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Code-Switching among bilingual German-American Adolescents

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Abstract

Im Rahmen der vorliegenden Bachelorarbeit wurde das linguistische Phänomen des Code-Switching, das auch unter der deutschen Bezeichnung des Sprachwechsels bekannt ist, innerhalb des Sprachgebrauchs von zweisprachigen, deutsch-amerikanischen Heranwachsenden genauer untersucht. Die Besonderheit liegt darin, dass die Analyse auf Probanden aufbaut, die im oder im näheren Umfeld des Truppenübungsplatzes der Stadt Grafenwöhr leben.

Ziel der Bachelorarbeit ist es, zunächst sprachliche Hintergrundfaktoren des Code-Switching zu beleuchten und im Anschluss unterschiedliche Aspekte des Code-Switching herauszuarbeiten. Dies umfasst zum einen Unterscheidungen, die die Heranwachsenden in ihrem alltäglichen Sprachgebrauch bezüglich des Code-Switching machen, zum Beispiel im Hinblick auf Gesprächspartner oder Art der Kommunikation. Zum anderen werden Chatnachrichten, die die Heranwachsenden im Instant Messenger WhatsApp verschickt haben hinsichtlich der verschiedenen Arten des Code-Switching untersucht. Danach werden die Reaktionen und Emotionen der Heranwachsenden gegenüber ihren eigenen Nachrichten, innerhalb derer sie die Sprachen gewechselt haben, genauer beobachtet. Zuletzt liegt der Fokus auf möglichen Ursachen des Sprachwechsels. Die Datensammlung für die Analyse setzt sich aus drei Komponenten zusammen. Der erste Teil umfasst einen Fragebogen mit 18 Fragen zu Hintergründen, dem Code-Switching selbst und auch zur Onlinekommunikation unter den Heranwachsenden. Für den zweiten Teil haben die Heranwachsenden Bildschirmaufnahmen von Chatnachrichten aus dem Instant Messenger WhatsApp zur Verfügung gestellt. Der letzte Teil erfolgte in Form mehrerer Interviews.

Obwohl die Heranwachsenden zweisprachig aufgewachsen sind, ist die deutsche Sprache im Vergleich zur englischen Sprache deutlich dominanter und auch die Sprachkenntnisse im Deutschen sind vergleichbar besser. Des Weiteren sind keine merklichen Unterschiede des Auftretens von Code-Switching in gesprochener und geschriebener Sprache zu vermerken. Allerdings machen die Heranwachsenden das bewusste Einsetzen anderssprachiger Elemente stark abhängig von der Muttersprache ihres Gesprächspartners. In den Chatnachrichten treten sowohl das satzübergreifende Code-Switching als auch der Sprachwechsel innerhalb von einzelnen Sätzen auf. Im Rahmen der Gegenüberstellung der Heranwachsenden mit ihren eigenen Nachrichten reagierten nahezu alle Probanden mit Lachen, empfanden die Situation jedoch als unangenehm und waren schockiert über ihre eigenen Nachrichten, da sie sich zuvor noch keinerlei Gedanken über ihre Sprachverwendung gemacht haben. Lediglich eine Heranwachsende reagierte selbstbewusst und entschlossen. Als mögliche Gründe für den Sprachwechsel wurden unter anderem fehlendes Vokabular und Faulheit am häufigsten genannt. Mehr als die Hälfte der Heranwachsenden erlebt das Code-Switching als unbewusst.

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1. Introduction

Oh, I'm sorry, I don't speak Deutsch. On one hand, this sentence is an example of the linguistic phenomenon of code-switching. Code-switching is regarded as one possible consequence of language contact, more precisely as an outcome of bilingualism. In this example, the two languages combined are German and English and the English equivalent of the sentence is *Oh, I'm sorry, I don't speak German*. On the other hand, not only within the context of this thesis, I came across this utterance a number of times, when contacting Americans residing in the German city of Grafenwoehr. And therefore, surely a lot of German citizens living in Grafenwoehr, and its surrounding area might have already heard this sentence once. Grafenwoehr is a small town, located in Bavaria, in the region of Upper Palatine and is not only a home to speakers of German but also to thousands of native speakers of American-English. This founds on the fact that Grafenwoehr is one of the five garrisons of the U.S. Army Garrison Bavaria and its military training area is the largest US military training camp outside the United States (US-Armee Garnison Bavaria). The military training area in Grafenwoehr was founded in 1910 by NATO. Today it is part of the U.S. Army Garrison Bavaria, administered by the US-Army and also used by the German Armed Forces and the armies of the other NATO countries (Stadt Grafenwöhr; US-Armee Garnison Bavaria). Due to that, about 12,000 Americans, including soldiers, servicemen and their families, are living in and near Grafenwoehr (Knobloch 2021). About a third of them resides in Netzaberg Housing Area, which was at the time of its opening, "the largest U.S. housing area construction project in Germany" (Morgenstern 2011: 93). The remaining part lives off post (= outside the military training area), in Grafenwöhr itself or the surrounding villages (US-Armee Garnison Bavaria). In comparison to other garrisons, the situation in Grafenwoehr is unique. Since the border between the military training area and the city of Grafenwoehr is in the midst of Grafenwoehr, numerous Americans decide on spending their free time in the 'German part' of the city (Knobloch 2021). Therefore, the catering trade is trained to serve both German and American customers and sports clubs try to attract American teammates, to only name two examples. According to the mayor of Grafenwoehr, Mr Knobloch, 90% of Grafenwoehr's population is able to at least engage in a basic English conversation, even senior citizens above the age of 70. Because of that, only a few Americans acquire the German language. Although the Americans have the opportunity to send their children to American facilities on post, more and more parents decide to enrol their children in German kindergartens and schools (Knobloch 2021). Nevertheless, these are not the only possibilities to assemble German and American children and adults. The German-American Volksfest is not only familiar to people living in and around Grafenwoehr, it is well-known all around the world, with more than 50,000 international guests every year (Morgenstern 2011: 176). The fair is always celebrated at the first weekend in August and offers "[m]any rides and booths, a large variety of international,

culinary delicacies, bands, music groups and performances entertain the guests. The main attraction is the large weapons display with German and American tanks and military vehicles" (Morgenstern 2011: 222). Besides that, there are also a lot of other celebrations that the Germans and Americans join in together in Grafenwoehr. Above all are the holidays of each culture, for example, carnival, the German tradition of setting up a maypole, Independence day, Halloween, Thanksgiving and Christmas (Knobloch 2021; Morgenstern 2011: 171). Both the Germans and the Americans welcome guest of each other's nationality and try to "foster their friendship and [] intend[] to increase mutual understanding" (Morgenstern 2011: 170).

Considering that I grew up in the surrounding area of Grafenwoehr, the composition of guests attending these festivities has always been normal to me. I was living in immediate neighbourhood with native speakers of American English and because of that, I was familiar with spending time with American children. For years now, I have friends who either learned German as their first foreign language while attending German kindergarten or who grew up bilingual having one German and one American parent. Already before the beginning of my studies in English, I could observe conspicuous features in their language behaviour. Spending time with them and further increasing my knowledge of English linguistics, made me curious and motivated me to closer observe language phenomena among their language usage.

Due to the current situation of the COVID-19 pandemic, I decided to focus on an investigation possible with only little or no physical contact. Therefore, I analysed bilingual German-American adolescents' language behaviour with regard to code-switching by first conducting a questionnaire on their own evaluation of their language use. Second, I examined their written WhatsApp chat messages respecting different types of code-switching and afterwards confronted the adolescents with the code-switching forms in their messages, recording their first reactions and consulting them regarding their personal reasons for switching languages in each instance.

In the following, the thesis will therefore first briefly address the issue of bilingualism and multilingualism by defining both concepts and relating them to the occurrence of code-switching (chapter 2.1). The initial chapter on code-switching itself will provide different definitions and introduce a working definition of code-switching (chapter 2.2.1). Thereafter, three approaches to the phenomenon of code-switching will be presented (chapter 2.2.2) and the section on different reasons for code-switching (chapter 2.2.3) will round down the second chapter of the previous research. Since the various types of code-switching play a major role in the analysis, they receive an independent chapter (chapter 2.3). The succeeding chapter is about the instant messaging app WhatsApp and provides background information on the app and its importance for linguistic research (chapter 2.4). After introducing and explaining the research questions relevant to the thesis (chapter 3), the data and methodology section will

provide profound information on the study itself (chapter 4). Chapter 5 will present the overall results from the study on code-switching among bilingual German-American adolescents. The conclusion again highlights the most important parts and findings from the analysis and rounds down the thesis.

2. Previous Research

2.1 Bilingualism/Multilingualism

Before entering the phenomenon of code-switching and its characteristics, the focus is on its basis, the events of bilingualism and multilingualism.

In the first place, bilingualism is the "learning and using [of] just two languages" (Quay and Montanari 2019: 544). More precise definitions also include specifications on the proficiency of the bilingual speaker. For example, Altarriba and Heredia (2008) "designate a bilingual as someone who can read, write, and speak fluently in more than one language" (Altarriba and Heredia 2008: 3). This definition emphasizes, similar to Simpson (2019), the fluency of the bilingual in the relevant languages. Simpsons (2019) "make[s] use of the term 'bilingual' in a more restrictive and traditional way, reserving it for individuals who have significantly more advanced proficiency in two languages" (Simpson 2019: 264). This definition includes "that a person can interact easily with other speakers of the languages he/she knows and talk confidently about any of the kinds of non-specialist topics that might come up in regular daily conversation" (Simpson 2019: 265). Therefore, bilingualism basically refers to speakers who are able to fluently communicate in two languages.

Although there is literature considering bilingualism and multilingualism as one and the same issue (Quay and Montanari 2019), this thesis will regard bilingualism and multilingualism as related, but distinct concepts. Bhatia and Ritchie (2013) also propose this view. According to them, bilingualism "refer[s] to the knowledge and use of two languages and [multilingualism describes the] use of three or more languages" (Bhatia and Ritchie 2013: xxi). The definition provided by Quay and Montanari (2019) is similar, by stating that "multilingualism [refers to] learning and using three or more languages" (Quay and Montanari 2019: 544). Overall, multilingualism pertains to speakers who are able to fluently communicate in more than two languages.

When discussing phenomena arising from both bilingual and multilingual contexts, authors suggest "the term plurilingualism to refer to both bilingualism and multilingualism" (Bhatia and Ritchie 2013: xxi), instead of repeating each of the concepts.

After defining the concepts of bilingualism and multilingualism, the following will briefly further examine bilingualism with regard to its importance for code-switching. Bilingual speakers can be divided into two types, based on the age and circumstance they started to learn their two languages. "Simultaneous bilingual children are those whose dual language experiences began at birth or at least before the age of 3" (Paradis 2007: 15). In this case, the children acquire their parents' individual mother tongues at home (Paradis 2007: 15). The second group are sequential bilingual children who "typically speak their first language (L1)

[] at home with both parents, and their second language (L2) at school" (Paradis 2007: 15). The earlier the age of starting to study two languages, the higher is the probability of acquiring both languages at a higher proficiency (Simpson 2019: 266). These factors leads to the distinction between balanced and un-balanced bilinguals. Balanced bilinguals acquire "'native-like' proficiency in two languages" (Turner 2019: 26). When bilingual speakers are able to fluently communicate in both of their languages but are "stronger in one of the two languages" (Simpson 2019: 267), they are considered un-balanced. Depending on the literature, they are also called semi-lingual speakers (Turner 2019: 26). But it should be mentioned that there is no ideal bilingual speaker and that there are observable differences between all bilingual speakers. The theory can only provide guidance when it comes to categorizing bilinguals.

The importance of bilingualism for the issue of code-switching arises due to the simultaneous occurrence of two languages within a speaker's repertoire. Bosma and Blom (2019) add to this by assuming that balanced bilinguals more frequently mix their two languages in comparison to un-balanced bilinguals. According to them, the switching does not occur as a consequence of "a lack of fluency" (Bosma and Blom 2019: 1432). More causes of code-switching will be discussed in chapter 2.2.3.

2.2 Code-Switching

2.2.1 Definition

As stated before, one possible phenomenon occurring as a consequence of a bilingual or multilingual setting is code-switching. Besides the plurilingual basis, the process of alternation plays a significant role in the event of code-switching. The latter can be literally found in the definitions of code-switching published by Grosjean (1982) and Auer (1998). According to Grosjean (1982), code-switching is "the alternate use of two or more languages in the same utterance or conversation" (Grosjean 1982: 145). Similar to that is the meaning presented by Auer (1998). He states that code-switching describes "the alternating use of two or more 'codes' within one conversational episode" (Auer 1998: 1).

In addition, Myers-Scotton (1993a) explicitly emphasizes the bilingual or rather multilingual foundation in her definition of code-switching. She describes code-switching as "the selection by bilinguals/multilinguals of forms from two or more linguistic varieties in the same conversation" (Myers-Scotton 1993a). In 2001, Myers-Scotton added to her initial explanation and published a more detailed version of it by stating that "[c]lassic codeswitching is defined as the alternation between two varieties in the same constituent by speakers who have sufficient proficiency in the two varieties to produce monolingual well-formed utterances in

either variety" (Myers-Scotton 2001). A similar definition is also provided by the Cambridge Handbook of Linguistic Code-switching, explaining code-switching as "the alternating use of two languages in the same stretch of discourse by a bilingual speaker" (Bullock and Toribio 2009: xii). The common ground of these three explanations is that they highlight the speakers' bilingual basis.

Present-day definitions of code-switching also combine the alternation and the multilingual setting, for example Kasim et al. (2019). "In a multilingual context, shifting or mixing codes with other languages among the speakers is a common practice; and this is typically called code switching" (Kasim et al. 2019: 104). Simpson (2019) even goes a step further and alludes to the different types of code-switching by writing that code-switching "refers to the switching between different languages or varieties within a single conversation, with alternations taking place either between sentences or actually inside sentences in many instances" (Simpson 2019: 118).

Based on the above-mentioned definitions, the thesis will work with the following meaning of code-switching. Code-switching is a phenomenon occurring as a result of bilingualism/ multilingualism and describes the alternation of two or more languages within a single conversation.

When defining the concept of code-switching, the aspect of code-mixing is not to be neglected. Muysken (2000) for example, clearly distinguishes between code-switching and code-mixing. He "us[es] the term code-mixing to refer to all cases where lexical items and grammatical features from two languages appear in one sentence […] [and] code-switching will be reserved for the rapid succession of several languages in a single speech event" (Muysken 2000: 1). Other authors assign code-mixing to be a type of code-switching describing "momentary switches which do not really change the language of the interaction" (Winford 2003: 105). The thesis will apply the latter classification. Therefore, code-mixing will be further discussed in the chapter presenting the different types of code-switching.

2.2.2 Approaches to Code-Switching

The study of code-switching can be carried out based on three different approaches. These approaches are: "linguistic, psycholinguistic and sociolinguistic" (Stell and Yakpo 2015: 1).

The linguistic approach to code-switching focusses on grammatical constraints and "mostly on the allowed and disallowed patterns of [code-switching] in sentences, phrases and words, and generally postulates the existence of systemic 'rules' or specific points where [code-switching] is possible or more used" (Selvaggi 2018: 33). Therefore, this approach is also

called structural-grammatical approach (Selvaggi 2018: 33). Moreover, the linguistic approach is applying "grammatical analysis of data extracted from corpora of actual bilingual conversations" (Selvaggi 2018: 27). The linguistic or structural grammatical approach bases its assumptions on naturally spoken data from corpora and analyses the grammatical structures behind code-switching. In this connection, the Matrix Language Frame (MLF) Model by Myers-Scotton (1993b) should receive a remark, although it has triggered a lot of criticism and is nowadays not regarded "as a valid and general explanatory theory on the patterns of [code-switching]" (Selvaggi 2018: 34). The Matrix Language Frame Model is a "production-based model which sees code switching constraints as set by processes which operate well before the positional level at which surface orders and structures are realized" (Myers-Scotton 1993b: 6). Basically, the MLF Model's aim is to "differentiate the languages involved in [code-switching]" (MacSwan 2014: 15). On one hand, there is the matrix language, the language "supply[ing] the morphosyntactic frame" (Keller 2020: 19) and on the other hand, there is the embedded language, which "is not involved in projecting hierarchical relations" (Jake et al. 2002: 79). But since the analysis of thesis does not apply the MLF Model, the model will not be further explained in this context.

"The psycholinguistic approach considers crucial variables, such as motivation, neural and cognitive basis of language acquisition, processing [and] production" (Selvaggi 2018: 35) besides others. These variables are linguistic systems that are part of the speaker's cognitive system (Stell and Yakpo 2015: 1). The psycholinguistic approach bases its analysis for example on "the inner variables of speakers and [] the issue of [code-switching] in bilingual children" (Selvaggi 2018: 27). Therefore, the psycholinguistic approach to code-switching investigates code-switching with regard to the bilingual speaker's cognitive system.

The last approach to code-switching is the sociolinguistic approach, dealing with "the social motivations behind code-switching" (Stell and Yakpo 2015:1). This approach does not count the individual bilingual speaker as "the starting point of linguistic analysis" (Selvaggi 2018: 27), but the speech community. Since the speech community and the issue of discourse are considered important here, the sociolinguistic approach is directly linked to the social and identity related reasons presented in the next chapter.

2.2.3 Reasons for Code-Switching

In order to gain a deeper insight into the phenomenon of code-switching, this chapter highlights different factors leading to code-switching. After assembling various material on the reasons and motivations for code-switching, the thesis will organize the different causes

under three categories, being lexical reasons, stylistic reasons, and social and identity related reasons.

The classification of lexical reasons includes two specific reasons for code-switching. First, code-switching can occur as a consequence of the speaker's inability to "producing an utterance in one language" (Du Bois 2009: 2). So, the bilingual speaker code-switches in order to fill this lack of vocabulary with elements from their other language (Amorim 2012: 183; Heredia and Altarriba 2001: 165). This shortcoming is directly linked to the "speakers' imbalance in knowledge of their two languages" (Simpson 2019: 126). Depending on the circumstances of acquiring the two languages, a speaker might be fluent in both of their languages, but the speaker's lexicon of each language will not be identical (Simpson 2019: 126). This lack of vocabulary is also typical for un-balanced bilinguals, being more proficient in one of the two languages. Second, bilingual speakers code-switch in order to fill lexical gaps (Kaushanskaya and Crespo 2019: 708). This means that "a certain concept is not available in [one] language" (Zamili 2018: 59) and because of that, a speaker code-switches to their second language in order to convey the exact meaning of their message. An example therefore is the Spanish word *cariño* that "implies a combination of liking and affection" (Heredia and Altarriba 2001: 165). In the English language, no synonymous equivalent to *cariño* is available and so, Spanish-English bilinguals could switch to Spanish in an originally English conversation, in order to transmit the exact meaning of *cariño* (Heredia and Altarriba 2001: 165).

Within the category of stylistic reasons, there is a distinction between three causes of code-switching. The first one is code-switching due to amusement or entertainment (Zamili 2018: 61). According to Zamili (2018), a bilingual speaker switches the language "in order that he can amuse or entertain other group members" (Zamili 2018: 61). He also addresses this reason of code-switching as poetic motive, referring to the insertion of word puns, language play or jokes in the other language (Zamili 2018: 61; Auer 1995: 120). The second cause, belonging to the stylistic reasons, is the quotation of statements verbalized by another person (Zamili 2018: 61; Auer 1995: 120). In some cases, bilingual speakers quote an utterance from another person talking in the speaker's second language and include the quotation in its original language into the conversation (Simpson 2019: 129). This switch can occur for example because of authenticity related reasons or due to the change in perspective. Simpson (2019) illustrates this with an example of a switch from German to English: "Er meinte: 'We should leave now.'" (Simpson 2019: 129) meaning "He said: 'We should leave now." (Simpson 2019: 129). The last stylistic reason is related to the issue of switching the perspective. It refers to "a change in tone and emphasi[s of] important parts of a conversation" (Zamili 2018: 60). In this

case, speakers can switch to their other language in order to stress a specific statement or to differentiate between serious and funny elements of the conversation (Zamili 2018: 60).

The last classification comprises different social and identity related reasons for code-switching. Besides ones that are both social and identity related, there are also more identity related causes. The first factor leading to code-switching is the issue of the symbolic value of a language (Du Bois 2009: 2). "[T]he choice of one linguistic variety is symbolic for a multilingual speech community, as it designates the way in which one language is valued in relation to others" (Du Bois 2009: 2). According to Myers-Scotton (2006), the language itself does not carry the overall social message but includes interpretations that are linked to the language choice. Based on that, matters such as "ethnic identity, power and prestige, solidarity, distance and social relationships" (Du Bois 2009: 2) occur as a result of language ideological assumptions. The issue of "distance and social relationships" (Du Bois 2009) can also be discovered in the next reason for code-switching. Speakers can switch their languages in order to achieve linguistic convergence or in contrast to that, linguistic divergence (Simpson 2019: 133f.). The aim of linguistic convergence is to "establish resemblances between interlocutors" (Yusuf and Fata 2020: 209) by adapting the language used by the communication partner or maintaining the interlocutor's preferred language (Simpson 2019: 133). This strengthens the social relationship between the interlocutors and symbolizes group membership and is therefore related to the concept of the in-group membership (Du Bois 2009: 2). On the other hand, there is linguistic divergence. In this case, "speakers use the possibility of making code choices to negotiate interpersonal relationships" (Myers-Scotton 1993a: 478) by refusing to switch to the interlocutors' preferred language. This refusal emphasizes the social distance between the speakers and can signal the difference between in-group and out-group membership (Du Bois 2009: 2; Simpson 2019: 134). Another social and identity related reason for code-switching is the one of "expressive motive" (Zamili 2018: 59). This cause is based on the speaker's aim to "use[s] more than one language to stress his/her self-identity or feelings to others in a conversation" (Zamili 2018: 59). The last reason is a purely identity related cause of code-switching and involves code-switching due to the laziness of the bilingual speaker towards remaining true to one language (Du Bois 2009: 2).

Although these reasons seem to promote conscious or intentional code-switching among bilingual speakers, there are also numerous instances of unconscious or unintentional code-switching. The latter is not noticed by the speakers themselves (Amorim 2012: 167). This issue will also be addressed in the analysis of code-switching behaviour among the bilingual adolescents.

2.3 Types of Code-Switching

Different authors who are addressing code-switching, suggest distinct types of code-switching. Auer (1995), for example, applies both a sociolinguistic and a grammatical perception to distinguish categories of code-switching (Wenny J 2018: 164) by "identif[ying] four patterns of code-switching" (Winford 2003: 103). According to Auer's (1995) sociolinguistic perception, there are discourse-related code-switching/conversational code-switching due to "a shift in topic, role relationship, or activity type" (Winford 2003: 103) and preference-related code-switching based on the "negotiation of a language of interaction" (Winford 2003: 103). In the perspective of a grammatical background, he adds inter-sentential and intra-sentential code-switching (Auer 1995: 125). After comparing different works on the classification of code-switching, this thesis will follow the grammatical distinction of types of code-switching since this frame will be most appropriate for the analysis. Therefore, the following will further explain intra-sentential and inter-sentential code-switching and add extra-sentential code-switching. The third type is also called tag-insertion.

2.3.1 Intra-sentential Code-Switching

Intra-sentential code-switching is "used for switches within sentences" (Murad 2013: 1160). In this case, "words or phrases from another language are inserted into the first language within one sentence or utterance" (Upa' 2014: 49). Depending on the author, intra-sentential code-switching is also referred to as code-mixing, "occur[ring] when speakers use two or more languages below clause level to appropriately convey his/her intents" (Cárdenas-Claros and Isharyanti 2009: 69). Although code-mixing can be regarded as an independent phenomenon, it is also closely related to code-switching. Moreover, Winford (2003) mentions, that intra-sentential code-switching, if the switch occurs within a clause, "more accurately [should be called] intra-clause code-switching" (Winford 2003: 105). Since this form of code-switching includes the insertion of single words from another language, intra-sentential code-switching allows for more than one switch in different positions within a clause (Simpson 2019: 123).

Simpson (2019) adds illustrative examples from different bilingual backgrounds. One is from an English/French conversation: "*Il a envoyé the book you gave him à sa mère*" (Simpson 2019: 122; emphasis added). The core of the sentence is in English, whereas at the beginning and the end of the sentence the speaker uses French. The overall English meaning of the sentence is "*He sent the book you gave him to his mother*" (Simpson 2019: 122; emphasis added). The English/Thai example follows the same structure. "*khaw khuan ja communicate all that nai phasaa thai*" (Simpson 2019: 122, emphasis added), meaning "*He should communicate all that in Thai?*" (Simpson 2019: 122, emphasis added). Since the thesis focuses

on German-American code-switching, a German-English example will round down this type of code-switching: *Ich weiß nicht, if we can do this together, weil wir kein Geld haben*. The English meaning of this example is *I don't know if we can do this together, because we do not have any money*.

2.3.2 Extra-sentential Code-Switching/Tag-insertion

The second type of code-switching, extra-sentential code-switching, is also known as tag-insertion, tag-switching or emblematic switching, depending on the literature (Yusuf and Fata 2020: 209; Simpson 2019: 121; Upa' 2014: 49). This type appears either at the beginning or the end of the sentence (Simpson 2019: 121) and "involves an exclamation, a tag, or a parenthetical remark in a language different from the rest of the sentence" (Yusuf and Fata 2020: 209). This type of code-switching can be applied easily since it shows up at the periphery of the sentences, and therefore does, if at all, only minimally influence the grammatical structure of the rest of the sentence (Simpson 2019: 121; Upa' 2014: 49; Yusuf and Fata 2020: 209). Typical English insertions are *you know*, *I mean*, and *right* (Yusuf and Fata 2020: 209).

Simpson (2019) displays illustrative examples for extra-sentential code-switching from English/French and English/Japanese language background: "*I mean, c'est un idiot, ce mec-là!*" (Simpson 2019: 121; emphasis added), which means "*I mean, he's an idiot, that guy!*" (Simpson 2019: 121; emphasis added). This example shows the insertion of the English tag *I mean* into an originally French conversation. The second example is "*I'm going to take the car now, daijoobu daroo?*" (Simpson 2019: 121; emphasis added). In the preceding sentence, the Japanese tag *daijoobu daroo*, representing the English *ok* was inserted at the end of the English sentence (Simpson 2019: 121; emphasis added). A further example from a German-English background is *Das kriegen wir schon hin, you know?* (= *We will manage this, you know?*). In this case, the main sentence is in German, whereas the insertion originates from the English language.

2.3.3 Inter-sentential Code-Switching

The third form of code-switching is inter-sentential code-switching. Inter-sentential code-switching "occurs at a clause or sentence boundary, where each clause or sentence is [] in a different language" (Upa' 2014: 49). Some authors, like Upa' (2014), classify clause boundaries as well as sentence boundaries under the category of inter-sentential code-switching. Others clearly distinguish between these two subtypes, like Simpson (2019). Therefore, Simpson (2019) individually addresses sentence-boundary code-switching and

clause-boundary code-switching (Simpson 2019: 120f). According to Simpson (2019), sentence-boundary code-switching is "[t]he most basic and linguistically least complicated mode of switching" (Simpson 2019: 120), since the individual sentences, each uttered in one of the two languages, do not influence each other on a grammatical level. The more complex type of code-switching is clause-boundary switching, especially when "typologically different languages are mixed" (Simpson 2019: 121). In contrast to that, there are authors (Murad 2013; Yusuf and Fata 2020) who use the term inter-sentential code-switching only "for switches between sentences" (Murad 2013: 1160).

An example of inter-sentential code-switching between sentences from French-English language background is presented by Simpson (2019). "*He's only just divorced. Alors, il m'a dit qu'il va te visiter demain*" (Simpson 2019: 120; emphasis added). In this case, the bilingual French-English speaker switches between English and French. His first utterance was in English, whereas the second sentence was in French, meaning "*So, he said to me he's going to visit you tomorrow*" (Simpson 2019: 120; emphasis added). Simpson (2019) also adds a German-English example for inter-sentential code-switching between clauses: "Johann hat mir gesagt, that you were going to leave" (Simpson 2019: 122; emphasis added). The first clause meaning *Johann told me* was uttered in German, whereas the second clause was formulated in English by the bilingual speaker.

2.4 WhatsApp

WhatsApp is an instant messaging (IM) app providing "fast, simple, secure messaging and calling for free[], available on phones all over the world" (WhatsApp LLC). The name WhatsApp "is a pun on the phrase What's Up" (WhatsApp LLC) and therefore can be seen as a first indication suggesting a communicative function. WhatsApp was published in 2009 by Jan Koum and Brian Acton and was meant to serve as an option for instant messaging besides SMS (WhatsApp LLC). In 2014, Facebook purchased the app for 19 billion dollars (Iqbal 2021).

Today (numbers from February 2019), WhatsApp is accessible in 60 languages spread over 180 different countries and used by more than 200 billion people (Iqbal 2021). Its biggest markets are India, Brazil and the US. On one day, more than 100 billion messages are exchanged between interlocutors (Iqbal 2021). According to numbers collected by *We Are Social*, WhatsApp has the majority of monthly active users in comparison to other messenger apps in 2020 (Iqbal 2021).

Besides the exchange of simple text messages, WhatsApp provides other features as well. Communication partners gain the possibility to share photos, videos, voice messages and

documents with each other or in group chats including several addressees (WhatsApp LLC). WhatsApp also allows free voice and video calls and promises to preserve all messages with an end-to-end encryption, that “only [the sender] and the [addressee one is] communicating with can read or listen to them, and nobody in between, not even WhatsApp” (WhatsApp LLC). Similar to Instagram and Snapchat, WhatsApp initiated the function of story sharing, known as status, including “text[s], photos, videos, and GIFs that disappear after 24 hours” (Iqbal 2021). In March 2019, WhatsApp status and Facebook stories both stood out due to their 500 million daily active users, whereas Snapchat only listed 190 million daily active users (Richter 2020). All the features WhatsApp provides, are not only available on phones, “[w]ith WhatsApp on the web and desktop, [one] can seamlessly sync all of [their] chats to [their] computer” (WhatsApp LLC).

Germany is able to record a high proportion of active WhatsApp users. According to Poleshova (2019a), 97% of the surveyed participants, aged between 18 and 29 years, used WhatsApp in 2019. The age range from 30 to 49 years of age contributed 93% of active users, whereas 79% between 50 and 69 years of age actively use WhatsApp (Poleshova 2019a). The survey did not include data from the underage population. But Statista published results from an online survey on the usage of social media apps among children between 10 and 19 years of age. From these numbers can be concluded that WhatsApp is the most used social media app among underage Germans (Poleshova 2019b).

With regard to linguistics, WhatsApp is still an underrated source of naturally occurring written and spoken data by different age groups. When the linguistic investigations retrieving data from WhatsApp started, the focus was often on the app’s influence on the learning process of students (Al-Khawaldeh 2016: 159). During the last years, the spectrum of linguistic analyses based on data out of WhatsApp chats noticeably expanded. This includes for example studies on “multimodality […], politeness […], users’ profile statuses […], the use of typographical variation […], the use of laughter as a resource to manage conversations […], its positive effects to increase phatic talk […] and the presence of conflict in WhatsApp interactions” (Fernández-Amaya 2019: 1068).

3. Description of the Research Questions

As the title already indicates, the thesis’ focus is on code-switching among bilingual German-American adolescents. Therefore, the results were conducted based on five research questions. The first research question examines background information on the language use of the adolescents, including the process and age of the acquisition of the English language, their personal dominant language and language skills in each of the two languages and the

language(s) the adolescents mostly speak with their families and friends. The second research question deals with distinctions the bilingual German-American adolescents make when switching languages. Here, the centre of the investigation is on the variance in spoken and written utterances and in the interlocutors. The types of code-switching, the bilingual adolescents deploy, is part of the third research question. This section of the survey is narrowed down to the written WhatsApp messages of the adolescents. Moreover, it refers to conversations that are overall in English but include German elements of code-switching. The fourth research question is directly linked to the precedent question. It enquires the adolescents' reactions and emotions to being confronted with their WhatsApp chat messages again. The closing research question deals with the reasons the German-American adolescents name in order to verify their code-switching to German in an overall English conversation and if these switches happen consciously or unconsciously.

4. Data and Methodology

The data for the study on code-switching among bilingual German-American adolescents were conducted from 20 simultaneous bilingual German-American participants. All of them are between 15 and 24 years of age are living in the surrounding area of the Military Training Area Grafenwoehr, Germany. All participants were born and raised in Germany and also attended German school education. The data come from nine male and eleven female participants, so the distribution among gender is almost equal. The conduction of the study's data was carried out during February and March 2021 and was split into three sections.

The first part was realized in the form of a questionnaire including overall 18 questions. The initial four questions focus on the age and gender of the participant and the mother tongues of their parents, to guarantee that the interviewees fulfil the required prerequisites. The next six questions centre on the age and place the adolescents acquired the English language, if German is spoken since the beginning of their memory, and which languages they speak with their family members and friends in order to gain a deeper impression of their daily language usage. To receive a first idea of the code-switching behaviour of the adolescents, the following three questions focus all on the same issue. First, the switching of codes in spoken contexts will be addressed. Second, the participants were asked, if they mix English and German, and if so, consciously or unconsciously. And third, if they differentiate between interlocutors with regard to code-switching. Questions 10 and 11 ask the adolescents to compare their own English and German language skills, by determining their dominant language and rating them on a scale from 1 to 6 (1 = unsatisfying language skills, 6 = excellent language skills). The next question examines the usage of messengers among the participants, asking which messenger they use most for communicating to discover if they prefer a specific messenger.

The last two questions again focus on code-switching, but in the context of written text messages and if the switching happens consciously or unconsciously. The questionnaire was completed by all of the 20 participants. The questionnaires were distributed to the participants via email because of the current situation of the COVID-19 pandemic. After receiving the completed questionnaires, they were evaluated, and their numbers were, when appropriate, transformed into charts showing the results of the quantitative analysis.

The second section analyses the types of code-switching the bilingual German-American adolescents use in their written WhatsApp chat messages. Therefore, the participants contributed screenshots of their private WhatsApp conversations to the data collection. The conditions for the extracts were, that the messages are in written form and that the general conversation takes place in English, including code-switching elements from the German language. 19 out of the 20 participants provided overall 70 appropriate screenshots. The screenshots of the adolescents' private WhatsApp chat messages were also collected via email. On one hand, the messages were qualitatively analysed based on the above-presented types of code-switching and on the other hand, these findings were arranged quantitatively in order to gain possible trends of types of code-switching used by bilingual adolescents.

The last part of the analysis was carried out in form of personal interviews, following the distancing rules of the COVID-19 pandemic mandatory by the time. Therefore, six of the 20 participants were surveyed. At the beginning of the conversation, each participant was confronted with the screenshots of their beforehand analysed WhatsApp messages. While the participants were reading through their provided chats again, their first reactions and emotions to the messages were observed. These qualitative findings were again converted to quantitative results to create comparable numbers. After that, each instance of code-switching in their WhatsApp chats was discussed individually and the participants were asked, why they made use of code-switching in this context. The results on the reasons were again first recorded as qualitative data and for discovering a possible trend, again adjusted to quantitative numbers.

5. Code-Switching among bilingual German-American Adolescents

5.1 Background Information on the Language Use of the bilingual Adolescents

Since the initial research question examines background information on the language use of the adolescents, necessary as a basis for code-switching, these results will be presented first.

The first part of this investigation comprises of related subjects and therefore, the questions referring to the age the participants started to learn the English language with whom and where and if German was spoken at their homes since the beginning of their memories, can be evaluated all in one.

Figure 1 illustrates the age spans, the participants started to acquire the English language.

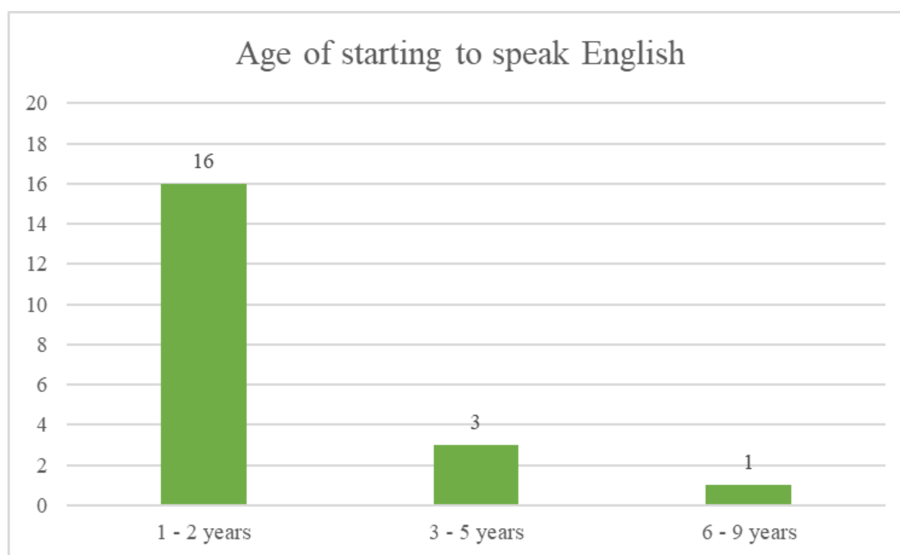

Figure 1 *Age of starting to speak English*

The clear majority (16 out of 20) of the bilingual adolescents, began to learn the English language between the age of 1-2 years. Three of the participants started to acquire English between the age of 3-5 years and one of the people questioned indicated that she learned English later, only between 6-9 years of age. Therefore, the same 16 of the overall 20 adolescents who studied English already in the earliest years of life, stated that German was spoken at their home since the beginning of their memories.

The same 18 adolescents who ticked the option of having an American native speaker as a father, were taught the English language at home by exactly those (see Figure 2). For the other two, it was the other way around, they had their American-speaking mothers as teachers of English at home.

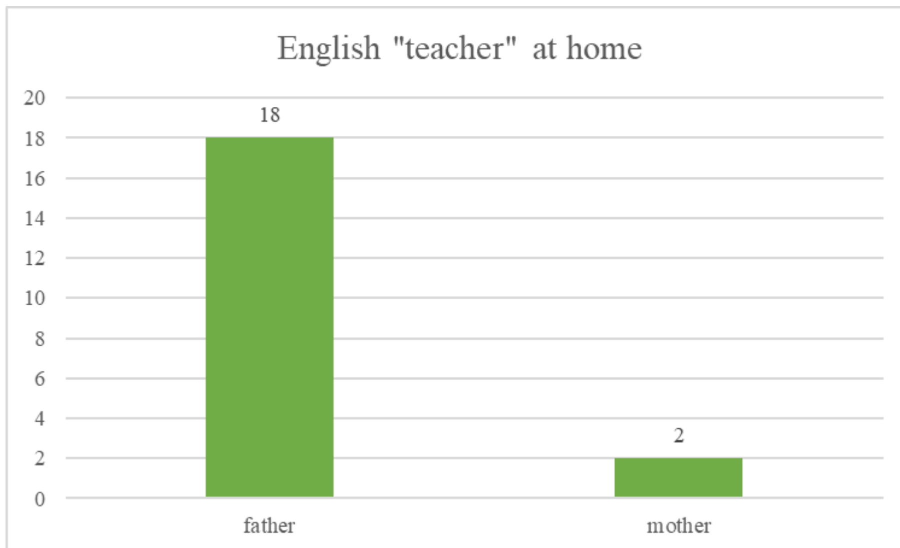

Figure 2 *English 'teacher' at home*

The next three questions are again combined in this section. These focus on the language the participants mostly speak at home and with their friends today and if there are specific family members, they only address in one of the two languages.

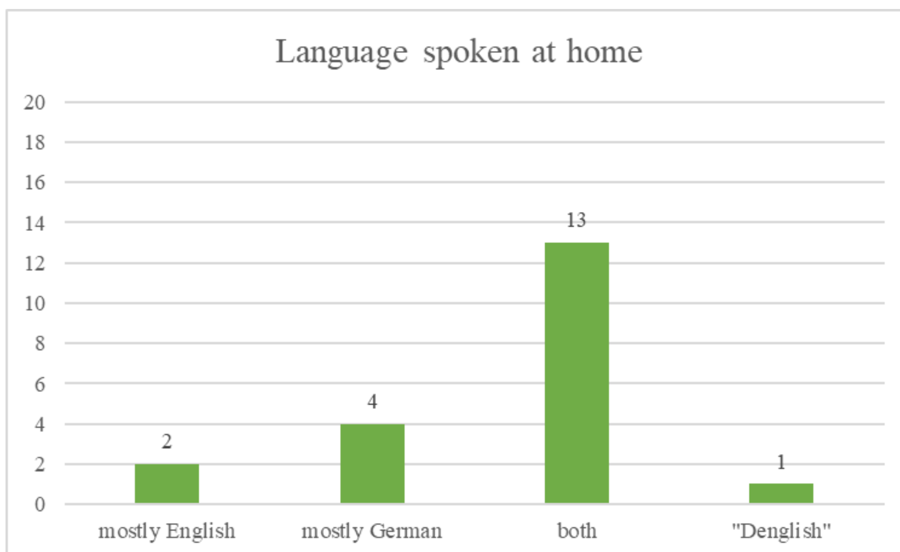

Figure 3 *Language spoken at home*

The figure (Figure 3) above shows the languages the bilingual adolescents mostly speak at their homes. Two of the participants indicated that they mostly speak English at home, and four of them mostly communicate in German within their families in their own households. The majority of the people questioned (13 out of 20) speaks both languages at home. One of the bilingual adolescents also added, that they mostly speak a mixture of both German and English, often resulting in 'Denglish'. These numbers show that more than half of the bilingual adolescents speak both of their native languages at their homes.

Regarding the distinctions between which language the participants use to address their individual family members, the following results can be presented. 18 of the 20 adolescents implied to differentiate between their relatives, depending on the first language of the individual family member. Therefore, the majority of the bilingual adolescents stated to differentiate more between their parents and their individual families than between their siblings, since their siblings also grew up bilingual.

In comparison to that, again two of the adolescents mostly speak English with their friends. Eight of the overall 20 people questioned indicated that they mostly communicate in German with their friends (see Figure 4). Exactly half of the participants stated that they use both English and German in conversations with their friends.

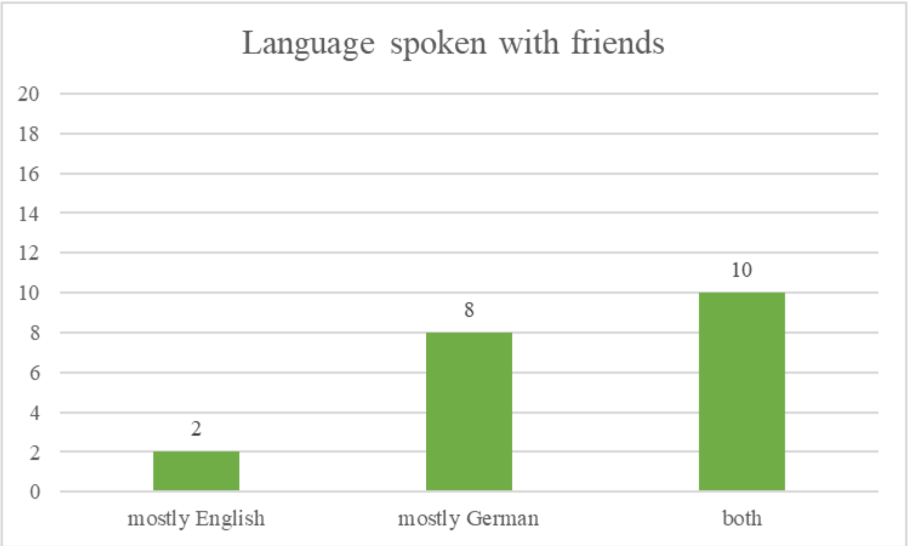

Figure 4 *Language spoken with friends*

The last part of this section asked the bilingual adolescents to determine their dominant language and to rate their personal language skills in each of the two languages.

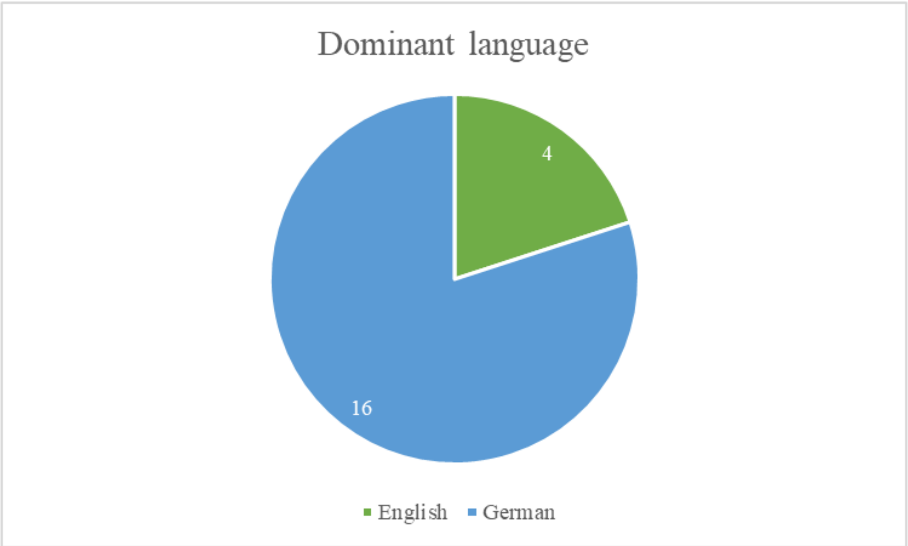

Figure 5 *Dominant language*

16 out of the 20 participants decided on German being their dominant language, whereas four stated that English is their personal dominant language (see Figure 5). So, the clear majority of the bilingual German-American adolescents sets German as their dominant language.

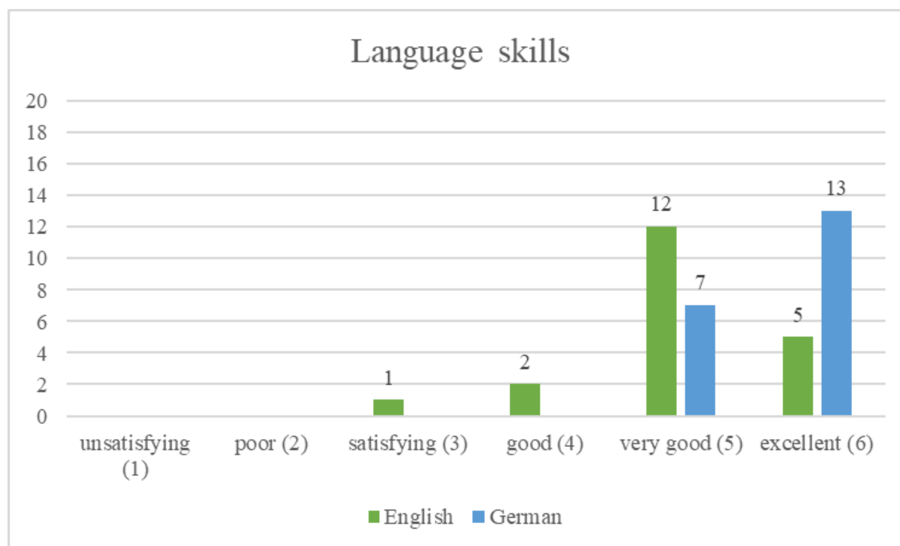

Figure 6 *Language skills*

With regard to the participants' personal perception of their own language skills, the adolescents graded their skills of both the English and German language as illustrated in Figure 6. 13 of the overall 20 questioned people categorized their proficiency of the German language under excellent language skills (6), whereas the other 7 indicated that they are able to perform very good (5) in German. The distribution among the English language skills is broader dispersed. Five of the participants stated that they have excellent language proficiency in English. 12 declared that they possess very good skills regarding the English language. Two bilingual adolescents decided on the option of good English language skills and one set for satisfying proficiency in the English language. Therefore, the bilingual German-American adolescents seem to overall consider themselves more proficient in the German language compared to the English language. This evaluation could arise due to the participants' German environment and their German school education. Due to that, they were most of the time surrounded by speakers of the German language and although the adolescents were raised bilingual at their homes, the English language is, proportionally seen to the German, the fewer applied language in the adolescents' daily life.

All in all, German seems not only to be the dominant language, but also the language spoken with a higher proficiency among the bilingual adolescents. This is regardless of the majority who began to acquire both the German and the English language at an early age. As well as the German school education and the greater German-speaking environment might have an impact on these results.

5.2 Distinctions in Code-Switching by German-American Adolescents

The second part of the investigation deals with distinctions the bilingual German-American adolescents make when switching languages. First, the observance focuses on the question, if the participants code-switch in spoken and written contexts and the deduction if they differentiate in their code-switching behaviour between written and spoken utterances. Second, it will be presented, if the adolescents only code-switch with specific interlocutors and if so, who these communication partners commonly are.

19 out of the overall 20 people questioned, declared that they code-switch in speaking (Figure 7). Upon request, the one participant, who does consequently not code-switch, uttered that since she can remember, she was trained by her parents to not mix German and English, because her parents regarded the switching as 'weak' language use. Therefore, she still pays attention to not mixing the languages today.

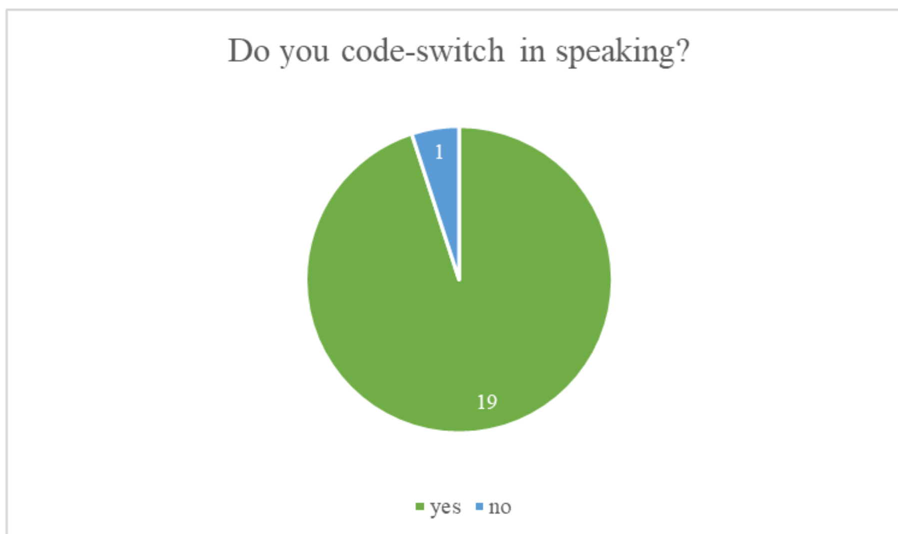

***Figure** 7 Do you code-switch in speaking?*

In comparison to that, 18 out of the 20 participants stated to switch between German and English in their written text messages (Figure 8). Consequently, two adolescents are not code-switching in a written context. One of these two is exactly the one who also does not code-switch in speaking. Therefore, the corresponding reason affecting her language use can also be applied here. The second participant, who is not code-switching in writing, actually prefers monolingual language use and proposes that he does not switch languages in writing due to that. In speaking, he often inserts German words into an English conversation in case he cannot remember the English equivalent. So, in writing, he can take as much time as he wants to overthink his language use and remove switched language elements before sending it off. Therefore, 90% of the bilingual adolescents code-switch both in spoken and written contexts. 10% of the participants try to avoid language mixing in written utterances, whereas only one

interviewee consistently refuses to code-switch between English and German as well as in speaking and in writing.

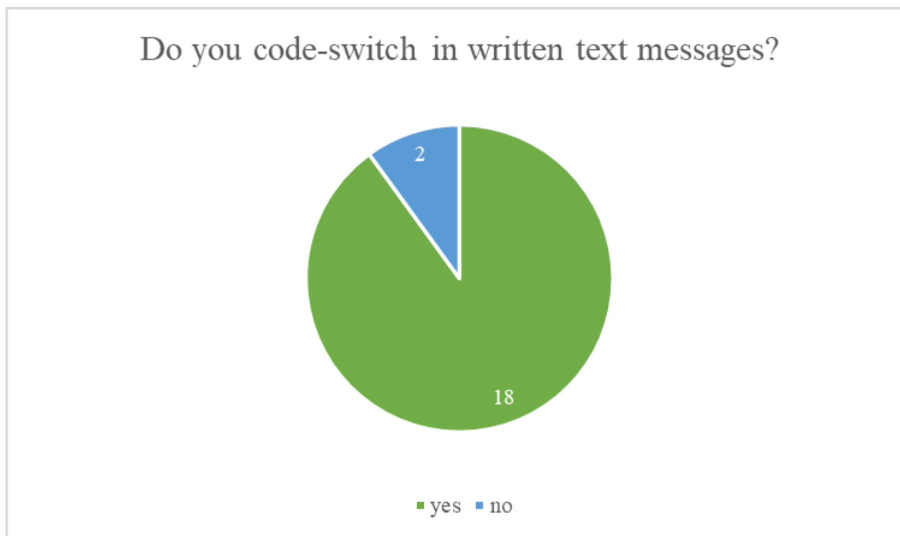

Figure 8 *Do you code-switch in written text messages?*

Since only 19 of the 20 adolescents do code-switch in speaking, the question on the dependence of switching between English and German on interlocutors only addresses these participants. All the 19 adolescents indicated that they consciously code-switch only with specific interlocutors, depending on their knowledge of the two languages.

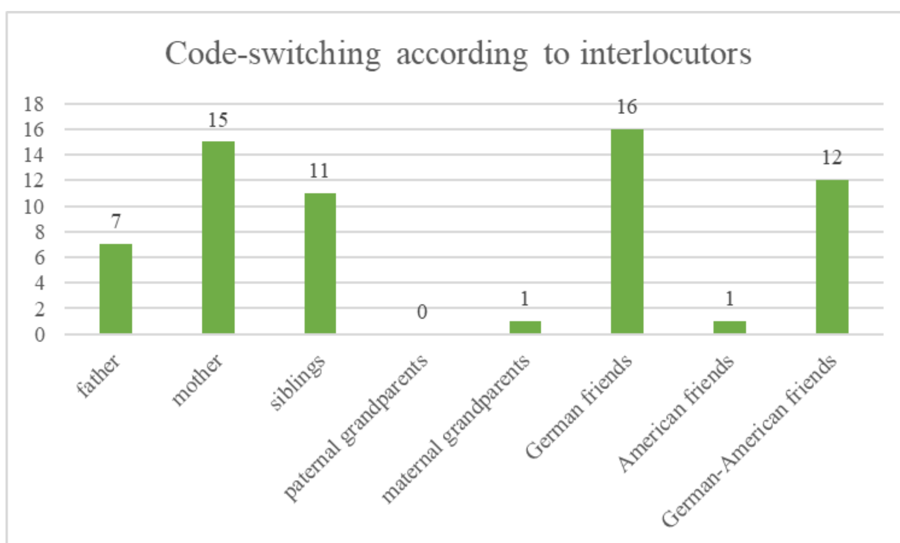

Figure 9 *Code-switching according to interlocutors*

In the questionnaire, the participants could choose between eight predetermined different options. These are father, mother, siblings, paternal grandparents, maternal grandparents, German friends, American friends, German-American friends (see Figure 9). Besides that, the participants also had the possibility to add other communication partners. Since no one of the adolescents inserted a new category of interlocutors, the analysis is based on the eight given

possible interlocutors. Seven of the bilingual adolescents code-switch with their fathers and 15 of the 19 switch between German and English when communicating with their mothers. More than one trigger could explain the comparably low number of fathers that are involved in their children's switching. First, 18 of all the participants have native American-English-speaking fathers and nearly half of these adolescents state that their fathers are not or only to a small extent able to speak German. Therefore, the participants' fathers would possibly not be able to fully understand their children's utterances including German switches.

Second, the proportion of German women having fairly good proficiency in the English language is comparably higher than the rate of American native speakers to be able to speak or understand German. This can be concluded from different data collections. Only 6.5% of the Americans attend German lessons, in many cases for a maximum of one year (Wagner). This results in merely rudimentary knowledge in the German language among a small part of the American population. In comparison to that, the majority of German adults indicate that they have either very good or fairly good English language skills (Pawlik 2020). This fact could correlate to the German education system, where pupils learn English from their early years on. More than half of the bilingual adolescents code-switches with their siblings, since they grew up under the same bilingual circumstances, whereas the rest of the participants prefers to only communicate in German with their siblings. With regard to the grandparents, no one of the adolescents mixes German and English with their parental grandparents and only one code-switches in utterances towards their maternal grandparents. These low numbers can be justified with the fact that most of the German senior citizens above the age of 60 do not or only to a poor extent master the English language and that the number of German-speaking Americans is generally low (Grieß 2016; Pawlik 2020). 16 out of the 19 participants code-switch between English and German when talking to their German-speaking friends, whereas only one reveals to include switches to German in conversations with their American-speaking friends. 12 adolescents code-switch with their simultaneous bilingual German-American friends. An explanation therefore could be that the adolescents' friends, whose first language is German, are at the same time sequential bilinguals due to the German education system. So, a high proportion of German teenagers is able to understand and speak English as well (Pawlik 2020). In contrast to that, the quota of native speakers of American English, who live and receive education on American territory, being able to speak German is smaller (Auswärtiges Amt 2020). Simultaneous bilingual German-American friends provide similar conditions regarding their language use like the participants' siblings and therefore, these numbers are almost equal. This leads to the assumption that the bilingual German-American adolescents prefer switching codes when communicating with other bilinguals, no matter if they are simultaneous or sequential bilingual.

5.3 Types of Code-Switching in written WhatsApp Chat Messages

This section demonstrates the results of the study on the different types of code-switching, the bilingual adolescents make use of in their written WhatsApp chat messages. In detail, it only investigates the switches to German in overall English conversations.

But before that, the distribution of the messengers preferably used by the adolescents will be presented.

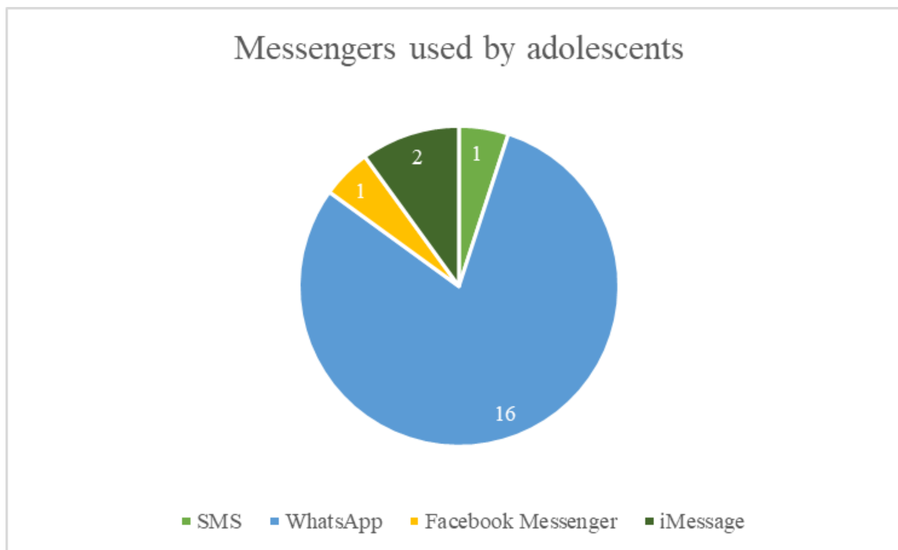

Figure 10 *Messengers used by adolescents*

With regard to this issue, the questionnaire predetermined two options by distinguishing between SMS and WhatsApp. If neither SMS nor WhatsApp was preferred by the adolescents questioned, they could also insert their favoured messenger. As Figure 10 indicates, the clear majority (16 out of 20) of the participants preferably uses WhatsApp for communication purposes. Two of the bilingual adolescents decided in favour of iMessage, an instant messaging app provided by Apple. Only one participant uses each SMS and Facebook Messenger. This correlates with the findings by Poleshova (2019b), that WhatsApp is the most used social media app among the German population.

The qualitative analysis of the different types of code-switching produced the following results. No instances of extra-sentential code-switching could be found in the provided chat messages. In contrast to that, both intra-sentential and inter-sentential code-switching was discovered. The table below lists all these occurrences and each example of code-switching is highlighted in italics (Table 1).

intra-sentential code-switching	inter-sentential code-switching
Sorry for the drunk *Belästigung*.	*Hab jetzt Zeit*, if you wanna talk about it.
I relate this so *hart*.	I love you, cutie pie. *Lass mal wieder was machen*.
Like who has *das erfunden*?	*Erklär mal schnell* what does a carpenter?
I guess I'm *schuldig*.	*Geile scheiße*, I'm proud.
Looking for a cute girl that has a beer *Fahne*.	All good. *Bei Ihnen?*
I'm sending 99 *Prozent* back.	All good, *nur paar Blähungen.*
Going to the gym *Nachmittag* today.	*Und ich hab gesagt:* „you are the reason why."
No, he's *nicht* in prison.	I hope my bed knows how much I love it. *Ich liebe schlafen.*
He said I keep my *Ausbildung*.	No, why that? *Hab dich immer noch nicht gesehen*.
Mama, do you know if he ordered it?	*Ich hoffe bald*, I don't ever wanna hurt you.
I'm with my *Klassenkameraden*.	*Zu viele Jungs fischen nach Goldfischen*. Not looking for a cute girl.
Zwecks homework I could use your help.	You'll get the chance, *ich versprechs dir*.
This flow is *anders* nice.	*Ich will dich*. I kind of knew that before.
Drove one hour through *die Stadt*.	Lucky you. *Bin auch im Fitnessstudio*.
You opened a whole *Fass* of feelings.	And off again. *Salat ist im Kühlschrank*. Love you.
This is just a sample from the *Mädchen* in my friend group.	We will see. *Liege im Bett*. Please do not yell.
You're as *hübsch* as them.	Ouh damn, *was ist denn los?*
I will be there *sicher*.	That means a lot, *ich danke dir.*
They are popular *bei uns*.	*Bin kurz vorm Bahnhof*, I guess I'm there in 2 min.
Thanks for the *Angebot*.	She is too much bad influence, *wenn du weißt, was ich meine.*
Again a *Samstag* group?	Oh yes, he did. *Eine wahre Legende.*
Sorry, *das war* a mistake.	Could eat pizza, *oder vielleicht holen wir Döner?*
Wie läuft's in the states?	I'm so happy, *dass wir telefonieren konnten.*
We come *dich besuchen* with Mackenzie.	You're my favorite couple, *ihr seid so süß.*
I would *sterben* because of happiness.	*Na klar kann ich das machen*, no problem.
Ok, *langsam* it's cringe.	You know it. *Also wann morgen?*
Ich *verstehe* because of memes but,..	I like huge round eyes. *Also, alles gut*.
We are just going to the *Weiher*.	*Aber gut, dass es dir gefällt.* What do you like more, America or Germany?
Can you bring a blanket, like a *Picknickdecke*?	*Das freut mich.* Germany because it is..
A normal *Döner* with *Käse* please.	*Ich danke dir.* Okay, I get it.
Do you want *einen Döner*?	There is a girl, *die wirklich ein Model ist.*
We're at the *Fußballspiel*.	*Vielen Dank.* I love you.
We learned about *Betriebs- and Verkehrssicherheit*.	Ella on the commentary. *Jetzt bin ich gefickt*.
Don't forget to put the *Rolläden* down.	*Die meisten sind ja eigentlich so.* Yes, I can imagine.
	That's so lost, *wie verrückt ist das denn?*
	What the heck just happened? *Der Theo hat mir einfach gratuliert.*

Table 1 *Occurrences of intra-sentential and inter-sentential code-switching*

Therefore, it appears to be uncommon to add German insertions/tags into an English conversation, but widespread among the bilingual participants to switch languages either within or between sentences. The majority of examples for intra-sentential code-switching includes single word switches to the German language. More than half of all (19 out of 34) intra-sentential code-switching forms are from the word class of nouns. With regard to inter-sentential code-switching, the bilingual adolescents' messages provide both clause-boundary and sentence-boundary switching.

Within the context of this analysis, another linguistic phenomenon could be observed. In overall German parts of a conversation, it seems typical for the adolescents to insert verbs that were borrowed from the English language and morphologically integrated into German. But since this is an issue that has to be examined independently, it will not be further elaborated in this thesis.

The quantitative outcomes can be contemplated with a quantitative focus as well, as the following figure (Figure 11) illustrates.

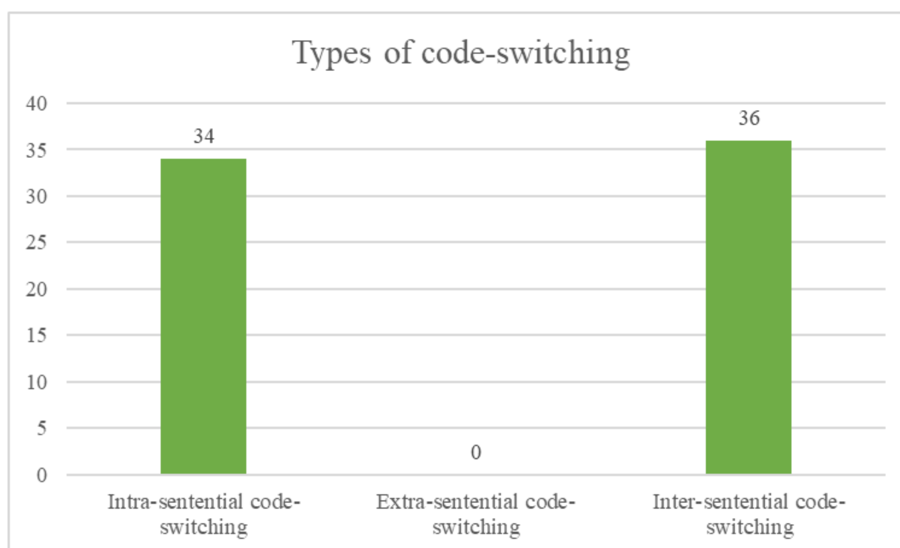

Figure 11 *Types of code-switching*

As already mentioned above, no instances of extra-sentential code-switching were observed. Out of the overall 70 instances of code-switching that were found in the WhatsApp chat messages, provided by the bilingual German-American adolescents, 34 could be classified as intra-sentential code-switching and 36 were categorized into inter-sentential code-switching. For a deeper insight into the results, the occurrences of inter-sentential code-switching were further divided into the subtypes of clause-boundary and sentence-boundary code-switching (Figure 12).

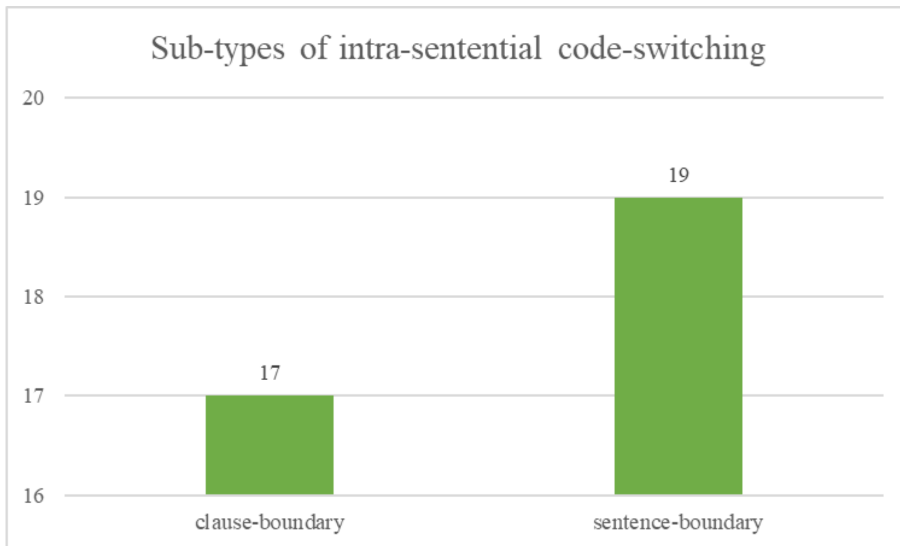

Figure 12 *Sub-types of intra-sentential code-switching*

Consequently, the distribution among clause-boundary and sentence-boundary intra-sentential code-switching is almost equal, since 17 instances can be classified as clause-boundary switches to German and 19 are switches between sentence-boundaries. All in all, the bilingual German-American adolescents in equal parts code-switch within and between sentences.

5.4 Reactions and Emotions towards the written Chat Messages

The investigation on the reactions and emotions of the bilingual German-American adolescents towards their written chat messages bases on the participants' confrontation with their beforehand provided WhatsApp chat messages including instances of code-switching.

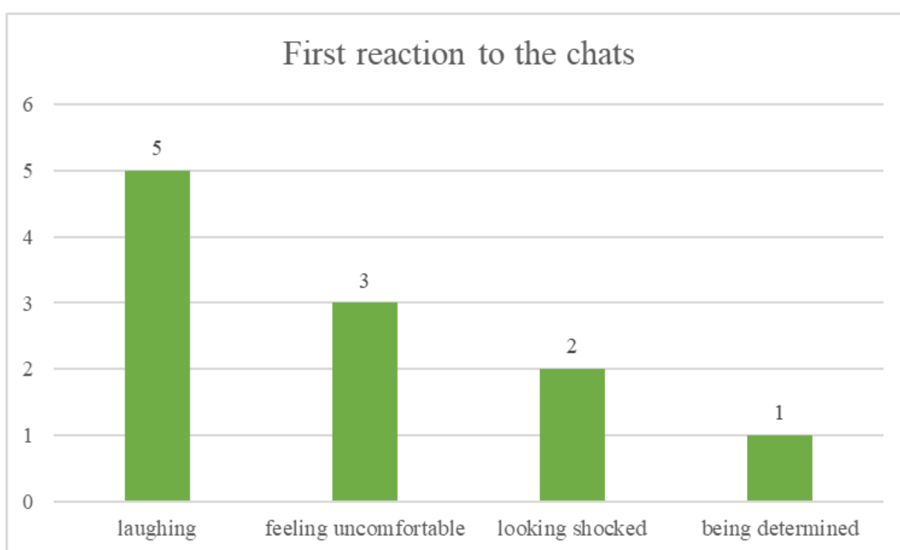

Figure 13 *First reaction to the chats*

As illustrated in Figure 13, five adolescents initially reacted with laughing, when they first read through their chat messages again. It was clearly visible that three of them at the same time felt uncomfortable being confronted with their messages. One of them also stated that it is 'kind of awkward' for her to know that a third person besides her and the addressee has read the messages. Another participant uttered that he felt uncomfortable because of the contents addressed in his chat messages. The other two adolescents who were laughing simultaneously appeared shocked. Both of them stressed that they have never questioned their personal language use before. They could not believe that the messages in front of them were written by themselves. The one participant who was being determined did not laugh when first seeing her chats again. She was the only one who fully supported her utterances and acted out self-confidence. The findings of this part of the study lead to different assumptions. On one hand, since the bilingual German-American adolescents' first reactions are mixed, it can be concluded that it is commonly unpleasant to be confronted with written text messages from one's own past. But due to the fact that nearly all participants concurrently first reacted with laughing and none of them refused a further investigation of their messages, the whole process of confrontation seems to be unpleasant only at its beginning. A possible reason therefore could be that unfamiliar situations and especially confrontations often cause discomfort at the outset. From this point on, realizing that the circumstances are comfortable for oneself, the tension decreases. On the other hand, it can be deduced that a lot of adolescents do not overthink their language use, since one-third of the adolescents admit to never have been overthinking their language use before. So, it was interesting for the participants to gain a deeper insight into their own language usage.

5.5 Reasons for Code-Switching among the bilingual Adolescents

The last chapter providing results of the study on code-switching among bilingual German-American adolescents deals with the reasons the adolescents name in order to verify their code-switching to German in an overall English conversation. Moreover, it analyses, if their switching of codes in both spoken and written contexts happens consciously or unconsciously.

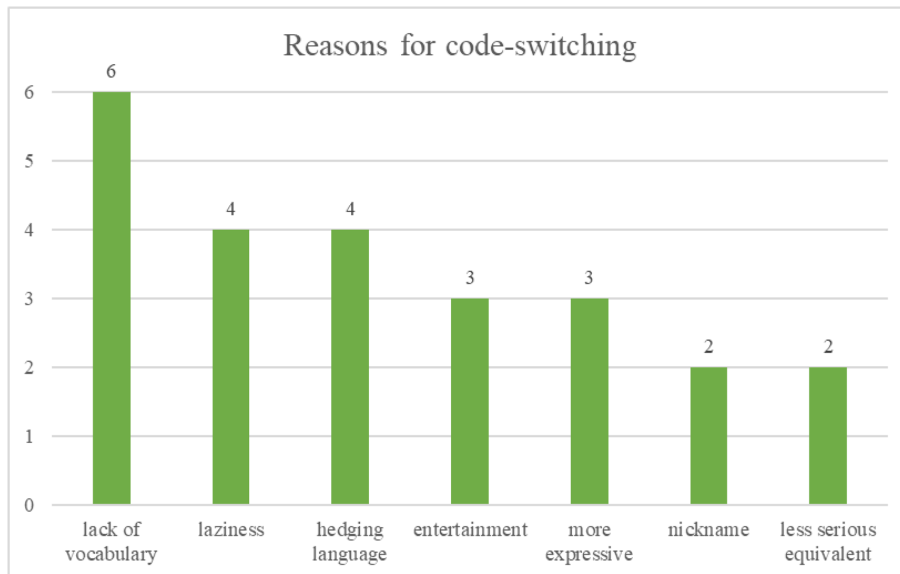

Figure 14 *Reasons for code-switching*

Figure 14 shows the findings on the reasons for conscious code-switching uttered by the six bilingual adolescents participating in the personal interviews. All of those questioned indicated that they code-switch due to a lack of vocabulary. In the relevant cases, they replaced an English term they did not remember with a German equivalent. Four out of the six participants stated that they switch to German in an overall English conversation due to laziness. This is based on the fact that, when their interlocutor is able to understand both English and German, they do not have to waste effort on translating an issue and can insert the German equivalent that is in their mind at that very moment. The same proportion makes use of code-switching with regard to hedging language. When an utterance seems unpleasant to talk about, they switch from English to German, for example when talking about feelings or when making confessions. Half of the adolescents questioned said that they make use of German insertions since they want to entertain their communication partner. None of these participants could precisely explain why they code-switch for entertainment reasons. Three interviewees claimed that they code-switch to German in an overall English communication situation since they can better express themselves in German. All of the three justified this with the fact that German is their dominant language. Therefore, they prefer expressing their thoughts in their predominant language. According to two participants, one possible reason for switching languages is the usage of nicknames. When the adolescents consistently address their

communication partner by a German nickname, especially in speaking, they will also make use of this name in written chat messages. As a consequence, this can lead to the insertion of a German nickname into an English conversation. The matter that German equivalents sound less serious in the instances, was the last reason the adolescents verified their code-switching with.

Two occurrences of code-switching were verified by the adolescents with the matter that German equivalents sounded less serious in these instances.

The reasons named by the German-American adolescents can be summarized as follows. The lack of vocabulary is a frequently occurring cause of code-switching and can, as already indicated in the chapter on reasons for switching codes, be regarded as a lexical cause. Another lexical source of code-switching is the insertion of a German utterance in cases where the English equivalent would sound exceedingly serious. The switching of languages in order to entertain the interlocutor is the only stylistic reason resulting from the interviews. Most of the causes verifying code-switching, stated by the bilingual German-American adolescents, are social and identity related reasons. These include the insertion of German nicknames and the switching to German in order to not sounding bold when addressing sensitive topics. The more identity related reasons are on one hand laziness leading to code-switching and on the other hand, the issue of better expressing oneself in the German language. This result suggests that there is a great number of individual reasons for code-switching.

Since the causes of code-switching presented in the interviews only comprise conscious instances of code-switching, two questions in the questionnaire focused on the consciousness among the bilingual speaker with regard to spoken and written code-switching.

Figure 15 *How do you code-switch in speaking?*

Out of the 19 adolescents who overall code-switch, seven participants indicated that they commonly code-switch consciously in speaking. So, they are aware of when and how they switch languages (Figure 15). In contrast to that, 12 adolescents are not aware of their code-switching instances. Therefore, they code-switch unconsciously in speaking.

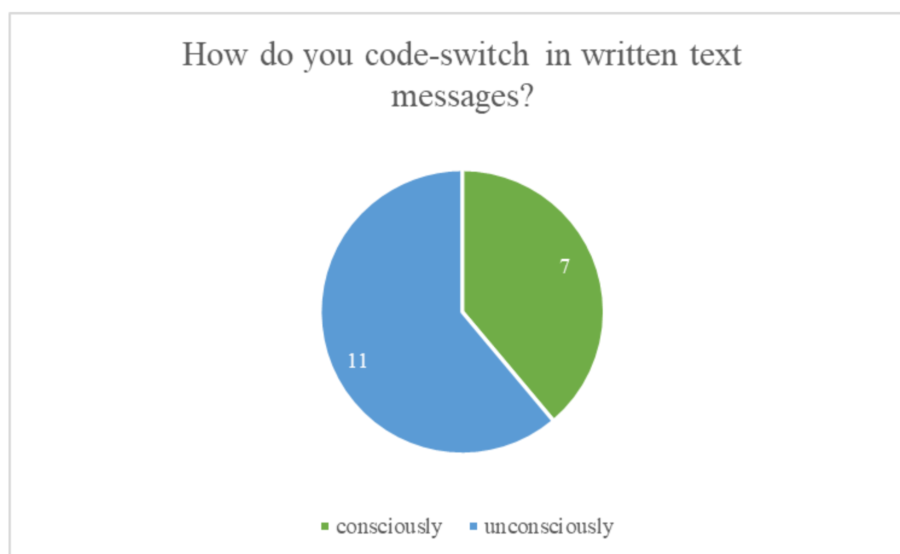

Figure 16 *How do you code-switch in written chat messages?*

In comparison to that, the distribution across the bilingual adolescents with regard to consciousness in written code-switching is similar to the results from switching languages in spoken contexts (Figure 16). The only difference is the overall number of participants who generally code-switches in written text messages. Therefore, 11 out of the 18 adolescents do unconsciously switch between languages in written text messages, whereas seven are conscious switchers of codes.

To summarize these results, clearly more instances of code-switching happen unconsciously. In contrast to the various conscious reasons for code-switching named by the bilingual adolescents in the interviews, this might not correlate with the high percentage of unconscious code-switching at first sight. But it is important to mention here, that the interview was only carried out with 6 of the 18 adolescents who code-switch in their written text messages, so the overall result could be different. Moreover, the German-American adolescents could in all cases verify their code-switching with plausible reasons, but maybe when producing the corresponding utterance, the initial cause was different, since a lot of time passed between sending and analysing the messages.

6. Conclusion

To conclude, code-switching can be regarded as a widespread phenomenon among bilingual German-American adolescents, since almost all of the study's participants code-switch in both writing and speaking. The majority of the simultaneous bilingual adolescents received English language education from their American native speaking fathers at home and at the same time they acquired the German language with the help of their German mothers. Until today, most of the adolescents who grew up bilingual use both languages for communicating with their family members and additionally German to the same extent when speaking to their friends. Possibly due to their German school education and their mostly German-speaking environment, the adolescents classify German as their dominant language. This could also influence that the German language skills among the bilingual adolescents were rated higher in comparison to English. Moreover, the adolescents do hinge their code-switching on the interlocutors, especially with regard to the communication partner's first language. Therefore, the majority code-switches with their mothers, siblings, German and German-American friends. This bases on the interlocutors' comparably higher proficiency of both the English and German language. The least or no code-switching occurs in conversations with grandparents or American friends since they are statistically speaking, the less bilingual interlocutors. In the adolescents' WhatsApp chat messages, no instances of extra-sentential code-switching could be found, but the adolescents seem to make use of intra-sentential and inter-sentential code-switching to a similar extent. The distinction between sentence-boundary and clause-boundary code-switching is at an almost equal rate as well. When being confronted with their chat messages, which include forms of code-switching, the clear majority of the adolescents reacts with laughing but seems to feel uncomfortable or shocked at the same time. But there are also instances, where the adolescent responds with self-confidence and determination. Based on that, most of the bilingual adolescents have never questioned their personal language use before. In order to verify the instances of code-switching, the adolescents named lexical, stylistic and social and identity related reasons. Besides others, these causes are a lack of vocabulary, laziness, entertainment and the application of hedging language. It is also to mention that the majority of the bilingual German-American adolescents indicates to code-switch usually unconsciously in speaking and writing. Therefore, the results on reasons for code-switching should be analysed with caution.

All in all, the thesis provides first a clear structured overview on code-switching and second presents interesting findings with regard to code-switching among bilingual German-American adolescents. It also adopted a new approach to code-switching. This is the confrontation of the adolescents with their beforehand provided chat messages and thereby analysing their reactions and personal reasons for code-switching. Based on that, it would be

interesting to carry out another study on the confrontation part on a larger scale in order to receive a deeper insight into the topic and the processes behind it. Furthermore, the focus could also be expanded to both investigating written and spoken WhatsApp chat messages, in order to gain the possibility to compare code-switching in written messages and voice messages. For example, maybe more occurrences of extra-sentential switches to German or a different distribution between intra-sentential and inter-sentential code-switching can be observed in spoken messages.

In my opinion, the direct encounter of the German and the English language in the German city of Grafenwoehr offers a considerable amount of potential to further examine linguistic phenomena there. The occurrence of code-switching among bilingual German-American adolescents is only a small part of the tip of the iceberg.

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8. Appendix

Questionnaire on Code-Switching among bilingual German-American Adolescents

Part A – Questionnaire

Age: __________

Gender:	◯ female	◯ male	◯ diverse
Mother tongue mother:	◯ German	◯ English	◯ other: ___________________
Mother tongue father:	◯ German	◯ English	◯ other: ___________________

1. At what age did you start learning the English language?	◯ 1 - 2 years ◯ 3 - 5 years ◯ 6 - 9 years ◯ later: _____ years
2. Where and how did you learn English?	◯ at home with my father ◯ at home with my mother ◯ other: ________________
3. Has German been spoken at your home since the beginning?	◯ yes ◯ no
4. Which language do you speak at home?	◯ only English ◯ only German ◯ both languages
5. Are there specific family members with whom you speak more German or English? (more than one answer possible)	◯ no ◯ yes, more German with _______________ ◯ yes, more English with _______________
6. Which language(s) do you speak with your friends?	◯ mostly English ◯ mostly German ◯ English and German ◯ other: _____________________________
7. When you are talking to other German-American bilinguals, do you mix English and German? (e.g. that you insert German words into an English sentence?)	◯ yes ◯ no

8. Does this mixing happen consciously or unconsciously?	◯ consciously ◯ unconsciously
9. Do you mix English and German only with specific interlocutors? (more than one answer possible)	◯ no ◯ yes, I mix the languages with: ◯ mother ◯ father ◯ siblings ◯ grandparents (on father's side) ◯ grandparents (on mother's side) ◯ German friends ◯ American friends ◯ German-American friends ◯ other: ________________
10. Which of the two languages (English or German) is your dominant language?	◯ dominant: German ◯ dominant: English
11. Please rate your German and English language skills. (1 = poor language skills to 6 = excellent language skills)	German: 1 2 3 4 5 6 English: 1 2 3 4 5 6
12. Which messenger do you use the most for communicating online?	◯ SMS ◯ WhatsApp ◯ other: ___________________
13. Do you also mix English and German in your written text messages?	◯ yes ◯ no
14. Does this mixture happen consciously or unconsciously?	◯ consciously ◯ unconsciously