

The Influence of location-related Factors on the Perception of Billboard Advertising

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Billboard Posters & Billboard Advertising

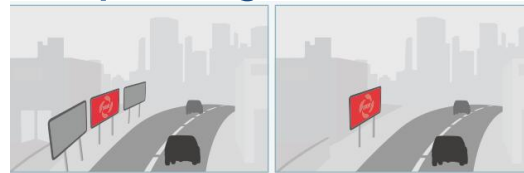


Influence of location-related Factors on Billboard Advertising

Complexity of the Environment



Number of competing Billboards



Distance to the Traffic Stream



Viewing Angle



Degree of Occlusion



~~Lighting Conditions~~

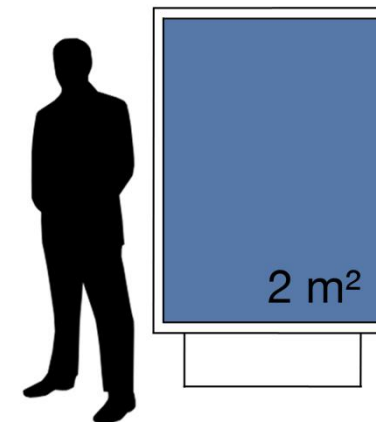


~~Duration of Visibility~~

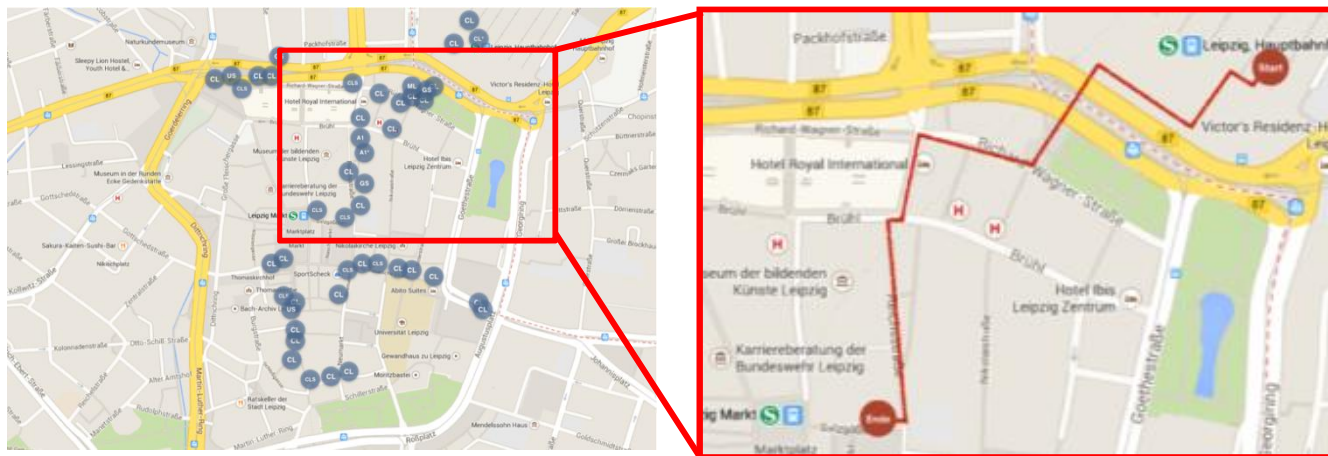


Objectives of Research

- Eye tracking analysis of the impact of location-related factors on viewer`s perception and information processing
- Comparison of results with unaided/ aided recall and recognition tests of corresponding billboard posters



Research Methods: City Walk Simulation



1. Identification of billboard locations in Leipzig's city center

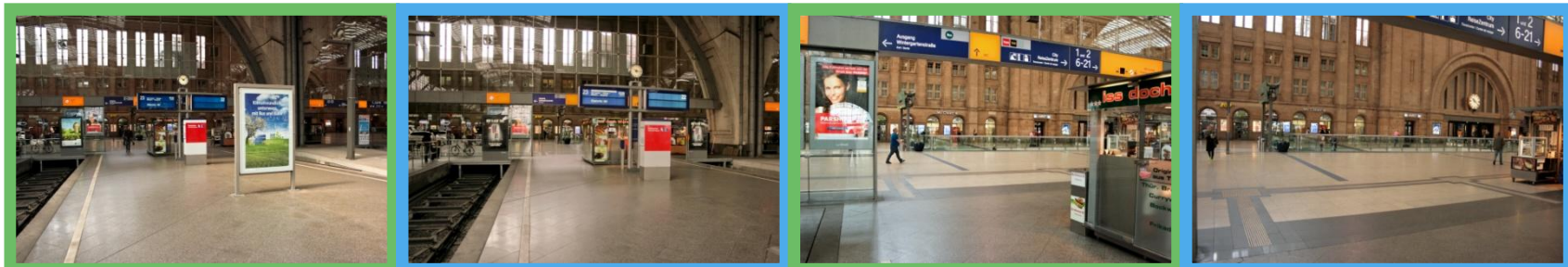
2. Simulation of a paradigmatic walking route

Research Materials: Stimuli

Series 1:



Series 2:

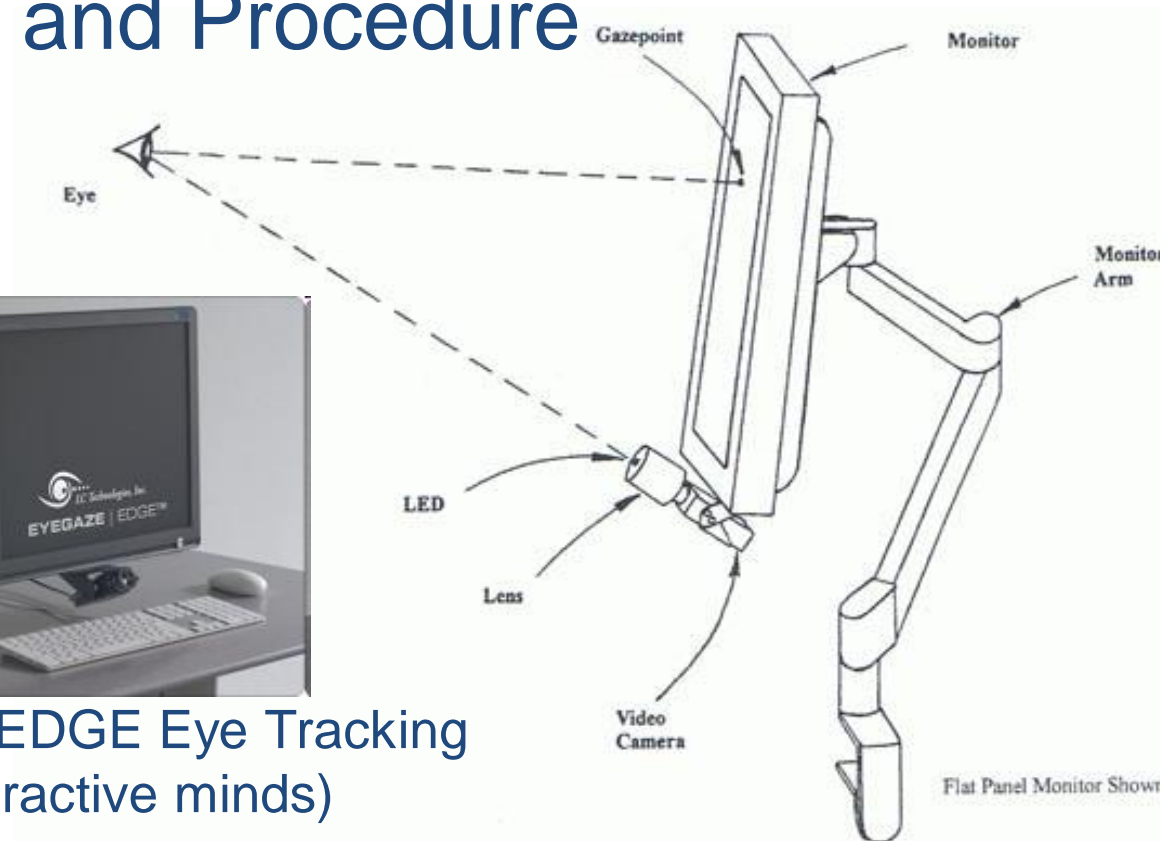


■ : neutral stimuli; ■ : differing stimuli acc. to location-related factors

Eye Tracking Apparatus and Procedure



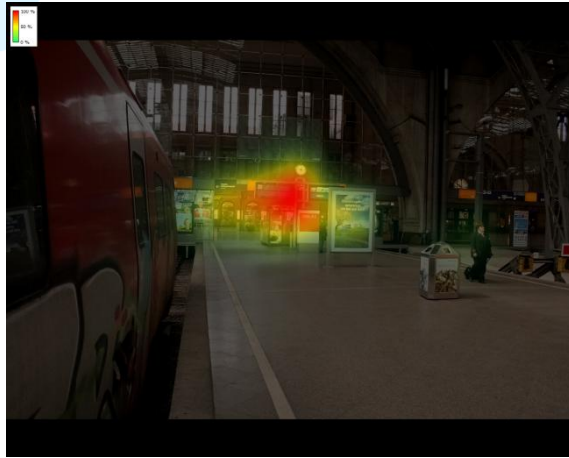
NYAN 2 XT/EDGE Eye Tracking System (interactive minds)



Heatmap Comparison



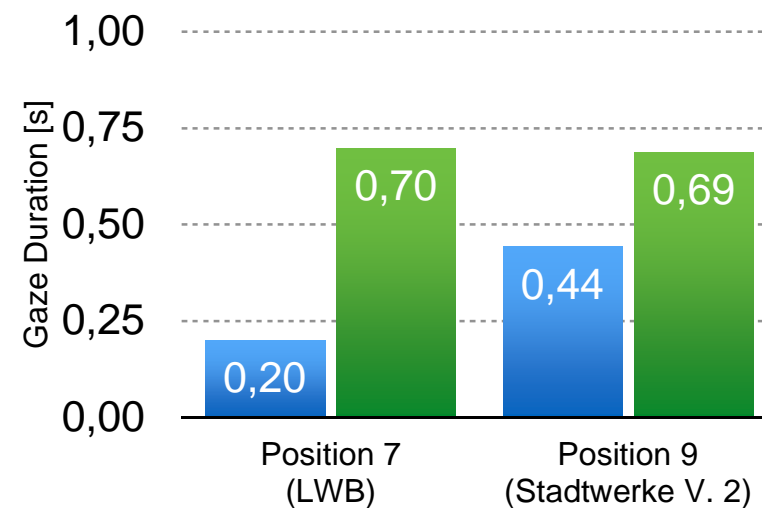
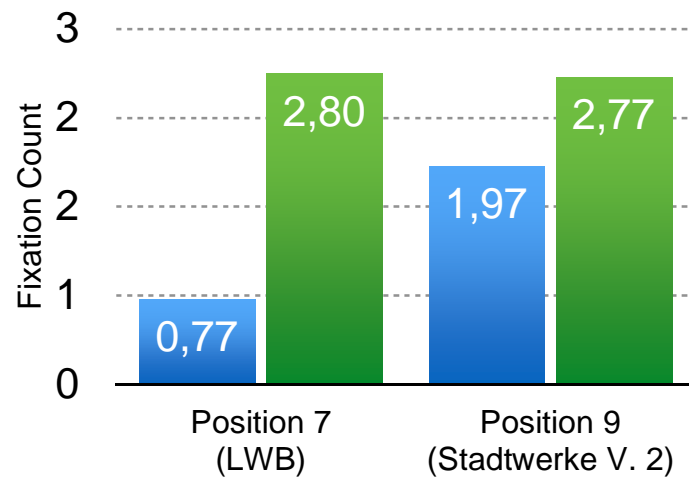
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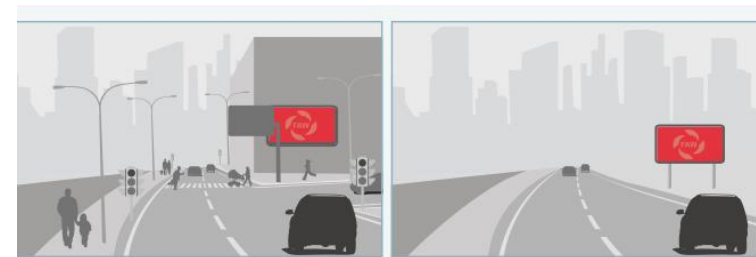
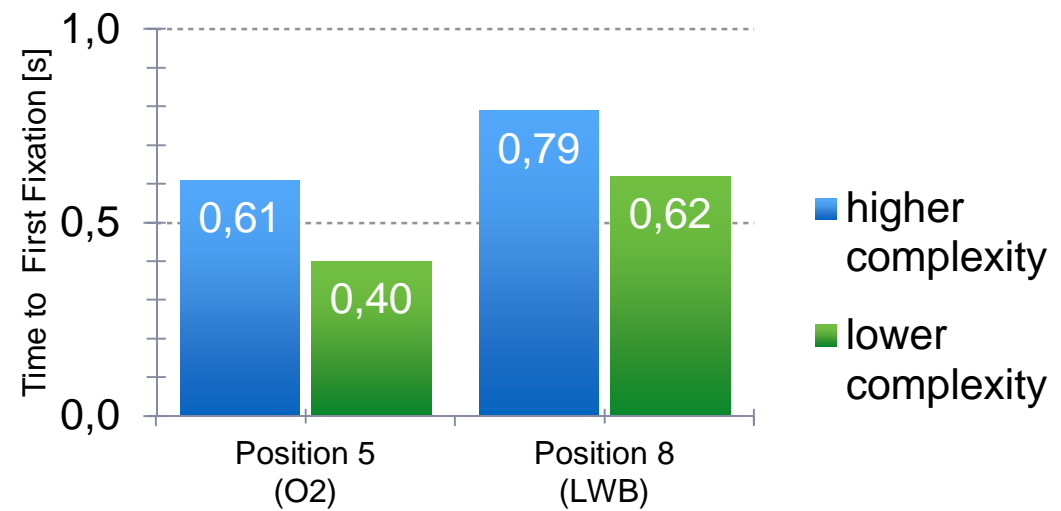
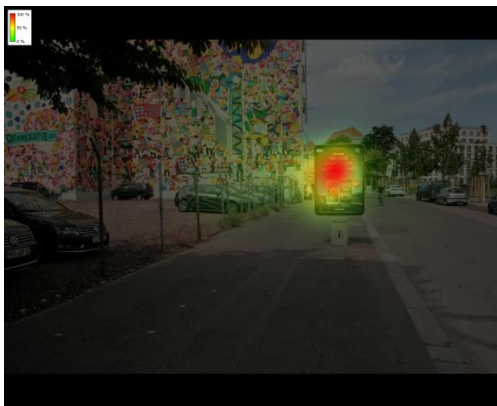
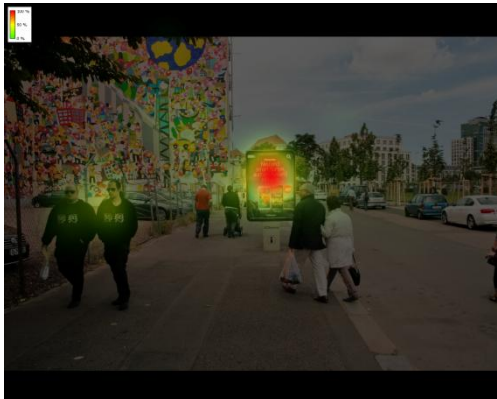
Location-related Factor: Degree of Occlusion



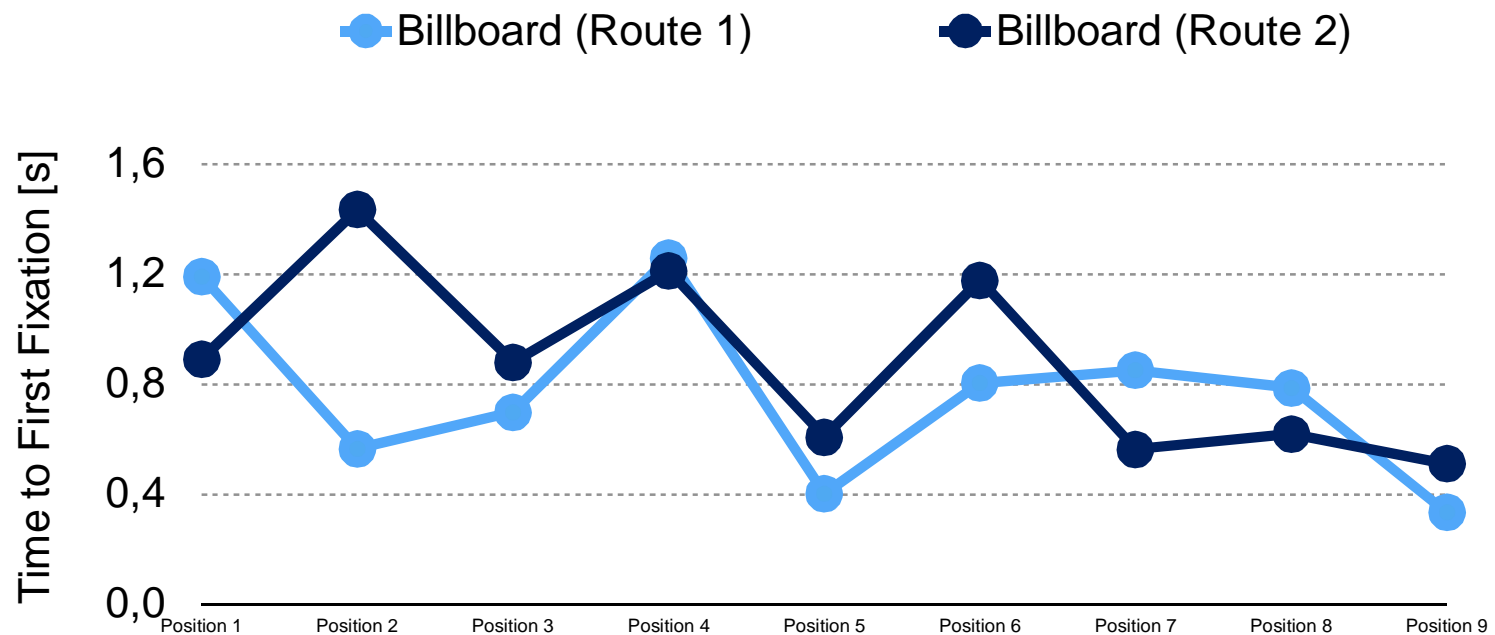
- hidden by other objects or persons
- not hidden



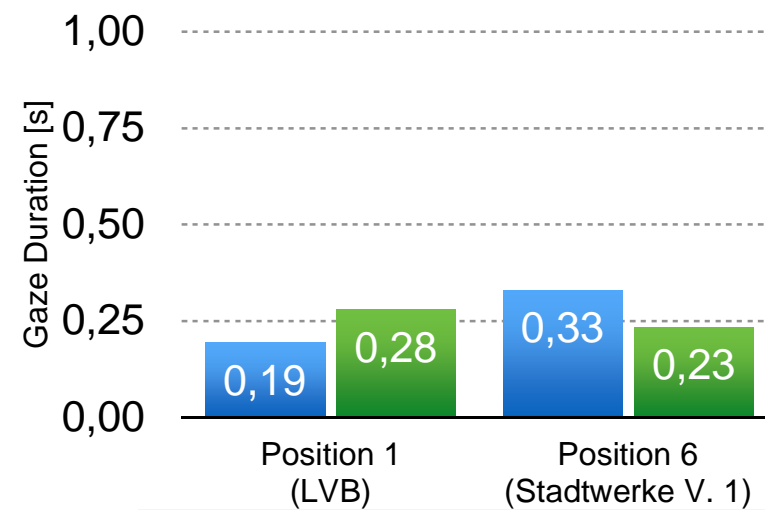
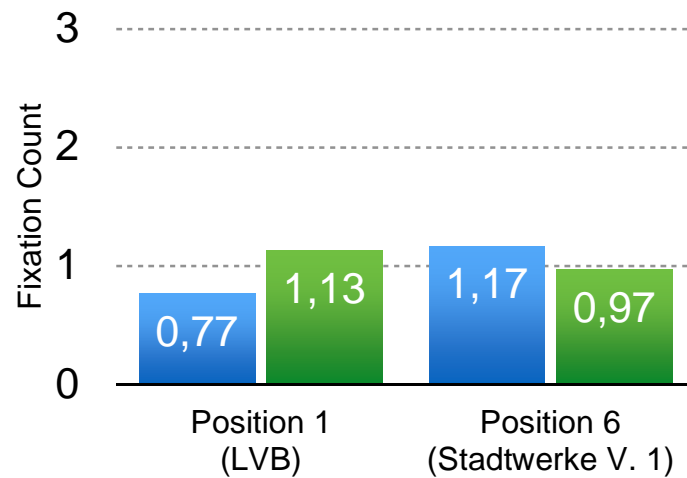
Location-related Factor: Complexity of the Environment



Comparison of the Time to First Fixation



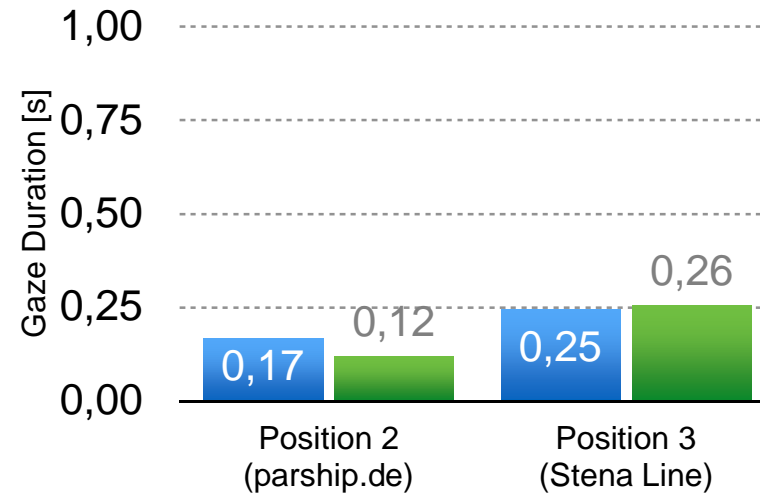
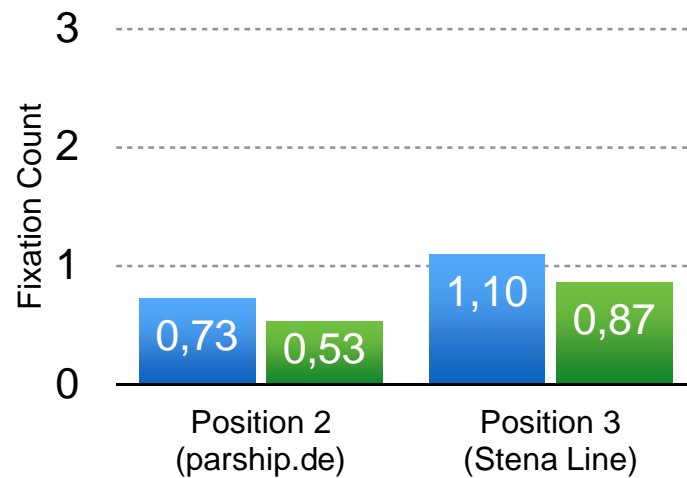
Location-related Factor: Distance to the Traffic Stream



■ far away
■ nearby



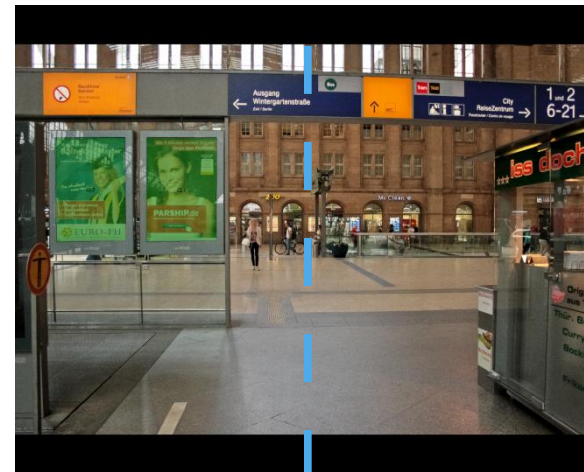
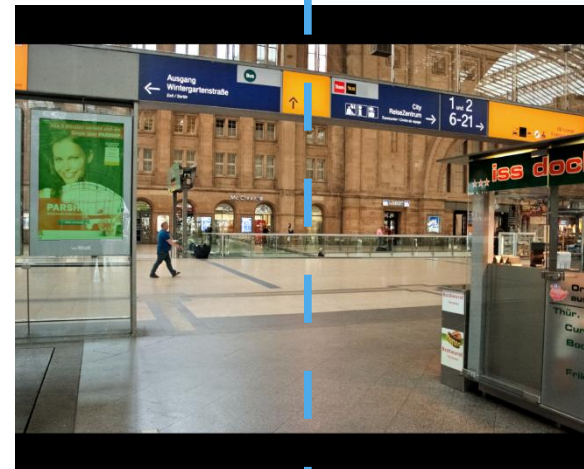
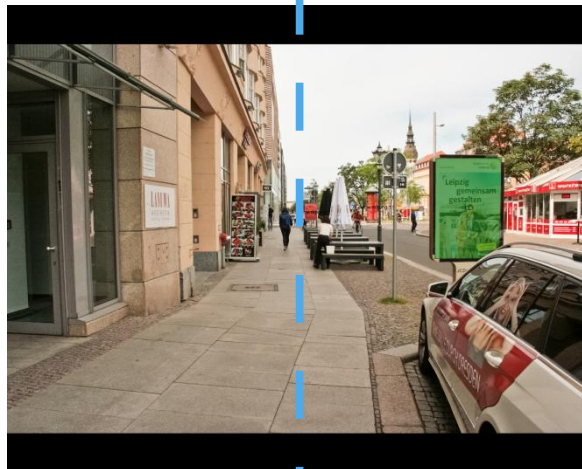
Location-related Factor: Number of competing Billboards



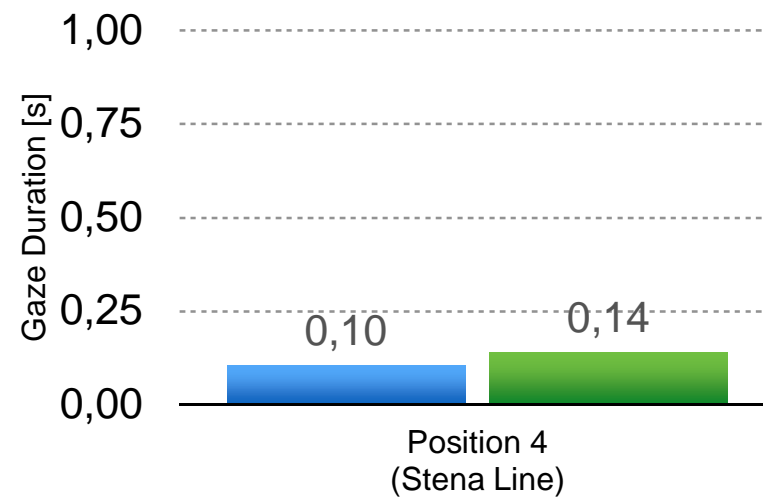
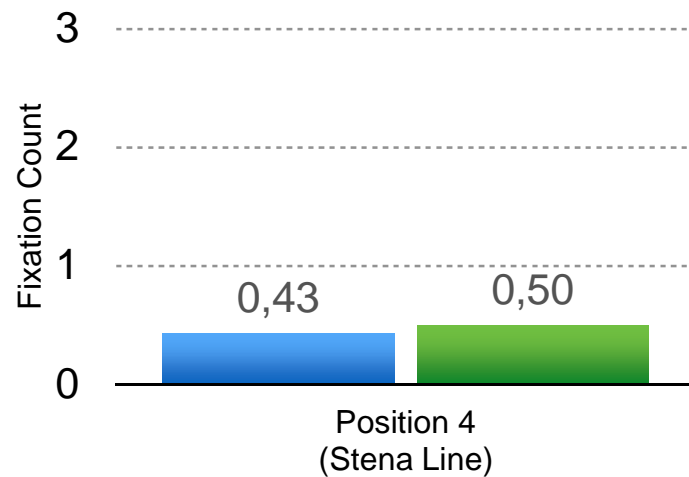
■ higher competition
■ no competition



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Location-related Factor: Viewing Angle



- Angle < 90°
- Angle 90°

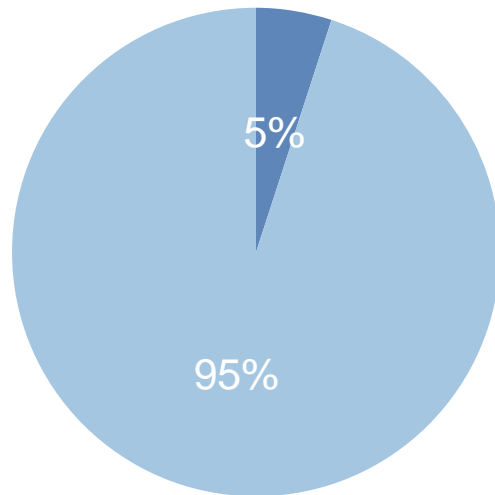


Location-related Factors in Rating Systems of other Countries

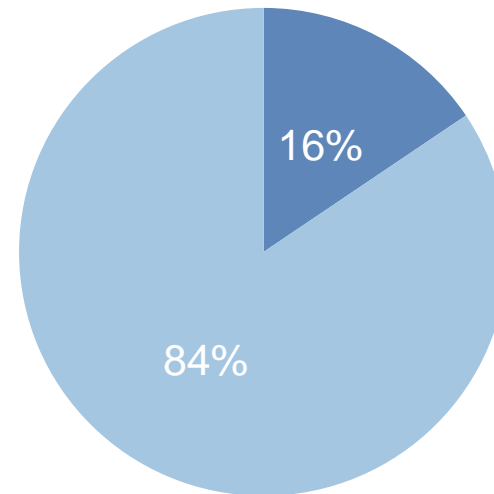
	Complexity of Environment	Number of Competing Billboards	Distance to Traffic Stream	Viewing Angle	Degree of Occlusion
Germany	✓	✓	✓	✓	✓
UK	✓	✗	✓	✓	✗
Netherlands	✓	✗	✓	✓	✗
USA	✗	✗	✓	✓	✗
Australia	✗	✗	✓	✓	✗
Ireland	✓	✗	✓	✓	✓
Switzerland	✗	✓	✓	✓	✗

Recall-Test

■ Recollection correct ■ No Recollection



Unaided Recall
(mean value)



Aided Recall
(mean value)

Recognition Test

■ Recollection ■ No Recollection



Conclusion

Billboard ads ...

- ... achieve large coverage and high levels of reach, but
- ...are perceived only fleetingly and without conscious attention (“a glance medium”)
- subconscious perception presumably responsible for low recall but higher recognition values
- still a lack of verified audience measurement research

Conclusion II

- Eye tracking results ...
 - ... confirm influence of location-related factors **environmental complexity** or **occlusion**
 - ... are less conclusive for the **number of competing billboards**, **viewing angle** and **distance**
 - instead, proximity to **main point of attention** seems to be decisive
 - international rating systems **heterogeneous**
 - consideration of location-related factors should be **scrutinized** and **harmonized**

References

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Visual Perception and Recollection of Pictures in Packaging Design



Questions?

Overall Distribution of Attention

