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Laitinen, Mikko

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## **Placing ELF among the varieties of English: Observations from typological profiling**

*Mikko Laitinen, University of Eastern Finland*

### **Abstract**

This study investigates how (dis)similar ELF is structurally from the core native varieties of English, indigenized L2 varieties, and learner English. ELF is understood as second language use of English in settings where the interactants do not necessarily share a first language. The empirical part makes use of the method of typological profiling based on aggregate structural features. This method measures three indices (i.e. grammaticity, analyticity, and syntheticity), and it has been used previously to analyze a range of variety types but has not been applied to the assessment of ELF. The results provide quantitative evidence that places ELF on the map and shows that, on purely structural grounds, ELF is a distinct variety type among English varieties. Moreover, the observations show that ELF is structurally different from second language acquisition, and there is a quantitative basis for drawing a distinction between ELF and traditional learner data.

### **1. Introduction**

This article tackles the question of how different English as a lingua franca (ELF) is structurally from other varieties of English.<sup>1</sup> It makes use of the method of typological profiling based on aggregate structural features (Szmrecsanyi 2009). This method measures three indices and has previously been used to analyze various native Englishes, indigenized L2 varieties and learner English. In a seminal study, Szmrecsanyi & Kortmann (2011: 182) use the method to draw a distinction between English as a foreign language (EFL) and English as a second language (ESL) on structural grounds. Up to today, the method has not been used to assess ELF, and my results provide quantitative evidence that places ELF on the map. ELF is understood here as second language use of English in settings where the interactants do not share a first language. As in Mauranen et al. (2015), my definition allows native speakers to be involved. Throughout the article, I will use the term ‘ELF speaker’ in a generic sense to include both speakers and writers.

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<sup>1</sup> I want to thank the two anonymous reviewers for their valuable comments on an earlier version of this article. I have also benefitted greatly from comments made by Professor Anna Mauranen and from the discussions and comments at the Changing English conference in Helsinki in 2015, ISLE-4 in Poznan in 2016 and ICAME38 in Prague in 2017. The usual disclaimers apply.

ELF is a comparatively new object of study, and it is not included in the current models in the study of World English, which are based on history and geo-political background (cf. Kachru 1985, Schneider 2007). Nevertheless, the sociocultural and sociolinguistic importance of ELF among the present-day English varieties is substantial. In his article on the World System of Englishes, Mair (2013) classifies ELF as a super-central variety, i.e. a variety that is transnationally relevant, carrying demographic weight and sociocultural importance. Mair (2013) argues that, unlike some other super-central varieties, ELF is restricted to domain-specific uses such as academia and international business/law, but as will be shown in the material used here, this is a far too restricted view (cf. also Pietikäinen (2017) on the uses of ELF in the family setting). Sociolinguistically, ELF is not a focused variety, in the sense of Milroy (1987: 182–183). It has no native speakers nor do speakers share a widely-held and recognizable set of norms at all levels of the language. Yet recent empirical evidence suggests that spoken ELF is gradually emerging as norm-developing, rather than being simply norm-receiving (Low 2016).

This line of quantitative typological research is novel in ELF, where the research has predominantly been qualitative. Mauranen et al. (2015) point out that grammatical variability has been the least researched area, and ELF scholars have primarily only investigated individual grammatical features without relating them to in-depth quantitative information and systematic comparisons with other varieties of English. These include studies of the reorganization in the relative pronouns *who* and *which* (Cogo & Dewey 2012), and the regularization of the third person *-s* (Breiteneder 2009). Large-scale corpus studies are fewer. Ranta (2013) has focused on shared non-standard features in grammar, viz. vernacular universals, such as the inverted word order in indirect questions, the extended use of the progressive, the use of *would* in hypothetical *if*-clauses, and the use of singular agreement in existential *there* structures (Ranta 2013). In addition, Laitinen & Levin (2016) and Laitinen (2016, 2017) have looked into how ongoing grammatical change is adopted in ELF. These studies consist of investigations of the changes in non-aspectual uses of the progressive and investigations of a broader set of features, such as core and emergent modal auxiliaries (*can*, *should*, *have*, *need to*, and *be going to*, etc.) in ELF. Nevertheless, it remains fair to say that little is known about the typological status of ELF.

Drawing her evidence from the *English as a Lingua Franca in Academic Settings* corpus (ELFA), Mauranen (2012: 247) points out that spoken academic ELF is in many ways similar to native speech and “the overwhelming majority of lexis, phraseology, and structures are

indistinguishable from those found in a comparable corpus of educated ENL [English as a Native Language], including their frequency distributions”. Her observations are based on n-grams and word lists. With regard to other non-native varieties, she argues that ELF is essentially dissimilar from learner English.

The research question is concerned with how different ELF is structurally from the core native varieties, indigenized L2 varieties and learner English. Since all ELF use has involved language learning at one point, my null hypothesis is that ELF is similar to learner data. The results respond to two questions: First, where on the unidimensional grammaticity index does lingua franca evidence fall; and second, where on the two-dimensional analyticity–syntheticity plane can I place ELF? Both of these questions will be explained below.

Section 2 details both the theoretical and the methodological basis of the profiling method adopted here. Section 3 discusses the ELF material analyzed, and the results are presented in Section 4. Lastly, Section 5 discusses the implication of the results for model building in World Englishes.

## **2. The method of typological profiling and ELF**

The study employs the method presented in Szmrecsanyi (2009), who proposes that the typological notions of analyticity and syntheticity by Greenberg (1960) could be amended by large-scale quantitative corpus data. This method makes use of three indices. Firstly, the synthetic index is based on the frequency of select bound grammatical markers, and the numeric value in this index is the number of lexical items that carry at least one bound marker. A prototypical case would be verbal third person *-s*, which marks two meanings, *viz.* nonpast and third-person singular. Secondly, the analytic index is calculated on the basis of a range of function words, which are “defined as being members of closed word classes” (2009: 320). Thirdly, the grammaticity index is the sum of synthetic and analytic markers per sample.

The indices are presented in detail in Szmrecsanyi (2009: 326–327). The analytic markers consist of the following:

- (1) conjunctions, subjunctions, and prepositions
- (2) determiners, articles and *wh*-words
- (3) existential *there*
- (4) pronouns

- (5) analytic comparative and superlative markers
- (6) *to*-infinitive marker
- (7) modal auxiliaries
- (8) negator *not*, or *n't*
- (9) auxiliary *be*
- (10) auxiliary *do*
- (11) auxiliary *have*

The synthetic markers are:

- (12) *s*-genitive
- (13) synthetic comparative and superlative adjectives
- (14) plural nouns
- (15) plural reflexive pronouns
- (16) inflected verbs

Some of the categories, *viz.* the analytic categories 9–11 also load the synthetic side. Similarly, the synthetic items 15–16 load the analytic indices. This method results in frequencies that measure variability, but it is not variationist as such, in which case all of the markers would be used to express one meaning with two forms. Szmrecsanyi (2009) points out that for some analytic markers there is a clear synthetic alternative (i.e. the forms of adjectival comparison, or the analytic and synthetic genitives). For some, such as the negator *not*, or the plural noun marking, this is not the case.

It should be noted that the method should also be viewed critically, especially since the grammatical components are not weighed relative to their basic frequencies. The component categories vary in token frequency, and the relative weight of the high-frequency elements is substantial. Therefore, tiny alternations in prepositions, determiners and pronouns (all on the analytic side) or plural nouns (synthetic) will lead to considerable alternations in the normalized frequencies. One way to improve the precision of the method could be to assign a relative weight to all the components, but since the present aim is to compare ELF with previous results, this is left for future studies.

Since the method integrates various structural features, it offers a useful way of quantifying a variety that does not prioritize a single grammatical structure, thus limiting the bias inherent in single-feature studies. For instance, it has offered a more fine-grained picture of the interplay between synthetic and analytic tendencies in the history of English. As Szmrecsanyi (2009) points out, Standard English is often seen to be an analytic language *par excellence*, but the quantitative results obtained through the method have contested this monolithic myth, and his results show that both major varieties, *viz.* American English (AmE) and British English (BrE), became more synthetic and less analytic during the second half of the 20<sup>th</sup> century. The same holds for earlier periods; Szmrecsanyi (2012) applies the frequency-based indices for post-Old English corpus-data. His results show that analyticity has been on the decline since the Early Modern English period, and syntheticity has increased.

The method has also offered a way of quantifying structural differences between varieties. Firstly, when it comes to grammaticity, varieties differ substantially with regard to how overtly redundant they are. Traditional L1 vernaculars (low-contact varieties) exhibit more grammatical marking than high-contact L1 vernaculars (e.g., AmE, New Zealand English, etc.), which in turn exhibit more grammaticity than indigenized L2 varieties (Singapore English, etc.). Secondly, in terms of syntheticity, low-contact varieties show higher frequencies of syntheticity than high-contact varieties, and L1 varieties in general display more syntheticity than L2 varieties. Thirdly, among the L2 varieties, Southeast Asian Englishes (e.g. Singapore, the Philippines, and Hong Kong) are less analytic and less synthetic than those outside (e.g. IndianE, JamaicanE, East AfricanE). Most importantly for my purposes, learner English data exhibit “less syntheticity and more analyticity than Standard British English” (Szmrecsanyi & Kortmann 2011: 182).

Many of the features covered in the indices are directly relevant to aspects of ELF and could therefore offer empirical insights into how similar or different ELF is when compared to the other English varieties. A case in point is one of the hallmark characteristics of ELF, i.e. negotiating meanings through online processing. According to Mauranen (2012: 244), one characteristic of spoken ELF is enhanced transparency through structural simplification. Since the typological indices are closely connected with language complexity, the method offers a way of quantifying such transparency in ELF. On the one hand, the more analytic a language is, the more it tends to contribute to transparency and explicit nature of communication. On the other hand, increasing syntheticity tends to create a more economical output, while grammaticity

contributes to explicit redundancy, meaning that the more grammatical markers there are, the less needs to be inferred from the contextual cues (Szmrecsanyi 2009).

While the present article applies the method that is readily available, it still involves a considerable theoretical component. It deals with ensuring empirical validity and enlarging the scope of ELF corpora, as the existing datasets cover only a small set of genres. We need new corpora that offer a multi-genre view to ELF. These new corpora should ideally be such that they enable comparisons with other (native and non-native) corpora.

### **3. First- and second generation ELF corpora as material**

My material comprises two sets of corpora, which for the first time make it possible to access a broad range of ELF genres. The term genre is understood as a concept that points to the functions of communication, i.e. situation, audience, and the purpose (see Biber & Conrad 2009). The first set of data consists of the well-known first-generation ELF corpora, *viz.* the spoken *Vienna-Oxford International Corpus of English*, VOICE (Seildhofer 2011), and the newly-released *Written English as a Lingua Franca*, W<sub>r</sub>ELFA, corpus (Mauranen et al. 2015).

VOICE is a one-million-word corpus consisting of unscripted, face-to-face spoken interactions from organizational settings. The informants come from a mixture of L1 backgrounds, and since the individual L1 collections result in small samples, the corpus is used in its entirety. VOICE represents spoken communication in which the informants' objective is to inform and to maintain interpersonal relations.

W<sub>r</sub>ELFA is an approximately 1.5-million-word corpus of academic writing divided into three text types in the academic genre. Unedited research papers provide half of the material, the so-called SciELF corpus. The PhD examiner's report genre contains some 400,000 words, and the research blog component some 372,000 words. The collection process targeted the academic user of ELF, and, according to the compilers, the texts have not undergone professional proofreading or checking by an English native speaker (see <http://www.helsinki.fi/englanti/elfa/wrelfa.html>). It represents second-language use in written scientific communication, and 35 L1s are represented in it. Additionally, an undetermined number of blog commenters are included in the blog component, and according to the corpus compilers, their identities cannot be verified. Similarly to the other ELF corpora, native speakers of English are occasionally included in the blog and in the PhD examiners' subcorpora. Since the

results in the following section are the first ELF results obtained using this method, I will only use the PhD examiner's statements contained in WrELFA.

To complement these first-generation corpora and to compensate for the fact that “genuine ELF written text databases are still missing” (Mauranen et al. 2015: 402), the author and his associates are currently compiling second-generation written ELF corpora. They offer a larger sample for a smaller set of L1 backgrounds than the first-generation corpora and broaden the stock of ELF genres available. They concentrate on second language use of English in specific geographical settings.

Our pilot work focuses on two Nordic countries, Sweden and Finland, where the role of English has undergone considerable changes in recent decades. The two countries are not undergoing a language shift, but the sociolinguistic situation is that of urban multilingualism in which English is used as an additional resource alongside the main languages, primarily, but not exclusively, by younger generations who live in urban areas and work in white- and pink-collar professions (see Laitinen 2016).

The working titles for the corpora are SWE-CE, the *Corpus of English texts in Sweden*, and FIN-CE, the *Corpus of English texts in Finland*. They are systematically-collected and sufficiently large sources of baseline data that fulfil the requirement for empirical validity. They contain texts from the written mode of communication, and together with the already-existing spoken ELF corpora they make it possible to investigate a range of genres. The texts have been produced by non-native writers who use English as a second language resource. The majority are taken from non-learner settings. The only exception is fiction, which we are collecting in collaboration with teachers organizing creative writing courses. The rationale is that (fan) fiction is an important arena of ELF writing (Leppänen 2012), but unfortunately such texts do not fulfil our need to identify the authors, and we have to collect material from educational settings.

We know to what extent the materials have been subjected to normative language checking by professional editors, translators and native speakers. Preference is given to texts that are not edited, but it is assumed that the more informationally oriented a text is, the more likely it is to have undergone some degree of language checking and collaborative effort. Furthermore, the informants' use of spell-checkers and other tools which nowadays are available in most web-browsers and mobile devices cannot be ruled out. To what extent such tools have an influence on our data is beyond our control, but it is clear that such tools are part of contemporary writing



practice and are equally used by native writers. Published materials edited by native speakers are excluded.

These second-generation ELF corpora cover a range of genres. We draw from Biber’s (1988: 104–108) multidimensional analysis of textual variation, and more specifically from dimension 1, i.e. information density and exact content vs. interactional and generalized content, to place texts within the genre matrix. This dimension is used as a heuristic tool and has not yet been validated empirically. Figure 1 visualizes the textual division covered in the study.

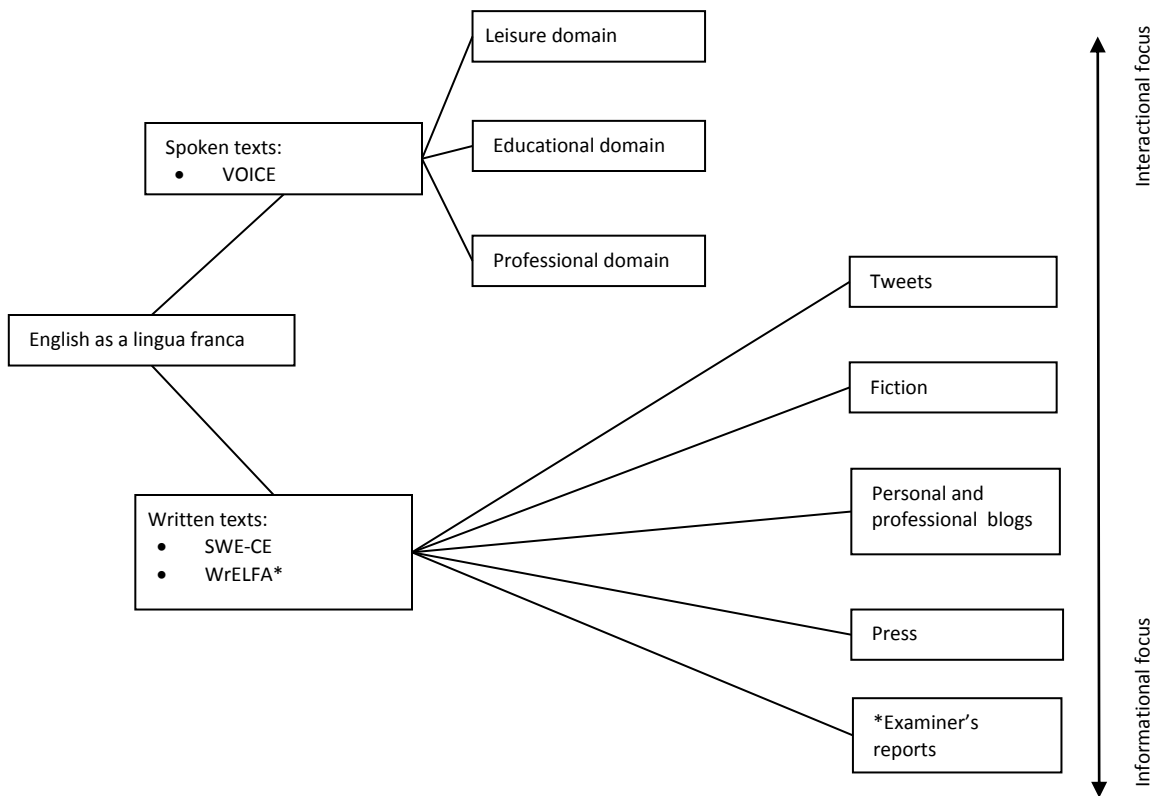


Figure 1. The genre distribution of the ELF corpora used in this study

When the written and spoken ELF materials are combined, the resulting corpora include some 2.3 million words. The results are based on 1,023,082 words of spoken VOICE. On the written side, I use the Swedish component as the material. The written corpus consists of 332,290 words of tweets (short micro-blog messages). This material has been collected from 50 randomly-selected individuals at [www.curatorsofsweden.com](http://www.curatorsofsweden.com). The site collects tweets sent by people who are citizens of Sweden and who manage the ‘official’ Twitter account Sweden for

one week at a time (for more on our Twitter data collection see Laitinen et al. forthcoming). The ELF fiction subcorpus is 193,755 words. The professional and personal blogs consist of 263,486 words, and they are considered as a single component (note that we will divide them into professional and personal blogs; see Grieve et al. 2010 on the classification of blogs using linguistic criteria). The news subcorpus consists of 196,232 words, while the examiner’s statement component from which the native English writers have been excluded comprises 276,712 words in 236 statements.

To ensure comparability with the previous observations, my study applies the method presented in Section 2 with no major modifications. One minor modification, however, is that the results for the VM category, (7) in the list above, also include the contracted forms *gonna*, *gotta*, *hafta*, and *wanna*, but their frequencies are low. The material that was untagged (WRELFA and SWE-CE) was parts-of-speech tagged using the CLAWS7 tagset. Tagging was also tested for blogs and tweets, but the error rate turned out to be high for these genres and hence it was determined that it would be best to run the material through a PERL script that attached 1,000 randomly selected items in the subcorpora with a tag. The script was kindly provided by Benedikt Szmrecsanyi. These items were manually analyzed for their POS. The results for the fiction, blogs, and press subcorpora are the frequencies generated through automatic POS-tagging. The VOICE results were obtained using the POS-tagged version (<http://www.voice.univie.ac.at>). Some of the results that required broader contextualization were checked using the XML-version of the corpus (<https://www.univie.ac.at/voice/help>). The tagging used in the VOICE corpus is based on a modified set of Hepple tags (Seidlhofer et al. 2014), and a scheme was created to convert the results comparable to those obtained using CLAWS7 (as illustrated in Table 1 below).

Table 1. The analytic (A) and synthetic (S) component categories as defined through the POS tags

<b>Feature</b>	<b>CLAWS7</b>	<b>VOICE tagset or search function</b>
A1: Conjunctions, subjunctions and prepositions	CC*, CS*, I*	CC, IN
A2: Articles, determiners and WH-words	APPGE, AT*, D*, RGQ*, RRQ*	DT, PDT, PRE, WRB, WDT, WP
A3: Existential THERE	EX	EX
A4: Pronouns	P*	PP*, indefinite, reflexive and reciprocal pronouns

A5: MORE/MOST	RGR, RGT	RBR, RBS
A6: Infinitive marker TO	TO	TO
A7: modals	VM*, gonna, gotta, hafta, wanna	MD, gonna, gotta, hafta, wanna
A8: negator NOT/N'T	XX	NOT, N'T
A9: auxiliary BE	VBD* VBG VBM VBN VBR VBZ* + (*)? + V*	lemma: BE + (XX0)?   (*)? + (*)? + V*
A10: auxiliary DO	VD* + (*)? + V*, VD* + XX	lemma: DO + (XX0)?   (*)? + (*)? + V*
A11: auxiliary HAVE	VH*+ (*)? + V*, VD* + XX	lemma: HAVE + (XX0)?   (*)? + (*)? + V*
S12: Germanic genitive marker (' 's)	GE, MCGE	POS
S13: Comparative and superlative adjectives	JJR, JJT	JJR, JJS
S14: plural nouns	NN2, NNL2, NNO2, NNT2, NNU2, NP2, NPD2, NPM2	NNS
S15: plural reflexive pronouns	PPX2	*SELVES
S16: Inflected verbs	VBDR, VBDZ, VBG, VBM, VBN, VBR, VBZ, VDD, VDG, VDN, VDZ, VHD, VHG, VHN, VHZ, VVD, VVG, VVGK, VVN, VVNK, VVZ	VVD, VBD, VHD, VVG, VBG, VHG, VVN, VBN, VHN, VVZ, VBZ, VHZ, VHS, DOS, VBS, VBP

The numeric results for the indices have been provided by two trained research assistants, and their initial searches have been checked once. As in Szmrecsanyi (2009), the indices are ratios of the number of markers normalized per 1,000 words.

## 4. Results

### 4.1. Grammaticity

Table 2 illustrates the total number of both grammatical markers, i.e. grammaticity. It is the most robust category, showing how transparent a variety is. According to Szmrecsanyi (2009), the higher the score, the more efficient the output is in terms of pragmatic functions, since the relationship between overt marking and negotiating meanings is indirect. Similarly, the lower the index, the more needs to be negotiated using pragmatic means. To acquire understanding of where ELF is situated among the varieties of English, the ELF results (in bold) are compared with the figures drawn from Szmrecsanyi (2009: 329). To make the samples more comparable, the ELF observations at this stage exclude tweets. They will be included in the subsequent tables

and figures, but as they constitute a highly distinct genre, they are presented separately (for more on the characteristics of tweets and other e-genres, see Knight, Adolphs & Carter 2014).

Table 2. Grammaticity index (GI) of ELF compared with the other varieties (from Szmrecsanyi 2009)

Language variety/form	GI	z score
Hong Kong E	539	-1.93
Singapore E	549	-1.70
<b>ELF</b>	<b>574</b>	<b>-1.13</b>
Philippine E	592	-0.72
Irish E	598	-0.58
New Zealand E	607	-0.38
Standard AmE	607	-0.38
Somerset (southwest)	626	0.05
Jamaican E	627	0.07
Indian E	632	0.19
Standard BrE	643	0.44
East African E	647	0.53
Kent (Southeast)	657	0.76
Lancashire (North)	667	0.98
Glamorgan (Wales)	669	1.03
Shropshire (Midlands)	680	1.28
Sutherland (Highlands)	689	1.49

The GI scores are the arithmetic means and indicate that ELF is roughly one standard deviation below the mean value of this index. ELF falls between two outer circle varieties, a little lower than Philippine English and a little higher than the Southeast Asian L2 English varieties, Hong Kong and Singapore English. These last two in particular are highlighted by Szmrecsanyi (2009) as contact-induced varieties in which adult language learning plays a significant role.

The results in Table 2 are important on at least two levels. For the first time, we are not confined to a limited set of genres in the ELF setting but can rely on evidence from various discourse situations on the spoken–written continuum. In addition, as opposed to much of the previous ELF evidence, Table 2 makes use of evidence based on aggregated linguistic structures rather than single grammatical, lexical, or phraseological features.

The results in Table 2 are quantitative evidence of structural simplification observed in previous ELF studies. They support some of the previous findings in the ELF literature based on

spoken data (see Mauranen 2012: 244), namely that one characteristic of spoken ELF consists of the negotiation of meanings in interaction, which leads to enhanced transparency and structural simplification. Table 2 offers a quantitative view of what this transparency means in corpus data. The results also add evidence that ELF speakers often avoid overt grammatical marking. According to previous studies by Breiteneder (2009) and Jenkins, Cogo & Dewey (2011: 289–290), one characteristic of ELF interaction is the omission of grammatical markers, such as third person *-s* or articles, both of which are included in the indices in this study.

While section 4.3 focuses on genre differences in the ELF corpora in more detail, I will next focus on how the spoken and written ELF modes differ from each other in terms of grammaticity. Specific attention is also paid to how one genre behaves relative to the spoken–written continuum. This genre, tweets, is written in its form, but it tends to exhibit spoken characteristics. Since the standard corpora used in Szmrecsanyi (2009) do not contain material from this genre, it is kept separate. The results also include the arithmetic mean values of four main variety types of English, drawn from Szmrecsanyi (2009: 329–330). They serve for reference purposes to show how substantial the differences between the spoken and written ELF subcorpora are.

Table 3 illustrates that the tweet subcorpus has the lowest grammaticity index (GI: 536), and it is clearly a specific written genre in which more emphasis needs to be placed on contextual cues and pragmatic inference than in spoken communication. VOICE corpus has a GI of 553. This result illustrates the emergent nature of spoken ELF, in which meanings are negotiated through enhanced explicitness (Mauranen 2012: 245). On the written side, however, the result is markedly different, and the grammaticity score is substantially higher (the mean is 597), giving it greater similarity to the outer circle L2 varieties than spoken ELF.

Table 3. Grammaticity indices of ELF compared with the data from Szmrecsanyi (2009)

<b>Language variety/form</b>	<b>GI</b>	<b>z score</b>
<b>ELF tweets</b>	<b>536</b>	<b>-1.26113</b>
<b>Spoken ELF (VOICE corpus)</b>	<b>553</b>	<b>-0.83599</b>
Southeast Asian Englishes (Singapore, Philippines, Hong Kong)	560	-0.66093
<b>Written ELF (WrELFA and SWE-CE)</b>	<b>597</b>	<b>0.264372</b>
Other L2 (outer circle) varieties	598	0.28938
Transplanted L1	607	0.514454
Low-contact L1 dialects	654	1.689839

The quantitative patterns observed are clear. With regard to the unidimensional grammaticity index, ELF falls between the two L2 variety types of Southeast Asian Englishes and other outer circle varieties. It is clearly not on a par with the transplanted L1 varieties and is well below the average of the traditional low-contact L1 dialects.

The illustrations below show what these quantitative differences mean in actual texts. Note that, for visualization purposes, only two of the analytic markers (determiners and modals) and synthetic ones (plural nouns and inflected verbs) have been included in the illustrations provided here. It goes without saying that any automatically-generated contextual information in tweets (i.e. the time of sending a tweet) and the material not keyed in by an individual author (URL-links, re-tweet mark-up, etc.) are separated by our text-level coding scheme used in the this subcorpus. They are not included in the results.

- (1) <TIME>May 31, 2015, 1:18 p.m.</TIME> <AT>@47thANNA</AT> Haha.  
 <TIME>May 31, 2015, 1:18 p.m.</TIME> <AT>@MarissaTree</AT>  
 <AT>@niannelynn</AT> When **will** the wedding be?  
 <TIME>May 31, 2015, 1:17 p.m.</TIME> <AT>@HarietaNoPotter</AT> Haha, sorry!  
 True detective!  
 <TIME>May 31, 2015, 1:17 p.m.</TIME> <AT>@va\_ellen</AT> Strangely enough I  
**haven't been** there.  
 <TIME>May 31, 2015, 1:15 p.m.</TIME> <AT>@Kyroenna</AT> **That's** my guess  
 also ...  
 <TIME>May 31, 2015, 1:13 p.m.</TIME> The Vegetable Man **goes** to the beach wearing  
 a zukini.  
 <TIME>May 31, 2015, 1:09 p.m.</TIME> What **could** be the favorite food and drink of  
 <Q>True blood</Q> writer Nic Pizzolatto, I wonder?  
 <TIME>May 31, 2015, 1:05 p.m.</TIME> <AT>@niannelynn</AT> You **are** absolutely  
 right.  
 <TIME>May 31, 2015, 12:59 p.m.</TIME> <AT>@niannelynn</AT> But we hardly  
 know each other?!  
 <TIME>May 31, 2015, 12:56 p.m.</TIME> <AT>@dmacuk</AT> Well said.  
 <TIME>May 31, 2015, 12:56 p.m.</TIME> <AT>@niannelynn</AT> Do you propose?  
 <TIME>May 31, 2015, 12:50 p.m.</TIME> <AT>@dmacuk</AT> But the vote said no?  
 (SWE-CE, tweets, May 2015) (8 markers = c. 14%)
- (2) yes to force to force to integr- to force **the** integration and that's **the** that's **the** main point  
 of difference because i **went** abroad i **got my** education and i **used** it at home for **my** duke  
 for **my** bishop fo- for **my** ho- hometown and today i think we get educa- er we get  
 education and we **don't** know where we **gonna** use it and that's **the** that's **the** big  
 difference (VOICE, EDsed251) (18 markers = c. 22%)

- (3) As **mentioned** earlier, when **an** employee compiles **a** quote in **the** office, **the** customer **might** feel that he **is** not part of **the** process and worry that **the** price **is** manipulated by **the** company. Examples of this **can** be **found** in forum threads, such as at byggahus.se [3], **discussing the** subject. Delayed price quotes and customers **feeling** cheated **is a** problem for **the** company. This thesis **will** look at how **the** manual process **can** be **sped** up and **made** more transparent (SWE-CE, theses, 2014) (29 markers = c. 35%)

Following on from the most robust category, i.e. the grammaticity index, the next section will examine analyticity and syntheticity in more detail and locate ELF among the various world English varieties.

#### *4.2. ELF on a two-dimensional plane*

The backdrop to this section is the observation that the variety types differ substantially on a two-dimensional analyticity-by-syntheticity plane. Space permits me to illustrate some of the previous findings only briefly, but they are explicitly explained in the sources used in this section. Despite the risk of oversimplifying matters, it is fair to say that the findings can be summarized as follows. On the one hand, Szmrecsanyi (2009) observes that the traditional regional dialects found in the British Isles are more synthetic than the varieties labeled as high-contact varieties. This latter group forms a heterogeneous set of varieties. They exhibit a considerable spread in which indigenized L2 varieties (East African English, Indian English, Jamaican English, Hong Kong English, Singapore English and Philippine English) form a clearly distinct group. This group is different not only from standard BrE and AmE, but also from language-shift Englishes (Irish and Welsh English) and transplanted L1 Englishes (i.e. New Zealand English and spoken AmE). The indigenized L2 varieties can be further divided into Southeast Asian L2 varieties, which are substantially less analytic and synthetic than “non-Southeast Asian L2 varieties” (Szmrecsanyi 2009: 328). Standard AmE is slightly less synthetic than BrE. On the other hand, Szmrecsanyi & Kortmann (2011: 182) observe that traditional learner essay data in the *International Learner Corpus of English* (ICLE) is less synthetic but clearly more analytic than Standard BrE. This observation forms the basis for the two authors to draw a distinction between learner language and second language varieties on structural grounds.

Figure 2 visualizes the two-dimensional analyticity–syntheticity plane, setting the written and spoken ELF results side-by-side with some of the results presented in Szmrecsanyi (2009) and Szmrecsanyi & Kortmann (2011). Note that the learner English data consist of all the ICLE

results combined and the same holds for the indigenized L2 Englishes. The spoken British English data are from of the spoken genres in Szmrecsanyi (2009: 333) and are used as a point of comparison for VOICE. On the ELF side, the spoken data are from VOICE in their entirety. The written ELF results exclude tweets and are based on 930,185 words in WrELFA and SWE-CE.

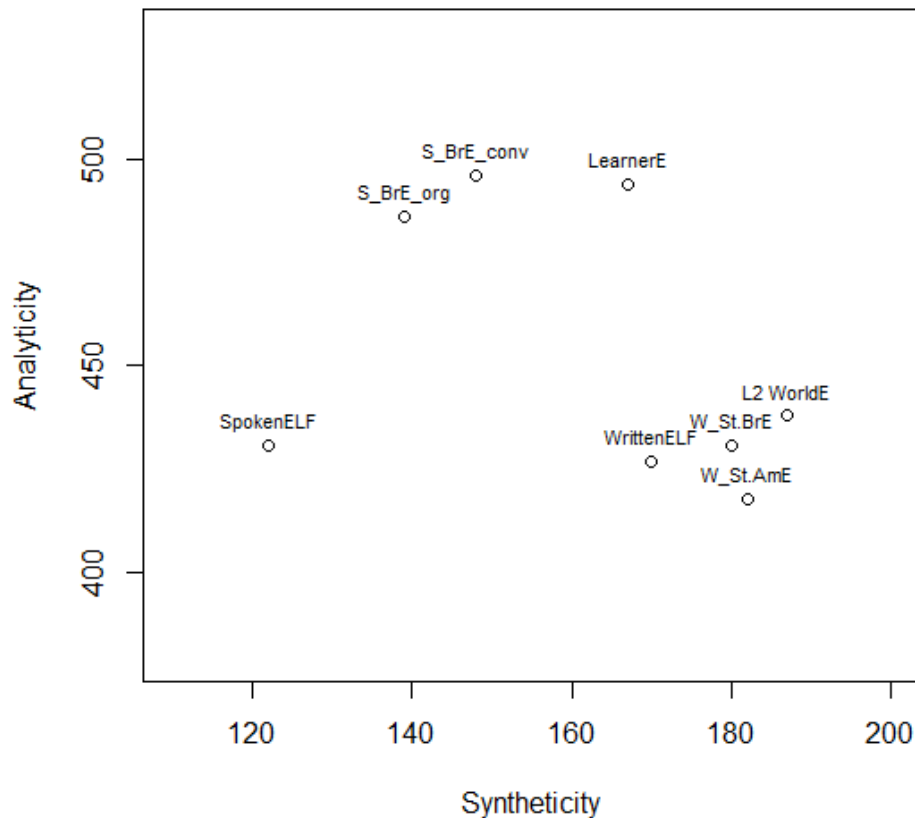


Figure 2. Written and spoken ELF compared with select variety types in Szmrecsanyi (2009) and Szmrecsanyi & Kortmann (2011)

The results visualize how spoken and written ELF could be positioned relative to a select set of English varieties. For spoken ELF, the synthetic value is 122, and the analytic value 431, while the respective values for written ELF are 170 and 427. The differences in the analytic values are not statistically significant (log-likelihood (LL) value 1.58,  $p > 0.05$ ), but they are highly significant for the synthetic values (LL 13.16,  $p < 0.001$ ). This finding is slightly different from our preliminary observations (Laitinen, Levin & Lakaw in press), in which our written



sample consisted only of formal academic and news genres. However, they do not change the main observation indicating that considerable differences exist between spoken and written ELF use. Figure 2 illustrates how the differences, which were already visible in grammaticity (Table 3), are brought about by a smaller share of synthetic markers in the spoken data. The Pearson residuals vary between -1.554 and 1.496, but the effect size in Cramer's phi for these nominal variables is minimal (0.073).<sup>2</sup>

The result regarding the differences between spoken and written modes in ELF is similar to that observed in other varieties in Szmrecsanyi (2009). His result shows that all of the major varieties of English exhibit similar decreases in analyticity and increases in syntheticity between their spoken and written modes of production. The ELF evidence is not random but conforms to the general pattern relative to the mode of production. However, it needs to be pointed out that VOICE exhibits lower index values for both analyticity and syntheticity relative to spoken British English, thus clearly highlighting the emergent characteristics of ELF in which meanings are negotiated in interaction.

More importantly for the ELF debate, the differences indicate increased transparency and output economy only in spoken ELF, but not necessarily on the written side. No such tendency is discernible in the written data, and more research needs to be carried out on the structural properties of written ELF.

Another important feature in Figure 2 is that the observations indicate substantial differences between traditional learner data and ELF. They confirm that, on purely structural grounds, language acquisition in foreign language settings should be viewed differently from second language use (cf. Mauranen 2011 on the notion that acquisition and use are connected but dissimilar). The two forms of non-native English are different. Written learner data exhibit close similarities with spoken native varieties, and Granger & Rayson (1998) suggest that such tendencies are discernible in register interferences and the over-representation of speech-like

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<sup>2</sup> Pearson residuals are utilized to check whether the observed values in two-dimensional data are larger or smaller than the expected frequencies (cf. Levshina 2015: 120). This method makes it possible to observe the effect of the dependent variable. The values that are smaller than -3.841 or greater than 3.841 are considered to be particularly noteworthy, and their effect is more pronounced than those that fall between. Cramer's phi is a post-test used in determining the strengths of association between two variables and is a measure of association ranging between 0 and 1.

features in learner data. However, the results here show that similar tendencies cannot be detected in my written ELF data. The latter are more synthetic and substantially less analytic than learner English data. The total figures for written ELF are 423 analytic markers and 170 synthetic ones, and for learner English they are 494 and 167 (according to Szmrecsanyi & Kortmann 2011). The result is statistically significant for the analytic markers (LL 5.50,  $p < 0.05$ ) but not for the synthetic ones (0.03,  $p > 0.05$ ).

The total frequencies of written ELF in Figure 2 suggest that it crops up within the broad group of standard BrE and AmE (data from the Freiburg versions of the Brown corpora in Szmrecsanyi 2009) and the indigenized L2 varieties. On the whole, comparisons of the syntheticity indices between written ELF and written BrE (LL 0.06,  $p > 0.05$ ) and AmE (LL 0.02,  $p > 0.05$ ) show no statistically significant differences. As for the analytic indices, the same holds true: there are no statistically significant differences in the data.

Thus far, I have considered ELF only as spoken and written modes of communication and have compared these two with the other varieties. In the next section, I will focus on ELF, and explore the extent to which the various written genres are structurally different from each other and from the spoken evidence in VOICE. Some comparative evidence from BrE is included.

#### *4.3. Genre differences in ELF*

The results in the previous sections establish that ELF (i.e. second language use) is structurally different from EFL (i.e. second language acquisition) and similar to other L2 uses of English in terms of both grammaticity and analyticity by syntheticity. These results, based on a large set of aggregate data, not only confirm a similar assumption in the ELF literature (Mauranen 2011), but they also illustrate correspondences between written ELF and the major standard varieties of English. Differences exist between ELF and Standard English, but these are more pronounced on the spoken side than on the written, as illustrated by the results in Table 3 and Figure 2. These results are important, considering the status of ELF in general, since they show that it is a structurally distinct variety type. As pointed out in the introduction, I am only referring to its structural properties here, as we should be careful in assessing the sociolinguistic angle of ELF being a focused variety.

A key question in this section is the systematicity of ELF genres. If the genre differences are systematic, so that both spoken data and the spoken-like written genres and the various

written genres (see Figure 1 above) exhibit similar tendencies as in the native varieties, the results should indicate that ELF speakers show at least some degree of the stability required of a focused variety and exhibit awareness of genre characteristics in terms of structural features.

These previous findings form the backdrop to the quantitative observations presented here. Figure 3 shows how the spoken VOICE and the five written ELF genres locate on a three-dimensional plane that integrates analyticity (y-axis), syntheticity (x-axis) and grammaticity (z-axis).

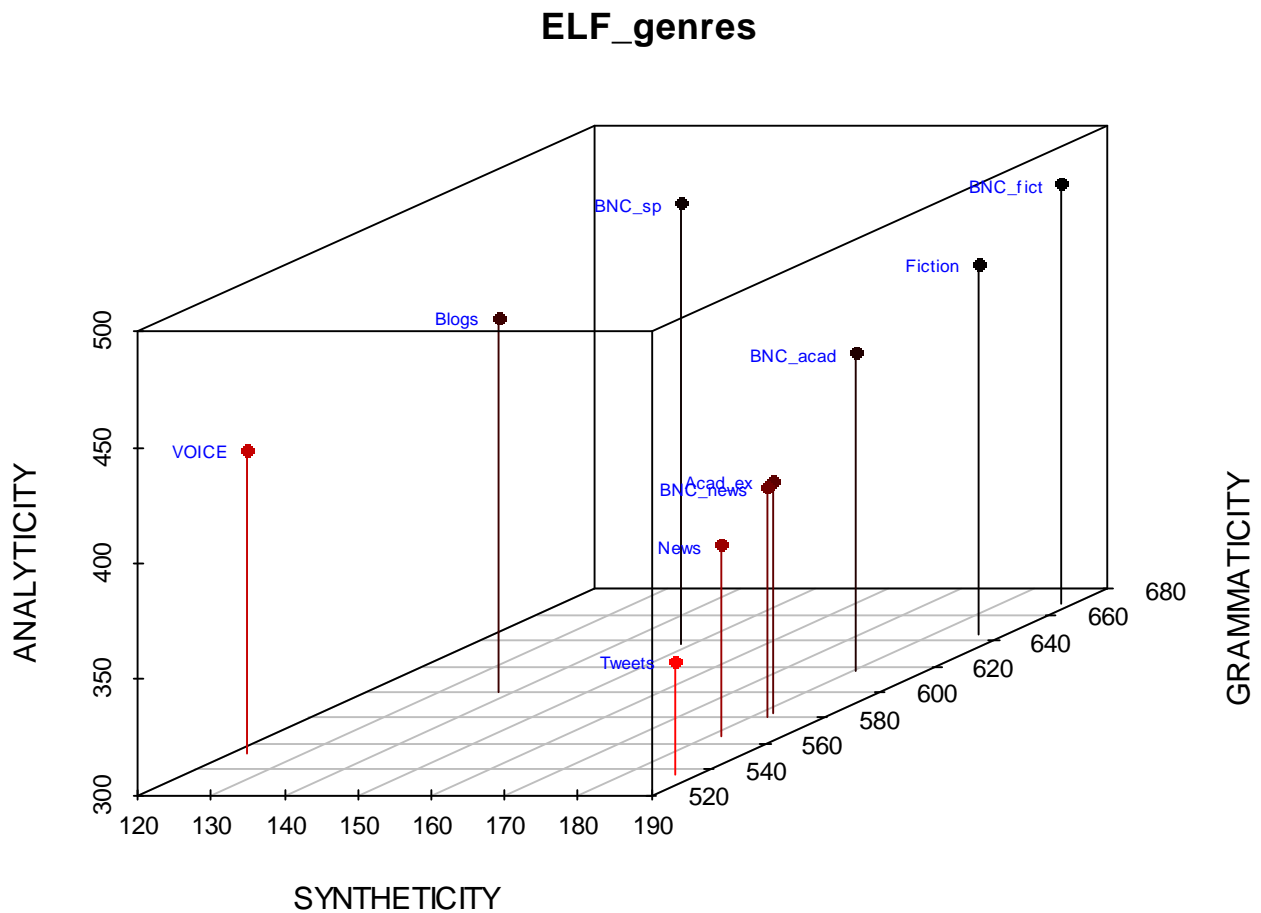


Figure 3. Spoken ELF data and written ELF genres in a three-dimensional genre space

I have included three written genres from Szmrecsanyi (2009), marked “BNC\_genre” in an abbreviated form (i.e. academic journal articles, news, and fiction). In addition, it includes the

spoken British English (BNC\_sp) results, which are the arithmetic mean figures of 16 spoken genres (2009: 333).

The results show, firstly, that spoken VOICE and the most interactive written ELF genre, tweets, are highly dissimilar. Recall that Table 3, above, demonstrates that both of them exhibit low grammaticity values, while Figure 3 shows that spoken material is characterized by higher frequencies of analytic markers, whereas tweets have more synthetic markers. This is also confirmed by the Pearson residuals, which indicate that in this regard the observed frequency of the synthetic markers is higher than expected (2.831). The Pearson residual value for the analytic markers in VOICE is (1.754). In all, Cramer's phi for nominal variables indicates that the effect size is small (0.142). These observations suggest that spoken ELF with its slightly increased analyticity highlights transparency and its negotiation of meaning through explicit analytic marking, but the same tendency is not true for interactive tweets. In tweets, economy and the compression of information to 140 characters weighs more, but the correlation coefficient remains mild. The tweet component shows characteristics of more formal genres, such as news. This finding is similar to that observed in native tweets in Knight et al. (2014), whose evidence comes from the relative frequencies of broad syntactic categories.

The blog data visualized in Figure 3 stand out not only from tweets but also from the other written ELF genres. They are closest to spoken data and exhibit lower frequencies in syntheticity than do the other written datasets. The Pearson residuals are highest for these synthetic markers, but they are not outside the critical values 3.841 and -3.841. Similarly, Cramer's phi shows no significant effect (-0.052). The finding goes against the observations in Knight et al. (2014), whose results on the native side show that blogs display the characteristics of formal genres.

When the two spoken corpora are compared with each other, the differences in the data are small. There is a slightly higher share of analytic markers in the BNC than in VOICE, and the same holds true for the synthetic markers. However, the Pearson residuals of this variable (analytic vs. synthetic in two datasets) show that the differences between the observed and the expected frequencies suggest no noteworthy differences. Cramer's phi, measuring the effect size, falls close to zero (0.014).

The analytic and synthetic indices for the ELF news genre are 383 (AI) and 182 (SI), and the differences are not statistically significant when we compare them to the BNC\_news

frequencies. The Pearson residuals vary between 0.189 and -0.187, while Cramer's phi shows no effect (0.009). In this genre, ELF and standard native English are therefore very close to each other, which is not surprising. According to Hundt & Mair (1999: 236), news as a genre tends to be agile, and authors (journalists) in native settings tend to be "receptive to" change and innovation. It would be unusual to assume that they would not be in ELF. In addition, it is likely that as language professionals, native and non-native journalists alike must be aware of their language production. The only marginal difference between ELF and native Standard English is the higher analytic score in the latter, but the correlation coefficient remains low.

In the academic genre, the datasets represent highly formal and informative academic writing, but the difference is that the ELF evidence comes from examiners' statements, whereas the BNC material has been taken from academic articles. Despite these differences, the quantitative patterns observed in the material are highly similar, with no statistically significant differences (the Pearson residuals vary between 0.462 and -0.449, while Cramer's phi shows no effect of correlation 0.022). The only difference is the slightly higher analytic index in the native dataset when compared with ELF, but not at any statistically significant levels.

Finally, the same tendency of remarkable genre similarities continues in fiction. On the ELF side, the analyticity index is 460 and that of syntheticity 186, while in the BNC data the corresponding values are 481 and 188. The differences are not statistically significant (the Pearson residuals vary between 0.167 and -0.164, while Cramer's phi shows no effect of correlation 0.007), and ELF is highly similar to native data. The finding is noteworthy since our fiction component is closest to learner writing. The texts were collected from creative writing courses in Sweden, but they exhibit only a little of the traditional learner language characteristics in the indices. One reason for this close similarity could be connected with our informants: people learning to write fiction in their L2 could be aware of their language production capabilities, which results in these close similarities.

## **5. Discussion and implications**

In this last section I will first provide a brief overview of my observations. I will then go on to explore some of the implications of these observations and aim at connecting them to the theoretical models of World Englishes in general and to issues related to the study of ELF in particular.

The results presented are the first ELF results obtained using the typological profiling method, and they enable the assessment of the variety status of ELF. They show that on purely structural grounds ELF is another distinct variety type among the English varieties. The quantitative patterns observable in the data are clear: Second language use is structurally different from second language acquisition, and there is a quantitative basis for drawing a distinction between ELF and traditional learner data (EFL) using purely structural criteria, as has been attempted here.

The results in Section 4.1 show that, with regard to grammaticity, ELF is similar to the many indigenized L2 Englishes. There exist substantial differences between spoken and written modes, and new genres, such as tweets, which are characteristic of the globalization of English, behave quite distinctly from the more traditional genres. Section 4.2 shows that, when it comes to ELF and native evidence, spoken ELF is structurally different from spoken native data. This observation can be compared to Mauranen et al.'s (2015: 402) observations. They point out that “even a short fragment of ELF talk heard or seen in transcription is usually enough to tell it is not ENL” [i.e. English as a native language]. My results offer quantitative confirmation of this. However, they also contrast some of the previous findings in ELF and add another angle to them. Mauranen et al. (2015) continue that when it comes to “word lists of individual word and n-grams” there is “notable overall similarity” between ELF and native uses in academic settings. My results show that spoken ELF is lower in terms of both syntheticity and analyticity when compared with native spoken data. It is important to note that Section 4.3 shows that no such differences can be discerned on the written side. When we use analyticity and syntheticity as an index of structural similarities, written ELF is not distinguishable from native data.

The empirical results enable refuting the null hypothesis, and hence they compel us to rethink the traditional tripartite division of Englishes. For instance, studies that have explored closing the paradigm gap between learner varieties and post-colonial indigenized L2 uses have suggested that the EFL–ESL should be seen as a continuum (cf. Mukherjee & Hundt, eds. 2011). However, the results here show that such a discussion excludes a crucial component, *viz.* a structurally distinct variety type of ELF. One possible explanation for such an exclusion is the fact that ELF is still seen to be limited to certain domains. However, as the corpus materials used here show, it is clear that the underlying determinants of the expansion of English, such as digitization and technologization, have led to a situation in which ELF serves a much broader set

of communicative functions than simply certain specific purposes. This is clearly seen in the digital genres covered in WrELFA, such as scientific blogs, which were not included in the results here, and in personal and thematic blogs as well as in tweets. The tweet component serves as a prime example of technologization and digitization since the material for the second-generation ELF corpus used here comes from a government-funded site that recruits ordinary citizens to manage the official Twitter account of Sweden. The great majority of these messages are in English; indeed the entire site is in English. Despite this fact, which derives from a single, specific case, it points to the question of the extent to which the current corpora used in the study of World Englishes can indeed capture the diversification of English and whether many of the corpora that are used actually reflect the real world. The second-generation ELF corpora used in this study offer one corpus design model that enhances representativeness. At the same time, it needs to be acknowledged that we also need more comprehensive geographic coverage of written ELF corpora, since the observations here are based on the Nordic context.

Lastly, one of the key points of ELF in Mauranen's (2012) study is that the emergence of second language use and the global spread of English add extra uncertainty to what we know about language change. She argues that ELF may lead to a situation where "we do not know in which respects the processes observed in earlier research on language change are valid" (2012: 243). One example of an area where rethinking is needed is in dissecting the observation that the spread of English through contact and adult language learning leads to simplification. The results presented here illustrate that some simplification takes place, especially in the most robust category of grammaticity, but there are also areas in which structural simplification is not present. The ELF corpora here display remarkable similarities with native Englishes and post-colonial L2 varieties, and new theoretical approaches are needed to understand such observations.

In a separate study, I have, together with my colleagues, explored the idea of applying variationist sociolinguistics as the theoretical toolbox necessary for understanding ELF (Laitinen et al. 2017). We used the social network model of the diffusion of innovations as the starting point (cf. Milroy & Milroy 1987). Of interest was the idea whether social network structures and an increase in weak ties in multilingual settings in particular might be used to account for some of the macro-level developments observed above. The social network model is well known in variationist sociolinguistics but is rarely used in studying World Englishes. Sociolinguists have shown that dense and multiplex network structures tend to impose norms on their members and

therefore promote language maintenance, whereas loose network structures lead to increased linguistic variation (Milroy & Milroy 1987). The model suggests that people are likely to accommodate to each other linguistically in weak-tie contact situations, and that contacts of this kind lead to the eradication of marked variant forms and therefore tend to result in conditions that are favorable to language change.

One of our suggestions is that ELF speakers, who are multilingual by definition, might have a larger number of weak ties in general than those who do not use English as a second language resource. These multilingual individuals could act as agents of linguistic change. Our results come from a 'big data' network of nearly 200,000 Twitter accounts in the Nordic region, where English is often used as ELF. We made use of two parameters that are automatically generated and available for third-party users in the Twitter stream. Our main finding is that those who tweet in English have a substantially larger number of network ties than those who primarily use the main L1s of the region (Danish, Finnish, Icelandic, Norwegian and Swedish) in their communication. This result supports the idea that the ELF settings and multilingual speakers in general favor innovation and change, and such settings and speakers might therefore offset part of the impact of simplification that normally takes place in adult language acquisition.

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