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The Acquisition of English as an Additional Language by Multilingual Heritage Speakers

Abstract

This contribution examines cross-linguistic influence in the acquisition of English as an additional language, focusing on multilingual heritage speakers. Moreover, we take up the notoriously troublesome issue of multilingual advantages. We insist on the importance of language dominance for cross-linguistic influence and the methodological differentiation between mutually exclusive groups of multilingual speakers.

1. Introduction

For a long time, the population of Germany has been hovering at around eighty million (Statistisches Bundesamt 2017). Most Germans can be expected to be aware of this figure. Of these eighty million, about fifteen million qualify as persons that have some kind of migration background. This figure is likely to be less well known. In Germany, the concept of migration background covers persons who do not have German citizenship or of whom at least one parent does not have German citizenship. This definition gives rise to various subgroups depending on immigration status, country of origin, and position in family lineage.

German is the official language of Germany, although it strictly speaking has no legal status as such. Germans without migration background speak German, sometimes in combination with one of the regionally recognized minority languages (Danish, Frisian, Sorbian, Romani). Germans with migration background can belong to a host of nationalities and ethnic groups, the most important of which include Turks, Kurds, Poles, Russians, Italians, and Serbo-Croats. They speak German in combination with their respective heritage language, typically in differing degrees of proficiency depending on whether they are first or second-generation speakers. They are unbalanced bilinguals.

In major German cities and urban areas, such as Hamburg, Berlin, Munich, Frankfurt, Dusseldorf, and Cologne, the share of citizens with a migration background is much higher than the country's average. Given the above figures, some leeway in the exact numbers and their calculation, we can assume that approximately twenty per cent of Germany's population bears migration status of one way or another. In comparison, the 2016 average in the city of Hamburg was

34 per cent (Statistisches Amt für Hamburg und Schleswig-Holstein 2016). There are impressive regional differences across the various neighborhoods of the city, ranging from less than 10 per cent in Vier- und Marschlande to more than 80 per cent in Billbrook. Moreover, we find a clear age-related stratification, with the group of under 18-year-olds contributing about 50 per cent of youths with a migration background, again subject to strong regional variation across the city. Major source countries of migration in Hamburg are Turkey, Poland, Afghanistan, Russia, Iran, and Kazakhstan.

If the above figures reflect the current reality in German urban areas, it is obvious that especially for the education system international migration represents a major challenge, as students with and without migration background and thus very different personal trajectories and experiences grow into peers in the same classroom, jointly undertaking their educational careers. Monolingual and bilingual students live and study side by side. Some classrooms are nearly exclusively populated by students with a migration background. Consequently, some classrooms are overwhelmingly bilingual, with a host of background languages being spoken in the same room or building next to the majority language German.

As it is impossible to explore all aspects of this new superdiverse reality within the confines of one article, we will here focus on the acquisition of English in multilingual and linguistically heterogeneous secondary school classrooms. Evidently, this is only one research area amongst several others, but it is highly prominent and relevant, as English is an obligatory school subject across Germany and is being taught from an early age onwards, typically starting in grades one or three. English in Germany has been taught as a classic second language for a long time, on the assumption that students studying it have a monolingual German background. Even though there has been some recent research interest in exploring the multilingual realities underlying this teaching and acquisition process (see the volume edited by Bonnet & Siemund 2018), the dominant teaching approach remains geared towards a monolingual learnership. It is rather evident, though, that learning and teaching a language to bilingual and monolingual learners necessitates an approach that is different from that for monolingual learners. The main difference is that two or more – and not just one – languages influence and interact with the acquisition process of English. In the context of bilingual heritage speakers explored here, we will refer to them as the majority language (i.e. German) and the heritage languages (i.e. Turkish, Russian, etc.).

The linguistic question that is of main theoretical interest in this context is which of the background languages influences the acquisition process of English, and under which conditions. This question forms the main thrust of the current paper, and we will explore it on the basis of a number of recent case studies in this domain. Above and beyond this central problem, we will here also explore

the different types of bilingual speakers as well as cross-linguistic influence (CLI) especially in unbalanced bilingual heritage speakers who acquire an additional language.

2. Cross-linguistic influence

The term 'cross-linguistic influence' (CLI) is nowadays widely used as a replacement for the traditional notion of transfer (Odlin 1989: 25-27), as it is considered more suitable for multilingual constellations and includes phenomena such as transfer, interference, avoidance, borrowing, and language loss or attrition (Kellerman & Sharwood Smith 1986: 1). More generally, it captures the impact of previously acquired language knowledge on the production, comprehension, and acquisition of another language (Cook 2016: 26-27; De Angelis 2007: 19).

The main issue that studies are interested in whose focus lies on language acquisition in bilingual and multilingual constellations is whether and to what extent previously acquired languages interact with the acquisition of a further language. Additional issues concern the interaction between the languages that are already in place and perhaps even backward influence from the language being acquired to those previously learned. Regarding the acquisition of English as an additional language by bilingual heritage speakers, the languages potentially interacting with the acquisition process of English are the relevant heritage language and the majority language, which happens to be mostly German in the case at hand. There arise four logical scenarios that need to be considered: (i) no influence from the background languages, (ii) only influence from the heritage language, (iii) only influence from the majority language, and (iv) influence from both the heritage and the majority language.

Needless to say, these four logically conceivable positions have been explored in some detail and have led to the formulation of competing models of CLI. The assumption of no influence from the background languages, however, is empirically not tenable, as all non-first language acquisition processes are influenced by previous language acquisition. Since the heritage language of bilingual heritage speakers is typically the first language that such speakers acquire, exclusive influence from the heritage language on the acquisition of English may also be referred to as 'Absolute L1 Transfer'. This model is difficult to maintain in its rigorous interpretation, but some researchers did find effects of L1 influence. For example, Na Ranong and Leung (2009) identified such L1 effects in a study on L1 Thai, L2 English, and L3 Mandarin. Also, Hermas (2014) reports a similar effect from the acquisition of L3 English on L1 Moroccan Arabic and L2 French. The case studies that we discuss further below also highlight such L1 effects, though they do not support models of absolute heritage language transfer.

The mirror image to heritage language transfer is influence from the majority language. As this language is typically acquired as the second language in chronological order, though not necessarily as a second language (L2), its status may be different from speaker to speaker: for some it may be a second first language (2L1), while it may show greater resemblance to a second language for other speakers (L1, L2). Crucially, this depends on our assumptions regarding the dividing line between first and second language acquisition. This so-called 'critical period' was considered to last until the beginning of puberty (Lenneberg 1967), but has been lowered in more recent publications and, what is more, made contingent on the phenomenon considered (Meisel 2004: 104; Meisel 2011: 205). Accordingly, the equation of majority language transfer with second language transfer needs to be approached with great caution and, crucially, any interpretations in terms of the 'L2 Status Factor Model' (Williams & Hammarberg 1998; Hammarberg 2001; Bardel & Falk 2012) can at best be considered metaphorically motivated.

As far as influence from both the heritage language and the majority language are concerned, there may be mutual positive reinforcement from the background languages on the further language to be acquired, though there can – of course – also be double interference (negative reinforcement), or facilitation and interference effects from either heritage or majority language. This most likely depends on the phenomenon in question, as we will argue here, but there is currently no coherent theory available that can accommodate the various facilitation and interference effects. The only models that currently allow influence from all background languages are Flynn et al.'s (2004) 'Cumulative Enhancement Model' and Westergaard et al.'s (2016) 'Linguistic Proximity Model'. While the former predicts facilitation effects throughout, the latter and more recent model allows for both facilitation and interference. By and large, we here accumulate evidence in support of the Linguistic Proximity Model. It goes without saying that the precise attribution of heritage and majority language influence is subject to additional factors, such as recency of use and typological proximity. The latter factor is the basis of the 'Typological Primacy Model' (Rothman 2010) that predicts transfer ~~to occur~~ from the structurally most similar language.

3. Research questions

In spite of the current study being an overview article that does not pursue a sharp and narrow research question, but rather tries to bring together a number of pertinent issues in the study of English as an additional language, there appear several issues worth noting and documenting at this point of the exposition. The most important question, as already noted further above, concerns the source and the strength of cross-linguistic influence. In other words, do both the heritage

language and the majority language interact with the acquisition of English as an additional language, and if so, to what extent do they make themselves noticeable? This research question naturally ties in with the four logical positions on CLI outlined in the previous section and the respective models discussed in the literature.

Another question – equally briefly raised above – concerns the influence of additional modulating factors on the central question of the source of CLI. It goes without saying, at least in our view, that the source of CLI cannot receive a categorical answer, but needs to be calibrated for each acquisition scenario separately, as too many modulating factors influence it. Such factors include typological and psychotypological proximity of the languages involved, proficiency, exposure and recency of use, age of onset, current age of learning, length of residence, order of acquisition, prestige, as well as issues of orality and literacy. Naturally, not all of these factors can be discussed here, but some will figure quite prominently in the sections to follow.

A third question that we will raise here relates to different types of bilingualism and their status in the bilingual mind. As far as we can see, the source and strength of CLI fundamentally depend on the representations of the languages in the bilingual mind, i.e. it matters if we sample balanced bilinguals, or study subtractive or additive bilingualism. Bilingual heritage speakers arguably show different forms of CLI than bilinguals growing up in an officially bilingual country.

The fourth question that we wish to address here concerns the source and strength of CLI in relation to specific grammatical phenomena. We will here argue that CLI is selective in the sense that all other conditions being equal, it may still happen that CLI draws on the heritage language for phenomenon A, though on the majority language for phenomenon B, perhaps depending on the closer structural and/or functional match.

Finally, we will here also briefly raise the issue of multilingual advantages. According to a widely held view, learners with bilingual or multilingual backgrounds enjoy certain advantages in the acquisition process of additional language in comparison to monolingual control groups. Such advantages, as we will argue, heavily depend on what counts as an advantage and also on the age groups sampled.

4. Different types of bilingual speakers

The aforementioned models explaining CLI in L3 acquisition found evidence for contradicting transfer scenarios. Henceforth, we evaluate the applicability of these models based on further studies that analyzed bilingual heritage speakers. These studies did not develop a new model for CLI in L3 acquisition, yet, they present state-of-the-art research that leads into somewhat different direction opposing

what we can find in Na Ranong and Leung (2009), Bardel and Falk (2007; 2012), Flynn et al. (2004), and Rothman (2010).

One point that was previously mentioned and that will now be further substantiated is that the latter studies differ from more recent studies in the type of L3 learner they investigate. Most previous research on L3 acquisition focusses on monolingual participants that acquire an L2 during adolescence and start to study an L3 at some later stage, typically at university level. Four of the most prominent L3 models, i.e. 'Absolute L1 Transfer', the 'L2 Status Factor Model', the 'Cumulative Enhancement Model', and the 'Typological Primacy Model' are rooted in exactly such scenarios. Na Ranong and Leung (2009: 171), for instance, investigate native speakers of Thai that learned English as a L2 during childhood and that had additionally (1.5 years prior to the experiments) taken up Chinese as a L3. In Bardel and Falk (2007: 470-471) we also find monolingual participants that speak a foreign language, their L2, and that were initial learners of a L3 at the moment of data collection. A similar L3 learner group is examined in Flynn et al. (2004: 10). The participants were Kazakh speakers that learned Russian as their L2 and English as their L3. In Rothman (2010: 116), there are two groups of bilingual participants that are in their initial stages concerning L3 acquisition: L1 Italian, L2 English, L3 Spanish, and L1 English, L2 Spanish, and L3 Portuguese. Hence, what we find in these and most other studies that investigate CLI in L3 acquisition are language biographies where it is straightforward to distinguish between native and foreign languages. In addition, the order of acquisition is typically known and allows discriminating between first, second, and third languages.

There is, however, a newly developing sub-field in language acquisition research that focuses on a different type of L3 learner (cf. Kupisch et al. 2013). These L3 learners are bilingual heritage speakers, i.e. they grow up bilingually (mostly as simultaneous bilinguals, or at least early bilinguals) with a home language and a majority language (Montrul 2016: 16-17). By this, we refer to members of a linguistic minority group who are exposed, typically at home and/or in their minority community, to a minority language (i.e. without official status in the country of residence) and at the same time to the official language of a speech community (Montrul 2016: 2). The order of acquisition may therefore differ for individual members of that group, i.e. some are at first only exposed to the family language or heritage language and receive additional input of the majority language when entering the school or pre-school system. Others may have one parent who is a speaker of the majority language and are exposed to both languages right from the start. Some may migrate to a new country during the first years of their lives and start learning the new language, i.e. the official language of the new country of residence, strictly speaking as an L2, concerning the order of acquisition.

However, there is not always a clear distinction between L1 and L2, and even the status of the language they feel most comfortable in may change during the lives of bilingual heritage speakers. This is to say that bilingual heritage speakers are not necessarily balanced bilinguals and in fact, in most cases they are not (Montrul 2016: 42). Typically, they are unbalanced bilinguals with varying degrees of proficiency in their two languages (varying in proficiency levels such as reading, writing, listening, and speaking) and they largely exhibit one frequently used language, which is sometimes referred to as the dominant language, and one less frequently used language (the latter mostly coincides with lower proficiency). We could also speak of them as subtractive bilinguals, which implies more than an unbalanced status. It strictly speaking means that the L2 takes over the role of the L1, it replaces it and becomes the stronger language. Reduced input of the L1 lowers proficiency and results in infrequent use of that language.

Of course, heritage speakers are not a homogeneous group, because they display different dominance patterns. In general, the majority language (i.e. the official language of the country) is strongest or at least as strong as the heritage language, in terms of language proficiency and frequency of use (Montrul 2016: 42). In addition, proficiency in the heritage language can range from very low, i.e. barely any receptive abilities, to almost native like (Montrul 2016: 44). Hence, heritage speakers could appear, different to balanced bilinguals, on the other end on a continuum ranging from equal use (i.e. equally frequent) of both languages to exclusively using only one language and having mere passive knowledge of the other.

The most common group of heritage speakers are immigrants and their offspring, which quite naturally provides a reason for why nowadays there is an increasing interest in heritage speakers and their language use (Montrul 2016: 2-3). Needless to expand what we have stated in the introduction, yet worth mentioning here once more: there are major global changes that transform our modern societies. As a result, in many parts of the world, the immigration population is increasing and new language biographies are emerging. Accordingly, a growing number of bilingual heritage speakers take foreign language classes side-by-side with monolingual learners for whom it is the second language (Montrul 2016: 3). Hence, we increasingly find monolingual German students in one foreign language classroom together with bilingual heritage speakers of varying heritage languages. The initial position for these two groups of learners is strikingly different, as was repeatedly pointed out.

Furthermore, balanced bilinguals, i.e. individuals that have (at least nearly) equal command of two (native) languages or second language learners that are highly proficient in their L2, can be assumed to form groups different than heritage speakers with a majority language and a less frequently used language.

These differences between distinct groups of bilinguals may explain why more recent studies fail to replicate what former studies have shown concerning CLI.

In addition, the remainder of this paper will also discuss some implications pertaining to ongoing controversial discussions regarding multilingual advantages. Multilingualism has been claimed to foster metalinguistic awareness and to support the acquisition of further languages. Cenoz (2003: 78) states that bilingualism seems to be associated with advantages in further language acquisition, here explicitly L3 acquisition. However, she admits that not all studies reported advantages, some did not find differences, others even disadvantages for bilingual L3 learners (Cenoz 2003: 78). The crucial point is that the latter studies have something in common: they investigate either bilingual immigrant students or subtractive bilinguals (Cenoz 2003: 78). Once more, it seems relevant to distinguish between different types of bilinguals as the results may crucially vary. The following section first investigates CLI in unbalanced bilingual heritage speakers by looking at the specific characteristics of this group, then reports findings of studies investigating different grammatical phenomena, and in the end discusses the notions of multilingual advantages for heritage speakers.

5. Case studies on L3 acquisition

5.1Shifts in the focus of L3 studies

Heritage speakers make up a large proportion of modern, industrial societies and yet, in the past, only a few studies have focused their investigation on them. The following paragraphs, however, show an increase in number of recent studies that focus on L3 acquisition of bilingual heritage speakers. These studies present evidence of a highly meaningful difference between different types of bilingual speakers.

One of the previously mentioned models, the ‘Linguistic Proximity Model’ (Westergaard et al. 2017: 672-673, 679), includes heritage speakers; however, very little information is offered regarding their language biographies in that publication. The authors make it explicit that the L3 learners are heritage speakers and that the majority of the participants was born in Norway (Westergaard et al. 2017: 679). However, it remains somewhat inconclusive whether they are balanced or unbalanced heritage bilinguals and how proficient they are in their heritage language. The overall situation seems comparable to a number of studies (cf. Hopp 2018; Lorenz 2018; Şahingöz 2014; Siemund & Lechner 2015; Siemund et al. 2018) that will be discussed in more detail in the remainder of this paper. Therefore, there is reason to believe that the participants in Westergaard et al. (2017) are indeed unbalanced bilinguals, hence typical heritage speakers as referred to in Montrul (2016).

Another crucial study by Iverson (2009: 227-228) compares bilingual heritage speakers (simultaneous bilinguals, English and Spanish) with successive bilinguals (native speakers of English, L2 Spanish) learning Brazilian Portuguese as L3. Both groups are reported to be highly proficient in Spanish: the L2 learners successfully master their first foreign language (Iverson 2009: 224, 228) and the heritage speakers are referred to as advanced heritage speakers of Spanish (Iverson 2009: 226). Both groups seem to be nearly balanced bilinguals, i.e. they are equally proficient in both languages. Hence, these heritage speakers are not the typical unbalanced bilinguals with one more proficient, or dominant, language and one less proficient language, as described above. Both groups can be classified as initial learners of L3 Portuguese with only little exposure to their L3. Native speakers of Brazilian Portuguese function as a control group. All three groups participated in a translation task focusing on noun-drop as well as a grammaticality judgment task focusing on gender marking on nouns and adjectives, and also on noun-drop (Iverson 2009: 228-231). Portuguese and Spanish both mark gender on determiners, adjectives, and nouns, contrary to English. See examples (1) and (2) for illustration of Portuguese (Iverson 2009: 225).

(1) *o* *carro* *branco*
the.masc.sing car.masc white.masc.sing
'the white car'

(2) *a* *casa* *branca*
the.fem.sing house.fem white.fem.sing
'the white house'

In addition, the head noun can be omitted in certain contexts, because the referent is traceable due to gender and number marking on adjectives and determiners in the two Romance languages. In English, the head noun cannot be dropped, but the pronoun *one* must be used instead. The Brazilian Portuguese sentence (3) and its English translation, taken from Iverson (2009: 227), exemplify this contrast.

(3) *Eu não quero o* *carro* *branco;* *eu* *vou*
I not want the.masc.sing car.masc white.masc.sing I go
comprar *o* *vermelho*.
to buy the.masc.sing red.masc.sing
'I don't want the white car; I'm going to buy the red **one**.'

Hence, we find similarities between Spanish and Portuguese, on the one hand, and different realizations in English, on the other. The motivation for this study was to test the 'Representational Deficit' and the 'Full Access' hypotheses (Iverson 2009: 231) as well as child language acquisition in relation to adult language acquisition. This may be the reason why nothing is reported about the status of the two languages, and only high proficiency in Spanish is acknowledged. However, the setting of this study includes heritage speakers and therefore it offers some interesting results relevant here.

Surprisingly, the author did not find differences between any of the groups, not even between the learners of Portuguese and the native speakers (Iverson 2009: 236). They all performed native-like and the small differences that could be observed were not statistically significant (Iverson 2009: 236). In light of the current paper, this could have several reasons: there is no difference between the two L3 groups because the type of bilingualism does not seem to affect L3 acquisition. Any bilingual person, be they late or early bilinguals, simultaneous or successive bilinguals, including heritage speakers, should follow the same aquisitional path when acquiring a further language. This view finds support in Rothman (2015: 188), who clearly argues that there are no differences between distinct types of bilinguals, here specifically concerning the 'Typological Primacy Model'. He explicitly limits this to the initial stages of L3 acquisition without making further reference to the source of this argument and without providing clear evidence for his claim (Rothman 2015: 188).

Alternatively, it is possible that both languages of the bilingual participants in Iverson (2009) have the same status, i.e. that the two groups are equally proficient in their previously learned languages and that they use them equally frequently; hence, there is no difference between heritage speakers and successive bilinguals. It may be that since both languages have the same status, the underlying CLI processes are the same for heritage speakers and successive bilinguals, which results in a highly similar performance in the L3.

Yet, it is also possible that Iverson (2009) did not find differences between the two L3 learner groups because they had already exceeded the threshold for that grammatical phenomenon. Following Pienemann (1998: 1; 2005: 2) and his 'Processability Theory', learners will be able to produce structural options once the necessary resources for that grammatical phenomenon in the target language have become available to them. Hence, one could argue that the two learner groups performed native like, because they had either already acquired this grammatical feature, at least the necessary processing resources, or because both learner groups were able to transfer grammatical knowledge from Spanish, because Spanish behaves like Portuguese in gender marking and noun-drop whereas English is different. Hence, CLI from Spanish seems to be possible for both groups, regardless of it being acquired from birth onwards or only after the age of 15. The crucial point could be again the status of the two languages. Since the participants know both of their previously acquired languages equally well, they are both available for CLI.

Summing up, Iverson (2009: 236) could not identify differences between adult L3 learners of Brazilian Portuguese and bilingual heritage L3 learners of Brazilian Portuguese. Both types of bilinguals were able to use their L2 Spanish knowledge, be it a formally learned L2 or a naturally acquired heritage language.

The findings by Fallah et al. (2015: 240) are in opposition to Iverson (2009) and the conclusion that there are no differences between heritage bilinguals and

successive bilinguals. Fallah et al. (2015: 241) investigate unbalanced bilingual speakers of Persian and Mazandarani, and present results contradicting the 'Typological Primacy Model' (Rothman 2010). They did not find CLI from the typologically closest language, but identified CLI exclusively from the dominant language. They report that regardless of order of acquisition, all participants had a dominant language; this was either the L1 or the L2. Hence, unbalanced bilinguals that have a majority language and a less frequently used language are the focus of this investigation. Even though these learners are not heritage speakers, there are clear similarities concerning the language repertoires of these bilinguals and the types of unbalanced bilingual heritage speakers characterized above. The evidence presented by Fallah et al. (2015) suggests that the dominant status of a language shapes CLI in L3 acquisition. This claim needs to be substantiated with unbalanced bilingual heritage speakers, namely by analyzing the underlying principles of L3 acquisition in such contexts.

Below, we present additional case studies that discuss L3 English acquisition of heritage speakers and of unbalanced bilinguals, and that share arguments with Fallah et al. (2015) in that they provide evidence for but also against the 'Typological Primacy Model'. Furthermore, they also present counter-evidence to the 'Cumulative Enhancement Model', the 'L2 Status Factor Model', and 'Absolute L1 Transfer'. However, they provide support for selective transfer according to the 'Linguistic Proximity Model' and furthermore, they present strong evidence for CLI (mainly) coming from the majority or dominant language as opposed to the heritage language.

5.2Background information about participants

There seems to be a clear shift towards investigating young, school-age L3 learners that are heritage speakers. After having presented research that points towards heritage speakers forming a distinct group of L3 learners (see Section 4), we need to focus on the characteristics of these bilingual heritage speakers in more detail to ensure comparability of the following studies.

Şahingöz (2014: 90) examines Russian-German and Turkish-German heritage speakers that grew up in Germany sampled at the age of 16. In a comprehensive questionnaire, the majority of the participants indicated that they first learned Russian or Turkish and only later German, or they acquired both languages simultaneously. In addition, they all studied English and some of them French as foreign languages at school. The C-Tests results measuring proficiency in the respective languages, i.e. German, the heritage language Russian or Turkish, and the foreign languages English and French, demonstrate that the participants are most proficient in German, which was noted as their dominant language (Şahingöz 2014: 91, 94).

Siemund and Lechner (2015: 150) look at an almost identical but enlarged data set: 12-year-old and 16-year-old schoolchildren with a Russian-German, Turkish-German, and Vietnamese-German background are here investigated. They are heritage speakers, i.e. their two languages could be considered native languages, and they are defined as subtractive bilinguals with German as their dominant language (Siemund and Lechner 2015: 156). Since the same data set is used in Siemund et al. (2018: 389), only with a larger number of participants (n=172), we can assume that German is also the more frequently used and hence dominant language for these bilinguals. However, the heritage language Russian is possibly "stronger" than the other two languages Turkish and Vietnamese due to differences in the migration biographies and the community (i.e. Russians tend to have shorter immigration histories and many Russian-German bilinguals were born in Russia as opposed to the bilinguals of the other two heritage speaker groups)(Siemund et al. 2018: 400). This heritage language proficiency difference may lead to divergent results, which we will address later. In another study (Lorenz 2018), the same data set is used with an additional English native speaker control group. The study by Hopp (2018) is different, as the Turkish-German heritage speakers investigated here are at primary school level and therefore much younger; the mean age for these bilinguals is 10.54 (sd=0.44) and for the monolingual control group it is 10.37 (sd=0.49).

All studies surveyed so far are limited to the German context, where the majority language for all participants is German and all participants attend German schools. In addition, there is an obvious bias towards English as a language of investigation. We are here unable to go beyond English as a L3, but there are additional studies that investigate different language combinations of L1 and L2. Two such studies, Fallah et al. (2015) and Fallah and Jabbari (2018), are relevant in this context. They look at bilingual speakers that grew up in Iran. The bilingual participants acquired Mazandarani and Persian naturally and study English as a foreign language in school. The authors look at three different bilingual groups and account for order of acquisition (either L1 Mazandarani and L2 Persian, or vice versa) and, most importantly, they take into account frequency of use, as the participants had to specify what their language of communication is (i.e. their majority language); this could be either the L1 or the L2. Hence, all three groups were unbalanced bilinguals with one majority and one minority language. We find an increased number of participants in Fallah and Jabbari (2018), though the same groups of participants remain.

Most models explaining L3 acquisition, especially the 'Typological Primacy Model' (Rothman 2010), limit their predictions to the initial stages of language acquisition. Hence, it appears necessary to include this information when analyzing L3 learners. The participants in Şahingöz (2014) are not in the initial stages anymore, as these students attended school years 9 to 12, and had been exposed to English for a considerable amount of time (at least since school

year 5, most of them even earlier). In Siemund and Lechner (2015), Siemund et al. (2018), and Lorenz (2018), the younger participants are still in the initial stages since formal written and oral instruction of English only starts in secondary schools. For the older participants, the situation is the same as in Şahingöz (2014), which means that they are not beginners anymore but rather intermediate or advanced learners of English. In Hopp (2018), we find very young L3 learners in primary school that are in the initial stages with little previous exposure to English. The participants in both Fallah et al. (2015) and Fallah and Jabbari (2018) are in the initial stages, too, with only some hours of formal instruction in English. Both groups are reported to have attended a maximum of 24 hours of English classes.

There is some variation among the above studies concerning the acquisitional stage of the foreign language learners. This will be useful for a comparison between learners in the initial stages and learners that have already advanced from this phase. What unites all groups is the unbalanced status of their languages; one of the background languages is clearly used more frequently than the other and corresponds with the earlier introduced classification of majority and minority languages.

5.3 The influence of grammatical phenomena on CLI

In Siemund et al. (2018: 384), the authors address a major shortcoming, common to most, if not all, studies focusing on CLI in L3 acquisition: "the examination of one particular phenomenon is usually taken to be sufficient to allow for far-reaching generalizations". Yet, CLI may actually differ for certain linguistic phenomena, as has convincingly been shown in Westergaard et al. (2017). Siemund et al. (2018) cannot overcome this weakness by focusing exclusively on demonstrative pronouns, as it would be impossible to look at every aspect of a language within the confines of one paper. Therefore, we will here combine the findings of the studies introduced above and embrace a number of different grammatical phenomena so that one can obtain a more complete picture.

Şahingöz (2014) uses written data in form of a language biography triggered by picture stimuli, as well as oral data from a picture description task. She explores word order in both samples. In Siemund and Lechner (2015), subject-verb agreement and the use of articles in a written picture description task is analyzed. The same written output is the basis of Lorenz (2018); here, the focus lies on the analysis of the progressive aspect. Hopp (2018) uses a sentence repetition task and also a picture story retelling task and compares verb-second order and adverb order (which behaves differently in English and in German) and analyzes verb-complement order and subject and article realization (which is different in Turkish, whereas it is the same for English and German). A range of tasks are used in Fallah et al. (2015), namely a grammaticality judgment task, an

element rearrangement task, and an elicited oral imitation task. They examine the placement of attributive possessives. Somewhat similar is Fallah and Jabbari (2018); they focus on attributive adjective placement with data from a grammaticality judgment task and an element rearrangement task.

Evidently, there is a strong bias towards syntactic phenomena, which is of course due to their rather straightforward operationalization. The only exception is the study by Lorenz (2018) where formal correctness and target-like meaning (cf. Bardovi-Harlig 1992) of the progressive aspect are examined and contrasted. These two concepts are related; however, "[g]rammatical well-formedness and appropriate use of forms do not necessarily develop simultaneously" (Bardovi-Harlig 1992: 253). Hence, it is crucial to differentiate between form and function and a form-function mismatch, as will be shown in the following section.

5.4Cross-linguistic influence

We now come back to our research questions in assessing which of the previously acquired languages influences the acquisition of further languages. More precisely, we seek to investigate to what extent the current L3 acquisition models explain the learner data found in unbalanced bilingual heritage speaker settings. The statuses of the two languages of a bilingual speaker need to be included as well as different grammatical domains. To a certain extent we would also like to offer a developmental perspective, namely whether strength and direction of CLI change over time, or whether CLI is stable across younger and older learners. It is possible to offer such a perspective because of the cross-sectional nature of some of the studies.

Şahingöz (2014) convincingly shows that word order in English is influenced by the language the participants are most proficient in, which is typically the L1 of a speaker, yet for bilinguals it is the dominant language, here German (Şahingöz 2014: 236). Thus, in the Turkish-German group, only transfer from German is visible, hence, neither L1 nor L2 status is relevant, the determining factor is dominance of use (Şahingöz 2014: 231). Furthermore, she also found transfer from Russian and Turkish, but this was related to proficiency in the heritage language: the higher the proficiency in either Russian or Turkish, the more flexible the word order in English was, apparently influenced by less rigid word order rules of Russian and Turkish (Şahingöz 2014: 234). Since English word order is rather rigid, these more advanced heritage speakers strictly speaking made more mistakes compared to those that were less proficient in their heritage language and also compared to the German monolingual learners.

Siemund and Lechner (2015: 157-158) also report that concerning the use of articles, CLI comes from the L2 German. As has been explained before, German is the majority language and should not be considered a normal L2, since the distinction between L1 and L2 is somewhat obscure in heritage speakers. In

addition, they argue against holistic transfer and propose that transfer is selective and that it depends on the linguistic feature involved (Siemund & Lechner 2015: 159). This clearly supports the 'Linguistic Proximity Model' (Westergaard et al. 2017), which argues for property-by-property transfer and selective transfer, even though this claim had been made by Siemund and Lechner (2015: 159) before the 'Linguistic Proximity Model' model was published.

The results presented in Siemund et al. (2018) are slightly different. They found differences between the monolinguals and the bilinguals and hence, they argue for additional transfer from the heritage languages (Siemund et al. 2018: 399). This was especially prominent in the data produced by the Russian-German participants. The authors argue that Russian is comparably stronger in these heritage speakers than the respective heritage languages (Turkish, Vietnamese) in the other groups (Siemund et al. 2018: 400). Since this influence is negative, they present evidence against the 'Cumulative Enhancement Model' (Flynn et al. 2004), but at the same time assert selective transfer in accordance to the 'Linguistic Proximity Model' (Westergaard et al. 2017). Furthermore, they propose to have found some support for the 'Typological Primacy Model' (Rothman 2010) because German is the typologically closer language to English, compared to Russian, Turkish, or Vietnamese (Siemund et al. 2018: 403). However, at the same time, German is also the most frequently used language, which means that the aforementioned dominant language transfer scenario applies here as well.

Lorenz (2018: 350) also shows that there are differences between the monolingual learners and the bilingual heritage speakers. They mostly manifest themselves as negative influence from German on the use of the progressive aspect (i.e. the meaning) and negative influence from Turkish and Russian on the form of the progressive aspect. In principle, the Russian and Turkish monolingual control groups show a facilitative effect of their native language on the use of the progressive aspect; yet, this clear facilitative transfer is lacking in the bilingual students (Lorenz 2018: 353). Similar to what we have seen before, the disproportionally influence from German may be responsible for suppressing CLI from the heritage languages.

This is much in line with Hopp's (2018) findings. He demonstrates that CLI in L3 acquisition comes exclusively from German, the dominant language. Once again, language dominance is understood as the language that is most frequently used, hence the one that is most frequently activated in the daily lives of the students, because it is the language of schooling and the language of the environment (Hopp 2018: 14). He could not identify differences between the L2 learners (monolingual German participants) and L3 learners (Turkish-German bilinguals) which he explains with complete transfer from German and no heritage language transfer (Hopp 2018: 11). He continues by explaining that German, since it is an early acquired L2, has the same status as a L1, because it is

the dominant language for the participants (Hopp 2018: 13). He also takes up the argument about typological similarity and here, as has been shown for the previous studies as well, language dominance and typological similarity fall together for German (Hopp 2018: 14). Therefore, it is impossible to differentiate these two concepts on the basis of German.

Precisely this contrast can be discarded in Fallah et al. (2015) and Fallah and Jabbari (2018), because neither of the languages investigated, i.e. Mazandarani and Persian, are typologically similar to English (Fallah et al. 2015: 240). Hence, both studies make another strong case in favor of CLI coming from the dominant language. It needs to be remembered that they did not examine heritage speakers, but that their study includes unbalanced bilinguals, a slightly different setting, though comparable to the former studies. Fallah et al. (2015: 239) maintain that there are different predictions for CLI in L3 acquisition for different kinds of bilingual learners. They demonstrate with their results that facilitative and non-facilitative influence is possible and that transfer comes exclusively from the dominant language here called "language of communication" (Fallah et al. 2015: 240). Accordingly, they argue against the 'Typological Primacy Model', the 'Cumulative Enhancement Model', and also against the 'L2 Status Factor Model'. These results are replicated in Fallah and Jabbari (2018) and are in accordance with Hopp (2018).

This discussion clearly shows that there is one thing that all studies have in common, namely that the dominant or majority language, or likewise called language of communication, is the language that mainly or even exclusively influences the L3. Şahingöz (2014), Siemund et al. (2018), and Lorenz (2018) present additional heritage language transfer, yet admit that German, the majority language, exerts the largest influence. In addition, all groups of unbalanced learners, initial and more advanced learners, show CLI from their dominant language. One possible influencing factor, namely the proficiency in the heritage language, has not been sufficiently addressed in all studies surveyed here and seems to have the potential to alter the findings as has been shown to some extent in Şahingöz (2014) and also in Siemund et al. (2018).

5.5 Multilingual advantages

There are numerous studies that investigate advantages of bilinguals over monolinguals in further language acquisition (see for example Cenoz 2003). Several, partly interconnected variables were identified that influence whether bilinguals have an advantage over monolinguals or not. Among these are socio-economic status and education (Bialystok et al. 2007), age (Bialystok et al. 2004), metalinguistic awareness (Jessner 2006), and general intelligence and motivation to learn foreign languages (Cenoz 2003). They are normally controlled for and kept constant, because they clearly manipulate the success of foreign language

acquisition for both monolinguals and bilinguals. One further variable, namely the type of bilingualism, seems to play a crucial role in this advantages discussion as well. Researchers convincingly present evidence for balanced bilinguals outperforming monolinguals in further foreign language performance (cf. Sanz 2000). The diverse findings concerning advantages and disadvantages for monolinguals and bilinguals can, to a certain extent, be explained by whether the participants are balanced or unbalanced bilinguals, as the following section demonstrates.

Agustín-Llach (2017: 2), as a study agreeing with Sanz (2000), found some advantages of bilinguals over monolingual when acquiring a L3. She looked at Spanish versus Spanish-Basque school students in school year 12 who were intermediate learners of English at the moment of data collection (level B1, according to the Common European Framework of Reference for Languages) (Agustín-Llach 2017: 5). The bilingual students outperformed the monolingual participants and in addition, they showed higher metalinguistic awareness (Agustín-Llach 2017: 10). However, she states that these are mere tendencies and that no general "bilingual superiority" could be attested (Agustín-Llach 2017: 9). Moreover, the participants in Agustín-Llach's (2017: 5) study are balanced bilinguals, hence equally proficient and fluent in both Spanish and Basque. What this means is that we find some support for a bilingual advantage in balanced bilinguals, as was the case in Sanz (2000).

However, if we consider unbalanced heritage speakers, the situation clearly changes. In Hopp (2018), no advantage for the bilingual students can be substantiated; the bilingual participants perform exactly the same as the monolingual students. In Şahingöz (2014: 237), it is even the reverse; there was no advantage of the bilinguals but a slight disadvantage in their performance in English in comparison to the monolingual students. She concludes that having an advantage because of bilingualism is nothing that comes naturally. The opposite is the case: certain conditions need to be met in order for bilingualism to be potentially favorable (Şahingöz 2014: 238). She especially identified the frequent use of the heritage language, hence a high proficiency in the heritage language, as one of the prerequisites for a bilingual advantage. She argues that the active use of both languages, the majority and the heritage language, and the early acquisition of both languages seem to be two of such factors that may lead to a linguistic advantage over monolinguals in a foreign language (Şahingöz 2014: 239).

Siemund and Lechner (2015: 11) report that, according to their observations, initially, there is an advantage for bilinguals when acquiring a further foreign language. However, they could only identify this benefit in the younger cohort and not in the older cohort, so it seems as if this advantage is lost during secondary schooling (Siemund & Lechner 2015: 12). A similar argument can be found in Agustín-Llach (2017: 10), who confirms the strong impact of English classes on

the students and that schooling may actually rule out bilingual advantages. This is taken up in Lorenz (2018: 353-354), who also stresses the impact of teaching style and especially the unfavorable impact of teaching from a German perspective for bilingual learners. It appears plausible that potential similarities between the foreign language and the heritage language are not straightforward to identify for the bilinguals if they are not stressed explicitly, and hence, they cannot be accessed during L3 acquisition. In addition, Agustín-Llach (2017: 11) claims that

> results suggest that teachers should encourage cross-linguistic comparison and positive lexical transfer through an increase in the use of cognates. Training students in cognate recognition and use can result in an increase in their vocabulary size and thus contribute to enhancing their foreign language performance; these benefits seem to be especially strong for bilinguals.

This seems reasonable, because students must be aware of similarities and differences to their previously acquired languages in order to make use of these resources and to foster language development.

The aforementioned studies all point towards no apparent linguistic advantage in L3 acquisition for unbalanced bilingual heritage speakers. On the whole, there are of course advantages for bilingual heritage speakers, such as being able to communicate to an enlarged number of people. Yet, on a linguistic level there appear to be fewer, or even no advantages, at least concerning the grammatical phenomena investigated above. This is somewhat surprising, because earlier studies, also targeting subtractive bilingual heritage speakers (DESI-Konsortium 2006), identified small advantages in further language acquisition of these bilingual participants over their monolingual peers. Thus, there is the need for additional research as further studies analyzing different features or perhaps focusing on pragmatics or other areas instead of grammar may indeed identify advantages for unbalanced bilingual heritage speakers.

Another confounding factor that has only been marginally addressed are the languages involved. Most studies, and here we essentially follow this trend, are concerned with L3 English and at least one language that is to a certain extent related to English (such as German). The only exceptions were Fallah et al. (2015) and Fallah and Jabbari (2018) who instead focused on Mazandarani and Persian, which are languages that are unrelated to English. However, here as well, additional research is needed to complete this still newly developing area of investigation.

6. Conclusion

We want to finish with a tentative conclusion since this is arguably still an ongoing discussion and no definite answer can be given at this point. However,

we clearly identified factors influencing CLI in L3 acquisition that go beyond the often discussed variables such as the role of L1 and L2, age of onset, motivation, age of language learner, education, and socio-economic status.

Most importantly, we identified language dominance and frequency of language use to crucially determine CLI in L3 acquisition. Accordingly, we need to differentiate between different types of bilingual learners, especially between balanced and unbalanced bilinguals. What the aforementioned studies demonstrate is that CLI in unbalanced bilinguals comes mainly or even exclusively from the majority language, i.e. the dominant language or the language the bilinguals are most proficient in and use most frequently. There is a strong bias towards German transfer as opposed to transfer from the heritage or minority language in case of the bilingual heritage speakers discussed above.

In addition, and this could easily be understood as an extension of the former argument, higher proficiency in the heritage language may result in additional heritage language transfer. We presented studies (see Lorenz 2018; Şahingöz 2014; Siemund et al. 2018) where mainly CLI from German but also some heritage language influence was identified. This is related to the relatively higher proficiency in the heritage language of some learner groups compared to their bilingual peers with lower heritage language proficiency. We understand this as support for CLI being possible from all previously acquired languages with the dominant language as the major source for CLI in L3 acquisition.

Furthermore, language dominance does not only influence the direction and strength of CLI in L3 acquisition, but it also has an impact on whether or not we find a multilingual advantage in bilingual speakers. The groups of unbalanced bilinguals presented here did not exhibit a linguistic advantage over their monolingual peers in foreign language acquisition. In the recent past, there have been numerous discussions about multilingual advantages of bilinguals, yet, for unbalanced bilinguals, supportive evidence is largely lacking and we could not identify such advantages based on the current heritage learner samples.

We wish to emphasize once again that further research based on unbalanced bilinguals and controlling for language dominance and frequency of use is needed in order to provide an L3 acquisition model that explains CLI for heritage speakers, who are a very frequent type of bilingual language learners in our modern, western societies.

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