Summary

Turkish grammatically expresses evidentiality, the linguistic encoding of information sources, through verbal morphemes indicating direct (-DI) and indirect (-mIş) evidentiality. This dissertation examines to what extent the evidentiality system in Turkish is vulnerable to differential types of language loss caused either by brain damage (i.e., agrammatic aphasia) or by acquisition of a heritage language in bilinguals. The investigations in this dissertation have extended our understanding of the neurolinguistic and psycholinguistic aspects of evidentiality. In particular, the neurolinguistic aspects relating to how the evidential forms are affected in Turkish speakers with agrammatic aphasia, and the psycholinguistic aspects concerning the processing of evidential forms in the healthy bilingual brain.

Chapter 1 presents a linguistic introduction to the expression of evidentiality in Turkish, and provides a background on its neurolinguistic and psycholinguistic aspects. Regarding the neurolinguistic aspects, individuals with agrammatic aphasia have problems referring to the past as compared to non-past time frames. According to the Past Discourse Linking Hypothesis (PADILIH; Bastiaanse et al., 2011), past time reference is discourse-linked, and, thus, impaired in agrammatic aphasia. That is, verbs which refer to the past are difficult for agrammatic speakers; however, not much has been explored as of yet about past verb forms in Turkish agrammatic speakers.

From a psycholinguistic perspective, heritage language speakers (i.e., early bilingual speakers) whose first language performance tends to be weaker than their second language often exhibit gaps in their knowledge of their first language grammar. Heritage speakers are assumed to have gone through disrupted acquisition processes during childhood, possibly under inadequate input conditions, and thus, in adulthood, some aspects of their first language inflectional morphology are attrited. Most previous studies on heritage speakers have indicated that the incomplete acquisition and attrition patterns in heritage speakers’ knowledge of inflectional morphology in their first language are due to the vulnerability of linguistic interfaces (e.g.,
Montrul, 2009). That is, the inflections that relate to the syntax-pragmatics interface are prone to incomplete acquisition and attrition in heritage speakers. This idea is based on the Interface Hypothesis (Sorace, 2000; Sorace & Filiaci, 2006; Sorace & Serratrice, 2009).

Chapter 2 aims at demonstrating (1) that Turkish agrammatic speakers are able to produce evidential verb forms in sentences that are linked to the respective information sources; (2) that they are able to identify the information source perspectives that the evidential verbs map onto. By using both a sentence production and a source identification task, we showed that Turkish agrammatic speakers performed poorly in producing verbs inflected for direct evidentiality, while the production of verbs used in contexts of inferred and reported events was relatively spared. Our findings from the source identification task, however, showed that indirect information sources (i.e., inference and report) were difficult for the agrammatic speakers to discriminate, while directly witnessed information sources were relatively easy to identify. The production data are consistent with the PADILIH, which suggests that referring to the past is difficult for agrammatic speakers as it requires discourse linking. We argued that the direct evidential is the discourse-linked form within the evidential paradigm, as its use is linked to the speaker’s direct witnessing of a past event. Hence, the direct evidential form is hard for agrammatic speakers to produce, although they are aware that the uses of direct evidentiality are linked to visual witnessing.

Chapter 3 addresses the question whether evidential verb forms are affected in comparison to other verb forms in Turkish agrammatic speakers’ narrative speech production. The findings from our narrative speech production experiment, including an open-end interview and a story-telling task, showed that Turkish agrammatic speakers’ verb diversity was reduced but their use of verb inflections was more or less normal. Nonetheless, their use of direct evidential morphemes was disrupted in the sense that a trade-off pattern between verb inflection for direct evidence and verb diversity was found. Agrammatic speakers who produced a high number of verbs inflected for direct evidentiality employed little diversity in those verbs, while agrammatic speakers who produced a greater diversity of verbs with a direct evidential produced relatively few of these forms. This pattern was
not observed for indirect evidential or present progressive forms. These data are compatible with Bastiaanse’s (2013) claim that retrieving the name of an event and inflecting it for the time frame in which the event takes place is arduous for agrammatic speakers.

Chapter 4 aims to unveil the extent to which Turkish heritage speakers’ processing of the evidential verb forms is affected by incomplete acquisition or attrition. A sentence-verification task was administered to both heritage and monolingual speakers of Turkish, which required the participants to respond to finite verb evidentiality violations and to time reference violations by non-finite participles. The aim of the experiment was to test whether Turkish heritage speakers were less sensitive to evidentiality violations, a form that relates to the syntax-pragmatics interface, as compared to non-finite participles, uses of which are linked to syntactic knowledge. As predicted by the Interface Hypothesis, the heritage speakers performed less accurately (and had longer RTs) in responding to evidentiality violations compared to time reference violations.

The goal of Chapter 5 is to explain how Turkish heritage speakers, as compared to late bilinguals and monolinguals, process evidentiality in a virtual visual-world setting while listening to sentences with direct and indirect evidentiality. An eye-movement monitoring experiment was conducted where the participants were asked to choose the corresponding picture (a form of visual evidence) appropriate for the use of either direct or indirect evidentiality. The results indicated that both the late and the heritage bilingual groups responded less accurately and more slowly in the direct evidential condition than in the indirect evidential condition, while the monolingual speakers did not differ between the two conditions. The late and early bilingual speakers’ target fixations showed a similar difference between the direct and indirect evidential conditions. We argue that the data are not consistent either with the Interface Hypothesis or with maturational constraints (i.e., order of acquisition or age of onset to bilingualism). We conclude that evidentiality erodes easily under incomplete acquisition and attrition in Turkish heritage grammars, especially when the dominant majority language has no comparable evidentiality marking.
Chapter 6 provides a general discussion and the conclusions from the studies reported in this dissertation. It was shown that evidentiality is a vulnerable grammar domain in both individuals with agrammatic aphasia and in heritage speakers of Turkish. Notwithstanding the different underlying reasons for these impairments and attrition effects, the outcomes are similar: there is a clear disadvantage of the direct evidential in both pathological and non-pathological language loss. The direct evidential form was difficult in the Turkish agrammatic speakers’ speech output (Chapters 2 and 3). The reason for this difficulty is the assignment of past time reference; in the case of direct evidential, a link between speech time and a personally witnessed event has to be established, which is hard for agrammatic speakers to compute. The direct evidential form was also shown to not evoke native-like sensitivity in the heritage speakers as verified by their eye-movements (Chapter 5). The heritage speakers were insensitive to violations both by direct and indirect evidentiality in the RTs study (Chapter 4), they seem to have restructured and simplified the semantic and pragmatic contents of the evidentiality paradigm.