From the Alps to the Diaspora: A Work-in-Progress on Reading Profiles Across Swiss Minority and Heritage Languages

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It remains unclear whether native speakers of minority language readers exhibit eye movements while reading that is similar to L1 readers of majority languages, heritage speakers of minority languages, or show their own reading profile. Majority language speakers encounter written input across the full range of linguistic domains. Minority language speakers, by contrast, face systematic domain restriction: written use is often limited to informal communication, while the majority language mediates all formal and literacy-intensive activities. A structurally comparable restriction characterizes heritage speakers, whose home language, though potentially a majority language elsewhere, is in its written form restricted to informal, and family contexts. Previous eye-tracking studies reveal that heritage readers show longer mean fixations, lower skipping, higher regressive saccade rates and enlarged frequency effects compared to monolingual adults (Parshina *et al.*, 2021). Eye movements of proficient L2 readers are similar to L1, but the less proficient the L2 reader is, the less sensitive the eye movements become to a word predictability, and more sensitive to its word frequency (Berzak and Levy, 2023). This raises the question of whether minority language status produces a similar processing signature as either L1 speakers, heritage speakers, or exhibit a unique reading profile. Using data from the MultiplEYE corpus (Jakobi *et al.*, 2025), in which all participants read the same texts translated into their respective languages, we present work-in-progress on the reading profiles of Swiss minority and heritage readers of Romansh Sursilvan and Albanian. We address two research questions: (1) Do we observe longer mean fixations, lower skipping rates, higher regressive saccade rates, less sensitivity to word predictability and enlarged frequency effects in heritage and minority readers compared to native readers of a majority language? (2) Does domain restriction alone, regardless of whether it stems from minority language or heritage status, produce comparable reading profiles? We first fit a linear model comparing Albanian L1 to Albanian heritage speakers, to investigate the profiles of the heritage readers. We then move on to fit Albanian L1 versus Romansh speakers to investigate the effect of minority language status. Finally, we investigate the differences in reading profiles between Romansh and Albanian heritage speakers, contrasting the two presuppositions for domain restriction. Fixation duration measures, skipping probabilities, and regression rates are modeled as dependent variables, and word frequency, word length, and surprisal as main predictors. We hypothesize that the profile for Albanian heritage readers will show the expected heritage profile, consistent with Parshina *et al.* (2021). Romansh readers will be more similar to heritage readers, rather than the Albanian L1 readers.

References

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