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Processing of Turkish evidential markers: Evidence from ERP studies

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Evidentials specify information sources [1]. Turkish marks two obligatory evidential forms affixed to verbs when referring to the past: the direct evidential (-DI) is used when the event being expressed was witnessed by the speaker whereas the indirect evidential (-mİş) is appropriate when the event was reported to or inferred by the speaker.

Evidentiality in Turkish has processing asymmetries – the direct evidential is acquired earlier than the indirect in children [e.g. 2], but direct evidentials are more severely impaired in aphasia [3]. To unveil the cognitive underpinnings of these asymmetries, we examined the moment-by-moment electrophysiological event-related brain potentials (ERPs) that occur during evidentiality processing in unimpaired adult Turkish speakers.

25 Turkish native speakers (14 females; $M_{age}=24$ years) silently read Turkish sentences presented with or without mismatches of the information source and evidentiality marker (e.g. *I saw her while chopping, she *chopped (INDIRECT) onions in the kitchen*). In a second condition, participants read sentences with time reference violations (but without evidential biases, e.g. *Tomorrow Sedat *washed the car*). We found no significant differences in ERPs between sentences that matched or mismatched for evidentiality. In contrast, for time reference, significant P600 effects (peaking around 800ms) were elicited on the critical verb depending on whether the verb violated the time frame of the temporal adverb preceding it. We suggest that time reference violations are perceived as unacceptable (ungrammatical) thus leading to pronounced ERP patterns. In contrast, pragmatically infelicitous evidentiality mismatches evoke significant behavioural differences in the absence of any discernible ERP differences.

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