# "They say" makes good liars: a cross-linguistic investigation on evidentiality in language and deception.

Şeyma Kalender, Sabancı University, Turkey Çağla Aydın, Sabancı University, Turkey Selma Berfin Tanış, Sabancı University, Turkey Amanda Edmonds, Université Côte d'Azur & CNRS Ayberk Kaan Güneş, Sabancı University, Turkey Junko Kanero, Sabancı University, Turkey Fanny Meunier, Université Côte d'Azur & CNRS Shona Whyte, Université Côte d'Azur & CNRS Seçkin Arslan, Université Côte d'Azur & CNRS

## **Background**

We know little about the grammatical composition of deception. Studies have found that, as compared to truthful ones, deceitful speakers produce relatively more negation words (Hauch et al., 2015), conditionals (Meibauer, 2018), inconsistent person and tense marking (Porter & ten Brinke, 2010). Little research has focused on other grammatical cues, however. One such grammatical category is evidentiality codifying through which sources of information a speaker knows about an event in his/her own statement (Aikhenvald, 2004). In English, perception verbs are used to express reported information (e.g., *I hear that*; Whitt 2010). French employs a non-obligatory conditional form to denote unattested knowledge (Dendale, 1993). Turkish inflectional marker -di indicates direct firsthand information while -miş codifies inferred or reported information (Aksu-Koç & Slobin, 1986). Japanese uses -rashii or -souda hearsay markers when referencing an indirect report as compared to unmarked direct reports of witness events to express evidentiality (Matsubara, 2017). Turkish and Japanese evidentials are obligatory categories.

#### Goals

The goal of the present study is to decipher whether speakers across two evidential languages (Turkish and Japanese) and two non-evidential languages (French and English) are using different grammatical "hints" and pragmatic strategies such as inconsistent uses of tense/evidentiality markers when producing deceptive statements.

#### Methods

We investigate written production of grammatical and/or non-grammatical evidential markers across four languages (English, French, Turkish, Japanese) in four conditions. We manipulate

deceptive information (truth versus lying) and modality of access to information (direct access through video clips versus indirect access through linguistic reports of others). 160 participants are being recruited, with 40 native speakers of each four languages. A set of 12 mini stories were created, linguistically and culturally adapted. Each story comprises one human referent and four transitive verbs which the referent performs each of these four actions (e.g., *Mary is sitting at the kitchen table with a photograph in front of her. She pours juice into a glass and drinks it. She suddenly tears the photo in two and throws the pieces into the bin next to her.*). The stimuli have been normed for naturalness with 126 participants. In our written production experiment, participants watch half of the stories as silent animated videos, in which the events in the storylines are directly witnessed (see Figure 1 below); and hear the other half of the stories auditorily, in which the events are indirectly accessed. Then, they are instructed to immediately retell the story truthfully or by deliberately changing at least three of the actions. A 2-way crossed design was used, all 12 stories are seen in two conditions of modality across different blocks, fixed in either lie or truth condition.

### Results and discussion

Data collection is currently underway. A sneak-peek into the so-far collected pilot data indicated (i) a trend towards more frequent use of past tense forms in deception conditions over non-past forms in all four languages, (ii) overuse of evidential forms in deception conditions in Japanese and Turkish. We further expect that deceitful retellings would present an elevated inconsistent and programmatically unmotivated evidential and tense forms.

Figure 1. Example fragments from an animated video used in the experiment.



## References

Aikhenvald, A. Y. (2004). Evidentiality. Oxford University Press.

Aksu-Koç, A., & Slobin, D. I. (1986). A psychological account of the development and use of evidentials in Turkish. In C. Wallace & J. Nichols (Eds.), *Evidentiality. The linguistic coding of epistemiology.* (pp. 159-167). Ablex Publishing Corporation.

Dendale, P. (1993). Le conditionnel de l'information incertaine: marqueur modal ou marqueur évidentiel? na.

Hauch, V., Blandón-Gitlin, I., Masip, J., & Sporer, S. L. (2015). Are computers effective lie detectors? A meta-analysis of linguistic cues to deception. *Personality and social psychology Review*, 19(4), 307-342.

Matsubara, J. (2017). The semantics and pragmatics of the Japanese evidentials-rashii, sooda, and-yooda: An experimental investigation Northwestern University].

Meibauer, J. (2018). The linguistics of lying. Annual Review of Linguistics, 4, 357-375.

Porter, S., & ten Brinke, L. (2010). The truth about lies: What works in detecting high-stakes deception? *Legal and criminological Psychology*, 15(1), 57-75.

Whitt, R. J. (2010). Evidentiality and perception verbs in English and German.