“I chuckled. Rolig pun där.”

A grammatical investigation of Swedish-English code-switching in two web discussion forums

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1. Introduction

The prominent role played by the English language in Swedish society is hardly a new phenomenon within linguistic research (see e.g. Hollqvist, 1984; Ferguson, 1994; Hult, 2003). Today, Swedes are exposed to English through music, television, the Internet and advertising. Further, Modiano (2003, p. 38) observes that “Swedes are adopting words and phrases from AmE [American English] in particular at an unprecedented rate.” As an example, Modiano (2003, p. 55) lists the English words chat, mail and surf which have been morphologically integrated in the Swedish language resulting in the Swedish verbs chatta, maila and surfa. Furthermore, as noted by Hult (2003, p. 55), it is not uncommon to overhear Swedes using English words or expressions when engaged in a conversation with another Swede. This phenomenon is what researchers in the field of contact linguistics have variously termed code-switching, code-mixing or language alternation (for further definitions of these terms see section 2.1).

As observed by Sebba (2012, p. 1), most studies on code-switching have focused on spoken code-switching. However, there are also few researchers who have used written data to examine this phenomenon. Sebba (2012, p. 1) argues that this is nevertheless a “relatively unexplored and under-researched” area, which he finds very surprising, given the great variety of multilingual written data available. Another relatively unexplored area of research, as noted by Sharp (2007, p. 224), is the study of code-switching in traditionally monolingual communities such as Scandinavia.

In the preceding paragraph we saw that most studies conducted on code-switching have used spoken data collected in bilingual societies. By way of contrast, this essay seeks to examine written Swedish-English code-switching in two Swedish web discussion forums: Gamereactor and Gitarrforum. More specifically, this essay will show that the so-called insertion pattern (as defined by Muysken, 2000) is the predominant pattern of code-switching in these forums. In order to investigate the dominant code-switching type in these forums, the following research questions will be addressed in this essay:

- Do the switched elements tend to be single words or several words in a string?
- What word classes are most frequently switched?
- Are the switched items morphologically integrated in the structure of the Matrix language (i.e. Swedish)?
The structure of this essay is as follows. Section 2 offers a definition of code-switching, code-mixing and borrowings. Moreover, it accounts for the different grammatical outcomes of code-switching, the different patterns of code-switching suggested by Muysken (2000) and major findings from previous empirical research on Swedish-English code-switching. Section 3, then, accounts for the method of analysis, the two forums under investigation, the procedures of data collection and analysis of the data. In section 4, the results of the study are presented. These are then discussed more thoroughly in section 5, with reference to previous empirical research and patterns of code-switching found in the material. Finally, section 6 summarizes the main findings and identifies questions for further research.

2. Grammatical perspectives on code-switching

Studies conducted on written code-switching have usually focused on code-switching from a sociolinguistic perspective (see e.g. Androutsopoulos, 2006; Siebenhaar, 2006; Leppänen, 2007). These studies are primarily concerned with the social factors behind the choice to use one language rather than another to convey a message (Myers-Scotton, 2002, p. 10). As pointed out by Gardner-Chloros (2009, pp. 42-43), these factors could pertain to power relations, social networks, attitudes, ideologies or factors within the conversation. This essay, however, focuses on the grammatical outcomes of code-switching and this will, thus, be the focus of this background section as well.

2.1. Defining code-switching, code-mixing and borrowings

There is no consensus in the field of contact linguistics as how to define code-switching. This is very well-illustrated in the following quote by Eastman (1992, p. 1): “efforts to distinguish code-switching, code-mixing and borrowing are doomed.” This section, however, attempts to account for the most commonly used definitions in the field of contact linguistics and the terminology adopted for this essay.

Bullock and Toribio (2009, p. 2) define code-switching as the alternation between different languages within the same conversation, often even within a single utterance or sentence. Two examples from my material are provided below:
(1) Bra att du har joinat¹ oss.
‘It is good that you have joined² us.’ (Gamereactor, 2013, no. 7)

B: Indeed, I will. År ledig nu i tentaveckan för bara uppsats och projektet är inlämnat
A: ‘Try it? Not much time left now.’
B: ‘Indeed, I will. I’m free now in the exam week because we only need to write an essay and I’ve already handed in the project’ (Gamereactor, 2013)

As seen in examples (1-2), code-switching may involve several different contact phenomena. It may be manifested as the insertion of a single word which is morphologically integrated in the Matrix Language (see section 2.2 for a definition of this term) through the use of suffixes (ex. 1), but it may also be manifested through the use of several words in one language followed by a string of words in another language (ex. 2). Furthermore, code-switching may be used by bilinguals with differing degrees of proficiency in the two languages involved and in various settings that display various relationships between the two languages in use (Bullock & Toribio, 2009, p. 2). These two factors naturally influence the code-switching used in a given context.

Traditionally, code-switching has been divided into inter-sentential code-switching and intra-sentential code-switching (Myers-Scotton, 2006, p. 239). Inter-sentential code-switching refers to instances where there is no alternation of languages within the sentences, but the speakers instead tend to switch languages between different sentences. Intra-sentential switching, on the other hand, implies that code-switching takes place within the sentence boundaries (Myers-Scotton, 2006, p. 239). However, some scholars (e.g. Muysken, 2000) prefer to further categorize intra-sentential code-switching in two different types: code-switching and code-mixing. Muysken (2000, p. 4) uses the term code-switching for instances where the two languages preserve their monolingual characteristics (see example 3), whereas he employs the term code-mixing for instances where the two languages converge (see example 4). This is the terminology that has been adopted for this essay.

(3) Ring Bruce nu å get him on the line!
‘Call Bruce now and/ get him on the line!’

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¹ Instances of code-switches in the examples will be indicated through the use of bold face throughout this essay.
² When the example is translated, a code-switch is indicated through the use of slash marks.
In example (3) above, it is clear that the code-switch get him on the line is untouched by the morphosyntactic framework of the Matrix Language and the two languages, thus, maintain their monolingual characteristics. In example (4), on the other hand, the two languages converge as the English noun swop is provided with the Swedish definite form swoparna.

In order to fully characterize code-switching, we also need to consider how to differentiate code-switches from borrowings. As noted by Sharp (2001, p. 8), the distinction between borrowings and code-switches “has long been a methodological problem in the study of language contact.” Despite this, Sharp argues that bilingualism is considered “a prerequisite for code-switching”, whereas borrowings may be employed by monolinguals (Sharp, 2001, p. 9). Furthermore, borrowings occur relatively frequently in the language of monolinguals. A code-switch, on the other hand, may only be used once and then never reoccur. Code-switches may also remain morpho-syntactically unadapted to the Matrix language, whereas borrowings tend to be integrated into the recipient language (Sharp, 2001, p. 10). However, researchers such as Myers-Scotton (1992) and Thomason (2001) have argued that it is sometimes difficult to draw a distinct line between code-switches and borrowings (as cited in Gardner-Chloros, 2009, p. 12). Instead, they argue that borrowings may start off as code-switches and that these then may become gradually integrated in the receiving language and through this process become accepted borrowings.

2.2 Grammatical outcomes of code-switching

This section deals with the grammatical outcomes of code-switching. Myers-Scotton (2006, p. 234) refers to these outcomes as language contact phenomena. She states that these phenomena can take various forms, but ultimately they are related either to how the items of the two languages are used together in different ways or how the grammar of one language has an effect on the grammar of the other language (Myers-Scotton, 2006, p. 234).

According to Myers-Scotton (2006, p. 235), there are two kinds of asymmetries involved in code-switching contexts. Firstly, there is structural asymmetry between the two languages that are used together. This implies that “one language supplies the main grammatical frame” for a sentence containing constituents from two different languages. The language that supplies the main grammatical frame is termed the ‘Matrix Language’. The
constituents drawn from the other language are mainly in the form of content words. The language from which the content elements are drawn is called the ‘Embedded Language’. Secondly, there is asymmetry between content and function words. Content words such as nouns, verbs, adjectives and adverbs tend to be drawn from both languages, whereas function words only come from the Matrix Language (Myers-Scotton, 2006, p. 236). According to Gardner-Chloros (2009, p. 31), nouns tend to be the most frequently switched word class. Furthermore, code-switches, similarly to borrowings, can be morphologically integrated in the Matrix Language. Researchers have found that verbs seem to be particularly prone to receiving inflections from the Matrix Language (see e.g. Gardner-Chloros, 2009; Muysken, 2000). Haugen (1973, p. 536) suggests that the predominance of morphological integration of verbs in code-switching data can be explained to be due to “the centrality of the verb in the sentence supplements [and] the fact that tense is an obligatory category in (at least) the Indo-European languages.” However, Myers-Scotton (2006, p. 255) shows that items taken from the Embedded Language also can be in the shape of bare forms. These bare forms do not show any inflections that would render them well-formed according to the rules of the Matrix Language. Myers-Scotton (2006, p. 258) states that bare forms are very commonly occurring in her data sets. However, there is no general consensus within the field of contact linguistics as to why these bare forms occur. Myers-Scotton (2006, p. 258) suggests that “lack of congruence between languages regarding abstract grammatical features” may be behind the occurrence of bare forms in code-switching data.

Another outcome of language contact phenomena is what Myers-Scotton calls ‘Embedded Language islands’. These consist of a well-formed phrase in the Embedded Language and tend to be collocations, i.e. strings of words frequently occurring together (Myers-Scotton, 2006, pp. 261-162). Further, Embedded Language islands show what Myers-Scotton terms structural dependency relations, meaning that constituents in an island display a hierarchical structure where some items are considered “higher” than others. An example of this is provided by Sharp (2001, p. 148) below:

(5) det här resulterar i **heavy overtime costs** va
‘This results in /heavy overtime costs/ you see.’

In example (5), the English noun phrase heavy overtime costs can be considered an Embedded Language island with costs as its head and the other constituents modifying costs; in Myers-Scottons’ words “the other elements ‘depend on’” costs (2006, p. 262). Finally, a last characteristic of Embedded Language islands is that they are often adjuncts, i.e. “‘add-ons’ to
the main structural [or] semantic elements of the clause” (Myers-Scotton, 2006, p. 264). As such, they often tend to be time or place adverbial phrases. The following example of Swahili-English code-switching from Myers-Scotton (2006, p. 264) illustrates this observation.

(6) Huja-sikia, kutoka next week wafanya kazi serikali was ta-kuwa wa-ki-endazini on Saturdays.

‘Haven’t you heard yet, from /next week/ government workers will not be going to work /on Saturdays.’

In example (6), we see how the two time adverbial phrases next week and on Saturdays are switched to English. The switched items are, thus, adjuncts, i.e. not forming part of the main elements in the clause.

2.3 Different patterns of code-switching

In this subsection, the three code-switching patterns found in intra-sentential code-mixing outlined in Muysken (2000) and Deuchar et al. (2008) are summarized. Through a survey of the findings of grammatical studies conducted on code-switching, Muysken (2000, pp. 2-3) suggests three main patterns of intra-sentential code-switching: insertion, alternation and congruent lexicalization. The two first patterns are of importance for this study and will be accounted for in this section. As noted by Deuchar et al. (2008, p. 303), one pattern tends to dominate though other patterns may also be present in a given context.

The insertion pattern is characterized by the insertion of a single lexical item from one language into the structure of another language, i.e. the Matrix Language (Muysken, 2000, p. 3). The insertion is, thus, embedded inside a clause and surrounded by words from the Matrix Language. Further, insertions are most commonly content words rather than function words (Muysken, 2000, p. 63). Concerning linguistic factors, Deuchar et al. (2008, p. 308) write that the insertion pattern is most likely to be found in a setting where there is a differing proficiency in the Matrix Language and the Embedded Language which can be said to be the case in Sweden where most people have a higher proficiency in Swedish compared to English.

Moreover, Muysken (2000, p. 63) states that insertions tend to display what he calls “a nested A B A structure”, meaning that they tend to be morphologically integrated in the Matrix Language. This pattern is illustrated in example (7) from Sharp (2007, p. 230):
In example (7), we can see how the insertion *dippat*, which is a content word, is embedded in the structure of the Matrix language and accordingly receives the Swedish verbal inflection *-at*.

In an alternational pattern, on the other hand, the two languages occur alternatively and they maintain their own structure (Muysken, 2000, p. 96). Thus, in Muysken’s words, alternations exhibit “a non-nested A…B…A” structure. Moreover, in an alternational pattern, several constituents are switched in a sequence. Muysken (2000, p. 97) also states that discourse particles and adverbs are particularly common in the alternational pattern. Finally, alternations are often placed “marginal to the core proposition” rather than “at the heart of the clause” (Muysken, 2000, p. 100). These can, thus, be compared to what Myers-Scotton terms Embedded Language islands. According to Muysken (2000, p. 99), an alternational pattern can be illustrated in the following example of French-Dutch code-switching from Treffers-Daller (1994, p. 213):

(8) Aller à l’hôpital *toch niet*?
‘Going to the hospital, /you don’t mean?’

As seen in example (8), the alternation *toch niet* is placed at the clause boundary this is further another characteristic of the alternational pattern (Muysken, 2000, p. 99).

I have now presented an overview of the main issues, terminology, grammatical outcomes and patterns of code-switching in general. In the following section, the focus will be more specifically on previous empirical research regarding Swedish-English code-switching.

2.4 Previous empirical research on Swedish-English code-switching

The influence of the English language in Swedish society has mainly been investigated from a sociolinguistic point of view, with a focus on attitudes, language choice and language shift in certain domains (see e.g. Berg et al., 2001; Olsson & Sheridan, 2012). To my knowledge, only one published study has investigated Swedish-English code-switching: the dissertation
from Sharp (2001). Accordingly, it is only her findings that will be summarized in this subsection.

Sharp examined the use of English words in Swedish discourse within two different domains: business meetings and informal conversations of a group of young adults (2001, p. 2). More specifically, Sharp (2001, p. 3) sought to investigate the frequency of English words used within Swedish discourse, “the formal and discourse functional characteristics of these English expressions used” and the extent to which English words were integrated in the Matrix Language. In order to examine this, Sharp (2001, pp. 38-40) recorded approximately six hours of business meetings with shipping executives (the Cool Corpus) and ten hours of casual conversations between young adults in a reality show (the Visby Corpus). For the analysis of the data, she adopted a wide definition of what she identified as “an English word”. She included all words with etymological roots in the English language that have entered the Swedish language after 1850 (Sharp, 2001, p. 50). However, it is not clear from her study, how she determined whether an English word entered the Swedish language before or after 1850. Further, due to this wide definition, it is not always possible to compare her findings with the findings of my study. Sharp included many words as English code-switches which I do not consider as genuine code-switches as these are established borrowings in the Swedish language, such as *jobba* (‘to work’), *squash*, *service* and *container*.

In order to account for the different code-switches found in her data, she classified them either as mixed or unmixed utterances (Sharp, 2001, p. 99). Unmixed utterances are, according to Sharp (2001, p. 100), instances of momentary language shifts untouched by the morphosyntactic frame of the Matrix Language. Mixed utterances, on the other hand, are instances where an English word is inserted in the morphosyntactic framework of Swedish. These lexical items may or may not be integrated in the Matrix Language through the display of Swedish inflections (Sharp, 2001, p. 100). As an example of the two classifications, she provides the following utterances:

(9) Mixed utterance: Man får **cutta** lite tidigare.
    ‘You have to /cut /a little bit earlier.’

(10) Unmixed utterance: **Yes at her place.**

(Sharp, 2001, p. 101)

According to Sharp (2001, p. 102), 84% of all the instances of code-switching occurred within mixed utterances in her data. Furthermore, most switches within mixed utterances were
in the form of a single word (Sharp, 2001, p. 102). In terms of word classes, these words were most often in the form of a common noun and a proper noun, followed by verbs, interjections and adjectives (Sharp, 2001, p. 103). Function words, on the other hand, only occurred within unmixed utterances.

Code-switches occurring within unmixed utterances constituted 16% of all the code-switches. These were most commonly “single-word utterances in the form of discourse marking interjections”, such as sure, alright and yeah, but also words of greetings and farewells, such as Hello! and Bye! (Sharp, 2001, pp. 104-105). Sharp (2001, p. 76) explains the relatively high proportion of interjections in her material to be due to the fact that her data consists of spontaneous speech.

Furthermore, Sharp found instances of unmixed clauses. According to Sharp (2001, pp. 106-107), the unmixed clauses most frequently consisted of three to five “lexically basic words” often with the subject I, occurrences of these are provided below in examples (11-13).

(11) I don’t know.
(12) I don’t remember.
(13) Look it up! It’s in the dictionary. (Sharp, 2001, p. 107)

Sharp claims that these utterances may be seen as prefabricated chunks that have been practiced in classroom drills and require little cognitive effort as they are most likely stored as a chunk in the memory and are consequently retrieved as a whole unit without being subject to the generation of grammatical rules on the part of the speaker. Further, Sharp (2001, p. 121) applied the typology suggested by Muysken (2000) and argued that the mixed utterances found in her corpus could be seen as examples of the insertional pattern, whereas the unmixed utterances exemplified the alternational pattern.

When comparing the use of mixed and unmixed utterances between the two domains, Sharp (2001, p. 109) found that the young adults used more unmixed utterances than the business executives. The higher use of unmixed utterances among the young adults can be traced to what Sharp terms the ‘quoting game’ where one of the young adults cite sequences from films, songs, commercials or television shows and the interlocutor is supposed to fill in the rest of the quote. An example of this quoting game is provided below.

(14) K: **Congratulations this is** dolda kameran!

‘Congratulations this is/ Candid Camera.’
Further, Johansson (2002, p. 99) argues that it is important to take the communicative purposes of the two speaker groups into account when analyzing the differences found between the two domains. In the COOL-corpus the purpose is transactional with a focus on the transference of information, whereas in the Visby-corpus the communicative purpose is mainly interactional with a focus on maintaining social relationships (Sharp, 2001, pp. 41-42). This may further explain the differences in code-switching behavior found between the two groups.

Finally, one last finding that deserves some attention here is the question of the integration status of the English words in the Matrix Language. When investigating this question, Sharp (2001, p. 143) found that most English nouns did not receive Swedish gender, number or definite/indefinite form. The use of Swedish plural inflections (see example 15) with English nouns was very rare in her data. Sharp (2001, p. 143), however, found that Swedish gender (see example 16) was more commonly assigned to the English nouns than the Swedish plural form.

(15) Det e väl bra om du använder dig av Sten och hans kunskap om halvskumma dealar.

‘It might be good if you make use of Sten and his knowledge of half-shady deals.’

(16) dom här äpplena från Cape Town till Libyen dom kommer gå i peaken.

‘These apples from Cape Town to Libya they will go in the peak.’

(Sharp, 2001, p. 143)

The majority of verbs, by contrast, received Swedish inflections, 249 tokens of 323 tokens (Sharp, 2001, p. 146). Further, Sharp (2001, pp. 146-147) found that single syllable verbs seemed particularly susceptible to Swedish verbal suffixes. Examples of these verbs are: cutta for ‘cut’, pusha for ‘push’ and splitta for ‘split’ (Sharp, 2001, p. 147).
3. Methods and materials

In this section, I will describe the two forums used for data collection, the procedures of data collection and analysis. But before moving on to these matters, it is useful to give a brief description of web discussion forums and characteristics of computer-mediated communication in general.

3.1 Web discussion forums and characteristics of computer-mediated communication

According to Kytölä (2012, p. 109), web discussion forums have been around since the turn of the millennium. Web discussion forums are asynchronous, meaning that when using a web discussion forum, users do not need to be online at the same time to be able to write or receive messages. Instead, messages are stored in the forum and the recipient can read and reply to a message the next time she or he is logged on (Herring, 2001). Further, Kytölä (2012, p. 111) writes that web discussion forums are commonly hierarchically structured in three intertwined levels. Firstly, the main page lists the different sub-forums that are grouped according to the topics discussed. Secondly, when clicking on one of the sub-forums, a list of the most recently active discussion headings is displayed. Finally, the last level consists of the actual thread where the different messages are displayed in a sequential order (Kytölä, 2012, p. 111). These threads are “multi-party conversations” of different lengths and duration (Androutsopoulos, 2006, p. 531). Furthermore, the messages posted by the users are monitored by administrators, to ensure that the contributions display appropriate content and style (Androutsopoulos, 2006, p. 531). Another characteristic of threads in web discussion forums is that they are multimodal and allow the user not only to post messages, but also to quote previous posts or external sources, post images or moving images and to change font style and colors to add emphasis to a particular part of their message (Kytölä, 2012, p. 111). In addition, forums allow the display of personal information with each post such as an avatar or a signature (Androutsopoulos, 2006, p. 531).

Androutsopoulos (2006, p. 531) states that a discussion thread most often starts with one user posting a question or a statement and that other users then post series of replies to the initial post. The thread may then develop into stretches of communication as other users start posting related questions or opinions. Further, as emphasized by Androutsopoulos (2006, p. 531), a single post may contain two or more moves and can, thus, not be equated with a
conversational turn. As an example, a user may first quote another user and answer his or her question and then shift to address the general audience.

As noted by Kytölä (2012, p. 109), the asynchronous characteristic of forums allows users to make use of online sources, such as Wikipedia or dictionaries, when they write their messages. However, writers can also type fast “in the flow” without the help of additional sources. Kytölä (2012, p. 109) argues that these different patterns of use affect the output, concerning “language choice, word choices, spelling [and] ‘correctness’.”

The language used on the Internet is often referred to as Computer-Mediated Communication (henceforth, CMC) in the literature. According to Dorleijn and Nortier (2009, p. 127), CMC is perceived to be more informal than other written texts, since it contains a great deal of colloquial forms and other features that are often associated with spoken language. Moreover, as emphasized by Dorleijn and Nortier (2009, p. 127), Internet data cannot be considered traditional written data. Crystal (2006, p. 52) writes that Internet language is a “genuine ‘third medium’” of communication which shares features with both written and spoken language. Crystal (2006, pp. 39, 42) lists a number of features that are typical for CMC, such as the use of smileys or emoticons (ex. 18) and verbal glosses within angel brackets (ex. 17).

(17) <smirk> or <laugh>

(18) :) or ;)

These characteristics of CMC have developed as a strategy to compensate for the lack of paralinguistic signals present in CMC (Crystal, 2006, p. 42). Moreover, Herring (2001) writes that CMC displays use of unconventional orthography to convey auditory information such as prosody, laughter and other non-verbal features (see examples 19 and 20).

(19) I SAID NO – to indicate shouting

(20) aaaaahhhhh or hey!!!!!!!

As seen in examples (19-20), CMC writers make extensive use of spelling, punctuation and capitals to enhance emphasis (Crystal, 2006, p. 37). Further, Crystal (2006, p. 42) argues that these features are used to prevent misunderstandings and to render the messages more explicit. However, sometimes these features can be interpreted in many different ways, which can make the message even more ambiguous. As an example, a happy smiley can be used to
refer to “happiness, joke, sympathy, good mood, delight [or] amusement” (Crystal, 2006, p. 39).

After this brief account of web discussion forums and general characteristics of CMC, I would like to turn to the description of the two forums used for data collection in this essay.

3.2 Description of the two forums used for data collection

When choosing a forum it was important that it was a Swedish forum with a Swedish target audience, to enable an analysis of how Swedes use English when writing in Swedish. Moreover, it was important that the forums had different purposes and dealt with different subjects, as we have seen in section 2.4 that Sharp found a difference in the way English was used in different domains. In addition, this naturally gives a more nuanced view of how people use English in Swedish forums and enables a comparison between the two forums.

The first forum I chose to collect data from is Gamereactor.se. Gamereactor is one of Europe’s biggest game magazines which publishes reviews of video games, computer games and cell phone games (Gamereactor, 2013). According to the main page of the forum, it is a forum where like-minded people with an interest in gaming can meet and discuss different matters [my translation] (Gamereactor, 2013). There is no official number of members on this forum, but according to e-mail correspondence with the editorial office, the forum has currently “thousands of active members.”

The second forum chosen for the collection of data is Gitarrforum (henceforth, The Guitar Forum). In this forum, the members mainly discuss guitars, guitar accessories and equipment. They also talk about their favorite music, post their songs to receive feedback from other members and post notices of guitars and equipment for sale. According to their list of members, this forum has currently approximately 8750 members (Gitarfforum, 2013). No exact age profile is available for the members of these two forums, but it can be assumed that they are in their early twenties to their early thirties judging from their conversation topics.

3.3 Data collection

The data were collected between the 19th October and the 6th of November, 2013. However, when I started to collect data, it soon became clear to me that the two forums differed considerably in terms of the number of messages posted each day, in the number of active threads, as well as in the length of each posted message. Therefore, it was impossible to
extract the exact same amount of threads and posts from the two forums. Instead, I focused on collecting approximately the same number of words from the two forums to be able to compare them.

Furthermore, due to the differing characteristics of the two forums, I had to adopt different strategies for collecting data. When collecting data from The Guitar Forum I only collected data from threads that contained at least 10 new posts during the period of data collection. In order to ensure that one thread did not affect the data too much, I did not collect more than 3600 words from a single thread. When choosing different threads from Gamereactor, a different approach was adopted. Firstly, I only chose threads that had more than 300 posts in total. This was taken as an indicator that a given thread was “popular” among the users and would, thus, yield much data. However, in some of these threads a great number of new messages were posted every day. Therefore, I decided to extract a sub-sample of no more than 2500 words from each thread. Furthermore, when collecting data from the two forums, quotes from previous posts were excluded so that the number of code-switches would not be duplicated. Moreover, signatures were not included as I found that these often consisted of English quotes by famous people and were, thus, not considered authentic code-switches. The number of threads, posts and words collected from each forum are summarized in table 1 below.

Table 1 Characteristics of the data collected\(^3\)

<table>
<thead>
<tr>
<th>Forum</th>
<th>Number of threads collected</th>
<th>Number of posts collected</th>
<th>Number of words collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guitar Forum</td>
<td>17</td>
<td>316</td>
<td>16 416</td>
</tr>
<tr>
<td>Gamereactor</td>
<td>11</td>
<td>426</td>
<td>16 434</td>
</tr>
</tbody>
</table>

As shown in table 1, the Gamereactor corpus contains more posts than The Guitar forum corpus, this is due to the fact that the posts on the Guitar forum tend to be longer than the ones posted on Gamereactor. Furthermore, the threads on Gamereactor are generally active for a longer period of time than the threads on the Guitar Forum, which explains the differing number of threads extracted from the two forums.

\(^3\) For the entire list of collected threads from each forum see Appendices 1 and 2.
3.4 Data analysis

In order to analyze Swedish-English code-switching, we must first recall how a code-switch is defined in this essay. As mentioned in section 2.1, it is sometimes difficult to distinguish between borrowings and code-switches, as there is sometimes only a thin line between the two. However, in order to attempt to make a distinction between the two, I used the Swedish Academy’s Dictionary (Svenska Akademiens Ordbok) as a basis for determining whether a given item could be considered as integrated to the Swedish language or not. However, when a word was indicated as newly added in the 13th edition of the dictionary, I resorted to other dictionaries to check whether they had included it as well. If a word was included in at least two of these dictionaries, it was considered as integrated in the Swedish language and consequently it was not counted as a code-switch. However, if a word was not included in the other dictionaries, it was classified as a code-switch. I did not include established borrowings the way Sharp (2001) did, as I consider these to be integrated to the Swedish language and not as genuine code-switches.

Moreover, in line with Sharp (2001, p. 94), I decided to include proper nouns in the analysis. As noted by Park (2006, p. 18), proper nouns are most commonly excluded from code-switching studies as these are viewed as borrowings. However, Park (2006, p. 18) argues that this is not as simple as one would imagine, since some proper nouns have equivalents in the Matrix Language, for example names of countries. Moreover, Park (2006, p. 18) points out that some proper nouns share features with common nouns. As an example, she provides the Swedish proper noun Botaniska trädgården (‘the Botanical Garden’) which also could be used as a common noun phrase botaniska trädgården meaning ‘the botanical garden’ (Park, 2006, p. 18). Therefore, it is sometimes very difficult to draw a line between the two. With this in mind, I decided to include all proper nouns that referred to computer games, guitar brands and song names which were derived from the English language as code-switches.

Abbreviations and acronyms were not included in the analysis of code-switches in this essay. This was due to the fact that the users of Gamereactor used a wide array of different abbreviations and acronyms and it was at times difficult to determine whether these were in fact derived from the English language, as well as what these referred to. Furthermore, as noted by Dorleijn & Nortier (2009, p. 131), written data does not enable the researcher to use

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4 See the list of references for the dictionaries used.
5 The proper nouns included are only the proper nouns found within the posts. No user names, avatars or signatures were included in the category of proper nouns.
phonological clues to determine whether a word can be considered a code-switch or not. Instead, I focused on the orthography when determining the “code-switching status” of a word.

When analyzing the data, I paid careful attention to individual switches to determine whether these showed characteristics of the insertional or alternational pattern. Furthermore, the individual switches were classified either as a single item (ex. 21), as a non-clausal string of words (ex. 22) or as a clause (ex. 23).

(21) **Enjoy** och berätta vad ni tycker... (Gitarrforum, 2013, no. 11)

‘Enjoy/and let me know what you think…’

(22) **Golden year of 88**, tror det är få år då så många bra album släpps under ett och samma år.

‘Golden year of 88/, I think there are few years when so many great albums have been released within a single year...’ (Gamereactor, 2013, no. 5)

(23) **Girls work in mysterious ways.** (Gamereactor, 2013, no. 7)

In addition, all switched items were classified according to word class as well. Finally, I also examined whether the switched common nouns and lexical verbs displayed morphological integration\(^6\) in the Matrix Language. The findings of these analyses are presented in the following section.

4. Results

In this section, the results of this study are presented. First, in section 4.1, we look at the total number of code-switches and whether these are realized as single words, non-clausal strings of words or as entire clauses. Then, in section 4.2, the results of the word class analysis are presented. Finally, in section 4.3, I examine whether the switched common nouns and lexical verbs used in my material could be considered as being integrated in the Matrix Language or not.

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\(^6\) See section 4.3, for examples of morphologically integrated common nouns and lexical verbs.
4.1 Number of code-switches and their realizations

Let us first look at the frequency of code-switches in the two forums. In order to calculate the total number of English words, I counted every single word as one record. Thus, a proper noun like Cypress Hill was counted as two words, similarly other multi-word expressions such as of course and telephone box were counted as two words each. However, in order to calculate the number of code-switches, I counted a switch of a single word such as preloading as one switch. Similarly, a switch of an entire clause such as I know that feeling was counted as one switch. In other words, as soon as a writer in one of the forums changed language from Swedish to English, it was counted as a code-switch no matter how many words this particular switch consisted of. This explains why the total number of English words is higher when compared to the total number of code-switches. The total number of code-switches and English words in the two forums are presented in table 2 below.

Table 2 Code-switching frequencies

<table>
<thead>
<tr>
<th>Forum</th>
<th>Number of code-switches</th>
<th>Total number of English words(^7) (percent of the total number of words)</th>
<th>Total number of words</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guitar Forum</td>
<td>378</td>
<td>495 (3.0%)</td>
<td>16 416</td>
</tr>
<tr>
<td>Gamereactor</td>
<td>715</td>
<td>1 039 (6.3%)</td>
<td>16 435</td>
</tr>
<tr>
<td>Total</td>
<td>1 093</td>
<td>1 534 (4.7%)</td>
<td>32 851</td>
</tr>
</tbody>
</table>

As seen in table 2, the two forums differ in the number of English words, as well as in the number of code-switches. The members of Gamereactor make more use of English words than the users of the Guitar Forum and code-switch more frequently than the members of the Guitar Forum do. However, when looking at the percentage of English words used in relation to the Swedish words, we see that they constitute a mere 4.7 % of all words in the material.

Let us now examine whether these code-switches were realized as single words, as non-clausal strings or as entire clauses. Table 3 below shows the frequencies of single-word switches compared to non-clausal strings of words and clauses in the two forums.

---

\(^7\) These may or may not display Swedish inflections.
As seen in Table 3 above, single one-word switches are by far the most common type of code-switches in the two forums. However, if we compare the two forums, we see that both English non-clausal strings and entire clauses in English are more common in the writing of the members of Gamereactor than among the members of the Guitar Forum. Moreover, the members of the two forums use more English clauses overall than English non-clausal strings of words.

4.2 Word classes of the code-switches

Let us now look at the different word classes of the switched words in my data. In line with Sharp (2001, p. 64), I decided to use the following word classes for my analysis: nouns, verbs, adjectives, adverbs, prepositions, pronouns, determiners, conjunctions and interjections. In the word class interjections, I included primary interjections such as oh and wow and secondary interjections such as damn and shit (Norrick, 2009, p. 867). In this word class, I also included what Quirk et al. (1985, p. 852) term ‘formulae’ such as greetings, farewells, thanks and apologies. Furthermore, the nouns were divided into proper nouns, i.e. names of songs, countries, computer games and different moves in computer games, and common nouns. The verbs were also divided into lexical verbs, i.e. verbs that act as main verbs in clauses (e.g. find, overcome, love), and auxiliary verbs, i.e. verbs that mark meanings associated with aspect, voice or modality (e.g. may, have, do). The distribution of the items across different word classes is shown in Table 4 below.

Table 3 Single word switches versus non-clausal strings of words and clauses in the two forums

<table>
<thead>
<tr>
<th>Forum</th>
<th>Single-word switch</th>
<th>Non-clausal strings of words</th>
<th>Clause</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Guitar Forum</td>
<td>371</td>
<td>2</td>
<td>5</td>
<td>378</td>
</tr>
<tr>
<td>Gamereactor</td>
<td>688</td>
<td>10</td>
<td>17</td>
<td>715</td>
</tr>
<tr>
<td>Total</td>
<td>1059</td>
<td>12</td>
<td>22</td>
<td>1093</td>
</tr>
</tbody>
</table>
**Table 4** Word classes of the switched items in my material

<table>
<thead>
<tr>
<th>Word classes</th>
<th>The Guitar Forum</th>
<th>Gamereactor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper nouns</td>
<td>210</td>
<td>402</td>
<td>612</td>
</tr>
<tr>
<td>Common nouns</td>
<td>107</td>
<td>193</td>
<td>300</td>
</tr>
<tr>
<td>Lexical Verbs</td>
<td>24</td>
<td>56</td>
<td>80</td>
</tr>
<tr>
<td>Auxiliary Verbs</td>
<td>2</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Adjectives</td>
<td>26</td>
<td>53</td>
<td>79</td>
</tr>
<tr>
<td>Adverbs</td>
<td>9</td>
<td>23</td>
<td>32</td>
</tr>
<tr>
<td>Pronouns</td>
<td>10</td>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>Interjections</td>
<td>5</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Prepositions</td>
<td>1</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Determiners</td>
<td>2</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Conjunctions</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

A first look at table 4 reveals that open word classes or content words such as nouns, lexical verbs, adjectives and adverbs were more frequently switched in these two forums than closed word classes. Nouns were the most commonly switched word class followed by lexical verbs, adjectives and adverbs. The closed word classes, i.e. auxiliary verbs, prepositions, pronouns, determiners and conjunctions, were very scarce in the data. These findings will be discussed more in detail in section 5.1.

4.3 Establishing the extent of integration

Muysken (2000, p. 63) states that insertions tend to be morphologically integrated in the Matrix Languages. Therefore, I decided to examine the extent of integration of the words used in my material. However, due to the limited space of this essay, I only examined the extent of integration of the common nouns and the lexical verbs found in my material.

In order to examine the extent of integration of the English common nouns in the Matrix Language, I used the criteria provided by Sharp (2001, p. 142). In line with her study, I investigated whether the English common nouns received Swedish gender, number, definite or indefinite forms. Examples (24 a-c) display English common nouns that were considered as integrated as they were used with Swedish gender, number, definite or indefinite forms.
(24)

(a) **Swedish definite and plural form**: Karaktärerna och **heisterna** var bäst.

‘The characters and the /heists/ were the best.’ (Gamereactor, 2013, no. 4)

(b) **Swedish gender and definite form**: Egentligen bara den **bundlen** jag är taggad på

‘I’m actually only excited about that /bundle.’ (Gamereactor, 2013, no. 10)

(c) **Swedish plural form**:... om man bortser från alla **buggar** och problem.

‘... if you disregard all /bugs/ and problem.’ (Gamereactor, 2013, no. 2)

Examples (25 a-b) show English common nouns that were considered as unintegrated as they were used with English inflections (ex. 25 a) or modified by another English word (ex. 25 b).

(25)

(a) **English number**: [...] men väger nästan ingenting i jämförelse med andra **hardwoods**.

‘[...] but it barely weighs anything in comparison with other/ hardwoods.’

(Gitarrforum, 2013, no. 1)

(b) **String of English words**: Jag har bara ett **low-level account** på den servern.

‘I’ve only got a /low-level account/ on that server.’ (Gamereactor, 2013, no 6)

Table 5 below shows the number of common nouns which were classified as integrated or unintegrated depending on whether they displayed Swedish or English inflections. However, 138 nouns in my data were used in a linguistic context where gender, number, definite or indefinite form could not be established. These were bare nouns used without inflections or determiners, 67 out of these were used together with another English noun or together with an English adjective modifying them. These were classified as unintegrated as they were used in a string of English words. The remaining 71 instances were classified as interdeterminables.
Table 5  The extent of integration of the common nouns in the data

<table>
<thead>
<tr>
<th></th>
<th>The Guitar Forum</th>
<th>Gamereactor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unintegrated</strong>: Nouns with Eng. inflections or determiners</td>
<td>36</td>
<td>58</td>
<td>94 (31.3%)&lt;sup&gt;8&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Unintegrated</strong>: nouns in strings of Eng. words</td>
<td>24</td>
<td>43</td>
<td>67 (22.3%)</td>
</tr>
<tr>
<td><strong>Integrated</strong>: nouns with Swe. inflections or determiners</td>
<td>18</td>
<td>50</td>
<td>68 (22.7%)</td>
</tr>
<tr>
<td><strong>Indeterminables</strong>: Bare nouns</td>
<td>29</td>
<td>42</td>
<td>71 (23.7%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>107</td>
<td>193</td>
<td>300</td>
</tr>
</tbody>
</table>

As seen in table 5, most common nouns did not receive Swedish number, gender, definite or indefinite forms. However, 22.7 % of the common nouns were morphologically integrated in the Matrix Language; these will be further discussed in section 5.3.

Let us now continue by looking at the extent of integration of the English lexical verbs in my data. In order to examine the extent of integration of the English lexical verbs used in my material I investigated whether the lexical verbs were used with Swedish or English inflections. Table 6 below shows the number of lexical verbs which were classified as integrated or unintegrated depending on whether they were used together with English or Swedish inflections.

Table 6  The extent of integration of the lexical verbs in the data

<table>
<thead>
<tr>
<th></th>
<th>The Guitar Forum</th>
<th>Gamereactor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unintegrated</strong>: Verbs with Eng. inflections</td>
<td>7</td>
<td>24</td>
<td>31 (38.7%)&lt;sup&gt;9&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Integrated</strong>: Verbs with Swe. inflections</td>
<td>17</td>
<td>32</td>
<td>49 (61.3%)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>24</td>
<td>56</td>
<td>80</td>
</tr>
</tbody>
</table>

Table 6 above indicates that a majority (61.3%) of the switched verbs received Swedish verbal inflections. According to my results, the verbs that received Swedish inflectional suffixes were all insertions, whereas the unintegrated verbs were all used within non-clausal

<sup>8</sup>Percent of the total number of common nouns found in the two forums.

<sup>9</sup>Percent of the total number of lexical verbs used in the two forums.
strings of English words or in English clauses. Instances of integrated and unintegrated verbs from the Guitar Forum and Gamereactor are shown in examples 26 (a-b) and 27 (a-b) below.

(26)
(a) Tonerna fade out på skärmen och man får spela efter minnet. (Gitarrforum, 2013, no. 13)
‘The tones /fade/ out on the screen and you have to play by heart’

(b) Vet inte vad jag tänker på men kanske en vinjett till ett barnprogram. I like it.
‘I don’t know what I think about, but maybe a vignette to a children’s program. / I like it.’
(Gitarrforum, 2013, no. 17)

(27)
(a) Någon som vet ifall Online-läget fungerar bättre nu jämfört med tidigare idag? (problem med att kunna spara sina framgångar online då man inte kan connecta till rockstar cloud servers).
‘Anyone who knows whether the Online-mode works better now compared to earlier today (I have problems with saving my progress online since I can’t/ connect/ to rockstar’s cloud servers)’ (Gamereactor, 2013, no. 4)

(b) I know that feeling. (Gamereactor, 2013, no. 3)

As the members of Gamereactor more commonly realize their code-switches as non-clausal strings of English words or English clauses than the members of the Guitar forum do, this could explain why the lexical verbs are integrated to a higher extent in the Guitar Forum compared to the forum on Gamereactor.

5. Discussion

In this section, the results are discussed in light of previous literature that is of relevance. First, in section 5.1, I take a closer look at the non-clausal strings of English words and clauses found in the material to examine whether these could be considered as alternations according to the definitions provided by Muysken (2000). Then, in section 5.2, major and minor word classes in the material are discussed. Finally, in section 5.3, I discuss the “integration status” of the English common nouns and lexical verbs found in my data.
5.1 English non-clausal strings and clauses

In my material, I found a total of 12 non-clausal strings of English words and 22 clauses or sentences in English. When comparing the two forums, however, it is clear that the members of Gamereactor make more use of English clauses and English non-clausal strings than the members of the Guitar Forum do. In this sub-section, we will take a closer look at what the non-clausal strings and clauses are made of and whether these could be considered alternations according to the definition proposed by Muysken (2000).

Similarly to the findings obtained by Sharp (2001, p. 106), the English clauses in my material are all main clauses and rather short. The switched clauses generally consist of three to six basic words that any Swede would understand. Examples from the two forums are shown below in examples (28) and (29).

(28) Var ju en underbar anime-morgon med HxH […] varje söndag där ett tag. **I miss it already.**

‘It used to be a wonderful morning of anime with HxH […] every Sunday for a while. / I miss it already’ (Gamereactor, 2013, no. 10)

(29) Grymt inledningsriff, sen tappade ni tyvärr mig eftersom det inte riktigt är min påse. **I love the guitarsound though.**

‘Awesome riff in the beginning, unfortunately you lost me after that since it is not really my kind of music. / I love the guitar sound though’ (Gitarrforum, 2013, no. 17)

In examples (28) and (29), entire clauses are switched to English. These are, thus, instances of inter-sentential code-switches rather than intra-sentential code-switches. The typology proposed by Muysken (2000), is, thus, not applicable to the English clauses found in my data as his model only is concerned with intra-sentential code-switching. However, one could argue that these clauses have a similar function to Embedded Language islands as they seem to function as what Scotton-Myers (2006, 264) terms “‘add-ons’ to the main structural [or] semantic elements of the clause.” Furthermore, these two clauses both have the subject *I*. Out of the twenty-two clauses I found in my data, eleven clauses had the subject *I*. This result is similar to the results in Sharp (2001, p. 107), who also found that English main clauses with the subject *I* were relatively common in her data.

Let us now examine the English non-clausal strings of words found in my material. Seven out of the twelve non-clausal strings found in my corpus can be categorized as alternations as these occur inside a Swedish sentence. The remaining five instances are
expletives used on their own not forming part of a Swedish sentence such as *Burn it*! and *In your face*. An example of an alternation, however, is provided below.

(30) Så jag tycker allt handlade om han var där, **right place, right time with the right people**, vilket hjälpte oerhört mycket med att han anses som någon hip hop gud.

‘So I think it all comes down to the fact that he was there/ right place, right time with the right people/ which helped tremendously to make him be considered as some kind of hip hop God’ (Gamereactor, 2013, no. 5)

As seen in example (30), the two languages occur alternatively, i.e. the English non-clausal string is preceded and followed by Swedish words. In addition, the alternation does not show any adaptation to the Matrix Language and eight constituents are switched in a sequence. This can, thus, be considered an alternation as defined by Muysken (2000). However, as noted, English non-clausal strings were not very common in the writing of the members of these forums. Therefore, it can be said that the insertional type of code-switching is the dominant pattern of code-switching in these forums, but that instances of the alternational pattern also occur, especially in the writing of the members of Gamereactor.

Let us now continue by discussing the “integration status” of the common nouns and lexical verbs found in my material.

5.2 Major and minor word classes in the material

As we saw in table 4, most switched items were in the form of content words rather than function words. This finding points to the insertion pattern as defined by Muysken (2000) as being the predominant pattern of code-switching found in these two forums. Among the content words, nouns were most commonly switched. Considering the findings in Sharp (2001, p. 66), this is not very surprising. She also found that an overwhelming majority of the switched items in her data were in the form of nouns. However, in her study most nouns were in the form of common nouns, whereas in my study proper nouns were more than twice as frequent compared to common nouns. This might be due to the fact that the users in the threads under investigation talk a lot about their favorite computer games, songs, guitars and artists, which yields a high number of proper nouns. The switched common nouns found in these two forums are often constrained by the discourse topic. As an example, in the threads where the members of Gamereactor talk about computer games, frequently switched common
nouns are game, kills, bundle and bugg (‘bug’). Similarly, in the Guitarforum, commonly switched common nouns are distortion, ebony, headroom and latency.

Further, just as in the study by Sharp (2001, p. 74), the second largest word class was lexical verbs. When comparing the two forums, however, the members of Gamereactor used considerably greater number of English verbs than the users of the Guitar Forum did. The verbs used in Gamereactor mainly denote different moves in computer games (ex. 31 a-b) or other verbs associated with computers (ex. 31 c), whereas the verbs used in the Guitar Forum were used to refer to different ways or techniques to play the guitar (ex. 31 d-e).

(31)

(a) Lasthitta bättre. Att spela passivt, dö mindre och få fler lasthits är generellt bättre
‘To last hit/ is better. To play passively, die less and get more /last hits/ are generally better’
(Gamereactor, 2013, no. 6)

(b) Slutade på honom, med den där spellen som gör så man kan reflecta.
‘I stopped playing with that character, with that /spell/ that makes it possible /to reflect/.’
(Gamereactor, 2013, no. 7)

(c) ...så vill ni preloada kanske det är bättre att se till andra butiker!
‘...so if you want /to preload/ maybe it is better to have a look in other shops!’ (Gamereactor, 2013, no. 2)

(d) Det är bara att strumpa på
‘Just keep on /strumming’ (Gitarrforum, 2013, no. 5)

(e) Hade problemet på min första gitarr. En Squierstrata med lite för hög stränghöjd som jag alltid palm-muteade av översta strängen på i replokalen.
‘I had that problem with my first guitar. A Squire Strat with too high string height that I always/ palm muted/ off the highest string in the rehearsal studio.’
(Gitarrforum, 2013, no. 14)

In these examples, the English lexical verbs are inserted in Swedish sentences and all English verbs receive Swedish inflections, a matter which will be discussed more thoroughly in section 5.3. Further, in example (31 a), we see an instance of a construction that Swedes seem particularly fond of, namely, turning an English noun into a verb through the use of the Swedish derivational affix –a. Other examples of these are bottlenecka used to refer to
a delay (a bottleneck) in the transmission of data through a data path and *beefat* meaning ‘to have a beef/fight with someone’. Furthermore, according to Sharp (2001, p. 147), in her data, single syllable verbs were particularly susceptible to Swedish verbal suffixes. However, in my study verbs consisting of several syllables also received Swedish verbal suffixes when inserted in a Swedish sentence. Instances of these are shown in the following examples.

(32)

(a) Istället *smoothtalkade* han mig att fara dit istället (bor i Uppsala) och köa.

‘Instead, he /smooth talked/ me into going there instead (I live in Uppsala) and queue.’

(Gamereactor, 2013, no.7)

(b) Jag har kommit på att om jag *topwrappar* gitaren så löser sig problemet.

I’ve discovered that if I /top wrap/ the guitar the problem is solved.

(Gitarrforum, 2013, no. 14)

(c) *Initiatea* genom att cc’a motståndarnas *backline*.

Initiate/ by conceding the opponents’ /backline/. (Gamereactor, 2013, no. 6)

Adjectives were the third largest word class of the switched items in my material. Adjectives were inserted on their own in the framework of the Matrix language, but were also used as a part of English clauses and non-clausal strings of words. The members of the Guitar Forum use the English adjective *clean* very often to refer to the sound of different amplifiers, but also *light* and *heavy* with reference to guitar strings. The users of Gamereactor, on the other hand, use a greater variety of different adjectives (see examples 33 a-c).

(33)

(a) Några enstaka rötägg finns det ju i nästan varje *ranked game*.

‘There’s a few bad eggs in almost every/ ranked game.’ (Gamereactor, 2013, no. 6)

(b) Personligen anser jag att man ska hålla inne på all den information som man hittat genom att *stalka* på internet, det är bara *creepy* när folk säger att de vet saker för att de rotat reda på saker om en.

‘Personally, I feel that you should keep all the information that you’ve found by /stalking/ on the Internet to yourself, it is only /creepy/ when people say that they know things because they have looked up stuff about a person.’ (Gamereactor, 2013, no. 3)

(c) *Mass Effect* var som bäst när det kretsade kring *witty* gruppdynamik, härliga rymdäventyr och simpla berättelser.
'Mass Effect/ was the best when it evolved around /witty/ group dynamics, fantastic space adventures and simple stories.' (Gamereactor, 2013, no. 7)

Further, the users of Gamereactor seem particularly fond of the adjectives nice (or the alternative spelling najs), good and bad.

English adverbs in the two forums were considerably less frequently switched compared to the other open word classes. This may further be an indicator that the insertion pattern dominates in my data, as Muysken (2000, p. 97) states that adverbs are commonly switched in the alternational pattern. My material only contains 32 instances of adverbs. Generally, these adverbs are short and simple adverbs such as only, already and maybe. Further, I did not find any instances of derivational adverbs. Just as the other open word classes, the adverbs appear both as part of an English clause (ex. 34 a) and as insertions (ex. 34 b).

(34)
(a) They just keep on comin’ (Gamereactor, 2013, no. 1)

(b) Jay-z maybe, absolut inte Eminem (Gamereactor, 2013, no. 5)

‘Jay-z maybe, absolutely not Eminem.’

If we move on to the function words, i.e. pronouns, prepositions, determiners and conjunctions, they were very rare in my material. In contrast to the content words, they were only used as parts of the English clauses or non-clausal strings found in my data. As the members of Gamereactor more commonly switched entire English clauses or non-clausal strings, the users of Gamereactor also switch function words more frequently than the users of the Guitar Forum do. Furthermore, out of all the function words, pronouns were the most commonly switched word class. This might be due to the fact that the writers used relatively many clauses with I as a subject, as we saw in section 5.1. An example is provided below.

(35) I know that feeling. (Gamereactor, 2013, no. 3)

Finally, the last word class I would like to discuss in this section is interjections. As mentioned in section 4.2, these include both primary and secondary interjections, as well as formulae. The interjections were mainly used as insertions in the morphosyntactic framework of Swedish. Furthermore, most of the interjections found in my material are secondary interjections (see examples 36 a-b). However, I did find three instances of formulae (sorry and gedday) and one instance of a primary interjection (whoa).
Further, English interjections were not as commonly used in my material as in the study by Sharp. In her study, the English interjections were the third largest word class and made up 10% of all the switched items. This is probably due to two factors. Firstly, the fact that she used spontaneous spoken data and, secondly, that she included the interjection *okay* as a code-switch. I do not consider *okay* a code-switch as it is an established borrowing. However, if I had included *okay* as a code-switch I would have had a considerably higher number of interjections in my material.

After this thorough discussion of the major and minor word classes found in my material, I will like to continue by discussing the English non-clausal strings and clauses found in my corpus.

5.3 The extent of integration of the switched common nouns and lexical verbs

As we saw in section 4.3, the verbs more commonly received Swedish inflections than the common nouns in my data. These results are similar to those obtained in Sharp (2001, p. 146) who also found that the English verbs more frequently received Swedish inflections than the switched nouns. Further, this provides additional evidence for the observation made by Muysken (2000) and Gardner-Chloros (2009) that verbs are especially prone to receive inflections from the Matrix Language. As we saw in section 2.2, Haugen (1973, p. 536) explains the predominance of morphological integration of verbs in code-switching data to be due to the centrality of the verb in the sentence and that tense is obligatory in most Indo-European languages. Further, Myers-Scotton (2002, p. 76) argues that verbs are more difficult to insert from one language to another as they, unlike nouns, are thematic role assigners and in her terms “carry more syntactic baggage than nouns [do].” According to Myers-Scotton (2002, p. 76), it is, thus, harder to fit verbs with the morphosyntactic framework of the Matrix
Language. This could further explain why the lexical verbs in my data were more commonly used with Swedish inflections than the common nouns, as well as why common nouns are more commonly switched than lexical verbs.

If we look at the common nouns used in my material, I found that English common nouns were rarely used in the Swedish plural form. I only found ten instances of common nouns used together with Swedish plural inflections. Two of these instances are shown in examples (37 a-b) below.

(37)
(a) Du kan vara helt ny eller i låga levlar.
   ‘You can be totally new to the game or in low /levels/’ (Gamereactor, 2013, no. 6)

(b) Annars så har jag inte stött på så mycket buggar i multiplayer.
   ‘Otherwise I haven’t come across so many /bugs/ in the /multiplayer.’
   (Gamereactor, 2013, no. 2)

Further, similarly to the results obtained by Sharp (2001, p. 143), it was more common for the English common nouns to receive Swedish gender than the Swedish plural form. A total of 33 instances of English common nouns assigned Swedish gender were found in the material. Most frequently these were used in the non-neuter gender, three instances of this are shown in examples (38 a-c) below.

(38)
(a) ... ibland kom jag i otakt med spelet (och det skyller jag på latencyn)
   ‘… sometimes, I got out of step with the game (and I blame it on the latency)’
   (Gitarrforum, 2013, no. 13)

(b) Slår vad om att det endast kommer fem exemplar i första batchen...
   ‘I bet that only five copies will arrive in the first/batch.’ (Gamereactor, 2013, no. 10)

(c) Tycker den mest intressanta är den första legit rap battlen inom hiphoppen...
   ‘I think the most interesting [battle] is the first/ legit rap battle/ within hip hop…”
   (Gamereactor, 2013, no. 5)

As regards definite and indefinite form, most nouns were used in the singular indefinite form (eighteen instances). Seven nouns, however, were provided with Swedish definite form. Only the members of Gamereactor used English common nouns with Swedish definite form, two examples of these are provided below.
(39)
(a) Efter att under några veckor stiga otroligt snabbt i divisions har jag nu börjat förlora medparten av gamesen jag spelar.
‘After having advanced quickly through /divisions/ during a couple of weeks, I have now started to lose the majority of the /games/ I play.’ (Gamereactor, 2013, no. 6)

(b) Angående missions så är det ju bara att en i party som hostar och bjuder in resten.
‘Concerning/missions/ there’s only one in the /party/ who/ hosts/ and invite the rest.’ (Gamereactor, 2013, no. 4)

Interestingly, in examples (39 a-b) the writers first use the English plural form together with division and mission, then in the same sentence the writers use the Swedish definite form together with the English nouns game and party. This might be due to the fact that the Swedish plural nouns divisioner and missioner are most commonly not associated with computer games. In the case of divisions, the Swedish word divisioner is more commonly used to refer to army units or departments of a company. Whereas, the Swedish plural form of missions (missioner) is more associated with religious work that involves going to a foreign country in order to teach people about Christianity than to refer to a task in a computer game.

Finally, 46% of the common nouns used in the data were used as bare forms. As observed by Myers-Scotton (2006, p. 255), these bare forms do not display any inflections that would make them well-formed according to the rules of the Matrix Language. Further, when comparing the two forums I found that the members of Gamereactor more commonly use English common nouns together with Swedish inflections than the users of the Guitar Forum do. In the Guitar Forum corpus, I found that approximately 17% of the common nouns were assigned Swedish gender, number or indefinite form. In the Gamereactor corpus, on the other hand, approximately 26% of the common nouns were used together with Swedish inflections.
6. Conclusion

This essay sought to examine the predominant code-switching type of Swedish-English code-switching found in two Swedish web discussion forums, namely Gamereactor and the Guitar Forum. At this point, it is important to stress that this study only examined the predominant Swedish-English code-switching pattern found in two different forums. Consequently, this study does not claim to make any generalizations as to the predominant type of code-switching found in all Swedish web discussion forums, but can only show tendencies found in these two forums.

In order to investigate the predominant pattern of Swedish-English code-switching in these two forums, I collected approximately 16,400 words from each forum. However, as the two forums differed in number of posts posted each day, as well as in the length of each message posted I did not manage to collect the same amount of threads or posts from the two forums. Instead, I focused on collecting the same number of words from each forum, only collecting data from the threads that were the most active during the period of data collection. This resulted in 17 threads containing 316 posts from the Guitar Forum and 11 threads containing 426 posts from the forum on Gamereactor.

In order to determine the dominant pattern of code-switching found in these forums, I examined whether the code-switches were realized as single words, as non-clausal strings of English words or as entire clauses in English. Moreover, I examined the word classes of the switches, as well as the morphological integration of the English common nouns and lexical verbs found in my material.

In my data, I found a total of 1,093 code-switches. The majority of these were in the form of a single word as opposed to several words in a string (1,059 instances compared to 34 instances). Furthermore, in accordance with the results obtained by Sharp (2001), the most commonly switched word class was nouns, followed by lexical verbs and adjectives. Content words were, thus, more frequently switched than function words in the two forums. Finally, when investigating the extent of integration of the switched common nouns and verbs, I found that the switched lexical verbs were more prone to receive Swedish inflections than the common nouns (61.3% versus 22.7%). These findings all suggest that the insertion pattern suggested by Muysken (2000) is the predominant type of code-switching in these two forums.

However, when comparing the two forums, I found that the members of Gamereactor more frequently realized their code-switches as non-clausal strings of English words or clauses than the users of the Guitar forum did (27 instances compared to 7 instances).
Furthermore, more function words were switched in the forum on Gamereactor compared to the Guitar Forum. This is due to the fact that the members of Gamereactor more commonly switch non-clausal strings of words or entire clauses. According to Deuchar et al. (2008, p. 303), one pattern tends to dominate in a given context though other patterns may also be present. Therefore, it has been argued that the alternational pattern also is present to some extent in my data, especially in the Gamereactor corpus.

To conclude, as mentioned in section 1, most studies conducted on code-switching have used spoken data collected in bilingual societies to analyze code-switching. This study, by way of contrast, analyzed written code-switching found in two Swedish web discussion forums. With the ever-growing influence of the English language in Sweden, especially on the Internet, it would be interesting to replicate this study and include a wider range of different forums as well as other types of CMC texts such as social medias, chats and blogs to uncover the predominant pattern of Swedish-English code-switching found in other CMC texts. This would offer more insights into the way Swedes use English in their everyday life on the Internet as well as characteristics of Swedish-English code-switching in general.
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   http://www.gamereactor.se/forum/?forum=1&thread=5908&page=806

   http://www.gamereactor.se/forum/?forum=2&thread=536091&page=7

   http://www.gamereactor.se/forum/?forum=1&thread=47224&page=2766

   http://www.gamereactor.se/forum/?forum=2&thread=100291&page=318

   http://www.gamereactor.se/forum/?forum=1&thread=2514&page=421

   http://www.gamereactor.se/forum/?forum=2&thread=158311&page=181

   http://www.gamereactor.se/forum/?forum=1&thread=397981&page=181

   http://www.gamereactor.se/forum/?forum=1&thread=194390&page=166

   http://www.gamereactor.se/forum/?forum=1&thread=44271&page=1680

    http://www.gamereactor.se/forum/?forum=2&thread=159033&page=83

    http://www.gamereactor.se/forum/?forum=2&thread=45281&page=965

Threads retrieved from the Guitar Forum:


Secondary sources:


Hamilton (Eds.), *The handbook of discourse analysis* (pp. 612-634). Oxford: Blackwell.


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**Dictionaries**


Appendix 1: The threads collected from Gamereactor

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## Appendix 2: The threads collected from The Guitar Forum

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