# An Investigation on the Forms of Negation in Turkish: Towards a Formal Representation

Negation is the denial of a proposition or some part of it, and it is realized in two forms. One form is the *standard* (*or internal*) *negation*, which takes scope over verbal predicates while the other, *sentential* (*or external*) *negation*, operates on sentence meanings, namely propositions (Emeksiz, 2010). Sentential negation is also thought to have the widest scope in the logical structure of the sentence (Emeksiz, 2010). It is proposed that there are syntactic (Tura, 1981) and morphological (Taylan, 1986) distinctions between these two forms. This study is a preliminary investigation of these distinctions to create lexical items and phrase structure rules towards a formal representation of these two forms of negation.

Tura (1981) presents four ways to mark negation in Turkish. In this study, two of them are relevant: the one with the suffix -mA; employed by verbal predicates after the verb, and the one with the predicate değil 'not'; a verbal predicate embedded under değil (Taylan, 1986). Tura (1981) makes a syntactic distinction between the negation with the suffix -mA (verbal negation) and the one with değil 'not' (sentential negation). Consistent with the analyses in (Tura, 1981), değil is claimed to be used in nominal and verbal clauses functioning as external negation in (Taylan, 1986).

It is not possible for all sentences with a verbal predicate to be embedded under *değil* 'not'. Taylan (1986) provides certain restrictions on the tense, aspect, and modality suffixes that the embedded verb may take. With the aim of clarifying where *değil* will be included in the grammar, *değil*'s interaction with *gibi*, which itself is analyzed as a raising predicate, is investigated. According to their relative distributions and their interaction with raising, it is concluded that external negation and sentential negation have different structures and different translations, hence different meanings. The study proposes a way of presenting explicit rules to construct a grammar for standard, sentential, and double negation in the light of these investigations.

Keywords: negation, standard negation, sentential negation, double negation

### **Appendix**

The grammar that is constructed in this study aims to generate the sentences below and address the grammatical and morphological differences among these sentences:

# i. Affirmative sentence:

Sen uyu-DI/-mIş/-sA/-((A/I)r/-z)/-(y)AcAK/-(I)yor/-mALI/-mAktA-(sI)n.

You sleep-past<sup>1</sup>/past<sup>2</sup>/cond/aor/fut/prog<sup>1</sup>/obl/prog<sup>2</sup>-2sg

'You slept/had slept/(if you sleep)/sleep/will sleep/are sleeping<sup>1</sup>/must sleep/are sleeping<sup>2</sup>.'

### ii. Sentence with verbal negation:

'Sen uyu-mA-DI/-mIş/-sA/-((A/I)r/-z)/-(y)AcAK/-(I)yor/-mALI/-mAktA-(sI)n.'

You sleep-NEG-past<sup>1</sup>/past<sup>2</sup>/cond/aor/fut/prog<sup>1</sup>/obl/prog<sup>2</sup>-2sg

'You did not sleep/had not sleep/ (if you do not sleep)/do not sleep/will not sleep/are not sleeping¹/must not sleep/are not sleeping².'

#### iii. Sentence with sentential negation:

Sen uyu-mIş/-(y)AcAK/-(I)yor/-mAktA değil-(sI)n.

You sleep-past/fut/prog<sup>1</sup>/prog<sup>2</sup> NOT-2sg

'You are not such that you had slept/will sleep/are sleeping<sup>1</sup>/are sleeping<sup>2</sup>.

#### iv. Sentence with double negation:

Sen uyu-mA-DI/-mIş/-((A/I)r/-z)/-(y)AcAK/-(I)yor/-mAktA değil-(sI)n.

You sleep-NEG-past<sup>1</sup>/past<sup>2</sup>/aor/fut/prog<sup>1</sup>/prog<sup>2</sup>

NOT-2sg

'You are not such that you did not sleep/had not sleep/do not sleep/will not sleep/are not sleeping<sup>1</sup>/are not sleeping<sup>2</sup>.

Additionally, the grammar aims not to allow sentences below:

### v. Sentence with sentential negation:

\*Sen uyu-DI/-sA/-((A/I)r/-z)/-mALI değil-(sI)n.

You sleep-past<sup>1</sup>/cond/aor/obl/ NOT-2sg

'You are not such that you slept/(if you) sleep/sleep/must sleep.

### vi. Sentence with double negation:

\*Sen uyu-mA-sA/-mALI değil-(sI)n.

You sleep-NEG-cond/obl/ NOT-2sg

'You are not such that you (if you) sleep/must sleep.

# References

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