

Grammar Engineering: Lab 3

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Lab 3 package choice Finnish has both case and agreement, so I’ve chosen to implement case, two types of agreement (subject-verb and determiner-noun), and lexical rules to inflect verbs (six rules for all combinations involving singular and plural and first, second, and third person), as well as lexical rules to change noun case from nominal to elative, determiner case checking from nominal to elative, or noun number from singular to plural.

Case and agreement in Finnish as it’s currently implemented The current cases I’ve implemented are **nominative**, **accusative**, and **elative**. I plan to implement **partitive** as soon as I add another verb that takes a partitive object.

Nouns in their citation form (as found in a dictionary, for example) are in the nominative form. These nominative forms are sometimes the root that other cases use in order to add their particular case endings to, though sometimes they are not. At this point I’ve chosen to include the nominative form of each word as the stem, though later I may change the stem to be the true word stem and create a lexical rule that inflects to the nominative form.

The accusative case is used in the object position of the verb “pelAtA” ‘to fear,’ and is seen in a sentence like “minA pelAAn tomaatit” ‘I fear tomatoes.’ The accusative in this position has the same ending as the plural nominative—there is no difference between these forms.

The elative case is seen in the object position of the verb “tykAtA” ‘to like,’ and is seen in a sentence like “opiskelija tykkAA tomaatista” ‘the student likes tomatoes.’ It is a feature of a certain number of verbs (like tykAtA) that their objects are in the elative case.

In order for the verbs to select the proper case agreement I’ve created two transitive verb subtypes (nom-acc and nom-part) and left the other verbs that

choose for different objects to specify that in their lexical entry (such is the case for `tykAtA` which selects for an elative object).

The verbs are also agreeing with the person and number of their subjects. This is most visible with personal pronouns, but is also occurring when words such as “`opiskelija`” ‘student’ are showing up as subjects, and the verb inflects for [PER third, NUM sg].

Adding agreement for NUM, PER, and CASE has greatly eased the grammar production, as I’ve been able to eliminate lexical and rule subtypes that supported an artificial case system. The grammar is much more streamlined, and open to further addition of cases by simply defining new case types and creating new lexical entries that use those cases, or by creating lexical rules that inflect for those cases.