

# The impact of font on typo detection: a novel visual search paradigm

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## Introduction

In visual search tasks, we scan our environment to identify a target.

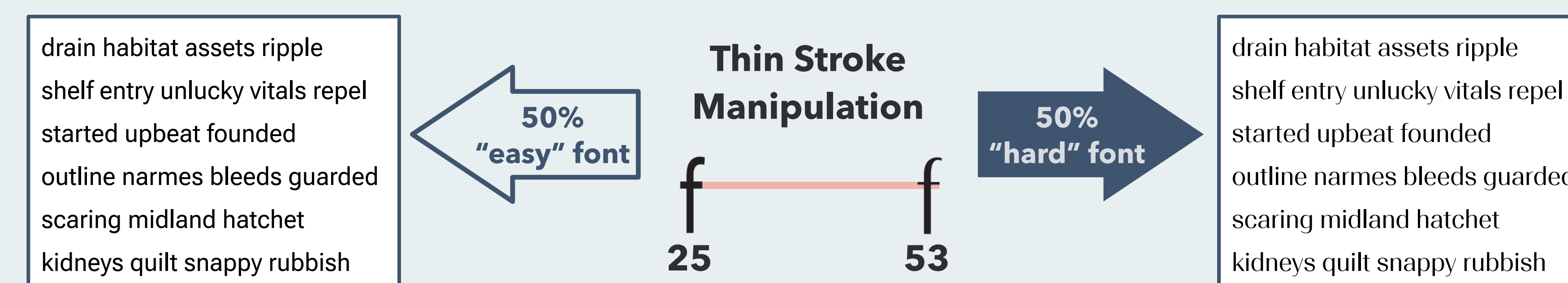
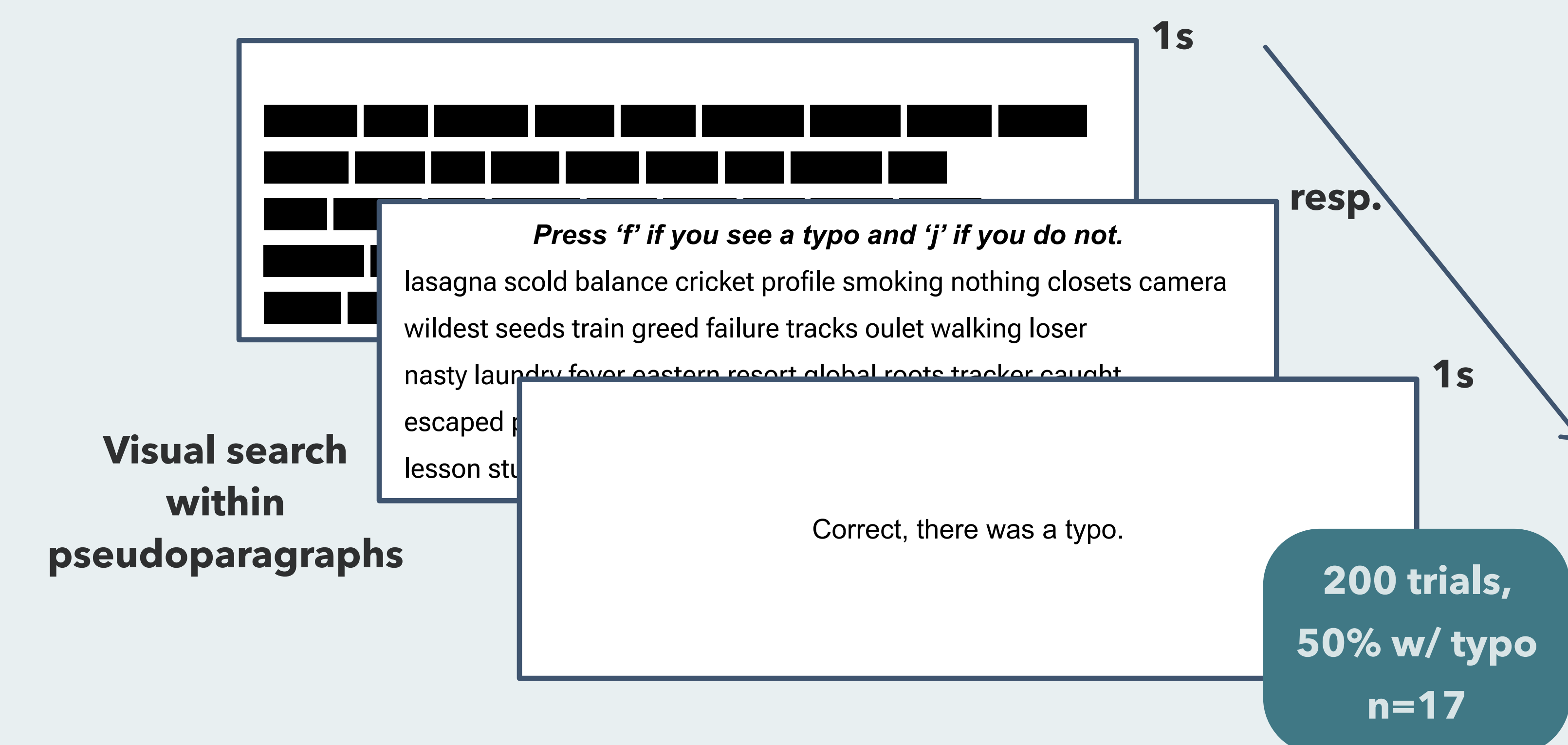
“Look but fail to see” (LBFTS) errors occur when the searcher fixates, but fails to respond to, a target<sup>1</sup>.

Typo detection is an everyday task we can use to explore visual factors that lead to success and failure in visual search.

This introduction has  
**5 typos**  
Can you spot them?

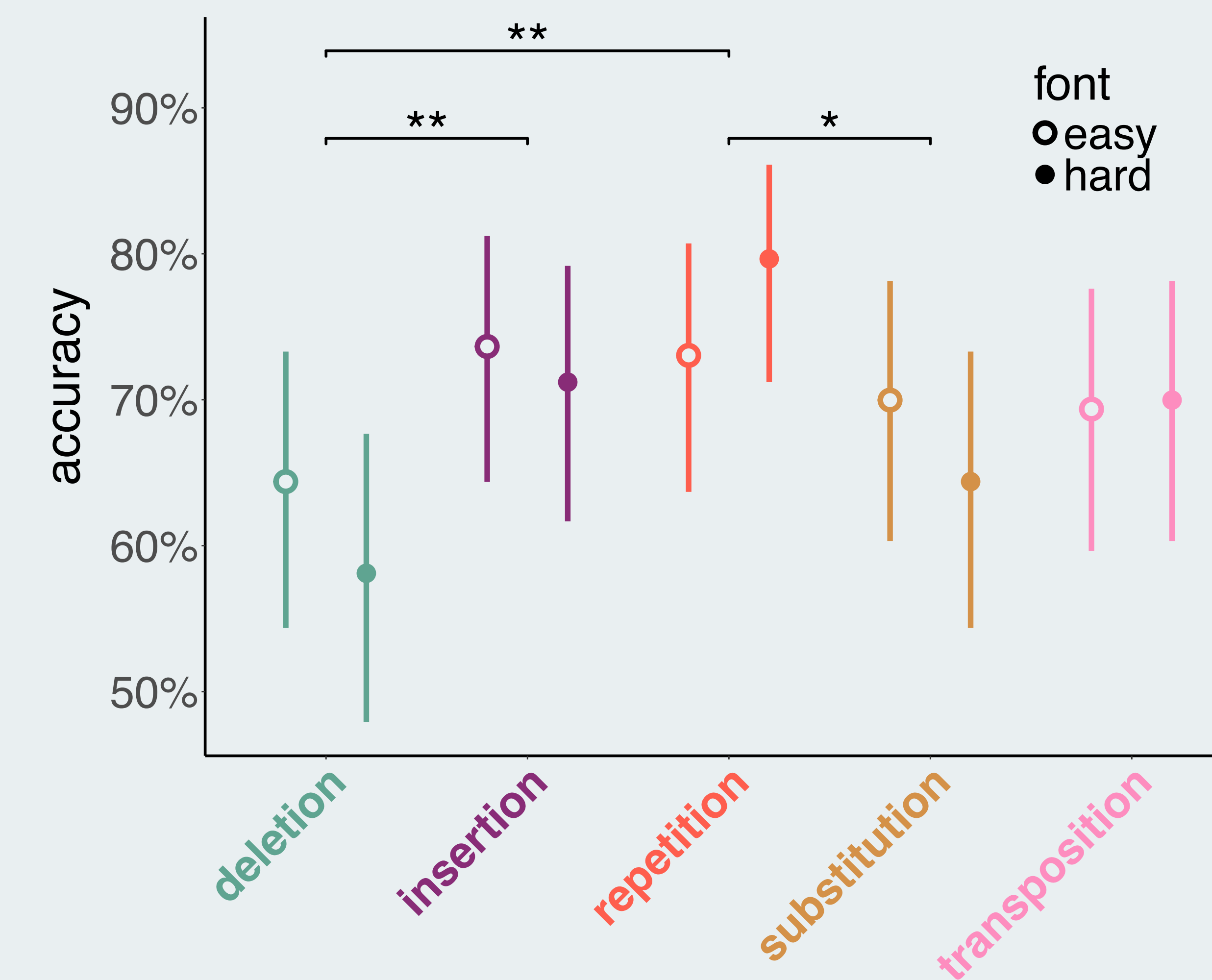
? How do the visual properties of text interact with attentional processes to influence visual search? ?

## Methods



Types of Typos (20 of each)				
deletion	insertion	repetition	substitution	transposition
(vison)	(visijon)	(visionn)	(visiqn)	(visino)

## How do font and typo type impact accuracy?

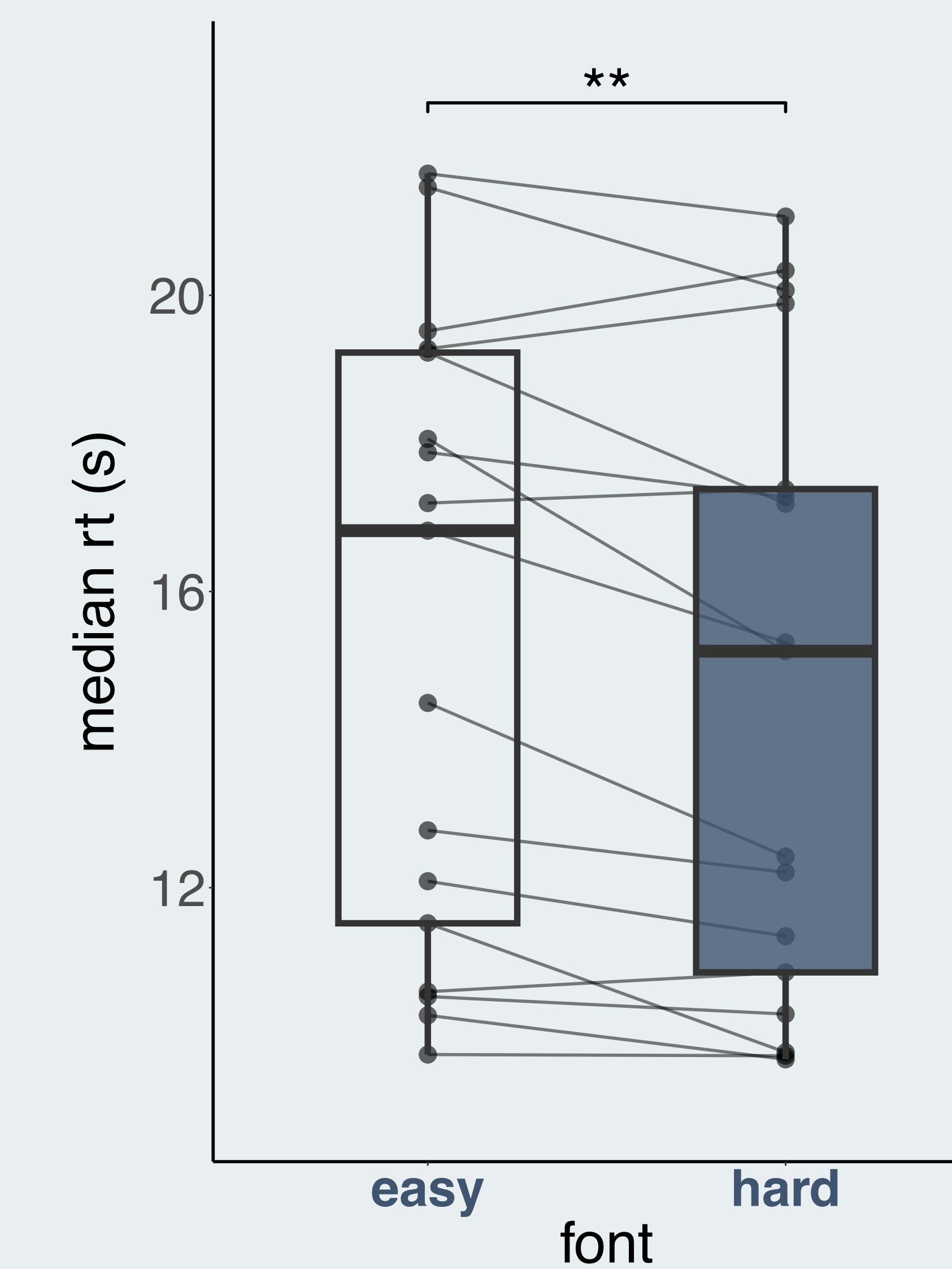


Detection is relatively **harder** for **deletion** and **substitution**.

Detection is relatively **easier** for **insertion** and **repetition**.

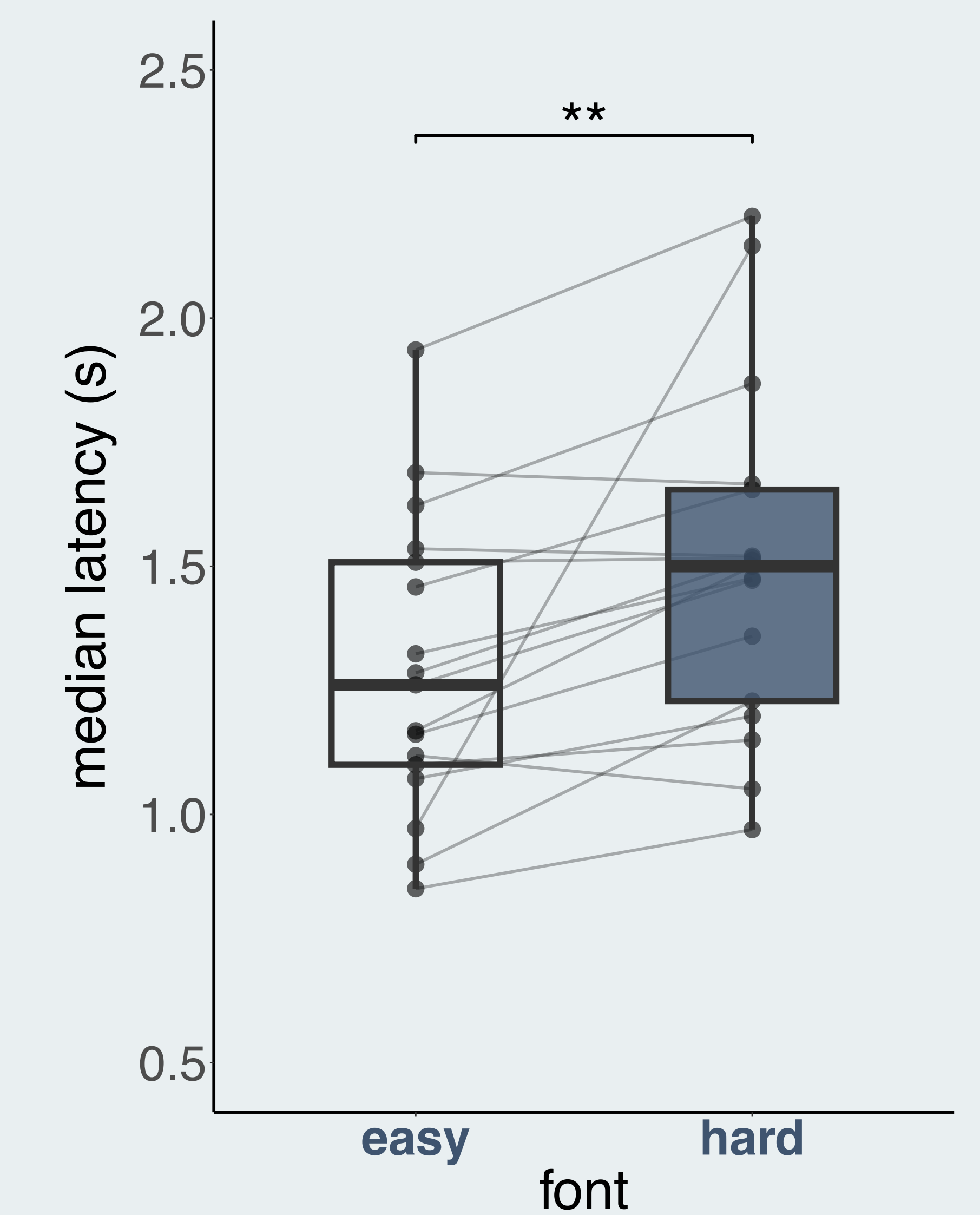
No effect of font.

## When do people stop searching?



Longer search times for easy vs. hard font on typo-absent trials.

## Does font impact typo processing?



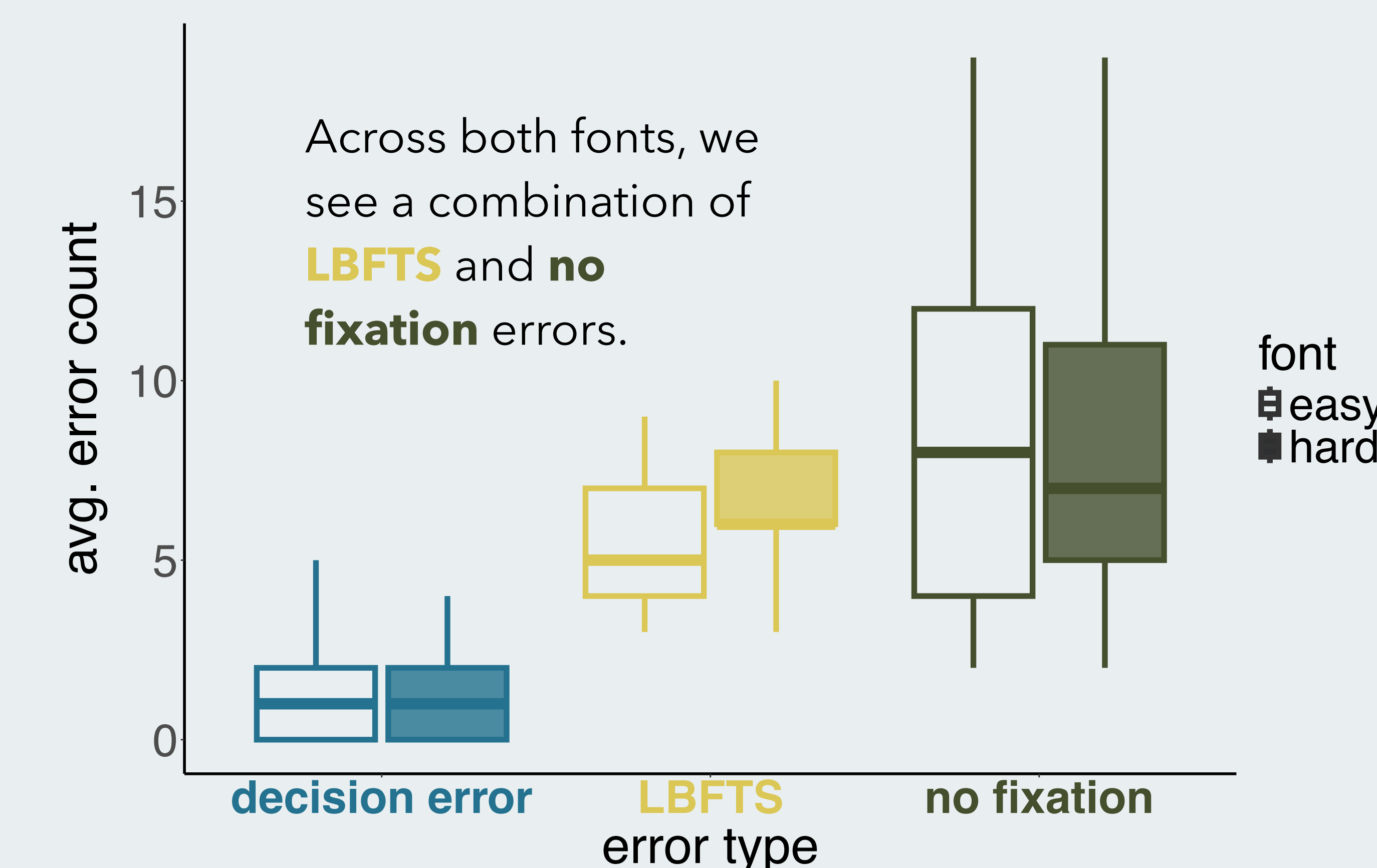
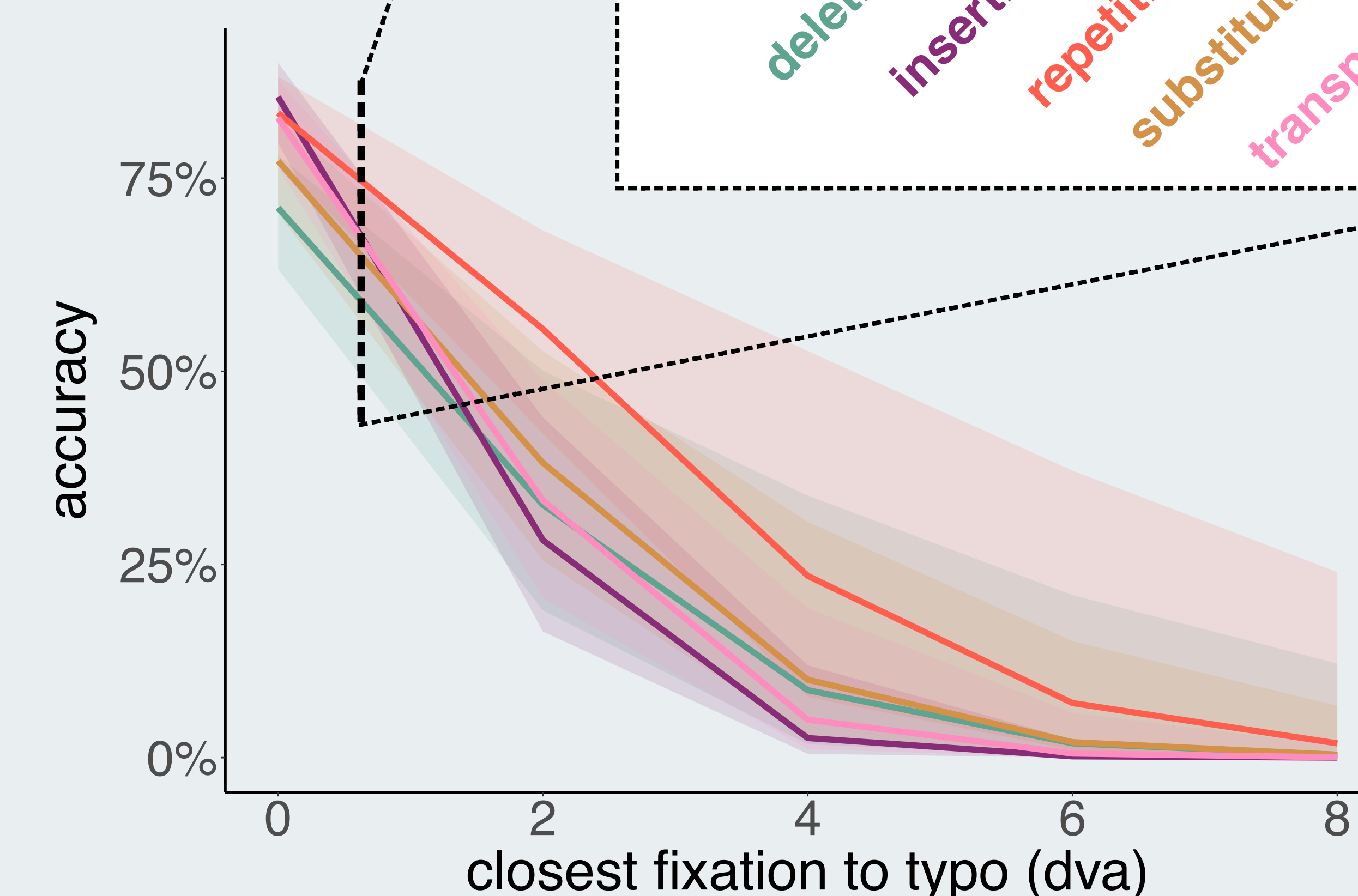
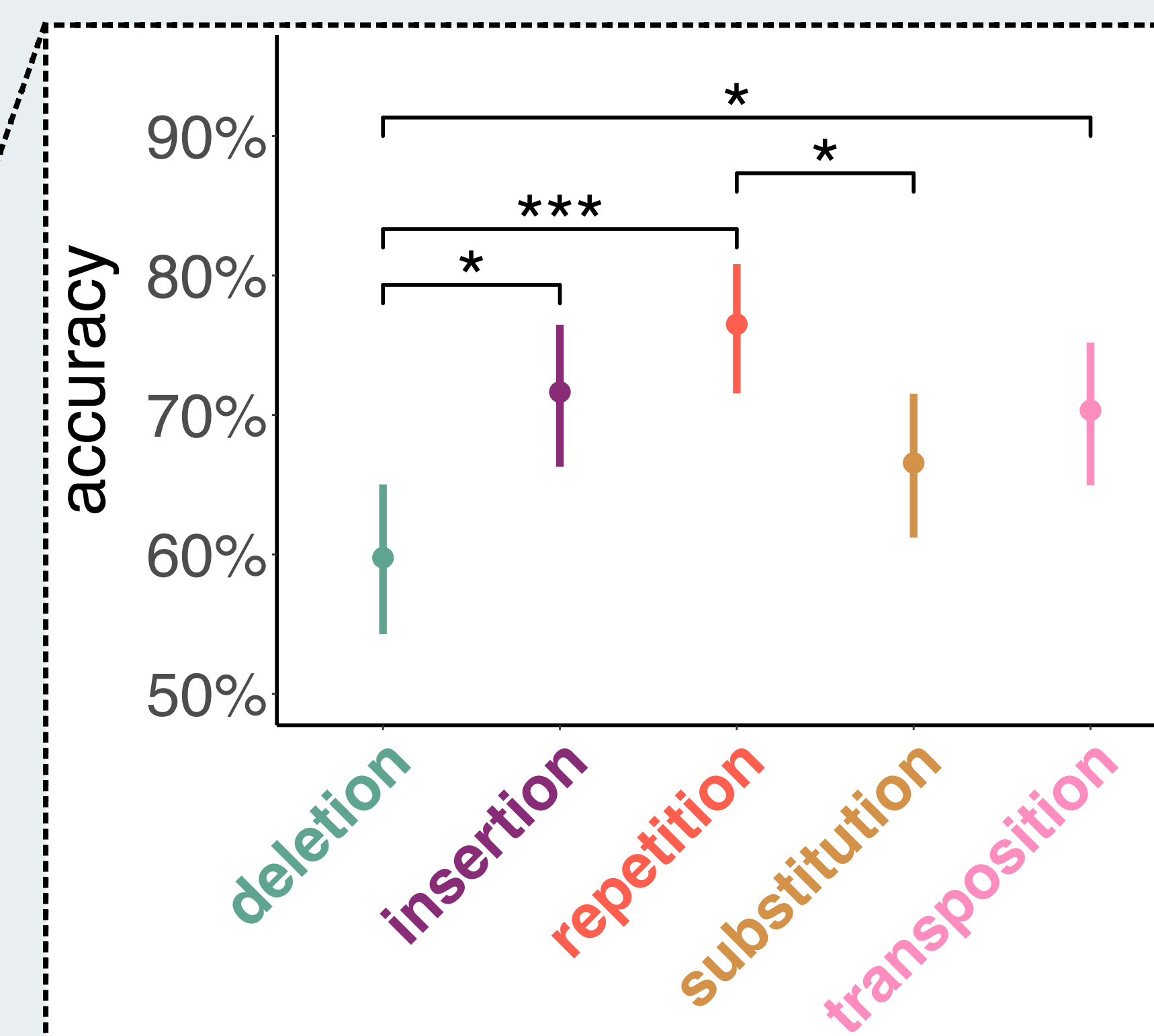
After fixating on a typo, people take longer to respond for hard vs. easy font.

drain habitat assets ripple shelf entry unlucky vitals repel  
started upbeat founded outline names bleeds guarded scaring midland  
hatchet kidneys quilt snappy rubbish doing prolong haywire olives

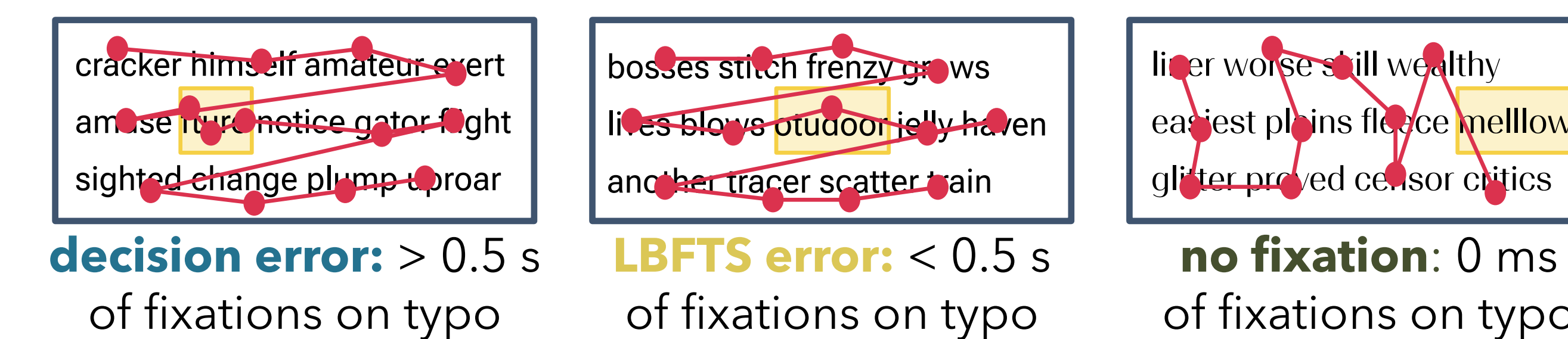
latency: time between 1st fixation in typo AOI and response

## Are people looking directly at the typos they miss?

Fixating closer to a typo improves, but does not guarantee, accuracy.



## Error Classification<sup>2</sup>



## Conclusions

The type of typo matters: typos with added letters seem easier than those with missing/swapped letters.

Hard-to-read fonts may reduce quitting threshold but increase decision time.

Missed typos can be attributed both to LBFTS errors and failing to fixate on the typo during search.

