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## **Learners' dilemma: an example of complexity in academic Finnish. The frequency and use of the E infinitive passive in L2 and L1 Finnish**

There has been a great deal of academic discussion on the definition of the linguistic complexity of learner language. My paper uses the Finnish passive infinitive structure of *tutkittaessa* 'while doing research' to represent the complexity in writing. I will examine the frequency of the structure and the accuracy of its use in the academic writing of advanced Finnish learners, and I will compare them to equivalent samples given by first language speakers of Finnish. I will also present a few structures which the learner may use incorrectly in replacing the structure in question. I will advocate the standpoint under which diverse morphosyntactic-semantic phenomena can be quite effective indicators of complexity.

**Keywords:** academic learner Finnish, complexity, second language research, E infinitive passive  
inessive

## 1 Introduction

The aim of this article is to investigate whether the Finnish construction *tutkittaessa* ‘while doing research, while research is being done, while one is doing research’ (henceforth ‘while doing research’ to facilitate reading) could be an indicator of distinguishing native speakers from advanced non-native speakers of Finnish, considering the complexity in their writing. The material in this article is from the corpus concerning advanced learners of Finnish (LAS2, University of Turku). The material of the corpus mainly consists of texts written by non-native MA students of Finnish. Corpus material involving Finnish students is also included as a part of the material for comparison. The corpus contains several text types within the time scale of 2 to 3 years per informant. The most important text types of the corpus material are exam essays, other academic essays and theses. For this article, I have chosen to examine a part of exam essays by 31 non-native and 57 native informants. (See section 3.1 the quantity of the material.)

Corpus research can be corpus-driven or corpus-based (see Tognini-Bonelli 2001). This article is based on a corpus-based study where my hypothesis is that a Finnish infinitive construction could be an indicator which reveals the differences between advanced Finnish learners and native speakers.

## 2 Different views on the nature of complexity

In the last decades, there has been much discussion about the criteria of complexity. Norris and Ortega (2009) have ascertained that the criteria are not unambiguous. Furthermore, Reiman (2011) has given attention to qualitative criteria in defining complexity by emphasizing the contextual distribution and the extent of vocabulary in the structure. Kuiken, Vedder and Gilabert (2010: 84–85) consider structural complexity, lexical diversity and accuracy to be general measures of linguistic complexity. Structural or syntactic complexity has been defined by the measurement of matrix clauses per T-unit and the ratio of embedded clauses. Martin (2013) has shown that when measuring sentences and clauses in learner language by quantity, the quantity measure of sentences and clauses in a learner language is not reliable, and she claims that “the ways of defining and counting clauses and sentences need to be better determined” (2013: 194).

The volume *Dimensions of L2 performance and proficiency. Complexity, accuracy and fluency in SLA* is responding to questions concerning the nature of CAF as multifaceted construct (Housen, Kuiken & Vedder 2012). In their contribution to the book, Bram Bulté and Alex Housen are demanding clear, transparent and specific measures for defining

the concept of complexity. In some research, this concept has been defined by general or vague terms. Bulté and Housen employ in their article many graphic and clarifying figures in order to show the multidimensionality and hierarchy of complexity. They divide the research of complexity into theoretical, observational and operational levels. (Bulté & Housen 2012: 23, 27–28.)

My article belongs to the area of **linguistic complexity**, which is divided into **structure complexity** and **system complexity**. In this article, complexity has been defined first of all by morphological richness of the structure in question. This is a part of **formal complexity** under structure complexity. Complexity is defined here as, and by the construction's property, an embedded phrasal construction and its use in the proper context. This is a part of **functional complexity**. The lexical variety belongs to the area of system complexity (Bulté & Housen 2012: 23). This variety can be an indicator of more advanced levels. Variety can also be examined by means of classifying the verbs used according to their abstractness (cf. Siitonen & Martin 2012). In his dissertation, Kajander (2013: 128) has noticed that the references' abstractness in local expressions increases significantly from CEFR level B2 to level C1 (see Council of Europe 2001).

I understand the complexity of the *tutkittaessa* structure in the complex setting of morphological items as a linguistic complexity in the morphological subsystem. My hypothesis is that the difference of Finnish from the writers' L1 also brings the dimension of cognitive complexity into the construction; this is the temporal aspect together with a local noun suffix (see Housen & Kuiken 2009: 463).

Many kinds of infinitive and participle constructions are typical of Finnish. Martin (2013: 189) states that they do not add to the number of clauses. Another question is whether these kinds of constructions themselves are an indicator of complexity. In this article, I will defend this opinion. Siitonen and Niemelä (2011) have shown that because there are many complex infinitive phrases and participle constructions in Finnish, the frequently used verbs *olla* 'to be' and *tulla* 'to come' are needed as finite verbs in the constructions. Thus, lexical variation in predicates is diminishing, whereas the proportion of simple verbs as predicates seems to be overlarge. Consequently, the variety of verbs in non-finite constructions is on the rise. The abstractness of verbs in these constructions will be put under the microscope in this study.

Suni and Nieminen (2011: 217, 222) have come up with promising results in applying the methods of MLU, MLT and IPSyn to Finnish.<sup>1</sup> These methods have been widely used, but also widely criticized. However, in languages with very rich morphosyntactic complexity having a close relationship to the variety in syntactic structures, such methods could be useful. (See e.g. Martin 2004.)

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1 MLU = Mean Length of Utterance, MLT = Mean Length of Turn and IPSyn = Index of Productive Syntax.

### 3 The construction *tutkittaessa* ‘while doing research’ as an example of a complex construction

As previously stated, there are constructions in Finnish which can be considered complex because they include many morphemes. I have chosen the construction *tutkittaessa* (ISK: 146), which is comprised of the following morphemes:

<i>tutki</i>	<i>-tta</i>	<i>-e</i>	<i>-ssa</i>	‘while doing research’
STEM	PASS	eINF	INE	
‘to research’				

Bulté and Housen (2012: 23) refer to the studies concerning learning of embedded and passive structures. This kind of structure seems to be hard to acquire for many learners. Finnish infinitive phrases or participle constructions can carry a great deal of information (see Martin 2013: 189). Such a construction is the passive E infinitive phrase carrying the features of: 1) being temporal, 2) being simultaneous with the matrix clause and 3) having the agent being an unknown person. The function of the construction is practically the same as the one of the temporal subordinate clause beginning with *kun* ‘when’ (ISK: 489–490, 536, 540–541).

This passive E infinitive phrase can be a lexicalized fixed phrase or creatively produced for a certain situation. Such constructions in Finnish as a second language instruction are not usually learned at an early phase.

In addition to the passive E infinitive phrase, there is also an active E infinitive phrase; sometimes learners use the active E infinitive instead of the passive. In some cases, even native speakers use either one, and in some case they do not; thus, variation is also a phenomenon amongst native speakers, and it is not always correct under the strict, standard norm. The distribution of this construction between active and passive amongst native Finnish speakers would be a subject of its own for another article. I will treat this question as needed in sections 3.2 and 3.3.

#### 3.1 L1 and L2 speakers using the *tutkittaessa* construction in the LAS2 corpus

For this study, I have chosen 275 L2 texts which include 120,999 words and 56 L1 texts which include 31,116 words from the LAS2 corpus (see Table 1). The examples from the LAS2 corpus have code types as follows: Las2-6tt01te06lo14. The code identifies the example.

The LAS2 corpus has been lemmatized and annotated in terms of parts of speech, morphological forms and syntactic functions. The texts and the annotation are stored in a TEI-based XML format also applied to other Finnish corpora collected at the University of Turku (Inaba 2007). The data queries have been carried out with query tools specifically designed for the LAS2 corpus (Ivaska forthcoming 2014).

TABLE 1. Research material used in this article. Advanced learners of Finnish (L2) and native Finnish speakers (L1). LAS2 corpus, Finnish language, University of Turku.

	L2	L1
Exam essays (n)	275	56
Words (n)	120,999	31,116
Informants (n)	31	52

There are 18 cases and 15 different verbs in the L2 texts that are in the *tutkittaessa* construction and 37 cases and 18 different verbs in the L1 texts. The texts only have six verbs in common in this construction. The difference in quantity between NNS and NS texts is extreme (the statistical significance  $p = 4e^{-12}$ ). In the L2 texts, we have on average 1.5 cases of this construction per 10,000 words, while in the L1 texts, there are on average 12 cases of this construction per 10,000 words. This tells us that the construction is not so commonly used in the texts of native speakers either. (See Table 2.)

TABLE 2. E Infinitive construction frequency in exam essays. Advanced learners of Finnish (L2) and native Finnish speakers (L1). Statistical significance in the difference (Mann-Whitney's U-test).

	L2	L1	
Words (n)	120,999	31,116	U = 10845.5 Z = 7.8985, $p = 4e^{-12}$ r = .4334865
Informants using eInf construction (n)	9/31	23/52	
eInf constructions (n)	18	37	
Per 10,000 words (n)	1.5	12	

The difference in the frequency of the E infinitive passive constructions between native and non-native writers is statistically significant. On the whole, the differences in frequency are the most important distinction between NSs and NNSs. There are some incorrect uses by NNSs, but they are not remarkable, mainly minor orthographic mistakes and some problems concerning the object case (see section 3.2 for more details). There are a total of 31 L2 informants and 9 of them use this form; there are a total of 52 L1 informants and 23 of them use this form.

Example 1 shows an L2 exam sentence and example 2 shows one by a native L1 speaker. Both examples have the appropriate use of the E infinitive passive construction.

- (1) L2 *Vokaaleja **äännettäessä** ilma virtaa vapaasti kurkunpäässä* (Las2-6tt01te06lo14)

Vokaale-j-a	ääne-ttä-e-ssä	ilma	virta-a	vapaa-sti
Vowel-PL-PAR	pronounce-PASS-eINF-INE	air	flow-3SG	free-PRT

kurkunpää-ssä  
larynx-INE

'Air flows freely in larynx **while pronouncing** vowels'

- (2) L1 *heidän mielipiteitään tulisi kuunnella opetusta kehitettäessä* (Las2-vtt01vert067)

hei-dän	mielipite-i-tä-än	tul-isi	kuunnel-la
they-GEN	opinion-PL-PAR-3P.POS	shall-CON3SG	listen-aINF

opetus-ta	kehite-ttä-e-ssä
teaching-PAR	develop-PASS-eINF-INE

'You/one should listen to their opinions **while teaching is being developed**'

The verbal lexemes of Finnish language learners are similar to those of native speakers, and the learners are able to apply them to their sentences. Lexical diversity is thus fulfilled. (See Table 3.)

TABLE 3. Verbal lexemes in the construction seen in L1 and L2 texts. Commonly used verbs are in boldface.

L1	L2
analysoitaessa analysoida 'to analyze'	<b>arvioitaessa</b> arvioida 'to estimate'
<b>arvioitaessa</b> arvioida 'to estimate'	katsottaessa katsoa 'to look'
erotettaessa erottaa 'to distinguish'	käsiteltäessä käsitellä 'to handle'
etsittäessä etsiä 'to seek'	<b>käytettäessä</b> käyttää 'to use'
haluttaessa haluta 'to desire, to want'	<b>laadittaessa</b> laatia 'to compile'
kehittäessä kehittää 'to develop'	luotaessa luoda 'to create'
kysyttäessä kysyä 'to ask'	opiskeltaessa opiskella 'to study'
<b>käytettäessä</b> käyttää 'to use'	<b>puhuttaessa</b> puhua 'to speak'
<b>laadittaessa</b> laatia 'to compile'	päästäessä päästä 'to get to, to reach'
luokiteltaessa luokitella 'to classify'	tarkasteltaessa tarkastella 'to examine'
nostettaessa nostaa 'to raise, to lift'	tarvittaessa tarvita 'to need'
<b>puhuttaessa</b> puhua 'to speak'	tehtäessä tehdä 'to make, to do'
suoritettaessa suorittaa 'to accomplish'	<b>tultaessa</b> tulla 'to come'
suunniteltaessa suunnitella 'to plan'	<b>tutkittaessa</b> tutkia 'to do research'
toteutettaessa toteuttaa 'to fulfil'	äännettäessä ääntää 'to pronounce'
<b>tultaessa</b> tulla 'to come'	
<b>tutkittaessa</b> tutkia 'to do research'	
vertailtaessa vertailla 'to compare'	

Almost all of these verbs are either abstract or abstractly used (Pajunen 2001: 51–57). For example, there are no verbs of motion; such as the verb *tulla* 'to come', which is used in the following contexts: *1600-luvun* [!] ***tultaessa*** 'as the 17<sup>th</sup> century approaches';

*nykykieleen tultaessa* ‘when coming into the period of Modern Finnish’; *1900-luvulle tultaessa* ‘as the 20<sup>th</sup> century approaches’. Furthermore, the verbs of action (see Table 3) usually have an abstract object: *tehdä valinta* ‘to make a choice’, *käyttää metodia* ‘to use a method’, *käsitellä nimiä* ‘to discuss names’ etc.

It seems that the outcome of demanding tasks is that students can write better and in a more complex manner than when given easier tasks (Alanen, Huhta & Tarnanen 2010: 28, 41). On the university level, the exam essays are by definition demanding.

### 3.2 L2 learners’ expressions in the LAS2 corpus

It is typical that the learners’ complex expressions are often learned as a fixed phrase, but it is not possible to determine whether the learner uses the construction as an unanalyzed phrase or as an analyzed structure. There is only one typical fixed phrase that appears in my corpus (see example 3).

- (3) L2 sen takia on yleensä **tarvittaessa** mahdollista saada tulkkausta (Las2-15tt01te06lo24)

...sen takia on yleensä **tarvi-tta-e-ssa** mahdollis-ta saa-da  
 ...therefore be-3SG generally need-PASS-eINF-INE possible-PAR get-aINF

tulkkaus-ta  
 interpretation-PAR

‘therefore it is generally possible to get the interpretation as needed’

It is also possible that the expressions *puhuttaessa* ‘while speaking’ and *äännettäessä* ‘while pronouncing’ have been repeated many times in the exam literature and therefore possibly learned as formulated phrases or so-called chunks. They are, however, clearly productive structures that could just as well be realized as whole clauses. The expression *tarvittaessa* is productive as well, when it replaces a whole clause (‘when it is needed’), but it has also been lexicalized as a fixed phrase, namely as an adverb ‘as needed’. The use of *tarvittaessa* as an adverb is, in fact, how it is usually used. The expression *tarvittaessa* ‘as needed’ can be compared with the participle construction *tavattavissa* ‘available’, which students of Finnish often learn in their first Finnish lessons as a fixed phrase. Let us compare this structure with the aforementioned E infinitive structure:

<i>tava</i>	<i>-tta</i>	<i>-v</i>	<i>-i</i>	<i>-ssa</i>	‘can be met’
STEM	PASS	VA PC	PL	INE	
‘meet’					



Table 4 shows all of the E infinitive passive constructions I collected for my corpus. The table shows that L2 students for the most part (12/18) correctly use the E infinitive passive construction.

TABLE 4. E infinitive passive constructions' correctness in exam essays. Advanced learners of Finnish (L2) and native Finnish speakers (L1).

	L2	L1
Informants using elnf construction (n)	9/31	23/52
Informants using all of their elnf constructions correctly (n)	4/9	23/23
Informants using a part of their elnf constructions correctly (n)	3/9	-
elnf constructions (n)	18	37
Correct elnf constructions (orthography or morphology) (n)	15	37
Correct elnf constructions (orthography, morphology and syntax) (n)	12	37

The following aspects can be treated as being typical for the learners' incorrect expressions:

#### 1) Orthography

In the writing of learners, there are problems concerning the quantity of consonants, for instance *\*käytetäessä* pro *käytettäessä* 'while using' and *\*laaditaessa* pro *laadittaessa* 'while composing'. These problems can be either in orthography or in morphology. The passive suffix can be *tA* or *ttA*.

#### 2) Passive and a possessive suffix

It is important to note that the active form quite often contains a possessive suffix, and sometimes the learner tries to use it in the passive form as well. NNS speakers have contaminations – the passive and a possessive suffix – as example 4 reveals. In this case, the best choice would be the construction of the E infinitive active and a possessive suffix *opiskellessaan* (*opiskell-e-ssa-an* 'study-eINF-INE-3P.POS').

- (4) ...että oppilaat opiskelijat lukisivat enemmän **opiskeltaessaan** suomen kieltä (Las2-15tt01te06lo24)

että	oppilaa-t	opiskelija-t	luk-isi-vat	enemmän
that	pupil-PL	student-PL	read-CON-3PL	more
	<b>*opiskel-ta-e-ssa-an</b>		suome-n	kiel-tä
	study-PASS-eINF-INE-3P.POS		Finnish-GEN	language-PAR

'...that the pupils, students would read more **while studying** the Finnish language'

## 3) Syntactic choices for a noun case in the construction

There are many details in the E infinitive passive construction, which are generally typical in terms of Finnish syntax on the whole. It is possible that when the learner is confronted with many different aspects at once, he or she can make errors also in such cases where he or she usually has command, for instance in the case of an object.

The learners have problems in making a choice between the nominative, genitive and partitive cases for an object in the E infinitive passive construction. The learners' expression *television katsottaessa* (with the word *televio* 'television' in the genitive: *televio-n* 'television-GEN') in correct Finnish is *televiota katsottaessa* (*televio-ta* 'television-PAR') (see example 5 *televio* = TV).

- (5) L2 ...*intake niin ei tapahdu vain koulussa mutta myös* – – **TV:n katsottaessa** jne (Las2-15tt01te07lo15)

intake	niin	ei	tapahdu	vain	koulu-ssa	mutta	myös
intake	so	not-SG3	happen-NEG	only	school-INE	but	also

-- TV:-n	<b>katso-tta-e-ssa</b>	jne
-- television-GEN	see- PASS-eINF-INE	etc.

'intake does not only happen at school but also -- while watching TV etc.'

With finite verbs, the partitive case is used in Finnish as in *katsomme televiota* 'we are watching TV', whereas in verbal noun constructions, the genitive is used as in *television katsominen* 'television watching' (lit. 'the watching of television'). In this case, the learner seems to choose the construction \**television katsottaessa*, maybe having this aforementioned noun construction as a model.

The learner seems to choose a noun construction model with the genitive also instead of a local case (see example 6). In correct Finnish, it would be *1600-luvulle tultaessa* (*luku-lle* 'century-ALL').

- (6) *mutta 1642 BIBLIA:ssa kirjoitettiin -d:na 1600 luvun tultaessa* (Las2-20tt01te04lo17)

mutta	1642 BIBLIA:ssa	kirjoite-tt-i-in	-d:na	<b>1600 luvu-n</b>
but	1642 bible: INE	write -PASS-PST-4	-d:-ESS	1600 century-GEN

<b>tul-ta-e-ssa</b>
come-PASS-eINF-INE

'but [it] was written as d in the 1642 Bible as the 17th century approaches'

## 4) A borderline case

There are many infinitive constructions in Finnish. It is not always unambiguous whether the chosen construction serves the purpose of the writer. Without asking him or her, it is impossible to know what the intention of the writer has been.

- (7) *Esimerkiksi sitä metodiaa käytetäessä todistettiin unkarin ja suomen \*sukulaisuutta...*  
(Las2-5tt01te01lo00)

Esimerki-ksi	si-tä	*metodi-aa	*käyte-tä-e-ssä	todiste-tt-i-in
Example-TRA	it-PAR	method-PAR	use-PASS-eINF-INE	verify-PASS-PST-4

unkari-n	ja	suome-n	sukulaisuut-ta...
Hungarian-GEN	and	Finnish-GEN	relationship-PAR

'For instance, the relationship between Hungarian and Finnish was verified **while** that method **was being used**'

I would interpret that a more probable meaning would be 'by using' *käyttämällä* (*käyttämä-llä* 'use-maINF-ADE'), but the expression 'while using' *käytettäessä* could also work in this context, but the meaning is not the same.

### 3.3 L2 learners' attempts to build the meaning of the *tutkittaessa* construction

As the above reveals, there are not so many examples of the *tutkittaessa* form in L2 learners' texts. It is presumable that learners would need this form in their texts, but because of its complexity, they do not always have a command of it. Therefore, they use something else to replace the form. One substitute is no doubt the aforementioned E infinitive active construction, which is also used by native speakers, but analyzing this matter is not within the scope of this article. My true question is whether the learners have other substitutes typical only for learners.

It is impossible to find substitutes for one construction with only the help of corpus investigation. The researcher must read the whole texts of learners to find out what he or she should be searching for. After reading more advanced texts, I discovered that the learners sometimes use the MA infinitive inessive construction as a substitute for the *tutkittaessa* form, in which the expression of temporality is lacking (example 8). One advanced learner uses the MA infinitive with the inessive in *järjestämässä* ('organize+maINF+INE': 'organizing'; lit. 'in to organize') instead of the E infinitive passive phrase *järjestettäessä* 'while organizing'. In the context of the flawed use, '\*in to organize' is somewhat equivalent to the Finnish mistake here:

- (8) \***Järjestämässä** ymmärtämisen testiä on tunnettava siihen osallistuvat testattavat

\***Järjestä-mä-ssä** ymmärtämise-n testi-ä on tunne-tta-va sii-hen  
organize-malNF-INE understanding-GEN test-PAR be-3SG know-PASS-PC se-ILL

osallistu-va-t testa-tta-va-t  
participate-PC-PL test-PASS-PC-PL

'\*in to organize a comprehension exam, the participants being tested must be known.'

This form chosen by the learner is not as complex as the E infinitive passive, but it is not comprehensible Finnish in this context either. My colleagues have found corresponding attempts to substitute the passive E infinitive inessive construction in academic texts of Finnish learners.<sup>2</sup>

After discovering that the *tutkimAssA* construction can function in L2 Finnish as a substitute for the *tutkittaessa* construction, I took a look into the LAS2 corpus. That investigation showed that there were barely any *-mAssA* constructions in the E infinitive passive inessive function, only 0.02 cases per 10,000 words. (See example 9.)

- (9) *Nimien merkitystä \*etsimässä luokittelumalleja on käsitelty* (las2-8tt01te10lo27)

Nimi-en merkitys-tä \***etsi-mä-ssä** luokittelu-malle-j-a  
Name-PLGEN meaning-PAR look-malNF-INE classification-model-PL-PART

on käsitel-ty  
be-3SG handle-PPPC

'\*In to look for the meaning of names classification models have been discussed.'

## 4 Conclusion

My material shows on the one hand that advanced learners of Finnish use remarkably fewer passive E infinitive constructions in the inessive case than native speakers. On the other hand, they employ this construction with almost as many different verbs as native speakers do. When learners choose some substituting expression, there will always be a lack of an important feature of this multidimensional construction.

Although all passive E infinitive findings are not accurate, they do not pose great problems – there are mainly orthographic or small morphological mistakes and some

<sup>2</sup> Personal discussions with colleagues.

incorrect object case choices in the construction. Semantic and syntactic relationships between the construction and context are mostly correct and clear.

This modest project has revealed that there is much to investigate in regards to the distribution of the *tutkittaessa* construction and its substitutes in Finnish. The substitutes can be correct temporal subordinate clauses (*sitä tutkittaessa = kun sitä tutkitaan* 'when it is investigated') also used by native writers or the learner language attempts to express the same meaning (see section 3.3). Moreover, the distribution of the active and passive E infinite in contemporary L1 Finnish should be clarified.

As a typologically synthetic language, Finnish affords these kinds of structures for indicators between differences of L1 and L2 speakers and plausibly also between different CEFR levels – mostly differences in most advanced learner writing between levels C1 and C2 in CEFR or between the C levels in CEFR and native writing (cf. Siitonen & Martin 2012; Council of Europe 2001).

In SLA research, it is important to compile features to be investigated in corpus-based research in order to see whether they truly are indicators of different skill levels in the command of the language. In corpus-driven research, it is possible to find new combinations of indicators (see Ivaska forthcoming).

The research of a morphologically rich language, such as Finnish, may make an important contribution to the discussion on the possibilities of defining the concept of complexity in learner language. The complexity of E infinitive passive inessive as an embedded construction can be defined on a theoretical level as a structural grammatical complexity. This has more to do with depth than with breadth. It may range also as a morphological complexity with its many inflectional suffixes. The construction appears on the observational levels in the LS texts of this research. Because of a wide range of verbs, the complexity of these texts represents also the systemic lexical complexity. On the operational level, also the frequency of the features will be measured. In this research, the narrow frequency of the construction by L2 learners seems to be the most important difference between native and non-native speakers (see Bulté & Housen 2012: 23, 27–28). Therefore, later also the DEMfad model with its frequency and also emergency function developed in the Cefling project in Jyväskylä, Finland, could give a good framework for this kind of research – specifically concerning the indicators for the different proficiency levels in CEFR (see Martin, Mustonen, Reiman & Seilonen 2010: 58–62).

## References

### Primary source

LAS2 = The corpus of advanced learners of Finnish. Available at [http://www.hum.utu.fi/oppiaineet/suomi/en/research/Siitonen\\_lvaska.html](http://www.hum.utu.fi/oppiaineet/suomi/en/research/Siitonen_lvaska.html).

### Secondary sources

- Alanen, R., A. Huhta & M. Tarnanen 2010. Designing and assessing L2 writing tasks across CEFR proficiency levels. In I. Bartning, M. Martin & I. Vedder (eds) *Communicative proficiency and linguistic development, intersections between SLA and language testing research*. EUROSLA Monograph Series 1. European Second Language Association, 21–56.
- Bulté, B. & A. Housen 2012. Defining and operationalizing L2 complexity. In A. Housen, F. Kuiken & I. Vedder (eds) *Dimensions of L2 performance and proficiency. Complexity, accuracy and fluency in SLA*. Amsterdam: John Benjamins, 21–46.
- Council of Europe 2001. *The common European framework of reference for languages*. Cambridge: Cambridge University Press.
- Housen A. & F. Kuiken 2009. Complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics*, 30 (4), 461–473.
- Housen A., F. Kuiken & I. Vedder 2012. *Dimensions of L2 performance and proficiency. Complexity, accuracy and fluency in SLA*. Amsterdam: John Benjamins.
- Inaba, N. 2007. Mikael Agricolan teokset tietokannan muodossa. In K. Häkkinen & T. Vaittinen (eds) *Agricolan aika*. Helsinki: BTJ, 147–161.
- ISK = A. Hakulinen, M. Viikuna, R. Korhonen, V. Koivisto, T. R. Heinonen & I. Alho 2004. *Iso suomen kielioppi*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Ivaska, I. Forthcoming 2014. The corpus of advanced learner Finnish (LAS2): database and toolkit to study academic learner Finnish. *Apples*, 8 (3).
- Ivaska, I. Forthcoming. Keystructure analysis: a corpus-driven method to study variety-specific typicalities.
- Kajander, M. 2013. *Suomen eksistentiaalilause toisen kielen oppimisen polulla*. Jyväskylä Studies in Humanities 220. Jyväskylä: University of Jyväskylä.
- Kuiken, F., I. Vedder & R. Gilabert 2010. Communicative adequacy and linguistic complexity in L2-writing. In I. Bartning, M. Martin & I. Vedder (eds) *Communicative proficiency and linguistic development, intersections between SLA and language testing research*. EUROSLA Monograph Series 1. European Second Language Association, 81–100.
- Martin, M. 2004. Three structures of Finnish and the processability theory. In L. Ekberg and G. Håkansson (eds) *NORDAND 6. Sjätte konferensen om Nordens språk som andraspråk*. Lund: Lunds universitet, Institutionen för nordiska språk, 201–212.
- Martin, M. 2013. Sentences and clauses as complexity measures in second language writing: a segmentation experiment. In M. Järventausta & M. Pantermöller (eds) *Finnische Sprache, Literatur und Kultur im deutschsprachigen Raum – Suomen kieli, kirjallisuus ja kulttuuri saksankielisellä alueella*. VSUA 85. Wiesbaden: Harrassowitz, 185–198.
- Martin M., S. Mustonen, N. Reiman & M. Seilonen 2010. On becoming an independent user. In I. Bartning, M. Martin & I. Vedder (eds) *Communicative proficiency and linguistic development, intersections between SLA and language testing research*. EUROSLA Monograph Series 1. European Second Language Association, 57–80.
- Norris, J. M. & L. Ortega 2009. Towards an organic approach to investigating CAF in instructed SLA: the case of complexity. *Applied Linguistics*, 30 (4), 555–578.

- Pajunen, A. 2001. *Argumenttirakenne. Asiantilojen luokitus ja verbien käyttäytyminen suomen kielessä*. Helsinki: Suomalaisen Kirjallisuuden Seura.
- Reiman, N. 2011. Two faces of complexity: structural measures and diversity of constructions. *Nordand*, 6 (2), 9–23.
- Siitonen, K. & M. Martin 2012. Suomen kielen U-verbit taitotason indikaattorina. In *Lähivertailuja – Lähivördlusi 22*. Tallinn: Eesti Rakenduslingvistika ühing, 369–404.
- Siitonen, K. & J. Niemelä 2011. Mitä pitkittäistutkimus paljastaa edistyneiden suomenoppijoiden kielitaidosta? *Lähivertailuja – Lähivördlusi 21*. Tallinn: Eesti rakenduslingvistika ühing, 242–279.
- Suni, M. & L. Nieminen 2011. Complexity and interaction: comparing the development of L1 and L2. *ESUKA – JEFUL*, 2 (2), 215–236. Available at [jeful.ut.ee/public/files/Suni%20and%20Nieminen%20215-236.pdf](http://jeful.ut.ee/public/files/Suni%20and%20Nieminen%20215-236.pdf).
- Tognini-Bonelli, E. 2001. *Corpus linguistics at work*. Studies in Corpus Linguistics 6. Amsterdam: John Benjamins.