

## The Two Finnish Ways of Agent Deletion in the Voice Continuum

There is a derivation in Finnish, see (1a)→(1b), which was regarded as a kind of *passivization* in traditional books for language learners (e.g. [5]:107) because of its coming with Agent deletion but is not called passivization any more in modern linguistic approaches [6]. Instead it is called an *impersonal* construction. It differs from the standard English passivization in partially retaining suffixes on Patients in the output:

- (1) FORMING IMPERSONAL CONSTRUCTION (1b-d):  $V\langle \downarrow \emptyset_C, -A/n/t_{+C} \rangle \rightarrow V\langle -A/\emptyset/t \rangle$
- a. ACTIVE FORM:  
*Tappa-a-ko sisäkö Kaisa-n / Kaisa-a / häne-t / hän-tä / rikkaa-t naise-t / rikka-i-ta nais-i-a?*  
 Kill-Sg3-QP housemaid Kaisa-Acc/Kaisa-Part /she-Acc /she-Part / rich-Pl lady-Pl /rich-Pl-Part lady-Pl-Part  
 ‘Did the housemaid kill Kaisa / her / the rich ladies yesterday?’
- b. IMPERSONAL CONSTRUCTION (-(tA)An / -(t)tiin):  
*Tape-tt-i-in-ko Kaisa / Kaisa-a / häne-t / hän-tä / rikkaa-t naise-t / rikka-i-ta nais-i-a eilen?*  
 Kill-Impers-Past-Arb-QP Kaisa / Kaisa-Part /she-Acc/she-Part/rich-Pl lady-Pl /rich-Pl-Part lady-Pl-Part y’day  
 ‘Was/Were Kaisa / she / the rich ladies killed yesterday?’
- c. MUST CONSTRUCTION (*täytyy / pitää / on pakko*):  
*Täyty-y-kö sisäkö-n tappa-a Kaisa/Kaisa-a/häne-t/hän-tä/rikkaa-t naise-t /rikka-i-ta nais-i-a?*  
 Must-Sg3-QP housemaid-Gen kill-Inf Kaisa/K.-Part/she-Acc/she-Part/rich-Pl lady-Pl/rich-Pl-Part lady-Pl-Part  
 ‘Is it true that the housemaid must kill Kaisa / her / the rich ladies?’
- d. IMPERATIVE PL2 (-kAA), PL1 (-kAAmme), SG2 (-Ø<sub>C</sub>):  
*Tappa-kaa(-mme) / Tapa-’ Kaisa / häne-t / rikkaa-t naise-t!*  
 Kill-Imp.PL2(-P11) / kill-Imp.Sg2 Kaisa / she-Acc / rich-Pl lady-Pl  
*Äl-kää(-mme) tappa-ko / Älä tapa-’ Kaisa-a / hän-tä / rikka-i-ta nais-i-a!*  
 No-Imp.PL2 (-P11) kill-Imp / no kill-Imp.Sg2 Kaisa-Part / she-Part / rich-Pl-Part lady-Pl-Part  
 ‘YouPl / We / YouSg must / [must not] kill Kaisa / her / the rich ladies.’
- e. POSSESSIVE SENTENCE:  
*On-ko sinu-lla kirja / kirja-a / häne-t / hän-tä / musta-t kengä-t / must-i-a kenk-i-ä?*  
 Is-QP you-Adess book / book-Part / she-Acc / she-Part / black-Pl shoe-Pl / black-Pl-Part shoe-Pl-Part  
 ‘Do you have a book / her / black shoes?’

The same pattern of partially retained suffixes can be observed in *täytyy* constructions, where the (appearing) Agent „goes over” to the argument structure of ‘must’ (1c), and in three sorts of *imperative* constructions, where the Agent’s person/number feature is fixed in what we consider the formative suffix of the verb (1d). What is common in derivations (1b-d), thus, is Agent deletion. It is also worth considering that in *possessive* sentences (1e) the possessed argument can also be marked with the group of suffixes in question. Observe, however, that the other two sorts of Finnish imperative comes with no Agent deletion (2) and, concomitantly, its Patient-like argument is case-marked in the same way as Patients in active sentences (1a):

- (2) IMPERATIVE SG3 (-kOOn), PL3 (-kOot):  
*[Tyttö valit koon]/[Tytö-t valit koot] kirja-n/kirja-a/häne-t/musta-t kengä-t/must-i-a kenk-i-ä!*  
 Girl choose-Imp.Sg3/Girl-Pl choose-Imp.PL3 book-Acc/book-Part/she-Acc/black-Pl shoe-Pl/black-Pl-Part shoe-Pl-Part  
*Tyttö ä-l-köön / Tytö-t ä-l-kööt valit-ko kirja-a / hän-tä / must-i-a kenk-i-ä!*  
 Girl no-Imp.Sg3 / Girl-Pl no-Imp.PL3 choose-Imp book-Part / she-Part / black-Pl-Part shoe-Pl-Part  
 ‘The girl(s) must (not) choose the book / her / black shoes.’

Another group of derivations, whose output is referred to as a *middle* construction in (3) below, also comes with Agent deletion but shows another pattern of changes in Patient suffixes. (4) below provides a systematic comparison.

- (3) FORMING MIDDLE CONSTRUCTION (-U, -tU, -UtU, -(V)ntU):  $V\langle \downarrow \emptyset_{-C}, -A/n/t_{+C} \rangle \rightarrow V\langle -A/\emptyset \rangle$
- a. *Pekka kaata a puu-ta / puu-n / <sup>?</sup>häne-t. → Puu / Hän kaat-u-u. / Ranna-lla kaat-u-u pu-i-ta.*  
 Pekka fell-Sg3 tree-Part / tree-Acc / her-Acc Tree / She fell-Mid-Sg3 Bank-Adess fell-Mid-Sg3 tree-Pl-Part  
 ‘Pekka fells the tree / <sup>?</sup>her’ → ‘The tree / <sup>?</sup>she falls.’ / On the bank trees fall.’
- b. *Sotilaa-t demokratisoi-vat maa-n / meidä-t. → Maa demokratisoi-tu-u. / Me dem’oi-du-mme.*  
 Soldier-Pl democratize-Pl3 country-Acc / we-Acc Country dem.-Mid-Sg3 / We dem.-Mid-Pl1  
 ‘Soldiers democratize the country/ us.’ → ‘The country / We become(s) democratic.’

(4) INPUT AND OUTPUT SUFFIXES ON PATIENT IN DERIVATIONS (1), (2), (3):

CONSTR.	NUMBER →	SINGULAR			PLURAL		
IMPERSONAL		-A → -A	-n → ∅	-t → t	-iA → -iA	-t → t	—
MIDDLE		-A → -A	-n → ∅	t → ∅	-iA → -iA	-t → t	—
IMPERATIVE SG3/PL3		-A → -A	-n → n	-t → t	-iA → -iA	-t → t	—

According to language typologists (e.g. [3] Ch8), there is a *voice continuum* between the active verb form and the standard (English) passive voice (5a). We claim that by the impersonal constructions (1) and the middle constructions (3) Finnish provides two in-between types in this continuum (5d-e). We claim that in our formal approach to thematic roles and argument-structure changes in derivations ([1]) we can capture formally this “in-between” character of these two Agent-deleting derivations:

(5) CASE MARKING IN AGENT-DELETING DERIVATIONS ACROSS LANGUAGES:

- a.  $V\langle \downarrow \alpha_{-C}, \beta_{+C} \rangle \rightarrow V\langle \alpha \rangle$ : e.g. *English passivization*, where  $\alpha = \emptyset$
- b.  $V\langle \downarrow \alpha_{-C}, \beta_{+C} \rangle \rightarrow V\langle \beta \rangle$ : e.g. *Polish general impersonal* [2]
- c.  $V\langle \downarrow \alpha_{-C}, \beta_{+C} \rangle \rightarrow V\langle \gamma \rangle$ : in Finnish:  $\alpha \subset \gamma \subset \alpha \cup \beta$ :
- d. where  $\{\emptyset\} \subset \{A, \emptyset, t\} \subset \{A, \emptyset, t, n\} \rightarrow$  (1) *Impersonal*
- e. or  $\{\emptyset\} \subset \{A, \emptyset\} \subset \{A, \emptyset, t, n\} \rightarrow$  (3) *Middle*

Our approach relies on the specialty of Finnish that the object can be case-marked with a *set* of markers (the partitive -(t)A, the accusative -n and the special accusative -t of personal pronouns), and the same holds true of the intransitive subject, with another *set* of suffixes: {A, ∅, t}. It is obvious why Finnish and its relatives (e.g. Estonian) need *sets* of case markers, instead of a single one, associated with the same grammatical function: telicity, aspect, definiteness and polarity are to be expressed (partly) by case-suffix alternation in the lack of articles and certain verb forms. What we argue, then, is that in Finnish, after Agent deletion, the input Patient-marking is not restricted to {∅} (nominative), as in English (5a), but may come with two in-between sets of the entire set of “central” case suffixes (which can be associated with subjects and objects).

In our talk we intend to review the V → V derivations of Finnish (on the basis of [4]), including the interesting type shown in (6), which can be accounted for by a two-step derivation consisting of a causative and a subject-deleting operation:

(6) Forming VERBS EXPRESSING PHYSICAL STATES:

$$V\langle \downarrow \emptyset_{-C} \rangle \rightarrow V\langle \nearrow \emptyset_{-C}, -A/n/t_{+C} \rangle + V\langle \downarrow \emptyset_{-C}, -A/n/t_{+C} \rangle \rightarrow V\langle -A \rangle$$

- a. *Minu-a nuku-tta-a.* (I-Part sleep-Cause-Sg3) ‘I am sleepy.’
- b. (*Minä*) *nuku-n.* → *TV / Hiljaisuus nuku-tta-a minu-a / minu-t.*  
 I sleep-Sg1 TV / Quiet sleep-Cause-Sg3 I-Part / I-Acc  
 ‘I am sleeping.’ → ‘TV/Silence [makes me sleepy] / [puts me to sleep].’

[1] Alberti, Gábor (2006): Changes in Argument Structure in the course of Derivation in Hungarian, *Acta Ling. Hung.* Vol. 53 (1), 1–39.  
 [2] Borbély, Angéla (2011): Generalization and False Reflexivity in Polish – *no/to* verb forms and syntactic constructions with *się* [in Hungarian]. To appear in G. Alberti (ed.): *Vonzatok és jelentések*. Ling. PhD Program, Univ. Pécs.  
 [3] Croft, William (2001): *Radical Construction Grammar. Syntactic Theory in Typological Perspective*. Oxford Univ. Press.  
 [4] Lepäsmä, Anna-Liisa – Anneli Lieko – Leena Silfverberg (1996): *Miten sanoja johdetaan. Suomen kielen johtopii*. Finn Lectura.  
 [5] Lepäsmä, Anna-Liisa – Silfverberg, Leena (1987): *Suomen kielen alkeisoppikirja*. Loimaa.  
 [6] Shore, Susanna (1986): *Onko suomessa passiivia*. Suomalaisen Kirjallisuuden Seura, Helsinki.