 6–10 words.

Fillers: 20 items from a different related experiment

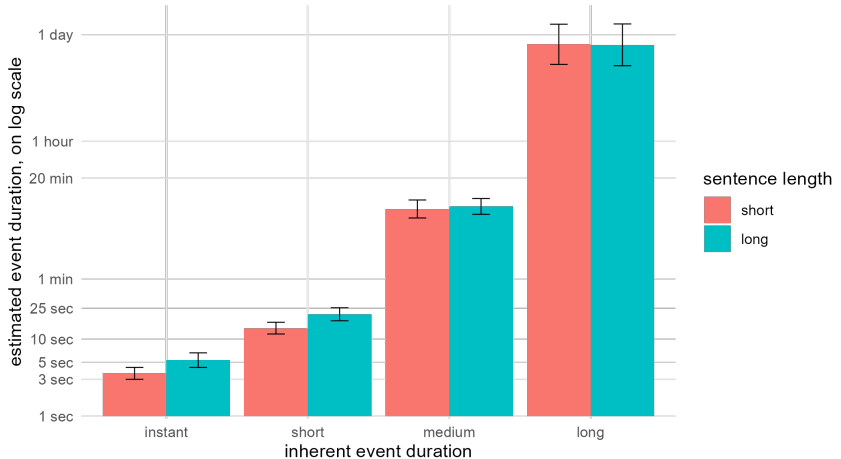
34 regular fillers

Latin square design: two lists

Procedure: Implemented in Gorilla experiment builder. Experiment duration up to 35 min. Participants received £5,25.

Participants: 50 participants from the UK and Ireland
self-reported native speakers of English
17 male, 33 female; age 26–70
recruited via Prolific

Results: duration



Evidence for iconic representation of duration: The amount of descriptive detail, which inflates sentence length and utterance duration, has an effect on the perceived duration of the reported events

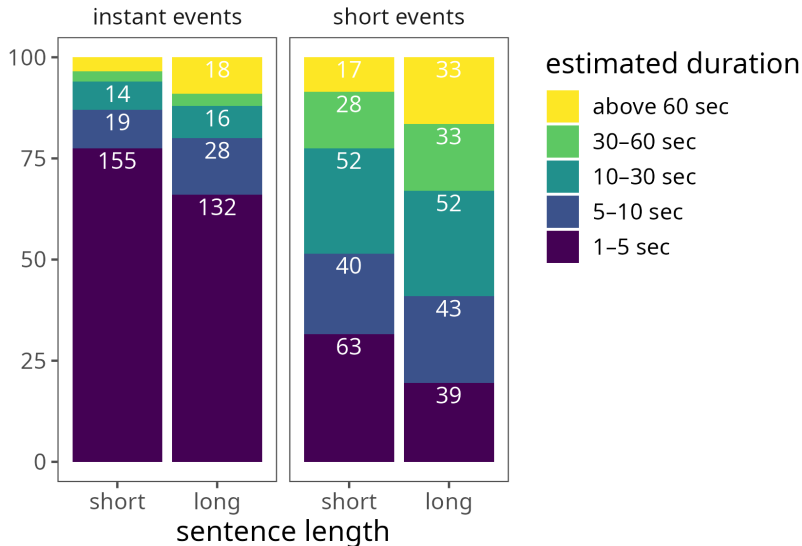
Evidence for the Live Report Hypothesis: The duration effect is observed only for events whose inherent duration is measured in seconds

Why do we find this effect in events that last between 5 and 60 seconds?

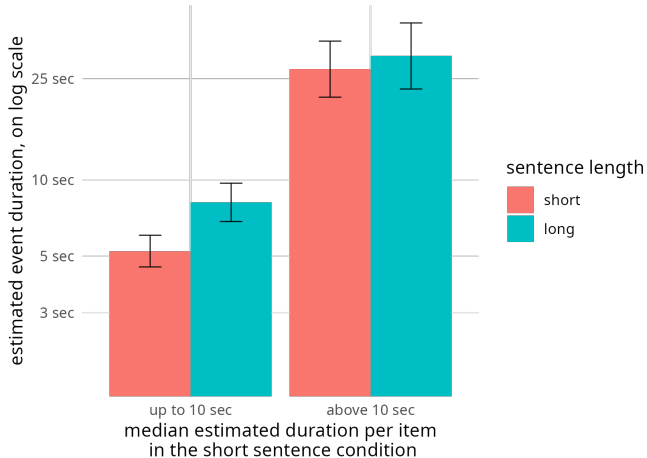
Possible reasons:

- Participants underestimated the duration of events compared to our expectations
- The real cut off point is above 5 sec, but still substantially below 60 sec

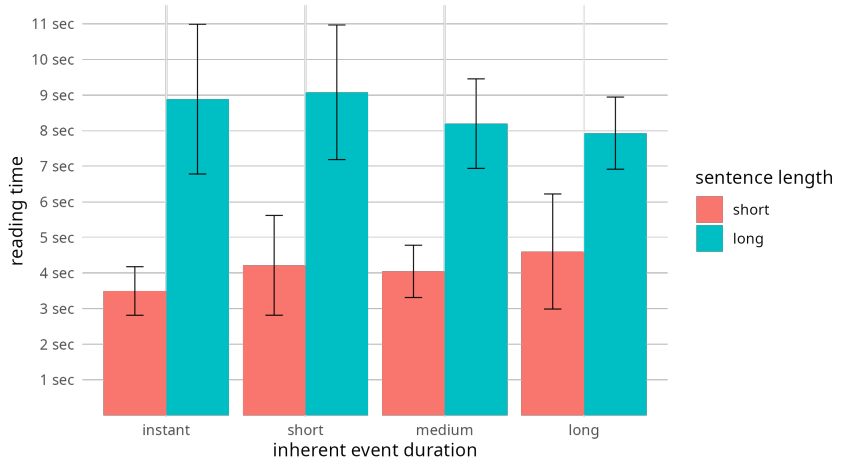
Distribution of responses for instant and short events



The cut off point: 10 seconds?



Reading times



- It is reasonable to expect that duration of events will be iconically reflected by the duration of utterances in fictional narrative because the narrator imitates a live report, and in a live report the duration of events puts an upper bound on the duration of the utterance reporting it
- Evidence for the iconic representation of duration through the duration of an utterance, modulated by the amount of descriptive detail
- The finding that the duration effect is observed only for events whose inherent duration is measured in seconds partly corroborates the Live Report Hypothesis
- The cut-off point where the duration effect disappears might lie higher than 5 sec, probably around 10–15 sec

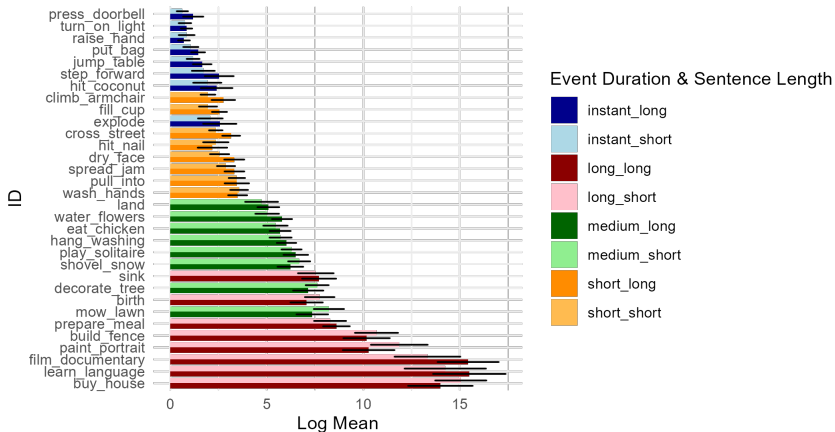
- Why that specific cut-off point?
- When do people stop reading an event description as a scene and start reading it as a narrative summary?
- Can special contextual conditions raise the cut-off point?

Thank you!

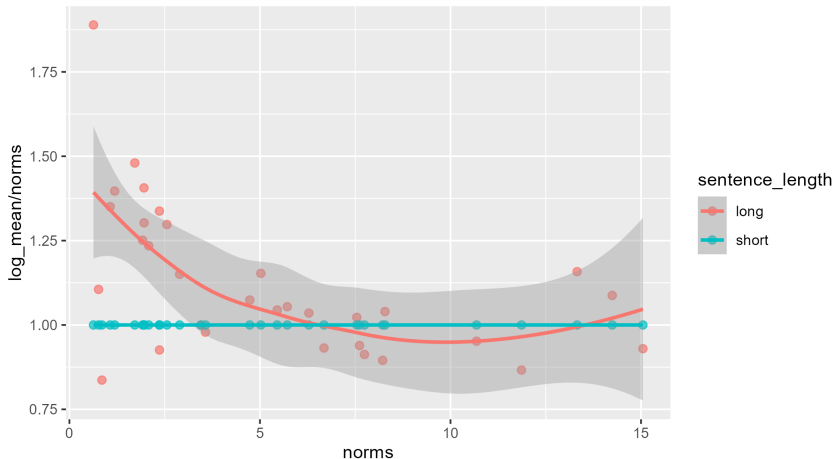
Acknowledgements: Special thanks to Carla Umbach for urging me to work on this topic, to Yuting Li for help setting up the experiment, and to Job Schepens for help with statistics. This research has been funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) through the CRC 1252 “Prominence in Language” and the individual grant “Templcon: Temporal Iconicity in Narrative Discourse” JA 2737/1-1.

Estimated durations by item

Log Mean by ID and Sentence Length with Error Bars



Estimated durations to duration in short sentence condition ratio



The temporal distance hypothesis

- The narrator is only pressed for time when reporting a sequence of events.
- If the event has short duration but the narrator has nothing else to report, they have all the time in the world to add descriptive detail.
- The amount of descriptive detail will affect the perceived temporal distance between the (critical points of) events in a sequence, rather than the duration of individual events.

short Olivia pulled the cord and the curtains swished open.

long Olivia pulled the cord and the sheer lace curtains
with delicate floral patterns swished open.

Duration items: 4×2 , 8 items per condition, 64 items total

4 inherent durations: instant, short, medium, long.

2 sentence lengths: short (6–10 w), long (12–18 w).

difference between short and long: 6–10 words.

Temporal distance items: 10 items per condition, 20 items total.

short 9–15, long 15–24, difference 6–14 words

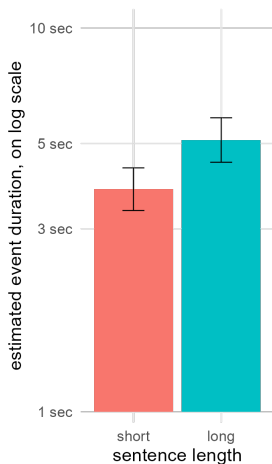
Latin square design: two lists

Fillers: 34

Procedure: Implemented in Gorilla experiment builder. Experiment duration up to 35 min. Participants received £5,25.

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self-reported native speakers of English
17 male, 33 female; age 26–70
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Results: temporal distance



short

Olivia pulled the cord
and the curtains swished open.

long

Olivia pulled the cord
and the sheer lace curtains with
delicate floral patterns swished open.

A linear mixed-effects model with random intercepts and random effects of participant and item.

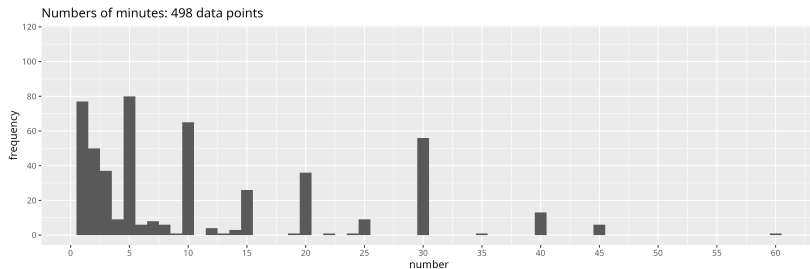
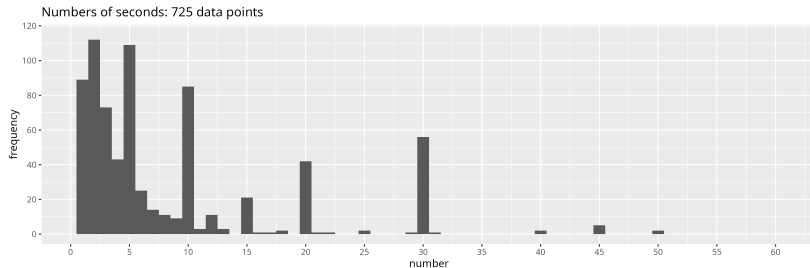
Long sentences were associated with an increase in log-transformed event duration.

Duration: $\beta = -0.200$, $SE = 0.085$, $t = -2.350$, $p = 0.019$

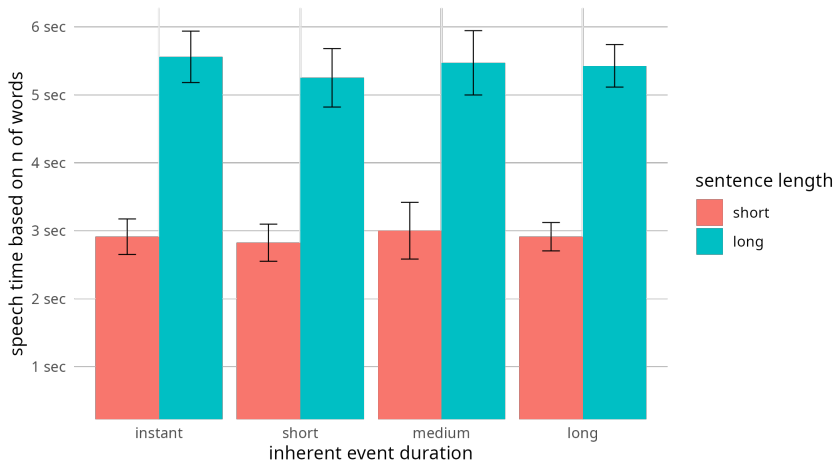
Temporal distance:

$\beta = -0.295$, $SE = 0.079$, $t = -3.717$, $p < 0.001$

Distribution of numbers of seconds and minutes



Expected reading time based on word numbers



Tauroza & Allison 1990. *Speech rates in British English*

170 words/minute

Is this meaning? Is this a sign?

Anonymous reviewer: It is not clear to me whether these effects should be considered 'meaning' at all as opposed to some kind of illusion or systematic cognitive processing error.

Is this meaning? Is this a sign?

Anonymous reviewer: It is not clear to me whether these effects should be considered 'meaning' at all as opposed to some kind of illusion or systematic cognitive processing error.

Natural/symptomatic meaning: The effect is not necessarily intended by the literal live-reporter, but is simply a consequence of the time constraints of the communicative situation.

Intended effect: Writers exploit the effect intentionally to create a certain impression of the passage of time in the reader.

Grice 1957. *Meaning*.

Hall 2019. *Fiction Pacing: Professional Techniques for Slow and Fast Pace Effects*.