## **Eyetracking Multilinguistic Landscapes**

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Many regions in the world are multilingual. Val Badia, for example, is a region in South Tyrol with three official languages: Italian, German and Ladin. The inhabitants of Val Badia speak, read, and listen to the three mentioned official languages daily with Ladin being a minority language belonging to the Rhaeto-Romance languages. Linguistic landscapes in Val Badia, such as traffic signs or other information, are presented in all three languages, making the regional multilingualism visible. The question arises, however, to what degree all languages are read and processed, and whether language processing depends on specific influential factors.

In this study, eyetracking was used on 23 trilingual participants fluent in Italian, German, and Ladin, to shed light on their reading behaviour when faced with signs containing text presented simultaneously in the three languages but in randomized orders (left to right and top to bottom). The focus is on the results concerning questions of reading strategies measured with fixation durations and transitions between the text instances. This allows us to find out whether one language is preferred over another when it is displayed in a randomized order and whether this preference is linked to the communicative situation or participants' language skills irrespective of the position of the language stimulus.

The stimuli included 18 photos of authentic trilingual traffic or informative signs containing varying amounts of text in all three languages. The stimuli were randomized and presented in six orders, so each photo was manipulated to create six text versions of the photos. Additionally, 19 distractors (images without text) were included. In a self-paced eyetracking experiment, participants then were randomly presented with 37 stimuli alternating a distractor and photo in one of the six versions. After each stimulus/distractor participants were asked to describe what they had seen in their language of choice. The eye movements are recorded and quantified for each text instance in the three languages and the respective position. The eyetracking data are triangulated with a speech production task as well as socio-demographic data and a self-assessment of language skills. Initial results suggest that the language in first position (left and top) receives the most initial attention, irrespective of the language. Overall, however, the minority language Ladin, seems to receive the most attention compared to Italian and German, irrespective of the position in which it is presented. Apart from that transitions were calculated and a control group with no knowledge of Ladin was also tested. The results will be reported in detail in our presentation. Furthermore, the discussion of the results also covers the linguistic situation in the area under investigation and the language politics involved. The trilingual nature of this study and the presentation of authentic stimuli with varying amounts of text is not without challenges to the methodological design which will also be critically discussed in the presentation.

(469 words)