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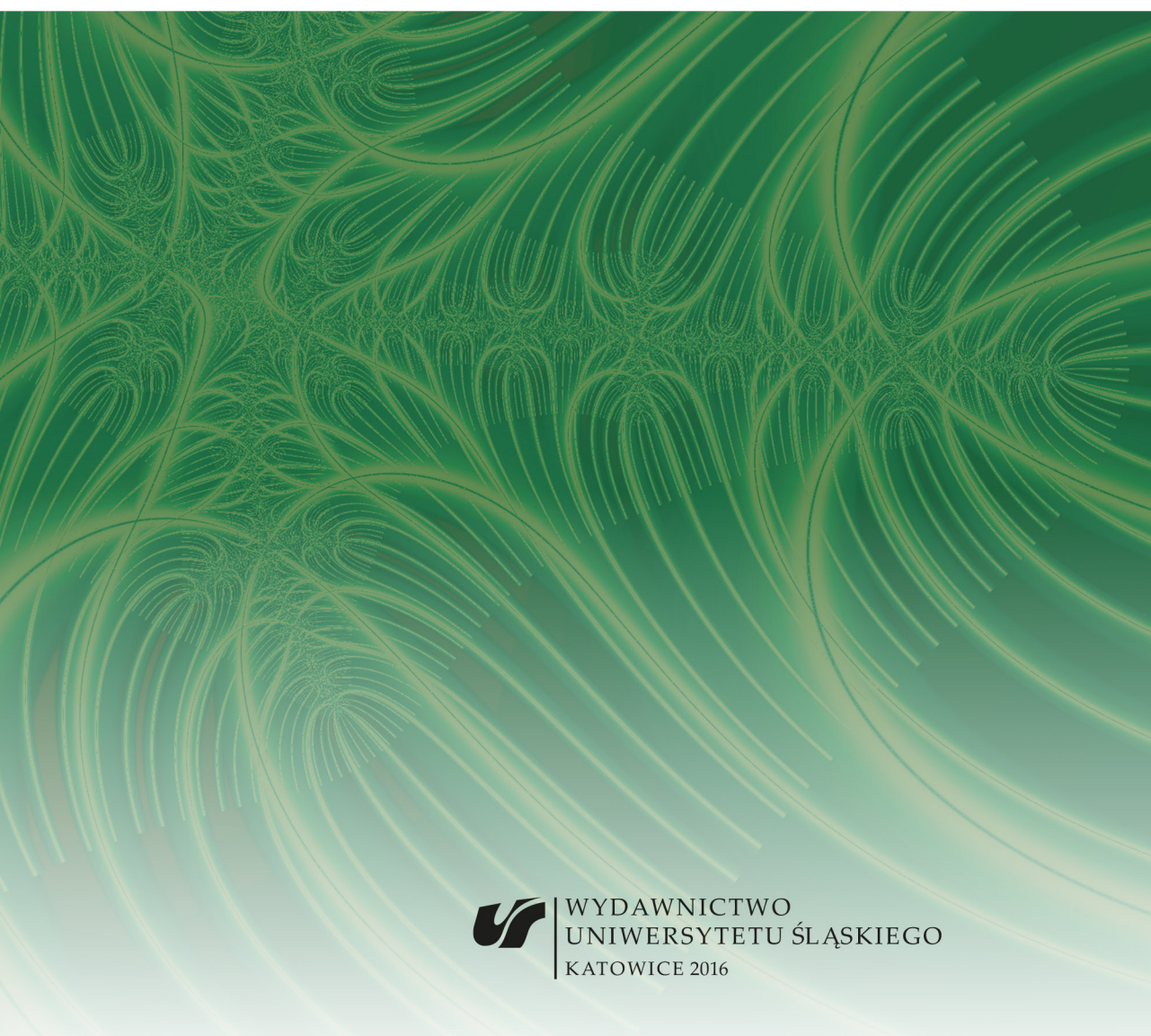

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Preface

We resolved to start publishing this journal thinking that despite the fact that Poland has a strong position in second language acquisition research and that quite a large number of monographic publications in this area come out every year—often published abroad with Multilingual Matters or Springer, among others—yet there is no academic research-oriented journal devoted to the theory and practice of SLA which would be widely available to Polish academia. The existing journal, *Studies in Second Language Learning and Teaching* published by Adam Mickiewicz University (Kalisz-Poznań), emphasizes the role of classroom-oriented research and so its particular focus complements the new journal by presenting foreign language pedagogy and its classroom applications. The origins of our journal also lie in the success of the *International Conference on Second/Foreign Language Acquisition* that has been organized for almost thirty years by the Institute of English at the University of Silesia. It gathers together each year many Polish and foreign academics and focuses on often un-researched issues and fairly new trends in SLA. Papers falling within the leading theme of each conference are usually edited and published in the form of a monograph, but there are also many studies presented in research areas not directly related to the main theme. Since many of these are of a high academic standard, we would like to open a channel for their publication, alongside other original articles and submissions. We believe that our new journal will serve an important need in projecting new and interesting research in SLA.

This is the second issue of our journal, which is published bi-annually and consists of articles submitted to us directly or solicited (by invitation). Each text is peer-reviewed in a double blind referring process by referees of the Editorial Board and beyond. The Editorial Board consists of both Polish scholars and foreign experts in the area, and represents the wide range of research interests of its members. All updated information on the journal is available on its new

website at www.journals.us.edu.pl/index.php/TAPSLA. Starting with the present issue, the journal is also available in electronic form.

We hope that this journal to some extent fills a gap in the Polish journal publishing market and that it will be of interest to researchers working in the field of second language acquisition. We would like to invite Polish and foreign academics to share their scholarly research with us by submitting their work to the *Theory and Practice of Second Language Acquisition*, published by the prestigious Polish academic publisher, Wydawnictwo Uniwersytetu Śląskiego (University of Silesia Press).

The present issue consists of articles in various areas of SLA and also research in multilingualism. The thematic spread starts with texts related to selected sociolinguistic variables (age and sex), followed by studies of non-native speaker e-mail communication and code-switching practices among immigrants in the UK, and a more theoretically-oriented paper delving into the theoretical conceptualizations of language aptitude. The final paper represents the multilingual dimension of psycholinguistic investigations.

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The Age Factor in the Foreign Language Class: What Do Learners Think?

Abstract: The present paper analyzes beliefs about the age factor of learners of English as a foreign language (EFL) with different starting ages (early vs. late starters), in different grades, that is, at the beginning (Year 7) and at the end of secondary school (Year 12) with different levels of EFL proficiency (high achievers vs. low achievers). The sample for the study was drawn from a larger sample of 200 secondary school students who were part of a longitudinal study, undertaken in Switzerland between 2008 and 2015. From this sample we selected 10 early starting high-achievers, 10 early starting low-achievers, 10 late starting high-achievers, and 10 late starting low-achievers. A qualitative analysis of language experience essays written at the beginning and at the end of secondary school revealed that learners with different starting ages, in different grades, and with different levels of proficiency displayed different beliefs about the age factor. The overall lack of age effect on FL achievement found in our previous studies may be explicable in terms of a number of affective factors (e.g., disengagement of the early starters due to language practices of the classroom) and contextual factors (e.g., transition from English in primary school to English in secondary school).

Keywords: starting age, language experience essays, learner beliefs, motivation, individual differences

Introduction

In a previous longitudinal study of ours (see Pfenninger & Singleton, 2016), we addressed the question of the relationship and interaction between long-term foreign language (FL) achievement and motivation in learners with different starting ages. The results revealed that the late starters were able to catch up very quickly (i.e., within six months in secondary school) with the performance

of the early starters, who had an advance of five years of English instruction in primary school, with respect to a range of oral and written measures, and that they were able to remain on a par with the early starters until the end of obligatory schooling in Switzerland. The overall lack of effect of starting the FL at an earlier age on FL achievement was able to be accounted for with reference to a number of theoretical, affective and contextual factors. On a theoretical level, as has been pointed out in myriad classroom studies, the long-term advantage conferred on most learners by an early start in a naturalistic language learning context may not be found in an FL learning context (see e.g., the reviews in Lambelet & Berthele, 2015; Muñoz & Singleton, 2011; Singleton & Ryan, 2004). With reference to possible reasons for the "kick start" of the late starters in the initial stages of FL learning and the general lack of age-related differences, our results indicated that for the late starters, motivation was more strongly goal- and future-focused at the first measurement, while the motivation of the early starters was predominantly influenced by (present and past) cumulative experiential factors. Since future selves—but not present selves—had a strong impact on the FL achievement, we have argued that the late starters were able to profit from their orientations at the beginning of secondary school.

However, the value of investigating motivation from a purely quantitative perspective may seem somewhat limited and tangential. For instance, the quantitative analyses can shed relatively little light on the needs and experiences of early and late learners (e.g., how their motivation shapes and is shaped by specific events in primary school and secondary school), and it does not reveal WHY the influence of motivation operates as it does. It was also not always straightforward to figure out from the questionnaires used in Pfenninger and Singleton (2016) to what extent events, actual or imagined, were incorporated into the self-concepts of the learners, which makes a qualitative analysis of the learners' stories indispensable.

In this article, it is our goal to use the qualitative data gathered from our focal group of 40 participants to explore aspects of the quantitative study that could not be quantified, that is, learners' perceptions, thoughts, and opinions. We are particularly interested in beliefs about the age factor elicited via language learning essays written by EFL learners with different AOs (early vs. late starters), in different grades (in Year 7 at the beginning and in Year 12 at the end of secondary school), and with different levels of EFL proficiency (high-proficiency vs. low-proficiency learners). Such a qualitative dimension allows analysis to get right down to the individual level, to take note of very personal circumstances, attitudes, and quirks that would not otherwise figure in the reckoning, and to arrive at a "flavor" of learners' perceptions and reactions which is very often very much needed when it comes to constructing a true-to-life interpretation of the quantitative data.

Background

A common view in research on the relationship between biological age and L2/FL learning motivation is that younger learners show significantly better attitudes toward learning English than older learners (see e.g., Cenoz, 2004; MacIntyre et al., 2002; Nikolov, 1999), which Kanno (2007) attributes to psychological and educational factors. For instance, younger learners are known to have a natural tendency to respond enthusiastically to new challenges in contrast with the self-consciousness that afflicts adolescents when performing in an L2 (Driscoll, 1999). However, one has to be cautious when generalizing from the fact that primary school beginners seem to demonstrate more positive attitudes to speaking an L2 than secondary learners. For instance, the quality of instruction might affect the strength of the motivation-outcome relationship negatively, for example, when the learners start off very enthusiastic (as it is often the case in the primary school classroom) but the teaching approach is not adequate (cf. Csizér & Dörnyei, 2005) or the teachers lack the necessary language skills. In the Zagreb Project 1991, for instance, Mihaljevic Djigunovic (1993) observed that the 336 seven-year-old children who participated in the study did not list FLs (English, French, and German) among their favorite school subjects, possibly because games and other kinds of play, which constituted a large part of the L2 curriculum, bored them. In Mihaljevic Djigunovic and Krevelj (2010) we read that under less than ideal conditions (large groups, two lessons per week, unqualified teachers), which is the current reality in many European contexts, young learners soon start to develop negative attitudes to FL learning. In Ushioda's (2013, p. 7) view, such an early dislike can have damaging consequences for long-term learning, as the first contact with the FL may be decisive for the young learners' aptitudes and motivation for the rest of their lives (cf. Singleton & Ryan, 2004, pp. 206–211)—a hypothesis which will be further analyzed in this paper.

Early adolescence, on the other hand, is typically associated with a period of flux and uncertainty—a period when learners "struggle to achieve a coherent sense of self" (Lamb, 2012, p. 19). Sometimes older learners are described as having a tendency to reject the school system in general, or they might be less motivated by the use of more traditional and less active methods in high school (e.g., Tragant, 2006). Marinova-Todd, Marshall, and Snow (2000) suggest that most adult learners are less successful language learners because they fail to engage in the tasks with sufficient motivation, commitment of time or energy, and support from the environments in which they find themselves to expect high levels of success. This, however, does not explain late starters' fast learning rates in the initial stages of L2 acquisition that are so often described (see e.g., Muñoz, 2006): older starters profit from an initial short-term advantage, that is,

they experience a faster rate of learning (e.g., of morphosyntactic development) than younger learners in the initial stages. This phenomenon is often ascribed to their cognitive advantages at testing. However, there is also a motivational dimension to this picture. The general impression is that late starters seem to feel the urge to achieve proficiency quickly. Snow and Hoefnagel-Höhle (1978) hypothesize that the superior initial performance by late starters (and thus older learners) is perhaps due to the greater academic demands placed on these learners by the schools, creating higher levels of motivation in them than in younger learners to learn the language necessary for success in school.

Tangential to motivation, attitudes, and learners' beliefs, for example, preconceived ideas about the age factor and early vs. late FL programs can affect learners' approach to language learning, but at the same time, new experiences can lead to changes in attitude and approach (see Moyer, 2014). In other words, because of learning experiences, feedback relating to the development of FL skills, and other salient events in the course of primary and secondary school, attitudes towards the age factor are likely to be re-evaluated and consequently reformulated as well as revised. Since "the earlier the better" or "the later the better" are specific beliefs that can be allocated to a set of beliefs that Horwitz (1988) called "difficulty of language learning," which includes beliefs about the time investment necessary to become fluent in language learning difficulty, we believe this is an emerging area of interest in age-related research, albeit still grossly under-researched.

Methodology

Participants and procedure. The present study is part of a larger, longitudinal investigation conducted in Switzerland between 2008 and 2015 on the effects of age and age-related factors, during a period when there coexisted for some time students who were subject to one or the other of two educational policies that were implemented before and after the Swiss Conference of Cantonal Ministers of Education issued a new set of guidelines for foreign language (FL) instruction throughout Switzerland (see EDK, 2004). 200 Swiss secondary school students (89 males and 111 females) took part in the longitudinal component of this project, all of whom had similar characteristics: they had the same biological age, the same L1 (Swiss/Standard German) and additional FL (French), and the same SES, schools, classes and teachers, thereby allowing us to isolate the influence of starting age (and co-occurring amount of target language exposure) at the level of EFL competence attained at the beginning and at the end of secondary school in German-speaking Switzerland. The participants

belonged to two AO groups: the early classroom learners (henceforth ECLs) were instructed according to the new model and learned Standard German from first grade onwards, English from 3rd grade onwards and French from 5th grade onwards, while the late classroom learners (LCLs) were instructed according to the old system without any English exposure at primary level, learning only Standard German from first grade and French from 5th grade onwards. They were tested at the beginning and at the end of academically oriented high school when they were 13 and 18 years old respectively.

For this qualitative analysis, we selected a focal group of 20 early learners and 20 late learners from those 200 who had participated in the quantitative phase. Early and late learners were selected according to scores on a range of FL proficiency tests at Times 1 and 2 (listening comprehension task, oral proficiency tasks, productive and receptive vocabulary tasks, argumentative and narrative essays, grammaticality judgment task, see Pfenninger, 2014a; 2014b; Pfenninger & Singleton, in prep.). Following Muñoz (2014), the criterion for selection into the high achievement groups (early or late start) was a score in the 75th percentile on all tasks. The criterion for selection into the low achievement groups (early or late start) was a score in the 25th percentile on all tests. Furthermore, the high-achievers all had grades at or above 5 (6 being the highest grade). Following these grouping variables, we ended up with four groups of 10 participants, each of which was tested at the beginning and at the end of secondary school (Time 1 and Time 2 respectively), amounting to a representative sample of 40 students: 10 early learners, high achievement (ELH); 10 early learners, low achievement (ELL); 10 late learners, high achievement (LLH); and 10 late learners, low achievement (LLL). This procedure enabled us to study different groups within the design, that is, early vs. late starters, younger vs. older students, and the most successful learners vs. the least successful learners in the sample.

Task and procedure. We asked our participants to write a 200-word language experience essay so that we could directly hear from these students in their own words what it was like to start studying a FL relatively early and relatively late respectively. We chose this task because exploring participants' own perspectives through certain forms of introspection, such as reflective writing, can help us understand which (contextual) elements may be relevant to motivation in a given classroom. Ushioda (2009, p. 216), for example, writes that "individual difference research can tell us very little about particular students sitting in our classroom, at home, or in the self-access center, about how they are motivated or not motivated and why." While student perspectives have occupied a central position in social constructivist approaches to education (e.g., Brooks & Brooks, 2000; Larochelle et al., 2009) as well as in the advocacy of autonomy in the classroom (e.g., Cotterall & Crabbe, 2008; Little,

2007; Ushioda, 2009; 2011), individualized approaches to age research are still scarce (but see Muñoz, 2014). Thus, in order to give a better account of the interaction of AO and other (often hidden) variables such as attitudes and beliefs, we used language experience essays, which were supposed to elicit: (a) the participants' reflections on their experience of multiple FL learning at the beginning and at the end of secondary school; (b) the participants' affect for FLs and English in particular; and (c) participants' beliefs about the age factor at the beginning and at the end of secondary school. The use of these essays was based on the idea that, on the one hand, learners' beliefs are—consciously or unconsciously—gleaned from past experiences, and, on the other, learners' beliefs have an influential role in learning outcomes and achievement (see e.g., Gregersen & MacIntyre, 2014). In that respect, these essays come close to the individual difference research tradition which uses interviews to identify differences among learners to establish why and how such differences may lead to differential linguistic attainment (Dörnyei, 2005); on the other hand, they also share some traits with the language experience interview, which is designed to elicit students' reflections on their own internalized experience of language learning (e.g., Benson & Lor, 1999; Polat, 2013).

We provided loose guidelines for the writing. These stated, "You should write about your feelings, thoughts, opinion, motivation as well as any experiences with regard to the early or late introduction of multiple foreign languages." No specific length was set.

The first test series was administered after six months of EFL in secondary school, that is, after 440 hours (ECLs) and 50 hours of instruction (LCLs) respectively. The second data collection took place five years (680 hours) later. At no point were early starters mixed with late starters in the same class.

Results

High-achievers vs. low-achievers. We begin our analysis by concentrating on retailing high- vs. low-proficiency learners' perceptions and perspectives at Time 1 with regard to the age at which their instruction in EFL had begun. There was something of a trend at the beginning of secondary school for learners to be positive about the age that they themselves had started learning English. The early high achievers came out fairly uniformly at Time 1 with sentiments like the following:

(1) *I wouldn't begin instruction too early. And not too late either. Finally, we need all these languages in everyday life. So I think primary school age is ideal for starting them.* (07_ELH2_F_GER)
(2) *'The earlier the better'. We should learn foreign languages early because our brain learns a foreign language faster when we're children*. (07_ELH3_M_GER)

At Time 1 the late high achievers tended, on the other hand, to support the pattern of starting English at a later age—the regime that had been in force during their own school years:

(3) *I think the system is fine as it is* [i.e., as it was!]. (07_LLH7_M_GER)
(4) *I personally don't think it's good to begin learning too early ... but I think of course that learning shouldn't begin too late, so beginning English at 12 or 13 I think is exactly right.* (07_LLH10_F_GER)

At Time 1 the late low achievers also tended to support the pattern of starting English later, which they themselves had experienced:

(5) *I had French from 5th class in primary and English from secondary. I think it's good only to have one language to begin with ... I find French harder than English, and so I think it's good only to have French at first.* (07_LLL2_M_GER)
(6) *I think it's too early to learn English in 2nd class. An 8-year-old child very probably still doesn't understand grammar. He/she at that time has other things in his/her head. I think it's not relevant to be already learning English this early*. (07_LLL4_M_GER)

The exception at Time 1 to the expression of satisfaction with what had been experienced was the tenor of the comments offered by the early low achievers, who were clearly less than charmed by their encounter with English in primary school (see examples 7–10):

(7) *English is already there in 2nd class, I find that a bit early. At the beginning, I understood nothing …* (07_ELL1_M_GER)
(8) *I had difficulties. But I think this was because of my former teacher, she taught us the same stuff again and again and we somehow stayed where we were. For that reason, I was very much at a loss when I got to secondary.* (07_ELL13_F_GER)
(9) *In primary school our teacher even still spoke German, but here at XXX the teacher only speaks English.* (07_ELL10_F_GER)

(10) *I had English for the first time in 2nd class (primary school). Actually, we really didn't get much out of it.* (07_ELL6_F_GER)

At Time 2 the early high achievers showed less unanimity than previously in regard to their assessment of the value of early English instruction. At Time 1 it will be recalled, the views expressed were overwhelmingly favorable; when the learners in question were older the picture was rather more complex. Opinions supportive of early English were still in evidence:

(11) *It's hardly the case that children who have English instruction from second class in primary school, can speak the language fluently after four years. In my opinion, however, it's not primarily a matter of making as much progress as possible, but much more a matter of getting a feel for the language. So, for example, in relation to pronunciation and intonation.* (12_ELH6_F_GER)

Some more nuanced, more skeptical views also appeared, however:

(12) *With the help of simple games and songs in a foreign language a small vocabulary can be built up. But I remember how in early years the learning was unconcentrated and slow. At secondary level it progressed really fast.* (12_ELH9_M_GER)

(13) *Anyway I must say from my own experience that the children in the way they learn these days only learn a couple of words in another language and nothing else. And the real learning of language in relation to the system begins only at secondary level, when you learn sentence construction and basic grammar. As at this point you mostly already have contact with the English language outside school, this is of course easier. But what you've learnt in the primary school you can't really use. So the teaching of a foreign language at this level is unnecessary.* (12_ELH1_M_GER)

The early low achievers were, if anything, even more skeptical about early English at Time 2 than they had been at Time 1, as examples (14)–(15) illustrate:

(14) *In my opinion, the early 'learning' of foreign languages ... isn't meaningful. First, really because they (the students) don't learn anything, but are only killing time and get demotivated for foreign languages. Besides this, day by day they lose motivation for school, as this additional, unnecessary teaching asks too much of many students.* (12_ELL1_F_GER)

(15) *Nowadays children are learning numerous languages earlier and earlier. The earlier the better runs the motto. But is that really of any use? In my opinion, this development is rather bad. From personal experience I can say that e.g. learning English in the primary school brings you practically nothing.* (12_ELL2_M_GER)

Amongst the late-starting high-achievers, at Time 2, as at Time 1, the overwhelming trend was approved for the late start in English that they had experienced. A lone voice talked about the benefits of an early start in this age of globalization:

(16) *It's hardly surprising that schools should if at all possible bestow on every child the advantage of multilingualism—and indeed as early as possible. Children can put up with more than we think!* (12_LLH2_M_GER)

The others in this subgroup were definitely not convinced that the change to primary-school English had been a good idea for their successors. They remained content with their own late-starting path (see examples (17)–(18)).

(17) *Actually, it seems to be doubtful how great the usefulness is of teaching foreign languages as early as the second class of primary school in regard to how sensible it is already to be introducing a foreign language at this very early stage in a child's development.* (12_LLH1_F_GER)

(18) *As a child I always envied my brother, who had English as early as the second class of primary school. It seemed to me that because of that he was a step ahead of me and therefore superior to me. ... But looking back I don't see this advantage as so big any more. Within half a year I had in the 2nd year of secondary school the same level of English as my brother.* (12_LLH6_M_GER)

The late low achievers at Time 2 on the whole remained as satisfied as they had been at Time 1 with the late English regime they had experienced, and as skeptical as they had been with regard to the idea of the introduction of English at primary level. The odd voice was raised in support of early English:

(19) *The idea ... they start with is that a child has less trouble to learn a language than adults. ... Therefore I think that it's fundamentally not a bad idea to begin to learn foreign languages as early as in the childhood years.* (12_LLL10_F_GER)

The large majority of comments, however, took a negative line with regard to early English, as the following examples show:

(20) *My little brother has had early English since second class, but till now he still can't perform better than I can. He is now in the 1st class of secondary school. I don't think it's worth it to learn a foreign language as early as just eight years old.* (12_LLL1_M_GER)
(21) *I don't believe that early English is an especially sensible model. In the first couple of years the children anyway learn almost nothing in early English, and also when I look at the teaching materials, I can clearly see that after a year in secondary school I was at the same level as the children who had been taught in the early English programme for about 3 years.* (12_LLL7_F_GER)

Early vs. late starters. In general, it seemed that the ECLs had to deal with a range of challenging aspects of FL learning and FL-related experiences at the beginning of secondary school, such as difficulty adjusting to the new teaching style. They indicated that, apart from the, as it were, intrinsic qualities, favorable or otherwise, of the early English experience, there seemed to be a host of difficulties associated with the perceived lack of congruence as regards the primary level and the secondary level of education. Specifically, the ECLs pointed to the (perceived) inefficiency of early FL instruction, they criticized the choice of language of instruction at primary school, and thus lamented the repetition in secondary school, as illustrated in (22)–(24):

(22) *At primary school I didn't learn the technique of learning in English. But now at secondary school I have to learn most of it, because I have to catch up with everything, above all I must learn to learn!* (07_ELb55_F_GER)
(23) *At primary school, I found, we only learned vocab, but not rules. Here it's very different, we learn to write sentences and so on. I would have liked it better if we had learned grammar earlier.* (07_ELb81_M_GER)
(24) *For example, until 6th grade we were allowed to spell the way we wanted, e.g. the word* the *as* de*, and it wouldn't be counted as wrong. In secondary school, suddenly correct spelling was expected, as well as some knowledge of grammar, which is something we'd never looked at before.* (07_ELb39_M_GER)

Examples (22)–(24) illustrate that many of our participants reported that the work was getting harder at secondary school. Some participants felt disillusioned because they received lower grades on their assignments or because they felt unfamiliar with the expectations of English at secondary school. Many of the

students felt that too much emphasis on communicative practice left too little time for grammar. As we have seen in the examples above, the LCLs seemed content on the whole with the conditions of their later start.

Younger vs. older students. Finally, the interval between Time 1 and Time 2 is so large that one might expect some changes to have occurred in learners' perspectives in this period. Indeed we have already seen evidence in our discussion of the focal group of such a change of perspectives especially in relation to the early high achievers' perception of the early experience of learning other languages. These kinds of changes are in evidence in the sample at large. The following quotation (25), for example, talks about the experience of looking forward to the prospect of encountering a new language in primary school followed by the disillusionment of failing to make the progress expected. It relates this explicitly to the age question.

(25) *I can still remember well when I began to learn French in 5th class. I had been looking forward to this immensely and was very motivated to learn everything. But today when I look at old tests from this time, I can see that I didn't learn anything. I got almost everything wrong, despite intensive learning and even got a 5* [on a scale from 1 to 6, 6 being the best]. *Now I'm still hopeless in French and much better in English and Spanish. Two languages that I started to learn somewhat later. Therefore I don't believe it's better to have children learn languages earlier. Despite their enthusiasm they won't get much out of it, as they're at that stage simply not as receptive as they would need to be.* (12_LLH3_M_GER)

On the other hand, at a different level and in the shorter term, it is possible for learners to notice in themselves a growing desire to learn languages as more become available. This seems to be the kind of change being talked about in what follows:

(26) *Actually I think it's good that we learn several languages simultaneously. You get to want more, once you've understood. I certainly have the inclination to learn more!* (07_ELH2_F_GER)

The durability and solidity of this kind of change may be in some doubt. It may be significant that the above remarks are associated with the early high achievers' initial (and in many cases temporary) enthusiasm of Time 1.

Discussion

What did we learn, then, from giving these learners a voice concerning how they felt about the age at which they had started being exposed to English at school? We learned that for the most part the late starters were content with and positive about their late start, and that those who had been able to compare themselves with early starters (e.g., younger siblings) did not find themselves at a disadvantage from beginning English later. Amongst the early starters we found differences between the high achievers and the low achievers. At Time 1 the mood amongst the high-achieving early starters was very buoyant; many of the positive opinions expressed, though, seemed to be based on 'received wisdom' about the desirability of beginning English instruction early. At Time 2, views were mixed; a number of high-achieving early starters referred to their disappointment with the actual experience of early English. The pattern of perceptions voiced by the early low achievers was overwhelmingly negative at both Time 1 and Time 2.

The expression of negative attitudes towards FLs and the learning environment at Time 1 is a striking result for the early starters, as it is one of the main goals of early English in Switzerland to make the learners aware of the role English plays in the world and to raise their cultural awareness. From the qualitative analysis it became clear that various factors seemed to contribute to the disengagement of the early starters and might be responsible for the observed lack of enthusiasm for engaging with English in school. These might include a lack of belief in the efficacy of in-school learning environments among learners (see also Henry, 2014) and a relationship between not liking the teacher and not liking the subject (see also Taylor, 2013). Resistance also appears to have arisen from a discrepancy between the learners' expectations of 'good teaching' and the pedagogical practices of the teacher. It also seemed that the ECLs had to deal with a range of challenging aspects of L2 learning and L2-related experiences at the beginning of secondary school, such as difficulty adjusting to the new teaching style. Some participants felt disillusioned because they received lower grades for their assignments or because they felt unfamiliar with the expectations of English in secondary school. Many of the students felt that too much emphasis on communicative practice in primary school left too little time for grammar. This is also what Cenoz (2004) observed. She found significant differences in favor of late starters when it came to the FL learning motivation of learners who were in the same school year (4th secondary) but who had received different amounts of instruction. Cenoz hypothesized that this might have been related to the differences in input and methodology between primary school and secondary school: the earlier starters "experience a more grammar-based approach after they have

moved to secondary school and this contrast between the two methodologies may affect their motivation" (214).

The ECLs' dissatisfaction with early English and the transition from English in primary to English in secondary school is problematic in several respects. Norton (2014), who takes a poststructuralist view of motivation and resistance in a classroom, points out that a student can be highly motivated and eager to learn English in general, but that if the language practices of the classroom make a learner unhappy or dissatisfied, the learner may resist participation in classroom activities, or become increasingly disruptive. This position finds support from Ushioda (2014), who points out that social-environmental conditions that undermine learners' sense of competence will generate forms of motivation that are less internalized, less integrated into the self or aligned with its values, and more externally regulated by environmental influences, pressures, and controls: "If the learning challenge is too great and students do not feel competent to undertake it, they will not develop any intrinsic motivation for doing so and will feel that they are acting under coercion (i.e., lacking autonomy if obliged to try)" (135). The reports in this study also confirm the influence of the teacher (in our case particularly the primary school teacher) which has been documented abundantly in the SLA literature (e.g., Noels et al., 1999; Taylor, 2013; Ushioda, 2011). Lamb and Budiyanto (2013) explain that if the teachers do not have any personal experience of Anglophone culture, English will be taught and learned as a "values-free body of knowledge conveyed via official textbooks" (26) and the students might become more oriented towards practice for local and national exams. In a similar vein, anxiety can result from the classroom situation (see e.g., Horwitz et al., 1986). For many students, the learning of English is not an enjoyable activity in itself, but one which they have been required to persist at for many years in primary school with negligible levels of success.

Conclusion

This study aimed at gaining insights into beliefs about the age factor of EFL learners with different starting ages, in different grades, and with different levels of EFL proficiency. The comparison of the profiles of the four participant groups revealed certain distinctive characteristics that distinguish the early starters from the late starters, the high-achievers from the low-achievers, and the younger students from the older students. At Time 1, early high achieving starters in English tended to value the importance of their early experience of English in primary school. Early low achievers in English as well as late starters in English in general were much more diffident regarding early second

language instruction. At Time 2 the attitudes of these latter groups had not altered markedly. The attitude of the early high achievers, on the other hand, had moved away from the enthusiasm for primary school language instruction evidenced at Time 1, and showed signs of being affected by disappointment with the effectiveness of such instruction. Another noteworthy result is that the early starters in this project seemed to have lost much of their optimism and motivation when they made the transition from English in primary to English in secondary school. Besides the problematic issue of streaming (see Pfenninger & Singleton, 2016), this finding raises the question as to whether the skills that are acquired in primary school are adequately measured and accredited in secondary school.

Thus, the overall lack of age effect on FL achievement may be explained with reference to a number of affective and contextual factors. The fact of this overall absence of an advantage for younger FL beginners in schools (not just in this study but generally and worldwide) has very far-reaching implications, which to date educational policy-makers have seemed intent on ignoring. The contribution of learners' own perspectives on this issue may perhaps add a little pressure to the clear requirement for a response to research findings in this area. What is called for in the first instance is some attempt to radically improve and enrich the primary school experience of foreign languages, as well as some serious attention to the disconnection between the primary and secondary level treatment of foreign languages. If such measures fail substantively to change the situation—as well they might—the notion of rethinking the place of foreign languages in the primary curriculum will in the longer term be impossible to resist.

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Simone E. Pfenninger, David Singleton

Der Altersfaktor im Fremdsprachenunterricht: was meinen die Schüler?

Zusammenfassung

Der Beitrag untersucht die mit dem Altersfaktor verbundenen Einstellungen der Englisch als Fremdsprache lernenden Schüler, die in verschiedenen Altersgruppen mit dem Lernen beginnen (frühe Anfänger vs. späte Anfänger), in verschiedenen Klassen Englisch lernen (angefangen von siebenjährigen bis zu zwölfjährigen Schülern) und verschiedene Spracheinstufung vertreten (schwache vs. erfolgreiche Schüler). Zu Versuchszwecken verwendeten die Verfasser die Stichprobe von den groß angelegten Forschungen, die in der Gruppe von 200 Oberschülern, als einem Teil der in der Schweiz in dem Zeitraum 2008–2015 durchgeführten Längsschnittstudie, durchgeführt wurden. Aus der Probe wurden 10 erfolgreiche Frühanfänger, 10 schwache Frühanfänger und 10 schwache Spätanfänger gewählt. Die Ergebnisse der qualitativen Analyse, die anhand der von den Schülern am Anfang und am Ende der Lehre in der Oberschule geschriebenen Aufsätze durchgeführt wurde bewiesen, dass die Schüler welche in verschiedenem Alter, in verschiedenen Klassen und mit verschiedener Spracheinstufung mit ihrem Fremdsprachenunterricht anfangen, sehr unterschiedlich den Altersfaktor beim Unterricht beurteilen. Die Ursache dafür, dass das Alter das erfolgreiche Spracherwerb nicht beeinflusst, was auch unsere früheren Untersuchungen bestätigten, liegt wahrscheinlich sowohl in den die Lernqualität beeinflussenden Faktoren (z.B.: unzureichende Hingabe des Lehrers daran, die Frühanfänger in der Klasse zum Lernen zu motivieren) als auch in kontextuellen Faktoren, wie z.B.: der Wechsel von dem in der Grundschule zu dem in der Oberschule unterrichteten Englisch.

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On Non-Native Speaker E-mail Communication from a Genre Perspective

Abstract: The author has investigated a corpus of informal e-mail messages produced by upper-intermediate Czech learners of English. The method of analysis draws upon Biber and Conrad (2009) employing primarily a qualitative analysis as part of the author's dissertation. First of all, the paper touches upon such descriptive terms as style, register, and genre. Secondly, the paper presents the results of an analysis of genre features including deviations. In the concluding part, the article outlines implications for practice.

Keywords: genre; register; style; second-language writer

Introduction

One of the challenges for non-native speakers represents the task of learning appropriate style, register, and genre. This could be attributed to a lack of language intuition (e.g., Crystal & Davy, 1969). Working on the assumption that the issues of style, register, and genre tend to be a stumbling block for non-native speakers of English, the author has investigated a corpus of informal e-mail messages. The e-mails were produced by upper-intermediate Czech learners of English. First, the paper touches upon such descriptive terms as style, register, genre, and deviation. Second, the paper outlines the method of analysis and delves into the situational characteristics. Third, it presents the results of an analysis of genre features (genre markers) and discusses their deviations. The method of analysis draws in part upon Biber and Conrad (2009) and employs primarily a qualitative analysis. The preliminary results from the selected genre markers under investigation do not corroborate the assumption that most second language writers of English should have substantial difficulty in applying the appropriate genre markers.

However, it is important to underscore that every text is situation-bound as well as situation-determined.

To reiterate, the present study aimed at conducting a genre marker analysis. The author has investigated a mini-corpus of informal e-mail messages produced by Czech learners of English. It presents the results of an analysis of genre features (genre markers) and their deviations, employing a qualitative analysis. To this end, the author has investigated a corpus of fifty-seven informal written scripts (e-mails), with a total of 10,383 words. The e-mails were written by Czech learners of English in answer to one of the Cambridge exam rubrics with the aim of finding out whether second-language writers of English have considerable difficulty in applying appropriate genre conventions.

It should be mentioned at the outset that the corpus gathered for the present study bore certain drawbacks. Only 57 e-mails were under investigation in a circumscribed context. This could affect the nature of any interaction. The mini-corpus is clearly biased towards an exam writing setting. Generalization is not the purpose of this study; rather, the aim is detailed genre marker analysis of the e-mail messages written by non-native speakers of English.

The Theoretical Framework

Note on register, genre, style, and deviation. The study of stylistics is of great importance and relevance for language learners. Yet it is a complex task. The complexity can be well-illustrated by looking at the key concepts of stylistics such as register, style, and other closely related concepts, for example, genre. Although there is at present a fairly extensive body of literature on the three descriptive terms, there is still little agreement on the concepts (cf. Biber & Conrad, 2009; Enkvist et al., 1964; Fowler, 1996; Urbanová, 2005).

In reviewing the literature and textbooks in sociolinguistics and stylistics the concept of *register* generally appears to fall into two main groups. Holmes (2001, p. 246) holds that the term register can be understood in two ways. In a narrower sense, the term is applied to refer to the specific vocabulary employed by various occupational groups as exemplified below. Or it is used in a broader sense and associated with such situational parameters as addressee, setting, mode of communication, task or topic. For some scholars (e.g., Romaine, 1994) the term register is confined to the specialized language of like-minded people. In other words, it only refers to occupational varieties. Similarly, Wardhaugh (2002, p. 51) refers to registers as "sets of language items associated with discrete occupational and social groups." In a similar vein, register is then understood as a speech variety used by special groups of

people, for example lawyers or tennis players, distinguished by a number of distinctive features such as grammatical structures (e.g., impersonal constructions in legal English) and vocabulary (e.g., love, van) in tennis terminology. It must be stressed, however, that these definitions are difficult to accept because the concept of register is strongly tied up with situations of use rather than a specific professional or social group. Other authors, therefore, (e.g., Halliday, 1978) stress the language variation and selection in a specific social situation and context with specific functions of language in those contexts. Examples include: legal register, scientific register, medical register, etc. According to Bhatia (2009, p. 389) register refers to a functional use of language to suit a particular configuration of contextual factors of mode, field, and tenor of discourse, while style refers to an individual's use of language. Lee (2001, p. 11) points out that Crystal and Davy (1969) tend to use the term style in the same way most other people use register—that is, to refer to particular ways of using language in particular contexts.

In examining discourse, another theoretical concept is worthy of consideration. It is the notion of *genre*. The concept of genre is nonetheless highly problematic. For Lee (2001, p. 37), the two terms (register and genre) are the most confusing and are often used interchangeably, especially due to the fact that they overlap to some extent. Swales (1990, p. 4), for instance, states that "…the relationship between genre and the longer established concept of register is not always clear." In recent years, genre analysis has enjoyed immense popularity and attracted the attention of a large number of scholars engaged in various fields (see e.g., Bawarshi & Reiff, 2010; Swales, 1990; 2004), who have been prompted by various motivations for the research. In particular, the last decade has witnessed increasing attention to the notion of genre and its application in language teaching and learning. The interest was driven by a dual purpose to understand the relationship between language and its contexts of education (Hyland, 2002, p. 113). The term genre has been defined in a variety of ways in the field of linguistics and much interesting research has been done on genres in more specialized varieties. According to McCarthy (2001, p. 112) "most linguists working in the area accept the notion of genre as norm-governed social activity that manifests linguistic and non-linguistic behavior to varying degrees of institutionalizations."

For Hyon (1996) and others, for example Hyland (2002), genre theorists and practitioners fall into three chief camps. They do not need to be seen as being mutually exclusive but complementary to each other. First is the Sydney School, based on the systemic functional work of Halliday, which has developed research and well-established pedagogies. It focuses on primary, secondary, and adult education (see e.g., Hyon, 1996); second, the English for Specific Purposes (ESP) camp represented by Swales (1990). It particularly focuses on non-native speakers of English in tertiary education. Finally, The New Rhetoric

(NR) group, especially North Americans, for whom genre knowledge has been considered to be primarily social, embedded in the community and context of writer and audience (Hyon, 1996, pp. 693–722). As the name of this group suggests, it is composed of rhetoricians and composition theorists who have been very well trained in rhetorical theory and composition studies. The NR group draws primarily from L1 perspective and makes no reference to second or foreign language studies. The research of the NR centers on investigating the ideological, social, and physical surroundings in which genres are produced. It also focuses on studying the ways in which genres evolve, are negotiated, and fall out of favor. Consequently, the NR rhetoricians claim that texts used in classroom study are not authentic any more when they are taken out the original contexts and purposes.

In agreement with Lewandowski (2010, p. 69), perhaps the most convincing explanation of the three descriptive terms (register, style, and genre) was offered by Biber and Conrad (2009). The authors make the point that style, genre, and register refer to three different angles or perspectives on text varieties. That is, the same text can be analyzed from all three perspectives. The perspectives vary in terms of: (a) the text for analysis; (b) the linguistic analysis for the text; (c) the distribution of these characteristics within the text; (d) the interpretation of the linguistic differences. More specifically, the *register perspective* is made up of a combination of an analysis of linguistic characteristics, that is, typical lexical and grammatical characteristics. The analysis centers on lexical-grammatical characteristics that are always functional and which are common in a text variety with analysis of the situation of the use of the variety. Biber and Conrad (2009, p. 2) explain that "the underlying assumption of the register perspective is that core linguistic features, for example, pronouns, verbs, are functional. In effect, particular features are commonly used in association with the communicative purposes and situational context of texts." Whilst a register is a set of linguistic variations that are context-dependent, *genre perspective*, by contrast, encompasses the description of the purposes as well as the situational context of a text variety. Its linguistic analysis concentrates on the conventional structures used to construct a complete text within a text variety, such as the ways informal e-mails tend to start or end. The same is true of the layout or physical organization on the page. Genre features are not usually pervasive. Rather, they are conventional and occur once in a text. In this connection, the two authors speak of *genre markers*. Genre markers are clear signals of the type of text and "the distinct expressions and devices that are used to structure a text from a particular genre" (Biber & Conrad, 2009, p. 54). Some genres (spoken or written) tend to be highly structured. These are, for example, religious speeches and formal business letters. In fact, they frequently contain fixed formulaic genre markers which occur in a fixed order. As mentioned above, written conventions are, as a rule, readily identifiable at the beginning and end

of texts. By contrast, other kinds of texts are less rigidly structured in this respect. To mention one example, informal e-mail messages and informal letters can show greater variation in the use of conventions. Moreover, because the purposes and other contextual factors of the two may be closely related, they may contain the same genre markers. Finally, in terms of *style perspective*, its linguistic focus is not functionally motivated by the situational context. Rather, style features reflect aesthetic preferences that are associated with particular authors (Biber & Conrad, 2009, p. 2). The features of style are not necessarily functional. However, they are preferred due to their aesthetic value.

To reiterate, according to Biber and Conrad (2009) the same text can be analyzed from register, genre, and style perspectives as shown and summarized in Table 1 with regard to the text, linguistic characteristics, distribution of linguistic characteristics and the interpretation of linguistic differences.

Table 1
Defining characteristics of register, genres, and style

Defining characteristics	Register	Genre	Style
Textual focus	Sample of text excerpts	Complete text	Sample of text excerpts
Linguistic characteristics	Any lexico-grammatical features	Specialist expressions, rhetorical, organization, formatting	Any lexico-grammatical features
Distribution of linguistic characteristics	Frequent and pervasive in texts from the variety	Usually once-occurring in the text, in a particular place in the text	Frequent and pervasive in texts from the variety
Interpretation	Features serve important communicative functions	Features are conventionally associated with the genre: the expected format, but often not functional	Features are not directly functional: they are aesthetically valued

Source: Biber and Conrad (2009, p. 16).

Furthermore, *style* can be defined as a choice of linguistic means: as *deviation* from a norm perspective, as recurrence of linguistic forms, and as comparison. Generally, deviation is a "noticeable difference from what is expected, especially from expected standards of behavior" (Tárnyiková, 2002, p. 116). Consequently, deviation is sometimes associated with irregularity. If irregularity is creative and unexpected, then it may be referred to as deviation. This is particularly true of literary stylistics where deviation is associated with the studies of a writer's individual style. In linguistics, it can be understood as linguistic usage which departs from normal expectations of the language. That is, deviation does not need to be ungrammatical or contrary to any rules. Seen from this perspective, deviation is not viewed as binary oppositions—deviant vs. non-deviant—but rather in terms of "scales/clines ranging from non-deviant to deviant language

manifestations" as suggested by Tárnyiková (2002, p. 118). The concept of deviation is equally relevant for the ESL/EFL domains. This is because it brings up the notion of idiolect and uniqueness of individual utterances of second language learners and the choices they make.

Methods of analysis. The current study has employed a quantitative approach and the e-mail analysis, as mentioned above, builds primarily on the comprehensive framework suggested by Biber and Conrad (2009). However, I have decided to modify the framework to a certain extent. More specifically, Biber and Conrad (2009, p. 47) advocate a register analysis which is dependent upon three steps.

1. A description of the situational characteristics of the register, e.g., participants, relations among participants, channel, production circumstances, setting, communicative purposes, topic.
2. An analysis of the typical linguistic characteristics of the register.
3. Identification of the functional forces that help to explain the reason why those linguistic features tend to be associated with those particular situational characteristics.

The analysis of situational characteristics is deemed to be an essential point of departure for the linguistic analysis. This is because a register is closely tied to a specific situation. It has a specific communicative purpose. It is for this reason that I attempt to follow Biber and Conrad (2009) and describe, firstly, the situational characteristics of the e-mails under investigation. The second step includes a lexico-grammatical analysis of register features. This type of analysis is equally important but is beyond the scope of this paper. Finally, the authors assert that "it is useful to add an analysis of genre features when undertaking a register analysis in order to describe the text variety more fully" (Biber & Conrad, 2009, p. 69). Taking genre perspective on board, the discussion is confined to an analysis of the situational characteristics and selected genre features (genre markers) including genre marker deviations.

Genre Markers

A quantitative genre analysis of conventionalized patterns of language use was applied. That is, the four selected genre characteristics—genre markers of the e-mail messages—were subjected to close examination in relation to three levels of formality (formal, neutral, informal):

- starting/opening of the e-mails/salutation, e.g., Hey John;

- ways of expressing thanks, e.g., acknowledging the e-mail or cheers for your e-mail;
- pre-closing formulae, e.g., Looking forward to your reply;
- ending/closing of the e-mail, e.g., All the best.

For the purposes of the quantitative investigation of the conventional, formulaic genre markers, a genre marker table depicted below (Table 2) was developed. Table 2 is composed of four columns and differentiates three levels of formality—formal, neutral, and informal. In examining each e-mail, an appropriate box with an appropriate genre marker was completed. To illustrate, Table 2 provides a number of genre markers with a set of prime examples. The section with examples serves the purpose of illustration and therefore it does not provide or aim to provide an exhaustive list of all possible genre markers which may appear in real-life e-mails and those under investigation. Further, it should be mentioned that the range of styles available to the writer is a continuum. The terms formal, informal, and neutral are treated here as a useful but inevitable simplification for the present research.

Table 2
Genre markers

Genre markers	Formal	Neutral	Informal
	(polite, distant, indirect)	(semi-formal)	(friendly, personal, casual, direct)
Opening email	e.g., Dear Mr/Mrs X	Dear X/Hello X	Hi, Hi X, John (name only), nothing
Thanking	e.g., Thank you very much for your email …	Thank you for your email …	Thanks/Thanks a lot for your email. Cheers for your email …
Pre-closing formulae	e.g., I look forward to/ I am looking forward to …	I'm looking forward to …	Looking forward to …
Closing email	e.g., Yours faithfully/ Yours sincerely, Yours ever	Best wishes/Regards	Best/See you/Cheers, Tom (writer's name only), Love, Hugs …

Data collection procedure. All materials (informal e-mails) were gathered in the period 2009–2010 at the end of the semester as part of a mock examination. The written instructions were based on one of the practice FCE exam rubrics. Subsequently, a corpus of fifty-seven e-mail messages, with a total of 10,383 words, was compiled. All of the analyzed e-mails were complete texts of 130–200 words in length. Since linguistic features tend to vary across a register depending upon the situational characteristics, different relationships between the participants and the primary purposes of e-mail, I decided to examine one type of transactional e-mail, a sub-register. All e-mails were written by Czech learners of English at upper-intermediate level of proficiency in answer to the

same task as part of the First Certificate in English examination in which the writer is asked to provide the target reader, a friend, with the requisite provision of information and written in an appropriate (informal) style for the situation.

Analysis

Situational characteristics. In keeping with Biber and Conrad (2009), I shall begin by describing the participants and relations among participants involved in the study.

Participants and relations among participants. The category of participants (addressor and addressee) is self-explanatory. Virtually every text is produced by someone and attributed to someone. For example, personal e-mail messages and personal letters tend to be addressed to an individual but can, of course, be addressed to multiple individuals. Social characteristics of the person (e.g., age, sex, level of education, social class) producing a text can have a profound effect on language choices. Similarly, the role of on-lookers must be taken into account in making language choices.

The consideration of the social role and personal relationships among participants is important as well. In many cases the participants are socially equal, for example, friends or classmates exchanging e-mail messages. Participants can also have different degrees of shared knowledge. For example, the description of your leisure time activities may vary depending on whether you are talking to your best friend or a stranger. In contrast with real-life e-mail messages in which the interaction can be immediate (or spread over days or weeks), the degree of interactiveness is in this research situation low. This is because the reader is not meant to reply at all. The two participants are said to be friends and are thus socially equal. The *addressors* are easily identifiable; they were young adults of Czech nationality between the ages of 18 and 25. Also, it must be noted that they were all students at the time of the beginning of the investigation. The students all took part in an intensive course and sat for the FCE mock-examination (*pomaturitní studium*) as part of their studies.

As for the gender of the participants, there were 41 females and 16 males in total. They all had been classified as being at the intermediate level of proficiency. Moreover, the majority of the learners had studied English as a foreign language previously at a secondary school in the Czech Republic. Most of them graduated with a pass in English, and Czech is their mother-tongue. In sum, the writers formed a homogenous group in terms of age, language level and learning background, nationality, and profession.

Regarding the intended reader, that is, *addressee*, their social role and personal relationship to participants: as based on FCE instructions, the informal e-mail message was essentially intended for a peer (a foreign friend), namely, for an individual reader. The writers were therefore expected to produce a personal e-mail using an informal or neutral register as well as appropriate genre markers, for example. The participants (authors of the e-mails) were, however, fully aware of the fact that the personal e-mail messages would be read by the examiner(s). The role of the on-lookers ought to be taken into consideration, and admittedly, cannot be ignored. It may be argued that the role of on-lookers is even more significant than that of an unknown addressee. In short, the influence of both should be recognized. In considering an appropriate sampling, I decided to follow a homogenous sampling strategy. That is, all the participants were young Czechs adults who participated in the same type of language program, were of upper-intermediate level of proficiency, and completed the mock test in identical exam conditions. It is felt that the focus on a homogenous group of Czech learners at a specific level of proficiency will be of benefit for present and prospective research studies.

Channel, production circumstances and setting. Generally, channel refers to the distinction between spoken and written language—speech vs. writing. The production circumstances are connected with the channel of communication. For instance, casual conversations usually allow very little time for planning, while written texts have greater editing possibilities. It must be noted that, in this study, the e-mail messages were not typed but handwritten. Moreover, the e-mails were produced in a very specific public setting, that is, in exam-like conditions at the Elvis language school. In addition, the e-mail messages were written within the required time limit and the exam was held in a public setting. Therefore, the time and place were equally shared by all of the test-takers. The writers had some time to plan what they were going to write—that is, the e-mails allowed opportunity for quick planning, editing, deleting, and revision. Admittedly, the setting (i.e., the time and place of interaction) including the type of channel, might have had a considerable impact on language choices. For instance, it may be argued that the language produced is not natural and was not written in natural conditions. While acknowledging that these specific means of expressing language can have a certain degree of influence upon the linguistic forms that the writers employed, it could also be argued that every text arises in a specific context, often with various and even hidden purposes and interests.

Communicative purposes and topic. Communicative purposes can be very general, for example, narrating or reporting past events, and relatively easy to identify. One parameter related to purpose is factuality. Does the ad-

dressor intend to convey, for example, factual, information, personal opinion or speculation or a mix of them? The final parameter concerns the expression of stance which includes both personal attitudes and epistemic stances. Topic can be of a very open or very specific category and this is of importance in making lexical choices. But it has no impact on the grammar of a language register. The e-mails under investigation combined several communicative purposes. The general communicative purposes of the e-mails were to convey four pieces of factual information (factuality) and to express personal opinion on a recent visit made by a friend and a future visit to the same friend. In other words, the e-mails were not only task-focused but interpersonal as well. More specifically, the purposes of the e-mails under study were to briefly inform the friend (Tom) about a more-than-three-hour delay on the way home (1), to tell Tom and perhaps describe which photos the writer likes best (2), to tell Tom about a found watch and about the place where it was found (3), and to tell Tom where the writer prefers to stay and why (4). This involved brief description and explanation of the problems, description of the photos and the watch, and giving holiday preferences. In terms of the topic, the instructions and e-mail combine the topics of the recent visit to a friend and upcoming mutual holiday plans.

Genre markers analysis. The linguistic features analyzed as part of a quantitative analysis included conventionalized patterns of language (genre markers) with regard to the level of formality. As is well-known, the use of conversational traits in written texts is connected with informality. By contrast, formality is tied to non-conversational and impersonal registers. While there is general agreement as to the conventions of very formal registers, there is greater variation in informal registers. Still, informal e-mails tend to adopt a lively and engaging style. They maintain a clear sense of address to a specific person. Also, they may include opening and closing salutations. As stated in the description of the situational characteristics, the writers under investigation form a homogenous group. The group may be regarded in a sense as a community with its own norms and conventions and ways of writing/speaking that are frequently taken for granted. It was therefore found relevant to examine the presence or absence of consistent textual conventions.

The act of greeting implies that a social encounter is taking place (Searle & Vanderveken, 1985, p. 216). And it is one of the aspects in e-mail communication. In fact, in the view of numerous scholars (e.g., Abbassi & Chen, 2005; Bunz & Campbell, 2002) openings and closings rank among the most salient structural features of an e-mail message and they encode social information. Also, they can be viewed as certain norms that structure and regulate conversations (cf. Baron, 2000). For instance, it is sometimes suggested that beginning an e-mail with a proper greeting shows friendliness and indicates the beginning of the message. At the same time, as previous research (e.g., Baron, 1998;

Biber & Conrad, 2009) has demonstrated, e-mail writers often dispense with conventional opening and closing routines. They are thus regarded as optional and conventional rather than compulsory and functional. This applies to both written and spoken varieties. For instance, everyday conversations do not often employ minimal conventions (Biber & Conrad, 2009, p. 70).

The acts of greeting and thanking the addressee formed the core of the study. In examining the e-mails from the genre perspective, the following textual conventions under investigation were used by the subjects. The majority of the e-mails under study begin with a friendly opening salutation *Hi + first name* followed by a comma (*Hi Tom*, 59%), (*Hello + first name*, 17%), and (*Dear + first name*, 14%). Other, more casual opening expressions are far less frequent, such as *Hey Tom*, *Hi buddy*, name only, and nothing, amounting to 9% in total. Considering the data in greater detail, no severe violation in terms of the level of formality was observed. This is equally supported by the fact that the vast majority of the openings were followed by a comma, which generally implies a friendly, familiar, and sociable tone. As far as the function of the opening salutations is concerned, the present results indicate that they are still widely used; not only are they conventional but also functional as they seem to open up a "conversation"; and the most common ones (*Hi, Hello*) evoke a conversational tone. Yet it must be noted the use of openings is strongly endorsed in the learning and testing materials. In other words, learners are encouraged to use genre markers.

As far as the ways of expressing thanks are concerned, I first present the results of the optional thank-you-for-your-e-mail expressions (acknowledging the e-mail). The most common expression is the friendly *Thanks for your e-mail* (35%) followed by the neutral or slightly semi-formal *Thank you for your e-mail* (25%). Thirty-two percent of the samples did not acknowledge the e-mail at all. Rather, the writers began by explaining the reason as to why they arrived home late, complimenting and/or expressing their delight with the return journey.

In addition to acknowledging the e-mail, the writers in response to one of the tasks had a chance to express their thanks for photographs. The vast majority of the writers (70%) opted for more pragmatic and immediate evaluation of the photographs (e.g., *The photos are very nice, beautiful*…, etc.) without any thanks whatsoever. Other writers expressed their thanks explicitly by using such expressions as *Thanks for your photos* (21%), *Thank you for the photo* (7%), and 2% of the writers resorted to *I thank you also*.

Twenty-four percent of the writers used the explicit pre-closing formulae *I'm looking forward to seeing you*, while 16% of them opted for a slightly more formal expression, *I look forward to see(ing) you*, and 7% of them did not use pre-closing formulae. More casual expressions such as *I'm dying to see you*, (less formal) *Looking forward to you* were used by 7% of the writers. The results show other expressions such as *Write me soon*, *Have a nice/*

great time/week/time, but they were far less common. Overall, the optional pre-closing formulae caused difficulty in terms of the structure and phrasal verb choice. The students either confused phrasal verbs, for example, *I am looking for your e-mail* (29), *I'm really looking after your e-mail* (25), or misapplied for an infinitive structure, e.g., *I look forward to see you* (47). *I'm looking forward to see you* (42*)*. Finally, one writer struggled with spelling, i.e., *I'm daying to see you* (42).

It is also apparent that the closings of the e-mails varied considerably, ranging from casual *See you (soon)*, *Bye*, or no closing, to the more intimate *Love*. Amongst less frequent closings expressions included *Yours*, *Take care*, *With love*, *Best wishes*, and other informal closings such as *Hugs*, *Lots of love*, *Your loving friend*. Only one e-mail ended with the semi-formal *Best regards*. Similarly, one e-mail used a rather formal closing, *Yours sincerely*.

Genre markers deviations and a comparison. Before proceeding to discuss the results from the quantitative data analysis of the selected genre markers, it is necessary to recall that using statistical data in relation to deviation from any social norms is problematic. As we know, when the students avoid norms and apply less acceptable or unacceptable genre markers, we tend to conclude that there is something wrong with the piece of writing. However, there are at least four problems with this reasoning.

To begin with, the use of genre markers in particular and appropriate register in general may vary enormously across cultures. The second problem lies in the historical variation. While some genre features have been employed extensively in the past, this may no longer be the case today. For instance, some types of business events have a tendency to be more informal today than in the past. The third problem is controversial. In many cases, including here, what is socially and linguistically acceptable or unacceptable has been established by groups with social power. Last but not at all least, recognizing genre conventions may be viewed as a learning process in students' development. It is, therefore, not only associated with age, gender, and culture but also the level of proficiency of the learner.

The results from the quantitative data analysis of the selected genre markers show no frequent violations in terms of the level of formality in general. Rather, regarding the choice of formality, it was found that the optional pre-closing formulae caused difficulty, especially the structure and phrasal verb choice, for example, *I am looking for your e-mail* (29), *I'm really looking after your e-mail* (25), or incorrect an infinitive structure, for example, *I'm looking forward to see you* (42). In other words, the selected genre markers under investigation were marked by a large number of structural deviations rather than by frequent deviations from appropriate level of formality. In addition to the genre markers, inappropriate formality was found to be a feature linked to individual cases; it

was not found to be characteristic of the majority of the e-mails under study. Rather than consistently using of less acceptable expressions, and a very formal style throughout, most of the students commited occasional lapses. Considering the data and comparing them with those of native speaker studies, some similarities as well as differences can be observed. For example, Biber and Conrad (2009) investigated approximately the same number of e-mails addressed to one of the authors. According to their findings, among the opening and closing salutations of e-mails written by their friends and family members (all native speakers), there was a strong preference for name only opening and closing expressions, followed by frequent *Hi* (name) or first name only. Similarly, e-mail-signatures where a first name is used sometimes introduced with an expression of personal affection, for example, love, hugs (Biber & Conrad, 2009, p. 188) were commonplace.

Conclusion

Respecting the above, several observations need to be made about the nature and functions of the aforementioned genre markers. Although genre markers are not primarily functional, their contribution cannot be ignored. First, the study shows that the genre markers under investigation are not pervasive in the texts. According to Biber and Conrad (2009) genre markers have a tendency to occur at a particular point in the texts, most commonly at the beginning and end of the text. In general, the opening and closing expressions were conventional. Other distinctive genre marker features often signaled a shift of a topic (cf. Swales's concept of moves). Second, it seems that the genre markers tend to evoke a "small talk." As a rule, rather than conveying information genre markers help to open, maintain and close conversation. Their role foregrounds the contact. Not only is their role phatic but conventional as well. As a consequence, the layout of the e-mails and the use of salient genre markers in boundaries bear similarities to a traditional (conventional) letter. All this seems to be particularly true of opening and closing formulae. Yet the thanking formulae were not found to be hollow polite phrases. Rather the use of these expressions seemed to show a genuine interest; the genre markers contributed substantially to the development and flow of the "conversation." Moreover, the use of these expressions helped the reader make sense of the text. Overall, the genre markers evoked turn-taking, guided the reader, and geared the texts towards a dialog.

Additionally, it is worth recalling that every text is *situation-bound* as well as *situation-determined*. Thus the specific context and situation in which a particular text is used have a considerable effect on its information structure and

its formal properties. And this, of course, also applies to the pieces of writing in this study.

Contrary to expectations, the results of the selected genre markers do not corroborate the assumption that most second-language writers of English should have substantial difficulty in applying the appropriate level of formality in the genre markers under investigation. But the results must be interpreted with a degree of caution. Given the task instructions and extensive practice and attention in modern teaching and learning material, the results of the genre markers were relatively predictable. While certain difficulties have been attested to genre marker lapses by individual writers, the problem merits further investigation. For instance, it would be beneficial to look at these considerations and challenges in a less circumscribed context (e.g., chat exchanges, e-forum postings, text messages), where a lack of intuition cannot be compensated for by such memorized genre markers as opening and closing lines.

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Jan Pikhart

Zu E-Mail-Kommunikation von Nicht-Muttersprachlern vom Standpunkt einer Gattung aus

Zusammenfassung

Der Verfasser untersuchte das Korpus von E-Mail-Nachrichten, die von tschechischen Schülern der höheren Mittelstufe englisch geschrieben wurden. Er bediente sich dabei der von Biber & Conrad (2009) formulierten Voraussetzungen der qualitativen Analyse. Der erste Teil des Beitrags konzentriert sich darauf, die Termini: Stil, Gattung und Register zu klären. Der zweite dagegen beinhaltet die Ergebnisse der Analyse von generischen Merkmalen, darunter der zu beobachtenden Abweichungen. Im dritten zusammenfassenden Teil schlägt der Verfasser vor, seine Untersuchungsergebnisse in weiteren Forschungen auszunutzen.

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Do Girls Have All the Fun? Anxiety and Enjoyment in the Foreign Language Classroom

Abstract: The present study focuses on gender differences in Foreign Language Enjoyment (FLE) and Foreign Language Classroom Anxiety (FLCA) among 1736 FL learners (1287 females, 449 males) from around the world. We used 21 items, rated on a Likert scale, reflecting various aspects of FLE (Dewaele & MacIntyre, 2014), and 8 items extracted from the FLCAS (Horwitz *et al*., 1986). An open question on FLE also provided us with narrative data. Previous research on the database, relying on an average measure of FLE and FLCA (Dewaele & MacIntyre, 2014) revealed significant gender differences. The present study looks at gender differences in FLE and FLCA at item level.

Independent *t*-tests revealed that female participants reported having significantly more fun in the FL class, where they felt that they were learning interesting things, and they were prouder than male peers of their FL performance. However, female participants also experienced significantly more (mild) FLCA: they worried significantly more than male peers about their mistakes and were less confident in using the FL. Our female participants thus reported experiencing both more positive and more mild negative emotions in the FL classroom. We argue that this heightened emotionality benefits the acquisition and use of the FL.

Keywords: Foreign Language Enjoyment, Foreign Language Classroom Anxiety, individual differences, gender

Introduction

Perhaps the most common way to divide humans is into two sexes, male and female. In childhood play, sex differences establish themselves and same-sex friendship lasts a lifetime for many of us, even if we marry a member of the opposite sex. Popular books tell us that "Men are from Mars and Women are from Venus" (Gray, 1992)—so distinct are men and women that they seem to come from different planets. However, not everybody agrees with this perspective. Feminist scholars, such as Cameron (2008), have accused Gray of perpetuating myths and of exploiting "people's tendency to rely on stereotypes when processing information" (p. 14). Moreover, we acknowledge that gender is not a clear-cut binary category. Transgender people situate themselves at different points along the gender continuum and this can be dynamic, as they can live in role part time (Kulick, 1998).

We agree that it is crucial to avoid simple, stereotypical concepts of gender differences. Eckert and McConnell-Ginet (2013) have shown that the connections between language and gender are deep yet fluid, and arise in social practice. Before speculating on possible reasons for differences between women and men (or the absence of them), there is reason to investigate how large the differences between boys and girls, men and women really are, especially when it comes to language learning. Simply believing the stereotype that girls have superior language learning skill might discourage some boys from engaging with the language learning process, in a self-fulfilling prophesy. The belief in gender differences, and what one should do about them, might be more relevant to communication than the observable gender differences themselves. For this reason, gender differences merit thorough investigation. Such research is particularly relevant in relation to emotional dimensions in FL learning, where small but significant differences have been identified (Dewaele & MacIntyre, 2014).

Literature Review

Meta-analyses point to the discovery of only relatively small gender differences[1] in various behaviors relevant to language, emotion, and communication. What is typically considered female communication style tends to be grounded in use of emotional expression (Tenenbaum, Ford & Alkhedairy, 2011). Stereotypically, women are expected to react to negative events more

[1] We use "gender" to refer to the social construct.

emotionally, for example with sadness, crying, and greater withdrawal than men (Hess et al., 2000). This leads to a question as to whether these judgments are due to unsubstantiated gender labels, or whether they have some basis in the intensity of felt emotion.

Neuroscience research shows that significant differences have been found in the way men and women process the same events. Event related potential (ERP) studies have found higher emotional reactivity in women than men when viewing a negative stimulus (Gardener et al., 2013). Furthermore, a comprehensive review by Chaplin and Aldao (2013) found that although women showed more internalizing emotions, such as sadness, anxiety, and fear, they also showed more positive emotions, such as happiness. This may be due to a higher level of emotional reactivity in women overall, not only to negative events.

While stereotypes paint a broad picture of gender differences in language, communication and emotional experience, the meta-analytic work does not support sweeping generalizations. A number of studies have addressed the issue of gender differences in FL learning that follow a trend of statistically significant but small effect sizes. There are studies that show a female advantage in language development and usage. Eriksson et al. (2012) analyzed emerging language skills in ten separate linguistic communities. They found that females show a small yet consistent advantage over males in several aptitudes, including communicative gestures, productive vocabulary, and combining words. Studies of scholastic achievement show similar results. One meta-analysis based on 502 effect sizes indicated that girls had a consistent advantage over boys in school marks, with effect sizes being largest in language-based courses (Voyer & Voyer, 2014). Further, a longitudinal study conducted by Van de Gaer, Pustjens, Van Damme and De Munter (2009) on a cohort of 2,270 secondary school students (aged 12–18) in Flanders (the Dutch-speaking part of Belgium) showed that girls made a quasi-linear positive learning gain in language across their secondary education, whereas boys started with a decline followed by acceleration in their learning gain in language.

Denies (2015) found a more mixed picture in her investigation of the English L2 self-efficacy beliefs of over 22,500 European fifteen-year-olds. She compared listening, reading and writing proficiency to their endorsement of 12 Can-Do statements taken from the Common European Framework of Reference for Languages (CEFR). Logistic regression analyses revealed positive correlations between both elements and variation linked to gender and country of origin. Boys tended to have higher self-efficacy beliefs than equally proficient girls, but the pattern was reversed when students were presented with the easiest task descriptions. Denies (2015) carried out a second study, linking gender to students' proficiency across three languages, three skills and fourteen countries. English turned out to be the exception to the general tendency for girls to surpass boys' L2 skills, with boys sometimes performing significantly better than

girls. Gender differences were stronger in writing than in listening or reading. Cross-country variation in the gender gap was interpreted by Denies as evidence that gender is primarily a social factor rather than a biological factor in FL learning. Her multilevel mediation analyses with constituents of motivation suggested that in most cases where girls outperformed boys, a significant part of this advantage could be explained by the differential appeal of the students' L2 course and by the instrumental, integrative and intrinsic value that students attribute to the L2 (Denies, 2015).

Henry and Cliffordson (2013) noted that gender differences in language motivation research have received little attention (Dörnyei & Csizér, 2002). Existing studies have found that adolescent male FL learners in the United Kingdom (Williams, Burden & Lanvers, 2002), Canada (Kissau, 2006; Kissau & Turnbull, 2008) and Australia (Carr & Pauwels, 2006) have less desire to acquire FLs and invest less effort in learning them than their female peers. Williams et al. (2002) also reported strong gender differences among British learners in their perceptions of FLs: French was the language preferred by girls while boys preferred German. A 14-year-old boy explained that "French is the language of love and stuff" (p. 520) while a 14-year-old girl said that German reflects "the war, Hitler and all that" (p. 520). Kissau and Turnbull (2008) confirmed that for boys, not all languages are perceived equally.

Anxiety certainly has been widely examined in language learning and might be the most studied emotion in Second Language Acquisition (SLA) (Horwitz, 2010). Defined as "the worry and negative emotional reaction aroused when learning or using a second language" (MacIntyre, 1999, p. 27), anxiety-arousal can weaken the learning potential of the FL learner, wreck the best teaching techniques and render the most attractive teaching material inadequate (Arnold & Brown, 1999, p. 2). It has been described as one of the strongest predictors of success or failure in FL learning (MacIntyre, 1999). The list of potential sources of anxiety in language learning and communication is long, including harsh error correction (Gregersen, 2003), competitiveness among learners (Bailey, 1983), incompatibility between teacher and student (Gregersen & MacIntyre, 2014), personality traits such as neuroticism, extraversion, and psychoticism (Dewaele, 2002; 2013a), emotional stability and social initiative (Dewaele & Al Saraj, 2015), perfectionism (Dewaele, in print; Gregersen & Horwitz, 2002), second language tolerance of ambiguity (Dewaele & Shan Ip, 2013), and other factors (Horwitz, 2010).

Conflicting findings have emerged from research into the relationship between gender and FLA. Some researchers reported lower FLA levels for women than for men (Campbell & Shaw, 1994; Kitano, 2001); others have found the opposite pattern (Arnaiz & Guillén, 2012; Donovan & MacIntyre, 2005) and some have found no differences at all (Dewaele, Petrides & Furnham, 2008; Dewaele, 2013b; Matsuda & Gobel, 2004). Wang (2010) observed that confu-

sion reigns in this area of research and that "unknown variables" may be at play (p. 96). Park and French (2013) attributed the inconsistent research results for gender differences to socio-cultural factors because prior research studies were conducted in one location, and speculated that learner variables, such as motivation, interest and sincerity, might be relevant to the pattern of gender differences. Perhaps in considering the research methods to investigate gender differences, the meta-analytic research net is being cast too wide to capture the nature of the effect—gender differences might not be found on an inter-planetary level but rather on a detail-oriented, microscopic level. In the present study we will examine in detail the possibility that the different findings might be the result of a lack of focus on the details of the emotional reactions themselves, where specific facets of anxiety might be tied to gender differences. Park and French (2013) investigated specific items of the FLCAS, but the authors did not focus on the substantive meaning of those items which might reveal some of the more subtle processes tied to gender.

Although anxiety has been well studied, it is difficult to draw conclusions about gender differences in enjoyment from the existing SLA literature. Previous literature on emotion in language learning has largely concentrated on negative emotion, with positive emotion not being as well researched (Arnold, 2011; Arnold & Brown, 1999; Brown & White, 2010; Imai, 2010). However, positive attitudes and emotions feature prominently in models of a broader complex of motivation. For example, Gardner's influential model of integrative motivation (1985; 2010) described the motivated learner as having affective reactions that include interest in FLs and desire to learn the FL.

Further study of positive emotions in language learning, as topics in their own right, is warranted by developments in Positive Psychology and potential applications to SLA (see Lake, 2013; MacIntyre & Mercer, 2014). Fredrickson's broaden-and-build theory has accumulated evidence for a clear differentiation between positive and negative emotions (Fredrickson, 2001; 2003; 2007). Fredrickson has reported that negative emotions tend to be associated with a specific action tendency, that is, a tendency toward a specific type of behavior (see Reeve, 2005). For example, anger leads to the urge to destroy obstacles in one's path. Fredrickson's research proposes that, compared with negative emotions, positive emotions produce a qualitatively different type of response.

> [The Broaden and Build] theory states that certain discrete positive emotions—including joy, interest, contentment, pride, and love—although phenomenologically distinct, all share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources. (Fredrickson, 2003, p. 219)

The effects of positive emotion go beyond pleasant feelings by enhancing the ability to notice things in the environment, enhancing awareness of language input, and dissipating the lingering effects of negative arousal, promoting personal resiliency and hardiness during tough times. Positive emotion facilitates both exploration and play, two key factors that tend to bring people together.

The development of theories in psychology that differentiate positive from negative emotion raises the interesting question of how each affects language learning (MacIntyre & Gregersen, 2012). In a preliminary investigation, Dewaele and MacIntyre (2014) investigated the amount of overlap between FLE and FLCA. They developed a FLE scale with 21 items (e.g., creativity, pride, interest, fun) reflecting a positive environment in the FL class (teacher and peers). They also used 8 items extracted from the well-established FLCAS reflecting physical symptoms of anxiety, nervousness and lack of confidence (Horwitz et al., 1986). They found a small, negative correlation between FLE and FLCA ($r = –0.36$), and that overall levels of FLE were significantly higher than those of FLCA. Interestingly, female participants scored higher for both FLE ($p < 0.002$) and for FLCA ($p < 0.004$) (p. 254). Dewaele and MacIntyre (2014) thus claim that FLE and FLCA are empirically (negatively) related but are not opposite ends of the same experience—enjoyment and anxiety are distinct emotions.

We decided that a greater amount of detail was needed on FLE and FLCA to understand more precisely what it is that women fear and enjoy more in the FL class. In considering the questions that will guide research we will look at some of the subtle ways in which anxiety and enjoyment operate in the language learning context, and in particular for ways in which male and female learners differ with respect to those emotions. In designing the following research questions, we are keeping the positive emotion (enjoyment) strictly separate from the negative emotion (anxiety) by focussing on the meaning of specific items.

Research questions

1. Are there gender differences in items reflecting FLE and FLCA? To be more precise, what items specifically reflect gender differences and what does the wording of particular items tell us about gender and language learning?
2. Given the gender differences, how do women and men describe their FL classroom experiences of anxiety and enjoyment?

Method

Participants and demographics. A total of 1736 multilinguals (1287 females, 449 males[2]) filled out the online questionnaire. The age range of participants was quite broad, ranging from 11 to 75, with a mean age of 24 (SD = 8.5). Levels of education represented in the sample included: having—or working towards—an intermediate high school diploma ($N = 91$), a high school diploma ($N = 113$), a Bachelor's degree ($N = 994$), a Master's degree ($N = 450$) or a PhD ($N = 94$).

The largest number of participants were studying English as a FL ($N = 855$, 49%), while others were studying French ($N = 276$, 16%), Spanish ($N = 218$, 13%), Dutch ($N = 157$, 9%) and German ($N = 139$, 8%), or a range of different languages (6%). A small number of respondents ($N = 34$) were not currently involved in FL learning, but had had recent FL experience. Most participants ($N = 1322$, 84%) were studying one FL, with smaller numbers studying two ($N = 215$, 14%) or three ($N = 37$, 2%) FLs.[3] A quarter of participants had been studying a FL for 5 years or less, another quarter had studied one between 6 and 9 years, a third quarter had studied a FL between 10 and 12 years, with the remaining participants having studied a FL for more than 13 years.

When asked about their mastery of the FL overall, only 5 described themselves as beginners (0.3%), 243 as low intermediate (14%), 67 as intermediate (4%), 435 as high intermediate (25%) and 293 as advanced (17%).[4]

Asked about how they would rate themselves compared to their FL learning peers, 42 described themselves as far below average (2%), 171 as below average (10%), 772 as average (44%), 638 as above average (37%), and 116 as far above average (7%).

Of the 90 nationalities reported, Belgians constituted the largest group ($N = 365$, 21%), followed by Britons ($N = 244$, 14%), Chinese ($N = 174$, 10%), Americans ($N = 118$, 7%), and 845 participants (48%) belonging to other nationality groups ($N < 80$). There were also many participants who self-reported as having dual-nationality.

The sample consists of 456 self-reported bilinguals (26%), 555 trilinguals (32%), 415 quadrilinguals (24%), 202 pentalinguals (12%), and 70 sextalinguals (4%). The 44 remaining participants (3%) reported knowledge of 7 to 10 languages.

[2] 10 participants did not disclose their gender.

[3] 172 participants did not provide this information.

[4] We decided to merge the category of beginners with that of lower-intermediate. Seven hundred and three participants did not provide this information.

The instrument. The questionnaire started with a demographics section from which the above information was retrieved. Following this, participants were asked to respond to 29 items describing the FL class on standard 5-point Likert scales with the anchors "absolutely disagree" = 1, "disagree" = 2, "neither agree nor disagree" = 3, "agree" = 4, "strongly agree" = 5. Of these items, 8 were extracted from the FLCAS (Horwitz et al., 1986) and 21 items written to reflect FLE (Dewaele & MacIntyre, 2014). The starting point for the FL enjoyment scale was Ryan et al.'s (1990) Interest/Enjoyment subscale consisting of 7 items related to enjoyment, fun, interest, and boredom at one point in time. These were specifically adapted to the FL environment and were rephrased so that they elicited a more global judgment of past FL classes. We added "items relating to dealing with FL mistakes made in public, identity, improvement in using the FL, pride in one's own performance, group membership, the social environment and cohesiveness, attitudes towards the learning of the FL, the presence of laughter, and judgments about peers and teachers" (p. 243). All items were positively phrased. In addition, the 8 FLCAS items reflected physical symptoms of anxiety, nervousness, and lack of confidence (Horwitz et al., 1986). They were chosen to capture the reliability of the original scale without sacrificing the reliability of the measurement (MacIntyre, 1992). Two FLCA items were phrased to indicate low anxiety and six were phrased to indicate high anxiety. The low anxiety items were reverse-coded so that high scores reflect high anxiety for all items on this measure. A one-sample Kolmorogov-Smirnov test revealed that the distribution of the items was not normal. However, *t*-tests tolerate moderate violations to their normality assumption (Rosenkrantz, 2008, p. 478) and the Levene's Test for Equality of Variances will be used to verify the assumption of equality in the groups of females and males.

The final survey question was open-ended. The instructions were as follows: "Describe one specific event or episode in your FL class that you really enjoyed, and describe your feeling in as much detail as possible." One thousand and seventy-six participants answered the open question, producing 52,471 words. These data are used for illustrative purposes only.

The first version of the questionnaire was pilot-tested with 15 participants. This led to the deletion of some items and the reformulation of others. The research design and questionnaire obtained approval from the Ethics Committee of the School of Social Sciences, History and Politics at Birkbeck, University of London. The final version of the questionnaire was posted online using Googledocs and an open call was addressed to multilinguals, to colleagues and friends of the authors, including participants in previous studies, asking them to forward the call to friends, teachers or students. In other words, we used snowball sampling, that is, a non-probability sampling technique. We are aware that there was an inevitable self-selection bias, as it is more likely for

satisfied language learners to participate in a study on language learning than those who dislike it.

Data analysis. Our data analysis can be described as the data-validation variant of a convergent parallel design (Cresswell & Plano Clark, 2011). In this approach, quantitative and qualitative data are collected simultaneously, which is efficient with large samples. The purpose of the quantitative data in this approach is to identify the specific items where values of male and female participants differed significantly. The purpose of the qualitative data is to provide illustrations of the closed items in the questionnaire, written by participants themselves. Results provided by the two types of data are mixed and combined in the discussion section. Cresswell and Plano Clark (2011, p. 81) explain that with this type of analytic approach "…the qualitative items are an add-on to a quantitative instrument, the items generally do not result in a complete context-based qualitative data set. However, they provide the researcher with emergent themes and interesting quotes that can be used to validate and embellish the quantitative survey findings."

The analysis will proceed in two stages. In the first phase, the statistical analysis will be used to identify which of the items had significantly different values for the male and female participants. In the second phase, data extracts will be selected from the open question guided by the principle that they are representative of a particular closed item, concise, and interesting. In this way, we give a voice to participants, allowing us to add an emic dimension to the abstract, etic statistical analyses.

Results

In order to assess gender differences in the FLE and FLCA items, a series of independent *t*-tests were performed. In reporting the results below, we adjusted the probability level required to decide on statistical significance using Bonferroni's correction to reduce the risk of type I error. The *t*-test is considered to be a relatively liberal test, and the Bonferroni adjustment is fairly conservative. Adopting this procedure might produce a slightly elevated risk of Type II errors overall, that is, we might not be declaring a difference to be significant when it should be. For this reason, we make note of both the Bonferroni-adjusted and unadjusted significance levels.

For this set of analyses, the *p*-value required for significance is equal to or smaller than 0.002 (0.05/29 = 0.002). A series of independent *t*-tests revealed that female participants differed significantly from males for 5 out of 29 to-

tal items, with significant differences for another 8 items using the standard $p < 0.05$ criterion (see Table 1).

Table 1

Differences between female and male participants in dependent variables, ranked according to the level of significance

Item	*t*	*df*	*p*	Mean females	Mean males
In class, I feel proud of my accomplishments	4.1	771.4	0.001	3.84	3.65
I don't worry about making mistakes in FL class	3.9	1734	0.001	3.05	3.30
It's fun	3.4	1734	0.001	4.34	4.18
I feel confident when I speak in FL class	3.1	1734	0.002	3.13	3.31
I've learnt interesting things	3.1	704.5	0.002	4.32	4.18
I can feel my heart pounding when I'm going to be called on in FL class	3.0	1734	0.003	2.99	2.78
I get nervous and confused when I am speaking in my FL class	2.8	1734	0.005	2.78	2.61
I enjoy it	2.7	1734	0.006	4.12	3.99
It's cool to know a FL	–2.1	653	0.011	4.63	4.53
I always feel that the other students speak the FL better than I do	2.3	1734	0.022	2.82	2.67
I can be creative	2.2	1734	0.031	3.77	3.67
I don't get bored	2.1	1734	0.033	3.64	3.51
There is a good atmosphere	2.0	1734	0.045	4.10	4.01
Making errors is part of the learning process	–1.7	1734	0.087	4.46	4.52
I'm a worthy member of the FL class	1.6	739.7	0.089	3.64	3.56
It's a positive environment	1.5	669.2	0.127	3.99	3.92
I can laugh off embarrassing mistakes in the FL	1.4	719.2	0.142	3.47	3.39
We laugh a lot	1.3	1734	0.154	3.45	3.37
I learnt to express myself better in the FL class	–1.1	1734	0.265	3.38	3.44
I feel as though I'm a different person during the FL class	1.0	1600	0.290	2.76	2.69
I start to panic when I have to speak without preparation in the FL class	1.0	1734	0.297	2.74	2.67
Even if I am well prepared for the FL class, I feel anxious about it	–1.0	811.1	0.324	2.64	2.58
We form a tight group	0.6	1734	0.518	3.28	3.24
The teacher is friendly	–0.6	1734	0.533	4.25	4.28
The teacher is encouraging	–0.5	1734	0.600	4.18	4.21
We have common "legends," such as running jokes	0.5	829.4	0.642	3.02	2.99
The peers are nice	–0.4	1734	0.644	4.01	4.02
It embarrasses me to volunteer answers in my FL class	0.3	1734	0.774	2.53	2.51
The teacher is supportive	0.1	1734	0.903	4.20	4.20

From Table 1 we can conclude that the female participants reported stronger negative **and** positive emotions than the male participants on items that showed gender significant differences.

Figure 1 visualizes the differences between the means of the female and male participants for the five significant items ($p < 0.002$).

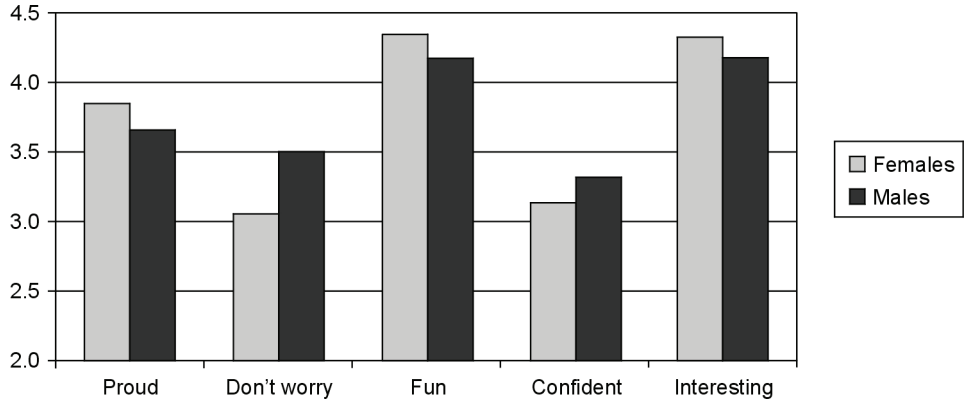

Figure 1. Differences in mean values (and SD) of female and male participants for the 5 Bonferroni-adjusted significant items.

In terms of FLE items, using the Bonferroni adjusted significance test and compared to the male participants, the female participants felt significantly more proud of their achievement, had more fun, and felt they were learning interesting things. Using the unadjusted significance test, the females also tended to like the atmosphere of the FL class more, enjoyed it more and agreed more strongly that it is "cool" to know a FL. Finally, females also tended not to feel bored and felt more creative in the FL class, compared to males.

To understand the results in more detail, and to hear the learners' voices, we examined the comments written by the respondents. The following comments by five female participants illustrate the ways in which emotional reactions unfold, in their own words:

> Brittany, female, 18, Canadian: It was the beginning of the school year and the teacher was handing back an essay we wrote the week before and when she gave me mine, she announced to the class that I had the highest mark and that she has never given anyone a mark that high before. I felt really proud of myself because the week before I got back an assignment I thought I did well on but I actually did really bad and it made me start to question if I continuing to learn the French language was the right decision for me. But getting such a good mark on that essay renewed my faith in

myself and it made me determined to always do my best and to not give up when it gets tough.

Sophie, female, 12, British: It is really fun as you make new friends with people you did not know and you form relationships over the bonds of you learning and making mistakes together.

Rosalind, female, 17, British: I had a conversation with someone entirely in French and saw how exciting (and useful) it is to be able to speak in a completely different language. I could also see how all my lessons weren't a waste of time and that I knew a lot more French than I thought I did.

Amy, female, 17, British: When I was training for my AS Speaking Exams last year, we had a language assistant over from South America to help us. In one of these sessions, I had a light bulb moment. I was suddenly able to express myself in Spanish in a way I hadn't previously been able to. I was answering spontaneous questions with ease and feeling confident enough to answer without pausing for more than a second.

Inès, female, 19, Belgian: When we played a game that consisted in finding the title of the film describes. It was funny and interesting. It was the first time I really enjoyed the course. And this subject was motivating, I had more things to say and more creativity.

In terms of FLCA items, using the Bonferroni-adjusted significance test, we found that female participants were significantly more worried about their mistakes and significantly less confident than their male peers. They tended to feel more nervous and confused, experienced more physical symptoms of anxiety such as a pounding heart in the FL class and felt the others were better at speaking the FL than they (according to the unadjusted significance tests).

The following observations by three female participants show how the lack of confidence and the worry about mistakes can be overcome by specific activities and by a positive atmosphere in the class:

Caela, female, 22, American: Irish Gaelic has some pretty nice curses (e.g., "May you be eaten by a cat, and may the Devil eat the cat!"), so the day we learned those we practiced cursing each other. We were a small class of about 5 people, so it was really fun to be a little silly. I didn't feel quite as intimidated to perform well when everyone was laughing, and was able to relax more than usual and try phrases without worrying about having perfect pronunciation.

Audrey, female, 24, Belgian: In English, I like the works of group and when we speak about topical subject. One day with my professor of English we played small plays. At the beginning I was anxious not to manage

> to pronounce well the text or to have made the errors in the text which I had written. But at the end I was satisfied to have been able to surmount (overcome) my anxiety to speak in front of everybody in English. I am also satisfied when I receive from good grade after an examination when I know that I worked hard.
>
> Simona, female, 22, Macedonian: We were supposed to have a 2-minute speech before our peers and our professor on a topic we chose. All of my peer's presentations were great and I really loved experiencing the feeling when I was talking before all of them. It was really special, even if at first I was a bit nervous and felt my heart pounding, but it felt great standing there and expressing my opinion and knowing that all of the other students are listening to you with attention.

Male participants made similar comments. Philip reported the joy of getting the pronunciation right:

> Philip, male, 23, Swedish: When I nailed the pronunciation on a sentence I read out loud in my seminar group.

Cristian enjoyed a moment of laughter in class that stimulated his learning:

> Cristian, male, 18, Columbian: El momento que me gusto fue cuando jugamos domino esto fue un momento de risa en el cual me divertí aprendí y fue un momento muy agradable. ('The moment I enjoyed was when we played domino, it was a moment of laughing, it was fun, I learned and it was very nice').

No significant differences appeared for three FLCA items referring to the more paralyzing aspects of anxiety ('I start to panic when I have to speak without preparation in the FL class'; 'Even if I am well prepared for the FL class, I feel anxious about it'; 'It embarrasses me to volunteer answers in my FL class'). Attitudes towards errors also were similar in both groups ('Making errors is part of the learning process'; 'I can laugh off embarrassing mistakes in the FL'). The same was true for perceived progress ('I learnt to express myself better in the FL class'). There were no differences either in the judgment of the social aspects in the FL class ('It's a positive environment'; 'We form a tight group'; 'We have common legends such as running jokes'; 'The peers are nice'), nor in the appreciation of the teachers (friendly, encouraging, supportive). Finally, no differences emerged between both groups in the amount of laughing, in the ability to express oneself in the FL, in feeling a worthy member of the group and in assuming a different identity in the FL class.

Discussion

The present study reveals a rich and nuanced picture of gender differences in two emotional dimensions, anxiety and enjoyment. We knew from Dewaele and MacIntyre (2014) that female participants scored significantly higher on the composite measures of FLE and FLCA. Although female participants experienced more FLCA overall, gender differences were not significant on **all** items. A similar pattern emerged in Park and French (2013) who reported gender differences on only 5 of the 33 items on the complete FLCAS scale. In the present data, the difference between female and male respondents was only significant for two items reflecting relatively milder experiences of FLCA. Female participants worried more about mistakes and were less confident. They also tended to feel that the other students were better, they tended to feel more nervous and confused, and were more likely to have a pounding heart in the FL class. However, they did not differ from the male participants in the more severe, paralyzing aspects of anxiety, such as panic, freezing-up often out of embarrassment, or increased anxiety despite being prepared. Williams et al. (2002) reported similar results, with girls scoring higher on desire and liking the FL, but not showing a significant difference with the boys in their attitudes towards teachers, parents and peers.

Our female participants had more fun, pride, enjoyment, excitement, and interest in the FL class that allowed them to be creative and become "cool" multilinguals. The observations of Brittany, Sophie, Rosalind, Inès, Amy, Philip and Cristian reported above bring the statistical findings to life. In their own words, learners described how a good mark on an essay boosted their pride and strengthened their determination to do well in the FL class, how learning together with peers is fun because it strengthens social bonds, how excited one can feel when actually being able to use the FL, and how funny and interesting games in the FL class can allow students to be creative and boost their motivation. These specific contexts converge with Chaplin and Aldao's (2013) finding that girls show more positive and internalizing emotions (sadness, anxiety, sympathy) than boys, especially in adolescence, a time often associated with emotional ups and downs. This obviously does not mean boys cannot experience similar emotions, as our comments showed. When interpreting gender differences, we should carefully avoid thinking of the results in terms of mutually exclusive categories (as in the Mars versus Venus type of arguments), preferring instead to think of baseline differences between groups that are modified to a considerable extent by individual experiences and lead to a wide distribution of scores within each group, and considerable overlap between groups.

Similar caution is necessary when conceptualizing positive and negative emotions. Although it might seem natural to conceptualize positive and negative emotion as operating in a seesaw fashion (one goes up and the other goes

down), such a view is inconsistent with emotion research, especially over the past decade (Fredrickson, 2007; MacIntyre & Gregersen, 2012). The combination of both higher FLCA and higher FLE shown by female learners is not a contradictory result. Female FL learners seem to care more about their FL performance and their progress in the FL perhaps because they find it intrinsically appealing, fun and of value (Dörnyei & Csizér, 2002; Henry & Cliffordson, 2013). In effect, this pattern "raises the stakes" for learning, boosting both positive **and** negative emotion. Although there is some worry that they might not do as well in the FL as they expect, the concern does not tend to cause them to panic or freeze when having to use the FL. Respondents Caela, Audrey, and Simona described how they managed to overcome anxiety and perform in the FL in front of their peers and teacher.

Fredrickson (2001; 2007) argues that enjoyment is associated with characteristics most teachers would welcome: creativity, the urge to play, and going beyond one's limits. Experiencing joy in the FL class is described as a facilitating experience for the language learners in our sample whose prose nicely exemplifies Fredrickson's theoretical tenets.

Fredrickson (2001; 2013) points out that the different types of resources that are built during play, including social bonds and specific skills, last much longer than the transient feelings that set the emotional tone for learning. If female, compared to male, FL learners are generally having more fun in FL classes, they might unlock their potential faster and thus progress further than their male peers, even if they also experience some of the facets of anxiety more often or with greater intensity.

High levels of language anxiety are typically negatively linked to FL proficiency scores, including course grades, standardized tests, and other measures (Horwitz, 2010). Researchers generally agree that strong anxiety feelings are disruptive to behavior, interfering with interpersonal communication, cognition, and learning (MacIntyre & Gardner, 1994). However, the interpretation of cases of moderate anxiety, and what to do about less-severe levels of anxiousness, might change considerably if we consider a wider emotional context. Dewaele and MacIntyre (2014) argued that enjoyment and anxiety could cooperate from time to time, with enjoyment encouraging playful exploration and anxiety generating focus on the need to take specific action. Our data suggests that we find greater levels of enjoyment among the active and successful learners in our sample, yet some anxiety certainly is present. Is it possible that our female participants managed to find a constructive balance between enjoyment and anxiety? Did they manage to develop a better ratio of positive to negative emotion in the FL class (Fredrickson, 2013)?

Females scoring higher than males on FLE and FLCA items is not problematic conceptually or in practice; a combination of stronger positive and negative emotions in FL learning might provide a stronger basis for motivation than

would weaker emotions. It can be argued that both positive and negative emotions are inherently adaptive (MacIntyre, 2007; Reeve, 2005), suggesting that stronger overall emotional experiences can facilitate language learning even if negative emotions are part of the experience. Fredrickson (2013) has suggested that the ratio of positive to negative emotions might be more important than simply the absence of negative emotion. Typically SLA studies of emotions have focused on one specific emotion, most often anxiety.[5] But if we consider emotions in combination with each other, then a study focused on anxiety (e.g., Park & French, 2013) or one that is designed to arouse anxiety (MacIntyre & Gardner, 1994) is likely activating a suite of associated emotions, both positive and negative (such as pride and confidence, frustration and anger) among the participants. Even if the focal point is anxiety, we should be aware of the network of emotions that surround it.

Mixing emotions occurs not only at the item level, but at the research design level as well. Interpreting the mixture of positive and negative emotions raises an important methods issue, specifically aggregation of regular and reversed-scored items. When a scale has some items with positive wording and other items with negative wording, it is the researcher who aggregates positive and negative emotions into a single construct, a single score for each respondent's FLA for example. This is done by taking the negatively worded items and "flipping" the scores (e.g., a "1" becomes a "7" and a "2" becomes a "6" on a 7-point Likert scale) before adding them to scores on the other items. In the case of FLCAS and other anxiety measures, positively phrased item-level words such as proud, confident, sure, and relaxed are reverse-scored at the time of analysis. But for the research participants, scores on these items might reflect something phenomenologically different as they respond to the questionnaire items. If positive and negative emotions are correlated but essentially different experiences, as Fredrickson suggests, then existing measures of anxiety may be conceptually less homogeneous than generally assumed because of the mix of positive and negative emotion.

It should be emphasized that the reverse-scoring used in self-report scales of emotions can be justified on the basis of item-response theory. It is a threat to the validity of scores when items are all keyed in a positive or negative direction. In addition, the correlations among items and the overall Cronbach's alpha coefficient typically obtained for the FLCAS (often in excess of 0.90) justifies the procedure of reverse-scoring and aggregation. It is when one takes on a research question with a more microscopic-level analysis, as we did in this study, that the mixing of emotions by using reverse scoring procedures presents itself as a conceptual issue. If the purpose of research is to assess changes in

[5] This is not the case with models of motivation such as Gardner's (1985; 2010) integrative motive which has combined anxiety with positive emotions such as interest and desire to learn.

typical anxiety reactions over time, or correlations between FLA and other measures (such as course grades), then reverse-scoring FLCAS items does the job very well (Horwitz, 2010). But if the research purpose is to dissect subtle variations in positive and negative facets of emotions as we are doing in the present study, or to identify changes in emotion over brief timescales, then we must exercise additional caution. Patterns and processes that are observed on one level or timescale can change substantially when examined on either a broader or narrower basis.

Pedagogical implications drawn from this analysis might help settle a long standing issue in the anxiety literature—the nature of facilitating anxiety (Scovel, 1978; Park & French, 2013). Horwitz (1990, in press) has consistently cautioned against language teachers deliberately increasing anxiety among their students in the hope of finding its elusive facilitating effects. This is wise counsel. Our data support and elaborate Horwitz' admonishment; techniques designed to increase anxiety divorced from enjoyment seem both troublesome and indefensible. However, mild-to-moderate levels of anxiety reactions likely will accompany positive emotions when participants value what they are doing, such as when the self-concept is implicated (e.g., a fun but potentially embarrassing activity) or when something important is at stake (e.g., course grades or future opportunities) (see also Dewaele, 2011; 2015). The subtle mixing of positive and negative emotion at the research design and item aggregation levels potentially has set the stage for the persistent notion of facilitating anxiety. We suggest that it is not the negative anxiety component of the FLCAS but rather the undertones of positive emotion implicated in some of the items that are associated with any potentially facilitating effects of anxiety. Therefore, consistent with the original differentiation of facilitating and debilitating anxiety (Alpert & Haber, 1960), facilitating anxiety should not be considered a lower level or amount of anxiety (below a hypothetical 'threshold') but rather a qualitatively different, strongly-negatively correlated, positive emotion related to excitement, risk-taking, arousal, eagerness, and so on. One potential implication of this notion is that teachers who put the prime focus on creating enjoyment experiences for learners in learning situations where something is at stake (e.g., course grades, public performance, and learner self-esteem) likely have to accept that some anxiety might come along for the ride, especially for the female learners. The present data that show that positive and negative emotions indeed are mixing in language classrooms; learners with greater emotional intensity are likely to experience both more anxiety and more enjoyment in FL classrooms.

Before concluding this article we offer some comments on the limitations of the research. Our sample is both very large and mostly self-selected. As such, the respondents do not necessarily represent the general population of FL learners (if such a sample actually could be defined and meaningfully delineated). In addition, participants who volunteered to spend time completing the online

questionnaire probably were positively biased towards FL learning in the first place. The size and international scope of the present sample, though it was not randomly chosen, does help to reduce the concern for gender differences tied to one specific location or nation (Park & French, 2013).

Further research could investigate whether the gender patterns in FLE and FLCA are similar for specific FLs. Williams et al.'s (2002) finding of stereotypical representations about so-called "feminine" and "masculine" languages could affect both FLE and FLCA of female and male FL learners. Here again, caution is needed. Indeed, more girls (69%) than boys studied French up to A level in the UK in 2013, but they also outnumbered them (60%) for German (Report by the Joint Council for Qualifications, 2013).[6] Moreover, as Denies (2015) showed, gender differences can vary from country to country, and from skill to skill. In other words, having a sample from a single geographical and school context might allow researchers to control certain variables, but it would not necessarily increase the generalizability of the findings.

We are aware that dividing our population into male and females learners may lead to the objection that we ignored possible intra-group differences and that gender may combine with contextual factors that influence FLCA and FLE. The present study is relatively decontextualized, as that is the nature of the survey method when a large, international sample is used. Future research on gender differences that takes into account the effect of classroom environment within specific schools is recommended. For example, it would be an interesting research question to ask whether male learners, who have been found to prefer a relaxed and supportive environment compared to female learners, experience different levels of FLE and FLCA when such a classroom environment is provided (Kissau & Salas, 2013). Finally, our selection of more extracts by female learners than male learners does not imply that the latter differed in the type of observations they made.

Conclusion

Item-level statistical analysis of the FLE scale (Dewaele & MacIntyre, 2014; 2016) and items selected from the FLCAS (Horwitz et al., 1986) revealed that

[6] With the caveat that only small differences existed in the proportion of British girls and boys obtaining A* to C grades in 2013 for the A level exams for French, German and Spanish. A larger proportion of girls did obtain A* to C grades for Irish, Welsh, and other modern languages. Of course, one could argue that only a minority of the best male FL learners chose a FL as A level subject, which would explain why their scores were not that different from those of their female peers.

our female participants had significantly more fun, were prouder of their FL performance and felt they were learning interesting things in the FL class. They tended to experience more enjoyment and more excitement in a positive FL classroom environment that allowed them to be creative, and tended to agree more that knowing a FL was "cool" compared to the male participants. The female learners' superior positive emotions were complemented by a higher level of some facets of anxiety. In other words, the female participants reported experiencing more emotion overall in the FL classroom, which has been described as the engine behind linguistic progress (MacIntyre, 2007). At first glance, this might seem to be a contradiction. However, drawing on Fredrickson's theory allows for a more complete understanding of the network of positive and negative emotions active in the language learning process. These findings point to the need for research to examine gender differences in a specific context of interest (Hyde, 2005).

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Ob Mädchen Spaß haben? Angst und Freude im Fremdsprachenunterricht

Zusammenfassung

Die Untersuchung konzentriert sich auf Geschlechtsunterschiede hinsichtlich zweierlei Aspekte: Freude am Fremdsprachenlernen (eng.: *Foreign Language Enjoyment – FLE*) und Sprachangst (eng.: *Foreign Language Classroom Anxiety – FLCA*). An dem Experiment nahmen 1736 eine Fremdsprache lernenden Schüler (1287 Frauen und 449 Männer) teil. Man gebrauchte dafür 21 Elemente von den Varianten der Likert-Skala, die verschiedene Aspekte der Freude am Fremdsprachenlernen darstellen und von Dewaele & MacIntyre (2014) entwickelt wurden und 8 mit Sprachangst verbundene Elemente nach Horwitz et al. (1986). Die bei der *FLE*-Untersuchung gestellte offene Frage erlaubte, narrative Daten zu sammeln. Frühere Untersuchung des *FLE*-Mittelwertes und *FLCA*-Mittelwertes (Dewaele & MacIntyre) hat wesentliche Geschlechtsunterschiede nachgewiesen. Die vorliegende Studie ist auf Geschlechtsunterschiede von *FLE* und *FLCA* hinsichtlich ausgewählter Elemente fokussiert.

Objektive t-Teste von den Studenten haben aufgezeigt, dass die Schülerinnen einen größeren Spaß als die Jungen beim Fremdsprachenunterricht hatten. Die Schülerinnen waren auch stolzer darauf, etwas Neues und Interessantes lernen zu können, gleichzeitig aber ließen sie eine mäßige – viel größere als es bei den Jungen der Fall war – Sprachangst erkennen. Sie waren auch beunruhigt über gemachte Fehler und nicht selbstsicher beim Fremdsprachengebrauch. So ließen die Probandinnen viel positivere und ziemlich negative Emotionen im Fremdsprachenunterricht erkennen. Es zeugt davon, dass verstärkte Emotionalität den Erwerb und den Gebrauch einer Fremdsprache positiv beeinflusst.

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Multilingual Processing Phenomena in Learners of Portuguese as a Third or Additional Language

Abstract: The purpose of the study is an analysis of Polish students' cued translation of Polish (L1) and English or French (L2) sentences into Portuguese (third or additional language in De Angelis's (2007) terminology). In particular, the study investigates cross-linguistic interaction (Herdina & Jessner's (2002) term) in multilingual processing involved in L3 production. In fact, translation constitutes a special case of production because, on the one hand, the content is already contained in the L1 or L2 source sentences, but, at the same time, this is not necessarily a facilitation, as the cues may require the use of words or structures the participants might not use in free production.

The article is based on two studies carried out with thirty and forty-two students of Portuguese philology respectively. As the results show, cross-linguistic interaction in various directions was observed, not only from L2 (English or French), L3 (in those participants for whom Portuguese was an L4 and their L3 was Spanish or Italian), L4, etc. or, intralingually, from Portuguese, but also from L1, despite the distance between Polish and Portuguese and the special status of the native language. However, the amount of interference and/or negative transfer often depended on the sentence rather than on the language combination. The diversity of the observed interactions also supports Herdina and Jessner's (2002) claim of the dynamic and unpredictable nature of cross-linguistic interaction.

Keywords: SLA, multilingualism, language learning, language acquisition, psycholinguistics

Introduction

By and large, the investigation of Portuguese L3 acquisition is an area of research that has received little attention and relatively few studies have been published so far on its phenomena. First, L3 acquisition research constitutes a new and constantly developing domain and, second, the Portuguese language

is still regarded as quite exotic and is rarely studied, as compared not only with English, but also, for example, with Spanish. However, the situation is changing, as more and more Americans are becoming interested in Brazil—be it for business or cultural reasons—and the demand for Portuguese is gradually growing (Razuk, 2008, pp. 21–22). Still, the learning of Portuguese as a foreign language has not yet received the attention it deserves.

The purpose of the paper is an analysis of Polish students' translations from Polish (L1) and English or French (L2) into Portuguese as a third or additional language (term introduced by De Angelis (2007) to refer to L3 and further languages) in order to reveal multilingual processing phenomena, especially different forms of cross-linguistic interaction (abbreviated to CLIN, Herdina & Jessner, 2002). The present article is based on two studies: in the first one, the subjects translated 15 sentences from Polish and 15 sentences from English or French into Portuguese. In the second one, another group of participants translated ten sentences from Polish into Portuguese.

It was assumed that translation, as a task involving the coactivation of at least two languages, would provoke more cross-linguistic interaction (CLIN) than a monolingual task. At the same time, unlike purely lexical or purely grammatical tasks, translation would involve both grammatical and lexical processing. Still, given that sentence structure is largely determined by the morphosyntactic properties of lexical items (Singleton, 2000, p. 17), grammar and lexis are largely interconnected. Thus, in the present paper, such errors as the use of false friends or the confusion of word meanings are regarded as lexical, whereas using, for example, an infinitive instead of the subjunctive after a particular verb is classified as a grammatical error. However, in the present two studies cued translation was used in order to make the participants use the target structures as much as possible, as in free translation they could have used a variety of unpredictable structures, which might have complicated the analysis.

The research questions were as follows: First, what languages were the sources of transfer and/or interference into Portuguese? As a working hypothesis, it could be assumed that an important role would be played by linguistic similarity, especially psychotypology (Kellerman, 1987), but given the special role of the native language (Hufeisen, 1991), its influence could not be excluded either. Second, what types of errors did the participants make and what language processing phenomena do the errors reveal? Third, what do the data reveal about multilingual storage and processing?

Multilingual Storage and Processing

General properties of multilingual systems. Generally, multilingual systems are neither fully integrated nor fully separate. On the one hand, cross-linguistic interaction, including such phenomena as transfer, interference, borrowing and code-switching (Herdina and Jessner, 2002, p. 29), indicates some interconnection between the languages. On the other hand, multilinguals' ability to use each language separately, for example, while talking to monolinguals, shows that there is enough separation to prevent language mixing (Singleton, 2003, pp. 168–169).

In the process of vocabulary acquisition, the L2 lexicon is initially an extension of the L1 lexicon and, with time and increased proficiency, it becomes an independent system (Herwig, 2001, p. 117). Similarly, the L3 lexicon starts out as an extension of another lexicon, though not necessarily L1, but, for example, a more closely related (and thus more similar) L2. Indeed, formal similarity plays an important role in both acquisition and processing. As Kellerman (1987) has shown, psychotypology, or a learner's own perception of language distance, is more significant for the learning of a foreign language than the language distance estimated by linguists. However, the distance perceived between languages influences not only the acquisition of vocabulary, but also processes of transfer in general, including those at the grammatical level. Still, transfer does not have to manifest itself in the form of errors or anomalous structures. Undoubtedly, positive transfer results in correct structures, but it is also more difficult to detect because the learner seems to know the appropriate rules (Kellerman, 1987, p. 222).

A related, though slightly different phenomenon is interference. According to Herdina and Jessner (2002, pp. 28–29), transfer can be defined as a regular and largely predictable phenomenon of transferring structures from one language into the other, whereas interference constitutes dynamic interaction which is not reducible to any of the languages involved. Consequently, it can be supposed that some forms of transfer are a result of interference: as two or more languages are coactivated and interact, some words or structures can be transferred from one language to the other, even without the speaker realizing it (Wlosowicz, 2008/2009). In fact, as the system shift (De Angelis, 2005, p. 14) phenomenon indicates, learners can use a non-target language word, thinking it is the intended target language word.

At the same time, it must be remembered that the mental lexicon is not arranged like a dictionary, but rather it is a network in which the properties of lexical items are stored in a distributed way (Herwig, 2001). Within each entry, there are separate yet interconnected nodes representing the phonological, syntactic, semantic, etc. properties of words (Herwig, 2001, pp. 121–123).

Moreover, as the present author's earlier research indicates (Włosowicz, 2012), some properties (e.g., the morphological endings of the indicative) may be more available than others, such as the subjunctive or irregular verb forms.

Still, as semantic and syntactic properties are stored in a distributed way, they do not all have to be immediately available and focus on meaning does not have to be accompanied by focus on form and a non-target form of the target word or a semantically related word with different syntactic properties may be selected.

As for the representation of more general grammatical rules, such as inversion or preposition stranding, they are acquired by UG parameter setting (Klein, 1995). If a foreign language value differs from the native language one, the parameter needs to be reset. As Klein (1995) has shown, L3 learners, who are already familiar with two grammars, build more powerful grammars and reset parameters to the L3 values more efficiently than L2 learners do.

However, in L3 acquisition both L1 and L2 can be sources of transfer and/or interference. While L1 remains an important source of transfer (Hufeisen, 1991), there is considerable evidence for L2 transfer as well (De Angelis, 2007, pp. 22–40). In general, given the interconnection between the languages, CLIN is inevitable. As Green (1993, pp. 260–269) has proposed on the basis of Bates and McWhinney's (1989) Competition Model, lexical entries compete for selection and the item most compatible with the input (in comprehension) or with the communicative intention (in production) is selected, although it may belong to a non-target language. This might explain the system shift phenomenon (De Angelis, 2005), as spreading activation leads to the selection of non-target language items which seem appropriate enough not to be intercepted by control mechanisms.

Given the number of factors involved in third or additional language acquisition, translation into L3 (or a further language) must be assumed to be a complex and largely unpredictable process. At the same time, as a combination of source language comprehension and target language production, it can be assumed to reveal a number of language processing phenomena.

Translation as multilingual processing. Generally speaking, translation consists in the reproduction in the target language of the meaning of the source language text. Simultaneously, the production process is somewhat simplified, as the communicative intention is already present in the source language text. As Hölscher and Möhle (1987, p. 114) remark, "the number of choices among available linguistic devices is restricted." However, this facilitation may only be apparent, as the learner may not know the target language equivalents of the source language words and structures and, if he or she were to convey the same meaning spontaneously, he or she would choose completely different

linguistic means. Translation is therefore useful for testing learners' knowledge of particular words and structures.

Translation can broadly be divided into two stages: source language comprehension and target language production. As illustrated by Perfetti's (1999) Blueprint of the Reader, based on Levelt's (1989) Blueprint Model of speech production, the comprehension process starts by the identification of word forms, which activate the appropriate lexemes within the lexical entries. The lexemes activate the corresponding lemmas, which send activation to the underlying concepts. Once a number of concepts have been activated, a context is formed, which then sends activation back to the lemmas, which permits, among other things, the selection of the contextually appropriate meanings of polysemous words.

It may be assumed that, in accordance with Levelt's (1989) Blueprint Model of speech production, in target language production the opposite process takes place. However, the following must be taken into account: First, if the translation operates from a well-known language, especially L1, it may be assumed to involve few or no comprehension problems (Herwig, 2001). Yet, in producing the target text, the subject may not know a target language word (both the lexeme and the lemma), the target form (e.g., the past tense form of an irregular verb, despite knowing the infinitive), some lemma information (such as the word's syntactic properties), or the target language concept.

Still, as has already been signaled, the target word form may not be available within the lexeme (e.g., the learner may know the form of the present indicative, but not the subjunctive), the lexemes of similar words may be confused due to formal similarity, or non-target syntactic information may be activated, either due to interference from another lemma, or because the TL lemma actually contains information copied from L1, which may result in the choice of an incorrect structure.

Second, in case of word order differences (e.g., adjectives precede nouns in one language and follow them in the other), translation cannot be word-for-word, but should take into account the target language rules. Even so, in translation from L2 into L3, some non-target structures might pass unnoticed, especially L2 structures, regarded as foreign and thus as more correct than structures transferred from L1.

In summary, translation into a third or additional language must be assumed to be a very complex process, involving CLIN between all the languages at the lexical and the grammatical levels. Still, in the case of cued translation, despite the apparent facilitation, the subjects cannot avoid using certain structures, which makes the transfer of non-target structures from L1 or L2 even more visible.

The Studies

Participants. Study 1 was carried out with thirty Polish (L1) students of Portuguese philology at the Jagiellonian University in Cracow and seven learners of Portuguese at the Iberian Language School 'Porto Alegre' in Katowice. Thirty-one of the subjects were female and six were male. As Portuguese philology students in Poland generally start learning the language at university, which is also the case of the participants in the present study, all of the subjects can be assumed to have an intermediate or an upper-intermediate level of proficiency in Portuguese. Similarly, the seven subjects at the private language school themselves defined their levels of proficiency in Portuguese as intermediate. Given the relatively low popularity of the Portuguese language in Poland, it was difficult to find a sufficient number of learners advanced enough to participate in the study, and the group is therefore not as homogeneous as it might be expected. In particular, they have a variety of language combinations and Portuguese is their third or additional language, but not always L3. Still, as Van Gelderen et al. (2003, p. 23) have observed, multilingual groups are generally more heterogeneous than the research design might require.

Their L2 was mostly English (30 subjects), but seven subjects had French as L2. All of them had also studied other languages, especially Spanish (19 subjects), German (16), Italian (11), French (8 subjects for whom it was not the L2), Latin (5), Romanian (4), ancient Greek (2), Catalan, Russian, Estonian, Hungarian, and modern Greek (one subject each). Still, their language biographies can be established only approximately, as the chronological acquisition order and the time of learning each language do not always reflect the proficiency levels attained in the languages.

Study 2 was carried out with forty-two intermediate students of Portuguese philology, at Maria Curie-Skłodowska University in Lublin (22 participants) and at the Jagiellonian University in Cracow (20), thirty-seven of whom were female and five male. Forty-one of the subjects had studied English and for 34 of them it was the L2. Thirty-five had studied Spanish and three of them indicated it as their L2. The next most popular languages were German (16 subjects, one of whom indicated it as her L2), French, and Italian (11 subjects each, while one indicated Italian as her L2), and Russian (6 subjects, two of whom indicated it as their L2). Some subjects had also studied Romanian (5), Latin (5), Swedish and Chinese (one subject each). Their language biographies are therefore so varied that determining the sources of cross-linguistic influence can only be approximate.

Data collection procedure. Study 1 consisted of the cued translation of ten sentences from Polish (L1) and ten sentences from English or French (L2) into Portuguese, followed by a questionnaire concerning the subjects' language biographies and the translation task. The thirty subjects whose L2 was English translated Polish and English sentences into Portuguese, whereas the seven subjects whose L2 was French translated Polish and French sentences. The focus was on infinitival and gerundive clauses, as well as on the subjunctive. The stimuli were of the following type: Adam congratulated Mary on winning a poetry contest. – O Adão felicitou a Maria _____ um concurso de poesia. However, if the focus was on the choice of the verb form and, consequently, the target verb form could not be revealed, the infinitive was prompted by an extra cue, for example: You did not really tell me to drive your grandma to the airport. (to drive – conduzir) – Na verdade não me disseste _____ a tua avó ao aeroporto. (The whole list of sentences used in the study is presented in Appendix 1.)

Study 2 consisted of the cued translation of ten sentences from Polish into Portuguese, where the focus was both on grammar and lexis, and a questionnaire. The stimuli were of the type illustrated by the following example: Kiedy słońce zachodziło, siedzieli na tarasie przy plaży.[1] _____ o sol _____, _____ numa terraça _____. However, the target structures were sometimes prompted by extra cues, for example: Chociaż Piotr jest bardzo bogaty (superlative), ciasto, które podał na swoich urodzinach, było bardzo złe.[2] _____ o Pedro _____, o bolo que _____ na sua festa de anos _____. Here, the extra cue was added in order to suggest that the students should use the superlative form *riquíssimo* (very rich, extremely rich), which is more emphatic than the analytic form *muito rico* (very rich). (The sentences are presented in Appendix 2.)

Results and Discussion

Study 1. Tables 1 and 2 show the sources of influence the students' translations from Polish and English into Portuguese can be attributed to and they actually reflect language processing only in this particular group, but even so, the participants' translation reveals a number of interesting phenomena.

[1] As the sun was setting, they were sitting on a terrace next to the beach.

[2] Even though Peter is very rich (superlative), the cake he served at his birthday party was very bad.

However, the results should be treated with some caution, as it is not always possible to determine a particular source of cross-linguistic influence and one has to rely on "plausible interpretation" or "plausible reconstruction" (Corder, 1972, p. 42, as cited in Heine, 2004, p. 85). Moreover, even if the source of influence is identified as, for example, L1, this does not necessarily mean that the transfer was negative and resulted in an error. In fact, as the present author has argued elsewhere (Włosowicz, 2012), transfer may take subtle forms, such as the preference for certain structures, for example, finite clauses, even if infinitival clauses sound more idiomatic in the target language. Moreover, as each sentence could contain several more or less serious errors, the focus here has been on CLIN at the grammatical level, though lexical transfer and interference have also been observed. (The results have been partly discussed in Włosowicz (2012, pp. 144–146), but only in reference to the English L2 group.) Furthermore, while the author's earlier paper (Włosowicz, 2012) focused on cross-linguistic interaction at the grammatical level as much as possible (as has been explained in the Introduction above, grammar and lexis are largely interconnected and cannot be fully separated in the analysis), the present study also takes into account CLIN at the lexical level (see below).

Tables 1 and 2 show the percentages of responses attributable to different sources in the translation from Polish into Portuguese and from English into Portuguese respectively by the Polish-English-Portuguese group (Włosowicz, 2012, p. 145). The results are categorized into: Correct (target structures), L1 influence, L2 influence, L3 error/non-target structure, Other languages, Avoidance, and Other (often impossible to identify).

Table 1

Percentages of responses attributable to different sources in the Polish-English-Portuguese group's translation from Polish into Portuguese

Sentence	Correct %	L1 influence %	L2 influence %	L3 error/ non-target structure %	Other languages %	Avoidance %	Other %
1		56.67	20	6.67			16.67
2	16.67	30	30	20		3.33	
3	30	46.67	6.67	3.33	6.67	6.67	
4	3.33	40	3.33	36.67	6.67	6.67	3.33
5	46.67	40		6.67		3.33	3.33
6	40	23.33	10	23.33		3.33	
7	46.67	13.33	3.33	20		6.67	10
8	90	3.33		6.67			
9	13.33	50	30		3.33		3.33
10	6.67	63.33		30			

Table 2

Percentages of responses attributable to different sources in the Polish-English-Portuguese group's translation from English into Portuguese (Włosowicz, 2012, p. 145)

Sentence	Correct %	L1 influence %	L2 influence %	L3 error/ non-target structure %	Other languages %	Avoidance %	Other %
1		16.67	6.67	53.33	13.33		10
2	26.67	50	6.67	16.67			
3		40	30	10		3.33	16.67
4	30		30	36.67		3.33	
5	30	43.33	23.33	3.33			
6	90	3.33	6.67				
7	6.67	40	40	6.67		3.33	3.33
8	50	13.33	13.33	10		6.67	6.67
9	33.33	46.67	3.33	13.33			3.33
10	23.33	6.67	30	36.66	3.33		

As the results show, the sentences differed in difficulty, from relatively easy to fairly difficult ones. The most correct translations (90%) were produced in the case of the sentences *Portugalski jest pięknym językiem mimo tego, że jest dość trudny* ('Portuguese is a beautiful language despite being quite difficult.') and *Despite working at an embassy, Robert speaks few foreign languages*. Both sentences contain the structure *apesar de* + infinitive (*apesar de ser* and *apesar de trabalhar* respectively) and it can be assumed that the subjects had good command of this structure and did not have to rely on the L1 routine, which would have required a finite clause. Still, falling back on L1 routines has been observed in the case of other sentences, for example:

(1) *Henry does not remember dressing up as a duck during the carnival*: 63.33%. Target: *O Enriques não se lembra de se ter mascarado de pato durante o carnaval*. Subjects' responses included, for example, *O Enriques não se lembra mascarou-se de pato/mascarar-se de pato durante o carnaval* (there is no perfect infinitive in Polish).

(2) *Czy mogłabyś powiedzieć Filipowi, żeby przyszedł jutro?* (Could you tell Philip to come tomorrow?): 50%. Target: *Poderias dizer ao Filipe para (ele) vir amanhã*? Subjects' responses included, for example: *Poderias dizer ao Filipe que viesse/ que venha amanhã*?

In the translation from English into Portuguese, the most L1 influence was observed in the case of the sentence *Isabella asked her sister to help her with the homework* (50%). Instead of the infinitival target structure, (*A Isabel pediu à sua irmã para ajudá-la/ para a ajudar no trabalho de casa*), the subjects tended to choose such structures as: *A Isabel pediu à sua irmã que lhe ajudasse no trabalho de casa*. Simultaneously, the indirect object (*lhe*) instead of the

direct object is another proof of L1 influence, as in Polish the verb *pomagać* (to help) takes the indirect object in the Dative case, whereas the Portuguese verb *ajudar* (to help) takes the direct object, which, in the case of pronouns, occurs in the Accusative case. (Unlike in Polish, in Portuguese only pronouns, and not nouns, are marked for case.)

Similarly, in the sentence *Joan hopes to marry a rich man* (target: *A Joana espera casar* (or: *casar-se* in Brazilian Portuguese) *com um homem rico*) 43.33% of the subjects produced finite clauses, for example, *A Joana espera que ela se case com um homem rico*.

The second most frequent case of L1 influence on L2-L3 translation (46.67%) is the sentence *John is very busy repairing his car* (target: *O João está muito ocupado a reparar/ reparando o seu carro*). In fact, the analogous sentence in Polish (*Alicja jest bardzo zajęta pisaniem pracy magisterskiej* ('Alice is very busy writing her M.A. thesis') triggered even more L1 transfer (63.33%), the dominant structure being a literal translation, for example, *A Alice está muito ocupada com escrever sua tese de mestrado*. However, the lower percentage of Polish-like structures in the L2-L3 translation and the use of the gerund (*O João está muito ocupado reparando…*) indicate that similarities between English and Portuguese facilitated the choice of the structure and that, moreover, source language structures influence subjects' choices in translation.

As for cross-linguistic influence at the lexical level, it was not very frequent, because most potentially unfamiliar words were prompted by the cues. However, some CLIN was also observed, for example, one participant wrote *ambaçada* instead of *embaixada* (embassy), under the influence of Polish (ambasada) and possibly also Italian (ambasciata). In fact, the Italian word *ambasciata* was used by three students, two others used the Spanish word *embajada*, and two borrowed the Polish word *ambasada* into Portuguese. Moreover, for unclear reasons (probably because of phonological and orthographic similarity, even though the target verb was prompted), one participant used the Spanish verb *marearse* (to be seasick or dizzy) instead of *mascararse* (*to dress up* in Portuguese).

Some influence of Spanish was also observed at the morphological level, as the past subjunctive forms *obtuviera* and *viniera* indicate. Certainly, errors of this kind lie on the borderline between grammar and lexis, but as word forms belonging to the Spanish lexemes *obtener* and *venir*, they can be regarded as lexical rather than grammatical influence.

Tables 3 and 4 show the results obtained by the French L2 group. The categories of sources of CLIN are the same as in Tables 1 and 2.

Table 3

Percentages of responses attributable to different sources in the translation from Polish into Portuguese by the Polish-French-Portuguese group

Sentence	Correct %	L1 influence %	L2 influence %	L3 error/ non-target structure %	Other languages %	Avoidance %	Other %
1		42.9			57.14		
2	42.9	14.3			28.6	14.3	
3	14.3	57.14			14.3	14.3	
4	14.3	57.14				14.3	14.3
5		28.6	14.3		14.3	28.6	14.3
6	71.4	14.3		14.3			
7		28.6		14.3		42.9	14.3
8	71.4				14.3	14.3	
9		42.9	28.6			28.6	
10	14.3	14.3	14.3				57.14

Table 4

Percentages of responses attributable to different sources in the translation from French into Portuguese by the Polish-French-Portuguese group

Sentence	Correct %	L1 influence %	L2 influence %	L3 error/ non-target structure %	Other languages %	Avoidance %	Other %
1	14.3		42.9	14.3	14.3		14.3
2	14.3		57.14			28.6	
3	57.14			28.6	14.3		
4		42.9			57.14		
5	14.3	14.3	28.6			42.9	
6	28.6	14.3	14.3				42.9
7	42.9			42.9	14.3		
8	14.3	28.6	14.3				42.9
9	14.3	28.6	42.9	14.3			
10	42.9	14.3			28.6	14.3	

In the French-Portuguese translation, as the languages are typologically closer to each other, one might expect a higher percentage of correct responses. However, as Table 4 indicates, this was not the case, as the highest percentage of correct responses (57.14%) was obtained in the case of the sentence *En dépit de travailler dur, Marie est toujours de bonne humeur* ('Despite working hard, Mary is always in a good mood'). Here again, the structure *apesar de* + infinitive proved to have been mastered best and, similarly, in the Polish-Portuguese translation, 71.4% of the subjects produced the target structure.

The other most frequently correct structure in the L1-L3 translation was the sentence *Małgorzata nigdy nie widziała, jak kangury skaczą* ('Margaret has never seen kangaroos jumping'; target: *A Margarida nunca viu cangurus a saltar*, though *A Margarida nunca viu cangurus saltar* was also accepted), where 71.4% of the subjects chose the infinitive, while only one person (14.3%) translated the sentence literally (…*como os cangurus saltam*). A possible reason may be the existence of a similar structure in French (*Marguerite n'a jamais vu les kangourous sauter*), which may have been a source of positive transfer.

Transfer from French was also frequent in the case of the sentence *Je vais traduire le texte pour que vous puissiez le lire* ('I am going to translate the text so that you can read it'; target: *Vou traduzir o texto para você(s) poder(em) lê-lo*). 57.14% either translated the French sentence literally or chose '*por*' instead of '*para*' because of its phonological similarity with '*pour*'.

Another interesting tendency towards French-Portuguese transfer was observed in the sentence *Il a demandé à la secrétaire d'écrire une lettre au ministre* ('He asked the secretary to write a letter to the minister'; target: *Pediu à secretária para escrever uma carta ao ministro*). Three subjects (42.9%) chose the French-like preposition and wrote *de escrever*.

Some influence of English was also observed. In the sentence *Przykro mi, że nie zaprosiłam cię na urodziny* ('I am sorry not to have invited you to my birthday party'; target: *Sinto muito por não te ter convidado à minha festa de anos*), four subjects (57.14%) omitted the preposition, producing structures like: *Sinto muito não te convidei…* (cf. I am sorry I did not invite you to my birthday party).

Here, the cross-linguistic influence was mostly grammatical, while lexical influence was limited to function words (for example, *por* instead of *para*), except for some interference from French (*voar* 'fly', cf. *voler*, though the Spanish verb *volar* might have been activated too). A possible reason is that the focus of the study was on grammar, while potentially unknown words were prompted by the cues. This indicates that L2-L3 influence is not limited to lexis, but can also occur at the grammatical level.

Study 2. The results of Study 2 are presented in Table 5. The categories into which the sources of influence have been divided are the same as in Study 1, with one exception. Here, Portuguese (Port) is a source of intralingual influence (e.g., overgeneralization), while L3 refers to another language that was the subjects' L3, especially Spanish. In fact, the calculations can only be approximate, as they are based on 'plausible reconstruction' (see above) and not on tapping the exact processes going on in the participants' brains. Moreover, as interference is dynamic and non-reducible to a single language (Herdina & Jessner, 2002, pp. 28–29), finding the exact source of a non-target form may even be impossible.

Table 5

Percentages of responses attributable to different sources in the translation from Polish into Portuguese

Sentence	Correct %	L1 influence %	L2 influence %	L3 influence %	Port. %	Other lang. %	Avoidance %	Other %
1	4.76	21.43	7.14	11.9	38.1		16.7	
2	9.52	19	7.14	4.76			57.14	
3	11.9	19	11.9	2.38	2.38		50	2.38
4	7.14	16.67	26.19	2.38	4.76	4.76	23.8	14.29
5	40.48		4.76	16.67	28.57		9.52	
6	28.57	4.76		4.76	23.8		28.57	9.52
7	28.57	50	2.38	7.14	9.52		2.38	
8	19	64.3		4.76	7.14	4.76		
9	47.62		2.38	11.9	30.95	2.38	4.76	
10	35.7	47.6		2.38	9.52		2.38	

L1 influence was most visible in the sentence *W Finlandii pije się dużo mleka, a we Francji je się ślimaki* ('In Finland a lot of milk is drunk and in France snails are eaten'; target: *Na Finlânda bebe-se muito leite e na França comem-se caracóis*), as 64.3% of the subjects chose the singular construction *na França se come/ come-se caracóis* instead of the plural, as the singular is also used in Polish. The second most frequent case of L1 influence (50%) was sentence 7, where the subjects tended to choose the indicative (e.g., * *A pesar do Pedro é muito rico*) instead of the correct forms *apesar de o Pedro ser riquíssimo* (infinitive), or *embora o Pedro seja riquíssimo* (subjunctive: though Peter be very rich), which indicates their reliance on L1 routines. However, apart from the target forms, the colloquial form *apesar do Pedro ser riquíssimo* was also accepted, as it is often used by native speakers on the Internet and the students may have also acquired it from such input.

L1 influence was also observed in sentence 10 (47.6%), where the subjects chose the imperfective form (*A Maria lia/ *leia um livro*) instead of the continuous form (*A Maria estava a ler um livro* (Mary was reading a book)).

Finally, in sentence 1 the influence of L1 Polish was quite frequent too (21.43%). The form *sentavam* (e.g., *Quando o sol* _____[3], *sentavam numa terraça à praia*.) is a reflection of the Polish imperfective aspect (*siedzieli* – they were sitting) expressed by a single verb form. In fact, the target Portuguese form was *estavam sentados* (literally: [they] were seated), while the

[3] The gap reflects the participant's ignorance or avoidance of the target form. However, as part of the sentence has been provided by the participant, it is analysed as a case of CLIN. On the other hand, the response would have been classified as avoidance if the subject had avoided translating the sentence completely or had provided only the prepositional phrase *à praia* (by the beach).

continuous form, *sentavam-se* is reflexive and means *they were sitting down*, which refers to the process or habit of taking seats, rather than to the state of being seated. On the other hand, different more or less inaccurate forms, such as *sentiam*, *sentaram*, *sentavão*, *estavam sentando*, etc. can be attributed to intralingual influence in Portuguese, which resulted in the retrieval of non-target verbs (e.g., *sentiam* comes from *sentir* – to feel) or verb forms, or even the creation of non-existing forms (e.g., *sentavão*).

The influence of L2 English was most visible in sentence 4, where 26.19% of the subjects used the present tense in the conditional clause (**se eu encontro esse livro*) instead of the future subjunctive (*se eu encontrar esse livro*), as in: *if I find that book*. However, as a similar construction occurs in Spanish, the influence may also have been double.

L3 influence came mainly from Spanish and was especially visible in sentences 5 (16.67%) and 9 (11.9%). In 5, instead of *Comprar-te-ei uma caneta nova* ('I will buy you a new pen'), the subjects used the Spanish future tense form *Compraré*, e.g. *Compraré-te uma caneta*. By contrast, in sentence 9, instead of *Vais tomar (um) duche agora?* ('Are you going to take a shower now?'), four subjects used the form *vais a tomar* (cf. *¿Vas a ducharte ahora?)*. In the same sentence, the subjects tended to use unnecessary definite articles (*tomar o duche*), probably due to overgeneralization of other Portuguese structures. In this case, the correct form contains either no article (*tomar duche*), or an optional indefinite article with a generic meaning (*tomar um duche*). They also sometimes used non-target words (e.g., *tomar um banho* 'to take a bath') or even *tomar uma banheira* 'to take a bath(tub)', or neologisms (e.g., *tomar o chove*, under the influence of *chuveiro* (a shower as a piece of equipment)).

Still, the biggest numbers of correct answers were observed in the case of sentences 9 (47.62%) and 5 (40.48%), precisely because they allowed the most possible alternatives. In 5, apart from *Comprar-te-ei*, *Vou comprar-te* and *Vou te comprar*, it was also possible to use the present tense (*Compro-te*, see below) and in 9, structures with or without the indefinite article were acceptable.

Possible influence of German might be supposed in the sentence *Compro-te uma nova caneta* (instead of *Comprar-te-ei/ Vou te comprar/ Vou comprar-te uma caneta nova*, cf. *Ich kaufe dir einen neuen Kugelschreiber*), where the present tense form was used in a future sentence. However, as the use of the present in reference to the future is also possible in Portuguese, the choice of the present tense is not an error, but rather a preference reinforced by the existence of a similar structure in another language. At the same time, this may just be the choice of a morphologically simpler option, prompted by the avoidance of the morphologically complex form *comprar-te-ei* (infinitive + pronoun + future tense morpheme), or hesitation between *vou te comprar* and *vou comprar-te* (I am going to buy you [a new ballpoint pen]), both of which are correct, but with a slight stylistic difference. Forms where the pronoun

follows the verb (e.g., *compro-te*) often appear stylistically better in European Portuguese, while ones in which the pronoun precedes the verb (e.g., *te compro*) are more characteristic of Brazilian Portuguese and are regarded in European Portuguese as more colloquial. On the other hand, in some contexts forms with the pronoun following the noun are considered hypercorrect, for example, after some conjunctions (e.g., *Estou a escrever para te dar as notícias* (I am writing in order to give you the news) sounds better than *Estou a escrever para dar-te as notícias*)). Thus, it is possible that some students were not sure whether to use *vou te comprar* ou *vou comprar-te*, while they were sure of the correctness of *compro-te*.

Still at the grammatical level, avoidance was observed in sentences which required the subjunctive (2, 3, 4, and 6). As the subjects themselves admitted, they had only recently started learning the subjunctive and were not sure of its forms.

On the other hand, lexical transfer was both interlingual and intralingual (overgeneralization, the confusion of similar forms), for example, *quando o telefone sonou* (target: *tocou* (when the telephone rang)), probably under the influence of Spanish (*sonar*) or French (*sonner*) or overgeneralization in Portuguese (*som* 'sound'). Similarly, *uma pena* (feather) used instead of *uma caneta* (pen) may be due to the influence of the English *pen*, or an extension of the meaning of *pena* in Portuguese, perhaps supported by the Polish word *pióro* (pen/feather) or the Italian word *penna* (pen/feather). The influence of Italian was reflected, for instance, in the borrowing of the verb *tramontare* (**Quando o sol tramontava*), instead of *pôr-se* (*Quando o sol se punha*—When the sun was setting). This indicates that the concepts underlying equivalents in different languages do not fully overlap (Pavlenko, 2009). However, as activation spreads from source language words to their equivalents, it also activates the corresponding concepts, which send activation back to the lemma level, and the result may be a non-target word, partly overlapping in meaning with the target.

General discussion. In general, both studies show that translation is a useful tool for studying multilingual language processing. To answer the research questions, first, the sources of transfer and/or interference were L1 (Polish), L2 (English, French or sometimes Spanish), L3 (if different from Portuguese, especially Spanish), Portuguese (intralingual influence), as well as other languages (Italian or possibly even German).

However, the influence of the particular languages often depended on the structure used in a given sentence. Although typological proximity is an important factor in both positive and negative transfer, the influence of L1 Polish remains visible, especially in the choice of target structures (not necessarily erroneous, as discussed above). This supports Razuk's (2008, pp. 171–172) find-

ing that L1 influence is particularly strong at the syntactic level, as L1 syntax is acquired early and remains deep-rooted in the mind, which often results in syntactic transfer.

Moreover, relatively many errors can be attributed to intralingual influence, especially the use of non-target Portuguese words or word forms. It can be supposed that an important role is played by formal similarity and phonological-level connections (cf. Herwig, 2001) and by such processes as semantic extension, largely motivated by transfer.

The hypothesis concerning the transfer sources is thus generally confirmed, yet with some additional reservations. Given the dynamic nature of multilingual systems, the results of CLIN are largely unpredictable and a word or structure from a less closely related language may reach the highest activation level and be selected, and the factors determining this may be quite idiosyncratic (recency of use, individual associations, etc.).

Certainly, lexical transfer and interference were generally limited to the Romance languages, especially Spanish and French due to formal similarity, though *pena* may have been influenced by *pen* in English. However, the CLIN observed between several languages at the grammatical level indicates that all the grammars of a multilingual are connected to a common UG base (cf. Cook's (1992) notion of multicompetence) and interact, often in unpredictable ways. It is also possible that, unlike the lexical level, where formal differences (e.g., between Polish or English and Portuguese words) facilitate language separation, the grammatical level is more abstract and thus the languages are more difficult to keep apart. Thus, even if UG parameters are reset in accordance with the rules of a language, the parameter settings of other languages can interfere with them, for example, because of higher activation levels.

Second, the error types observed ranged from the confusion of words (e.g., *apesar* (despite) and *apenas* (hardly)) and the creation of neologisms (e.g., *ambaçada*), borrowing (e.g., *volar* instead of *voar*), through the use of incorrect non-target structures (e.g., the present indicative form instead of the future, the subjunctive or the future subjunctive) and structures occurring in a non-target language such as Spanish (*ir a* + infinitive), to reliance on L1 routines, such as finite clauses instead of infinitival ones (which, in some cases, were erroneous, but not always). However, all the errors observed occurred in production, as the comprehension of L1 and L2 did not cause the subjects any problems. This shows that CLIN is a multifaceted phenomenon which can occur at different levels simultaneously and result in the production of unpredictable structures.

Finally, the results indicate that, on the one hand, lexical and grammatical processing is largely interconnected and the choice of particular structures often depends on the activation of lexical items and their morphosyntactic properties (e.g., verb + *de* (or another preposition) + infinitive). On the other hand, in multicompetent language users the grammars of their languages are all based

on UG and interconnected, perhaps more or less strongly as a function of their similarity, and the parameter settings appear to be so subtle that they cannot be kept apart, as CLIN is inevitable.

Conclusion

On the basis of the results, it can be concluded that the processing of Portuguese as a third or additional language constitutes a highly complex process, dependent not only on the typological similarity between the languages, but also on a variety of factors, such as the activation levels of particular words and structures, or the existence of a formally similar word in two or more languages which supports transfer (also negative, as in the case of *pena* and *sonar*). The status of the native language is indeed special, however, if the languages are as distant as Polish and Portuguese, L1 influence can be subtle, leading to the preference for certain structures, rather than direct transfer. Undoubtedly, the languages are interconnected; they share a common UG base despite different parameter settings, and not only is it impossible to separate their processing, but often it is also difficult to identify the source of an error or a syntactic or lexical choice.

However, the occurrence of syntactic transfer may be partly attributable to the use of translation: in some cases, the source language sentence may have activated the corresponding syntactic structure, leading to a literal L3 translation. While translation allows testing of the participants' knowledge of the target structures, it may also prompt them to use the source language structures in the target language.

Moreover, as the present study is based on written production, it is possible that some other processes, even inaccessible to consciousness, also took place, so it would be advisable to continue research on this topic, using other methods as well. Future research might also investigate the processing of other structures, also in other language combinations, to contribute to the study of multilingual processing.

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Appendix 1

Stimuli used in Study 1

Polish sentences

1. Przykro mi, że nie zaprosiłam cię na urodziny.
   (zaprosić: convidar)
   Sinto muito _____ à minha festa de anos.
2. Nie przypominam sobie, żebym rozmawiała z prezydentem w zeszłym roku.
   Não me lembro _____ com o Presidente no ano passado.
3. Anna ma nadzieję, że dostanie pracę w liniach lotniczych „TAP".
   A Ana espera _____ um trabalho na companha aérea 'TAP'.
4. Piotr pogratulował mi tego, że zdobyłam nagrodę.
   O Pedro felicitou-me _____ um prémio.
5. Chciałabym cię prosić, żebyś kupił pomidory.
   Queria pedir-te _____ tomates.
6. Małgorzata nigdy nie widziała, jak kangury skaczą.
   (kangur – canguru, skakać – saltar)
   A Margarida nunca viu _____.
7. Przyniosę buty, żeby pani je zobaczyła.
   Vou trazer os sapatos _____.
8. Portugalski jest pięknym językiem mimo tego, że jest dość trudny.
   O português é uma língua bonita apesar _____ bastante difícil.
9. Czy mogłabyś powiedzieć Filipowi, żeby przyszedł jutro?
   Poderias dizer ao Filipe _____ amanhã?
10. Alicja jest bardzo zajęta pisaniem pracy magisterskiej.
    A Alice está muito ocupada _____ sua tese de mestrado.

English sentences

1. Adam congratulated Mary on winning a poetry contest.
   O Adão felicitou a Maria _____ um concurso de poesia.
2. Isabella asked her sister to help her with the homework.
   A Isabel pediu à sua irmã _____ no trabalho de casa.
3. I'm sorry to have disturbed you with a phone call last night.
   (to disturb – incomodar)
   Sinto muito _____ com um telefonema ontem à noite.
4. One day Mark saw a strange man walking in the woods.
   (to walk – passear)
   Um dia o Marco viu _____ na floresta.
5. Joan hopes to marry a rich man.
   A Joana espera _____ um homem rico.
6. Despite working at an embassy, Robert speaks few foreign languages.
   Apesar _____, o Roberto fala poucas línguas estrangeiras.
7. You did not really tell me to drive your grandma to the airport.
   (to drive – conduzir)
   Na verdade não me disseste _____ a tua avó ao aeroporto.
8. I will translate the text for you to read.

Vou traduzir o texto _____.

9. John is very busy repairing his car.
   O João esta muito ocupado _____ seu carro.
10. Henry does not remember dressing up as a duck during the carnival.
    (to dress up as – mascarar-se de)
    O Enriques não se lembra _____ de pato durante o carnaval.

French sentences

1. Anne a vu un oiseau étrange voler au-dessus de la forêt.
   A Ana viu _____ em cima da floresta.
2. Je vais traduire le texte pour que vous puissiez le lire.
   Vou traduzir o texto _____.
3. En dépit de travailler dur, Marie est toujours de bonne humeur.
   Apesar _____, a Maria está sempre de alto astral.
4. Je suis désolée de ne pas t'avoir informé du mariage de ma sœur.
   Sinto muito _____ do casamento da minha irmã.
5. Pourrais-tu dire à Philippe de venir demain matin?
   Poderias dizer ao Filipe _____ amanhã de manhã?
6. Jean est très occupé à réparer sa voiture.
   O João está muito ocupado _____ seu carro.
7. Hélène ne se souvient pas d'avoir voyagé en Allemagne en 2001.
   (voyager – viajar)
   A Helena não se lembra _____ para a Alemanha em 2001.
8. Je te félicite d'avoir terminé tes études.
   Felicito-te _____ os estudos.
9. Il a demandé à la secrétaire d'écrire une lettre au ministre.
   Pediu à secretária _____ uma carta ao ministro.
10. Monique espère obtenir un travail à la banque.
    A Mônica espera _____ um trabalho no banco.

Appendix 2

Stimuli used in Study 2

1. Kiedy słońce zachodziło, siedzieli na tarasie przy plaży.
   _____ o sol _____, _____ numa terraça _____.
2. Gdybym tylko (=I wish) kupiła bilet na ten koncert wczoraj!
   _____ um bilhete para esse concerto _____!
3. Gdyby Sylwia nie odmówiła, pracowałaby teraz w międzynarodowej firmie.
   Se a Sílvia _____, _____ agora _____ multinacional.
4. Jeśli znajdę tę książkę, pożyczę mu ją jutro.
   Se _____ esse livro, _____ amanhã.
5. Nie przejmuj się! Kupię ci nowy długopis.
   Não _____! _____ uma _____.
6. Oby egzamin nie był zbyt trudny!
   _____ o exame _____ difícil!
7. Chociaż Piotr jest bardzo bogaty (superlativo), ciasto, które podał na swoich urodzinach, było bardzo złe.
   _____ o Pedro _____, o bolo que _____ na sua festa de anos _____.
8. W Finlandii pije się dużo mleka, a we Francji je się ślimaki.
   Na Finlânda _____, e na França _____.
9. Czy zamierzasz wziąć prysznic teraz?
   _____ tomar _____?
10. Maria czytała książkę, kiedy telefon zadzwonił.
    A Maria _____ um livro _____.

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Teresa Maria Włosowicz

Phänomene der mehrsprachigen Sprachverarbeitung bei den Lernern von Portugiesisch als Dritt-oder Zusatzsprache

Zusammenfassung

Das Ziel der Studie war eine Analyse der Übersetzung mit Hinweisen (*cued translation*) von polnischen (L1) und englischen oder französischen (L2) Texten ins Portugiesische

(Dritt- oder Zusatzsprache, nach der Terminologie von De Angelis, 2007) von polnischen (L1) Studenten. Die Studie erforscht insbesondere die interlingualen Interaktionen (*cross-linguistic interaction,* den von Herdina und Jessner geprägten Begriff, 2002) bei mehrsprachiger Verarbeitung in der Produktion von L3. Eine Übersetzung stellt in Wirklichkeit einen Sonderfall der Sprachproduktion dar, weil der Inhalt schon in den L1- oder L2-Quellensätzen enthalten ist, obwohl es andererseits keine Erleichterung ist, denn die Hinweise können den Gebrauch von solchen Wörtern oder Strukturen erfordern, die von den Probanden in freier Sprachproduktion nie gebraucht werden könnten.

Der Beitrag basiert auf zwei Studien, die jeweils mit dreißig und zweiundvierzig Studenten portugiesischer Philologie durchgeführt wurden. Wie die Ergebnisse zeigen, wurden interlinguale Interaktionen in verschiedenen Richtungen beobachtet, nicht nur aus L2 (aus dem Englischen oder dem Französischen), aus L3 (bei den Probanden, für die Portugiesisch eine L4 war und deren L3 Spanisch oder Italienisch waren), L4, etc., sowie intralinguale Interaktionen im Portugiesischen, aber auch aus dem Polnischen (L1), trotz der Distanz zwischen dem Polnischen und dem Portugiesischen und des besonderen Status der Muttersprache. Die Menge von Interferenzen und/oder negativem Transfer hing jedoch häufig eher von dem Satz als von der Sprachkonstellation ab. Die Vielfalt von den zu beobachtenden Interferenzen bestätigt Herdina und Jessners (2002) Behauptung von dynamischer und unvorhersehbarer Natur der interlingualen Interaktion.

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Code-Switching Practices among Immigrant Polish L2 Users of English

Abstract: The present paper aims to present a mixed method study on code-switching practices among L2 users immersed in the L2 culture. Code-switching practices were measured among 62 Polish L2 users of English who had immigrated to the UK and Ireland and reported using English on an everyday basis. The informants of the study were to fill in an online questionnaire and answer an open question concerning situations in which they switch from their L2 to L1 most frequently. Quantitative analysis showed that age and self-perceived L2 proficiency were both linked to the frequency of code-switching. Qualitative analysis of the results revealed that the participants reported code switching mostly in emotionally charged situations as well as when discussing personal topics with known interlocutors. The results of the study are in line with some quantitative studies (Dewaele, 2010) as well as some autobiographical findings (Grosjean, 2010; Pavlenko, 2004; Wierzbicka, 2004) and shed some more light on the complex notion of bilingualism and code-switching.

Keywords: code-switching, bilingualism, immersion, L2 use

Introduction

> A language is not a code for encoding pre-existent meanings. Rather, it is a conceptual, experiential and emotional world. Shifting from one code to another is not like shifting from one code to another to express a meaning expressible equally well in both these codes. Often, the very reason why a bilingual speaker shifts from one language to another is that the meaning that they want to express 'belongs' to the other language. (Wierzbicka, 2004, p. 102)

Language switching or code-switching is described as occurring most often in a bi-multilingual context (Altarriba & Heredia, 2008). Literature reports vari-

ous types of code-switching, such as inter-sentential switching, which occurs outside the sentence or the clause level; intra-sentential switching, which occurs within a sentence or a clause; tag-switching of either a tag phase or a word, or both; or intra-word switching, which occurs within a word itself, such as at a morpheme boundary (Li, 2000). Li (2007, p. 15) states that it has become clear from previous research that "code-switching is not necessarily the sign of a problem, but rather the illustration of the skilled manipulation of overlapping sections of two or more grammars." He asserts that there is "virtually no instance of ungrammatical combination of two languages in code-switching, regardless of the bilingual ability of the speaker" (Li, 2007, p. 15). It is important to note that in the process of code-switching two languages do not play the same role, as one language sets the grammatical framework, whereas the other provides items to fit into that framework. Therefore, it is not a simple combination of two sets of grammatical rules but the grammatical integration of one language into other (Li, 2007). At the same time, Li (2007) suggested that bilinguals who have different proficiency levels in their two languages or who are speaking two typologically different languages can not only engage in code-switching, but also vary it according to their needs, as there might be different reasons behind the process. One of the reasons might be the fact that "certain notions or concepts are simply better expressed in the other language … the word or expression in the other language adds a little something that is more precise than trying to find an equivalent element in the base language" (Grosjean, 2010, p. 53). Another reason for code-switching, according to Grosjean (2010, p. 54), is to fill a linguistic need for a word/expression that requires lengthy explanations in the base language. However, he mentions that despite different reasons possibly influencing code-switching it is important to remember that it follows very strict constraints and is implemented by bilinguals who are competent in their languages (Grosjean, 2010, p. 56).

Sociocultural studies on code-switching view it both as a method of organizing a conversational exchange and as a means of making knowledge of the wider context in which conversation takes place relevant to an ongoing interaction (Nilep, 2006). According to Myers-Scotton (1993), each language in a multilingual community is associated with particular social roles, termed "rights-and-obligations." By speaking a particular language, participants signal their understanding of the current situation, and particularly their role within the given context. Therefore, by using more than one language, speakers may initiate negotiation over relevant social roles. Nevertheless, Myers-Scotton (1993) assumes that speakers must share, at least to some extent, an understanding of the social meanings of each available code in order to be able to negotiate it. If no such knowledge of social norms existed, interlocutors would have no basis for understanding the significance of particular code choices (cf. Nilep, 2006, p. 11). In line with Myers-Scotton (1993), Wilson (2008) suggests that

social interaction is a performance during which we present ourselves in particular roles. She claims that the new roles adopted by foreign language users require preparation in terms of appearance and manner in order to influence the audience and that they carry a warning that the foreign language user may have doubts about their presentation of self. Therefore, it might be noted that the choice of different languages to express, for example, different emotions (Dewaele, 2006; Wierzbicka, 2004) whether conscious or otherwise, suggests that each language enables individuals to present themselves in different ways (Wilson, 2008, p. 27). Heredia and Altarriba (2001) claim that some words match the context "better" in the other language, such as in the case of *carino*, a Spanish word that has a connotation of liking but does not have a single English equivalent. Therefore, if two Spanish-English bilinguals are speaking in English, and then use this Spanish word, it provides a much richer and deeper understanding than a weakly corresponding English word (Altarriba, 2003).

Code-switching is also claimed to be a "textualization cue" which signals parts that need to be interpreted differently from the rest of the conversation (Chan, 2004, cf. Altarriba & Heredia, 2008). Dewaele (2010) points to the fact that code-switching can signal that the speaker is reporting someone else's speech; it can also serve to highlight particular information, indicate a change in the speaker's role, qualify a topic or single out one person as the addressee. Dewaele's (2010) quantitative analysis reveals that self-reported code-switching is most frequent when discussing personal or emotional topics with known interlocutors (friends or colleagues) and is significantly less frequent when talking about neutral topics to strangers or to larger audiences. He suggested that this may be simply due to the fact that once the speaker knows which languages the interlocutor has mastered, information that is typically shared by friends and colleagues, the speaker may choose to resort to code-switching to establish a common multilingual identity, or to create specific illocutionary effects. Dewaele (2010) also found that the topic of conversation is significantly linked to the frequency of self-reported code-switching. More specifically, the frequency of self-reported code-switching was found to be much lower when speaking about neutral topics compared to personal or emotional topics.

It could be hypothesized that code-switching might not only provide enrichment to bi/multilingual communication but can also enable the speaker to express a concept or emotion that does not have an equivalent in the other language, provided the collocutors share knowledge of the same languages. In the case of communication in the L1 or L2 which does not have equivalent relevant concepts or emotions, the speaker faces difficulties in expressing thoughts or emotions in that language, as it feels distant and unemotional (Ożańska-Ponikwia, 2013). Wierzbicka (2004) reflects on such situations and describes this phenomenon from her own experience in being unable to use English, her L2, to talk about her little granddaughter:

> I just can't find English words suitable for talking about my little granddaughter. It is not that I am not familiar with the register of English used for talking about babies but I feel that this register does not fit the emotional world to which this baby belongs for me. No doubt, one reason is that Polish was my first language and that as such it is imbued with an emotional force that English doesn't have for me. But this is not the only reason. Another reason is that Polish words that I could use to talk about my baby granddaughter do not have exact semantic equivalents in English and therefore feel irreplaceable (Wierzbicka, 2004, p. 100).

In light of the above, Wierzbicka's reports concerning language and code-switching are in line with Heredia and Altarriba's (2001) view that words fit the context 'better' in the other language. Similarly, Fishman (1965, p. 69) reflects on language choice in different situations:

> Not only do multilinguals frequently consider one of their languages more dialectal, more regional, more sub-standard, more vernacular-like, more argot-like than the others, but in addition, they more frequently associate one of their languages with informality, equality, or solidarity than the other. As a result, one is more likely to be reserved for certain situations than the other.

Pavlenko (2004) describes switching into Russian, her L1, to signal more intense affect, be it positive and negative. Similarly, a number of studies on code-switching have established that bilinguals may code-switch to mark an affective stance. In this regard, speakers may switch to their L1 to signal intimacy or to express their emotions, and to the second language to mark distance, an out-group attitude, or to describe emotions in a detached way (Dewaele, 2004; Pavlenko, 2004). Nevertheless, the use of L1 as the 'intimate' language and L2 as the language of detachment might not always be the case. Dewaele (2010) states that sometimes L2 or LX can become the most emotional language, and this was the case for participants in his study who reported shifts in language preference linked to new partners or simply to the fact of having moved to a different country and, subsequently, having acculturated to the new language and culture. Feedback also showed considerable variation between individuals, with cultural background playing an important role in the perception and use of emotional language. Fishman (1965, p. 69) comments on the topical regulation of language choice that:

> Certain topics are somehow handled better in one language than in another, in particular multilingual contexts. This situation might be brought about by several different but mutually reinforcing factors. Thus, some multilingual speakers may "acquire the habit" of speaking about topic *x* in language *X*

> partially because that it the language in which they were trained to deal with this topic, partially because they may lack the specialized terms for satisfying discussion of *x* in language *Y*, partially because language *Y* itself may currently lack as exact or as many terms for handling topic *x* as those currently possessed by language *X*, and partially because it is considered strange or inappropriate to discuss *x* in language *Y*.

This is later presented by Wierzbicka's (2004) and Pavlenko's (2004) self-reports of language switching, which also point to the social structure and the cultural norms of a multilingual setting and the role they might play in language switching in particular social or cultural contexts. In the light of the research presented above, it could therefore be stated that code-switching might depend on the sociocultural context of the interaction (Dewaele, 2010; Panayiotou, 2004), as well as the topic (Altarriba & Heredia, 2008; Dewaele, 2010; Fishman, 1965) and its emotional force (Dewaele, 2010; Pavlenko, 2004; Wierzbicka, 2004).

Study Design

The present study is a part of a larger online survey on perception and expression of emotions by Polish L2 users of English (Ożańska-Ponikwia, 2013). Detailed description of questionnaires addressing code-switching is provided below.

Research questions. The present study is to address the following research questions:

1) What variables might influence code-switching among the immigrant group of Polish L2 users of English?
2) What are the code-switching practices among researched Polish L2 users of English who are exposed to L2 language and culture?

It could be speculated that such variables as self-perceived L2 proficiency and length of stay in a foreign country might influence code-switching among Polish L2 users of English.

It was hypothesized that informants of the present study will report code-switching from L2 to L1 mostly in emotionally charged situations.

Participants. The informants of the study were 62 Polish L2 users of English. Two thirds were females and one third were males. Their age varied from 17 to 58 years, with two thirds of the sample being in their twenties, almost one fourth being in their thirties, and the remaining 10% being in their forties

or fifties (N = 97, Mean = 29, SD = 7.9). More than half of the informants held a BA, 8% had an MA, 8% had received secondary education, and more than one quarter reported receiving vocational education (N = 97, Mean = 3.4, SD = 1). As far as L2 proficiency is concerned: 1% reported beginner level, 3% rated themselves as pre-intermediate, 15% as intermediate, one third as upper-intermediate, and nearly half as fluent (N = 95, Mean = 4.2, SD = 0.89). Half of the participants had lived in the UK and Ireland for up to 12 months, one quarter reported living there from 12 to 24 months, and the remaining 23% had lived in the UK and Ireland between 24 and 324 months (N = 97, Mean = 25.7, SD = 47).

Selection and recruitment. The aim of the present study was to find a heterogeneous group of informants that would fulfill the requirement of immigrating to the UK or Ireland and using L2 on an everyday basis. It is important to mention that the focus of the study was on the exposure to foreign language and culture, rather than on command of the L2, even if they are closely related. Another aim, as mentioned by Ożańska-Ponikwia (2012; 2013) when approaching particular groups of participants there was an attempt to capture the responses of a broader group than only 'young adults enrolled in the universities where the researchers work' (Dewaele, 2005, p. 370), who are likely to represent a narrower range of ages, ability, and linguistic background (Wilson, 2008, p. 115). Consequently, a snowball sampling procedure was used. For this reason, volunteers were recruited in different ways including advertising the questionnaire on various conferences, on the Linguist Lists and through Polish societies in both the UK and Ireland.

Procedure and data gathering. The informants of the study were to fill in an online questionnaire on perception and expression of emotions in the L1 and L2. However, for the purpose of this discussion only the analysis of participants' self-reports concerning code-switching practices will be presented.

Instruments. Two instruments were used: a personal background questionnaire and questions concerning code-switching practices. Below detailed presentation of both instruments is presented.

Personal background questionnaire. The personal background questionnaire comprised ten questions that allowed the researcher to gather the data concerning age, gender, self-perceived L2 proficiency, length of stay in an English-speaking country (LGS), and educational level. In addition to the variables described above, it also elicited data on participants' self-perceived command of other foreign languages but only 6% of the sample reported some basic command of such languages as Russian, French or Spanish.

Questions concerning code-switching. The questionnaire contained two items designed to provide a detailed insight into the process of code-switching practices among bilinguals and L2 users of English. The first question was "Do you ever change the language of the conversation from English (L2) into Polish (L1)?" This question was scored on a 5-point Likert scale requiring participants to choose between 1—Not at all, 2—Occasionally, 3—Sometimes, 4—Often, or 5—Very often. After choosing one of these five options, the respondents were presented with an open clarification question: "In what situations do you change the language of the conversation from the L2 to L1?" Both questions were presented in participants' L2.

Data Analysis

Quantitative data analysis. All participants of the study ($N = 62$) answered the question "Do you ever change the language of the conversation from English (L2) to Polish (L1)?" marked on the five-point Likert scale from 1—Not at all to 5—Very often. 15% of the respondents claimed to never change the language of the conversation from L2 to L1, 30% reported doing so occasionally, almost one quarter admitted to switching language sometimes, and the remaining 31% selected the options 'often' (11.4%) or 'very often' (20%). In order to analyze these results in a more detailed statistical manner a correlation analysis was introduced. It showed that frequency of the code-switching was related only to age ($r = 0.216$, $p < 0.05$) and self-perceived L2 proficiency ($r = –0.233$, $p < 0.05$). That could suggest that self-reported code-switching takes place mostly among younger participants with lower self-perceived L2 proficiency. It was interesting to see that the length of stay in a foreign country was not a significant factor in this correlation. Nevertheless, another statistical analysis revealed that it was correlated with self-perceived L2 proficiency ($r = 0.213$, $p < 0.05$), which could suggest that it influences the process in a non-direct way, and that the interplay between the measured variables is quite complex and nuanced.

Qualitative data analysis. A majority of the researched sample ($N = 54$) provided answers to the open question: "In what situations do you change the language of the conversation from L2 to L1?" which were analyzed qualitatively with the use of inductive category development (Mayring, 2001). The criterion of definition was derived from the theoretical background and research question. Following this criterion the material was worked through and categories were deduced. Later these categories were revised and reduced to main categories and analyzed in terms of frequencies. Detailed data analysis is presented below.

As a result of the content analysis four sub-groups of answers emerged:
1—Known interlocutors,
2—Emotions,
3—Inability to translate into L2,
4—Inner speech.

A detailed description of the frequency of occurrence of each sub-group of answers is presented in Table 1.

Table 1

Answers to the question "In what situations do you change the language from L2 to L1?"

Categories	Frequency	%
Known interlocutors	31	57.4
Emotions	16	29.6
Inability to translate	5	9.3
Inner speech	2	3.7
Total	54	100.0

As can be seen in the table, participants reported changing the language of conversation from L2 to L1 most frequently in the presence of known interlocutors, with 57% of all answers. The second biggest reported sub-group was Emotions (30%). Meanwhile, the remaining 13% of answers were distributed between two categories of Inability to translate into L2 (10%) and Inner speech (3%). Examples of participants' answers are presented below.

Language switch from L2 to L1—Detailed presentation of findings. All responses to the code-switching question were carefully analyzed and categorized into four sub-groups. A detailed analysis of the qualitative data from all these categories is presented below.

Presence of known interlocutors. The majority of statements concerning language change from L2 to L1 (57%) referred to the presence of known interlocutors. Informants reported that they would change the language of the conversation in order to clarify, translate or explain something in the L1.

> When I can see that my friends don't get what's going on I often switch to Polish to explain or translate. It's quicker this way. (Male, 24, Secondary Education, LGS 64 months)

> My husband is Polish and his English is good but he often interrupts while code-switching to Polish and asks for clarification. I didn't feel it's right among our English friends so asked him to explain in English that he doesn't understand and wants me to translate. Even if I switch to Polish from time

to time I feel that when everyone knows why, it's acceptable. (Female, 34, MA, LGS 45 months).

When I see that someone has problems with English in everyday situations I often translate or explain in Polish. It happens very often not only with strangers but with my Polish friends as well. (Male, 22, Secondary Education, LGS 24 months)

It's funny; I live in Ireland and have an Irish partner but use Polish at work with my colleagues all the time. (Male, 25, BA, LGS 34 months)

From the examples presented above, it could be concluded that language switch situations occur because of a vocabulary deficiency or low L2 proficiency. It is interesting that some informants consider it wrong frequently to use one's L1 in the presence of the L2 speakers who do not understand the given the language. This would suggest that adhering to social rules is very important; if these are violated, this needs to be explained to and approved by the L2 speakers.

Emotions. Thirty percent of answers concerning language switch from L2 to L1 report that it occurred in the context of expressing positive and negative emotions and enjoyment:

When I want to express what I feel I find it impossible to use English. When I really want to say how I feel I need to use Polish. (Male, 25, BA, LGS 24 months)

I know English, and I know how to express what I feel in English; however, it's just not what I feel and I need to use Polish. My partner tries to understand my Polish emotions, but since he is English, he finds it a bit difficult. Well, how can you understand something you have never experienced? (Female, 30, BA, LGS 64 months)

Expressing emotions in English is possible, but when you really want to let other people know what's going on only Polish words seem to be right. I hate translating my emotions into English as it seems that I feel something totally different. (Female, 28, BA, LGS 50 months)

My partner is English but I prefer to say 'Kocham Cię' instead of 'I love you'. He was even joking that when I said 'tak' instead of 'yes' when he was proposing that meant way more than 'yes'. He got used to my Polish way of expressing affection. (Female, 32, MA, LGS 76 months)

For most of the time at home or at work I operate in English but even so I use Polish in everyday situations in order not to be understood. Sometimes

> when I'm arguing with my partner I start to use Polish to tell him what I think of him. It's safe as I'm not hurting his feelings and at the same time venting my anger. (Female, 23, BA, LGS 43 months)
>
> Sometimes I switch to Polish to express my anger/frustration. I prefer not to be understood so I do that in Polish. (Female, 22, Secondary education, LGS 28 months)
>
> At work I find myself changing to Polish as no one understands. (Male, 24, Secondary education, LGS 32 months)

These observations indicated that expressing emotions in the L2 seems to be a difficult task. Participants claimed that they cannot fully express themselves in the L2 as they lack specific concepts in English that could correspond with Polish emotion words. However, foreign language proficiency is not the main factor as the majority of informants considered themselves fully fluent in the second language. It could therefore be speculated that some emotions and emotion words are specific to a given language and that expressing them by means of another language is not always possible, or that it changes the meaning of the emotion. Some participants also use their L1 for venting negative emotions or expressing their true feelings without hurting someone else's feelings. It could be suggested that living with two languages, which are so distant in terms of expressing emotions, results in a compromise between the two social scripts: the English script that avoids hurting someone else's feelings and being considerate and thoughtful, and the Polish one which avoids controlling and suppressing emotions.

Some informants claimed to switch to L1 when expressing their enjoyment:

> Sometimes when I'm having fun I switch to Polish it just seems more natural. (Female, 30, MA, LGS 43 months)
>
> I can't imagine watching a football match and reacting and commenting in English. It's unnatural. It's the same when I have fun with my friends, doesn't matter whether Polish or English, all the exclamations are in Polish. I can't control it as controlling it ruins the fun. Being natural is being Polish. (Male, 45, MA, LGS 87 months)
>
> My friends even learned all little exclamations of joy and fun! They know that I really have fun when I switch to Polish. (Female, 28, BA, LGS 48 months)

These observations might suggest that at moments of enjoyment, such as while watching a football match, informants feel it is inappropriate to use L2, as they do not feel comfortable with it. They feel more at ease expressing the

joy of the moment in their L1. It could also be speculated that strong positive emotions are encoded in the L1 and thus participants find it impossible to fully enjoy themselves without being able to express that in the L1.

Inability to translate into L2. Almost 10% of responses were categorized as Inability to translate into L2. Most of informants in this group reported shifting to L1 due to a lack of appropriate vocabulary that they could use in their L2:

> I often change to Polish when there's no word that would mean the same in English. There are many such words staring from food (national cuisine) and ending on expressing emotions. I find it better to use a Polish word than to use a translation because it feels kinda right. I know that it might not be appropriate but what can you do? You either express it in Polish or not express it at all. I prefer the first option. (Female, 27, BA, LGS 34 months)

> I know English well but sometimes I lack the professional vocabulary that I know in Polish but not in English and need to use Polish equivalent. Well, it's easier to use L1 as I know exactly what I am to do and I feel more self-confident. (Male, 24, BA, 24 months)

This might suggest that for some informants it is impossible to find L1 equivalent in the L2. In such situations they opt for L1 in order to express themselves, even though it might be socially inappropriate.

Inner speech. It is interesting to note that some informants responded to the question "In what situations do you change the language of the conversation from L2 to L1?" by understanding change in self-directed speech as an instance of departure/shift from L2:

> I have quite good English and I'm studying in England but even if I talk fluently in English I talk to myself in Polish as if all the mental processes were conducted solely in Polish. When I do simple counting out loud I always do that in English; however, when I have to do some serious calculations I'm unable to do that in English and I always use Polish, even if I am to do it out loud. It seems that my brain is not able to perform any more complicated tasks when 'receiving instructions' in English. (Female, 29, BA, LGS 34 months)

Some reports state that using L1 in the act of talking to oneself is treated as shifting from the L2 but, on the other hand, some participants claim to be unable to use L2 for inner speech. It is interesting to note that some informants were very self-aware and able to notice such subtle changes as changes in their

inner speech while performing mental processes. This would suggest that living in the non-native country implements L2 as the language one would use to talk to oneself. Departure from this language choice, even in mental processes, is regarded as an instance of language switch from the L2 to L1.

Discussion

Our first research hypothesis stating that self-perceived L2 proficiency and length of stay in the UK and Ireland might influence code-switching among Polish L2 users of English was only partially confirmed. Quantitative data analysis showed that both age and self-perceived L2 proficiency correlated with the frequency of code-switching reported by informants of this study. It could be noticed that younger and less proficient L2 users tend to code-switch more often than their older and more proficient colleagues. Another important finding was that the exposure to a foreign language and immersion in its culture was not directly linked to code-switching. It influenced self-perceived L2 proficiency, which was shown to be one of the variables correlating with the frequency of code-switching, but no direct influence of the length of exposure to a second language or code-switching was found.

Qualitative data analysis was included as it is believed that incorporation of participants' views and insights might shed some new light on the interplay of language, culture, and emotions (Dewaele, 2008; Pavlenko, 2008). The research hypothesis was partly confirmed as the informants reported code-switching from L2 to L1 in emotionally charged situations, but at the same time also pointed to a number of other situations in which they most typically code-switch from L2 to L1. Among such situations were: the presence of known interlocutors, inner speech, and not being able to find an appropriate translation in the L2. However, 30% of informants pointed out that code-switching from L2 to L1 occurs most often in emotionally charged situations. It could be noted that from their perspective some emotions are untranslatable; secondly, it doesn't 'feel right' to use L2 in some situations (as switching to L1 conveys more emotional intensity, be it positive or negative); and thirdly, in some instances L1 is used in order to vent emotions and avoid hurting someone else's feelings. These findings support those of Dewaele (2010) and Grosjean (2001). Dewaele states:

> I have argued that a highly emotionally aroused speaker might become more self-centered and momentarily diverge from the shared language. Grosjean (personal communication) suggests that the Complementarity Principle could also explain, in part, which language is used when expressing emotions (i.e.

> does the bilingual have the vocabulary needed to do so in the "wrong" language?). He thinks that a lack of vocabulary may force bilinguals to revert to the other language when expressing their emotions. It is also possible that the emotion vocabulary is present in both languages, but that the speaker may be aware of the nonequivalence of emotion concepts in both languages. A realization that the emotion concepts in the weaker language may be incomplete (Pavlenko, 2008a), combined with possible gaps in the prototypical scripts, may push the speaker to switch to the language in which emotion concepts are more complete, where the emotionality and valence of an emotion word—or an emotion-laden word—are known and where they will have the intended illocutionary effects (Dewaele, 2008b; 2008c). This would explain why many participants said that their stronger language felt more appropriate to convey a strong emotion in. (Dewaele, 2010, p. 210)

It can be speculated that in the present study, living with two languages which have such distant norms in terms of the expression of emotions, resulted in a compromise between the two social scripts for expressing emotions; the English one which avoids hurting someone else's feelings for being considerate and thoughtful, and the Polish one which avoids controlling and suppressing emotions (Hoffman 1998; Wierzbicka, 1999).

Results of this study showed that informants reported code-switching most often in the presence of known interlocutors and while expressing emotions. The quantitative analysis of a similar code-switching study by Dewaele (2010) revealed that self-reported code-switching was most frequent when talking about personal or emotional topics with known interlocutors (friends or colleagues) and was significantly less frequent when talking about neutral topics to strangers or to larger audiences. Dewaele (2010) suggested that the reasons for this might be quite simple. Once the speaker knows which languages the interlocutor understands—information that is typically shared by friends and colleagues—the speaker may choose to resort to code-switching to establish a common multilingual identity, or to create specific illocutionary effects. The analysis of the narratives confirmed the general trends uncovered in the quantitative analyses, while adding rich information concerning the reasons for code-switching and self-perceived difficulties in expression of emotions in the L2. The qualitative data analysis showed that self-reported code-switching from L2 to L1 was more frequent in the context of a discussion of emotional topics with interlocutors who shared the knowledge of both L1 and L2. Dewaele (2010) additionally states that the typical preference for the L1 for communication of emotion can enter into conflict with the need to maintain the dialogue in the L2 because the interlocutor might not share the speaker's L1. Such instances were also noted in the narratives of the informants of the current study. One participant reported expressing love in the L1 even if the partner does not share

the knowledge of that language. She comments that her partner knows what she means and that it is more emotional and important for her to express it in her L1. This is reminiscent of Pavlenko's (2004) comments concerning her own experiences of code-switching between Russian and English. She states that switching to Russian, her L1, would imply that she is serious about the things she's discussing. Dewaele (2010) notes that strong emotional arousal might either activate a background language or wreck its inhibition, thus allowing the background language to temporarily become the output language. This instance of code-switching would thus be non-strategic and probably uncontrolled. It therefore seems that strong emotions can disturb the balance of the language modes, leading to increased code-switching (Dewaele, 2010) especially from L2 to L1. Dewaele (2010) further suggests that a multitude of situational and pragmatic variables can be linked to code-switching and that additional factors may become relevant, such as the perceived emotional strength of words and expressions in the different languages, the degree of emotionality of the topic under discussion, and the amount of control that the speaker retains over language choice. The analysis of informants' narratives concerning difficulties in expressing emotions in the L2 led to the conclusion that the greatest difficulties are faced while expressing negative emotions in stressful situations. In this regard, Dewaele (2010) suggests that:

> A highly socialized LX user may be perfectly capable of communicating emotions in an LX, feeling both competent and confident in using it, but it takes years before the positive language characteristics and emotional strength of swearwords in the LX will equal those of the L1. Participants confirmed that it is often only after decades of living in an LX environment that they dared to use some of the swearwords in that language, and even then only the mild ones. Feedback also showed considerable variation between individuals, with cultural background playing an important role in the perception and use of emotional language. (Dewaele, 2010, p. 218)

Conclusions

The present study shows that the relationship between language and culture is very complex and nuanced with different variables influencing various aspects of code-switching. Quantitative analysis of the present study shows that frequency of code-switching researched among Polish L2 users of English was related to such variables as age and self-perceived L2 proficiency. At the same time, qualitative data analysis presents some interesting insights into the

process, showing that a qualitative approach and focusing on the respondents' perspective might also provide some useful data that could explain the reasons behind code-switching practices of Polish immigrants to the UK and Ireland and shed some more light on this complex process.

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Der Sprachcodewechsel bei den englisch sprechenden polnischen Immigranten

Zusammenfassung

Der vorliegende Beitrag bezweckt, die Ergebnisse der Forschungen über den Sprachcodewechsel (code-switching) bei den eine Fremdsprache Sprechenden darzustellen. Die mit code-switching verbundene Verhaltensweise wurde in einer Gruppe von 62 in Großbritannien und Irland lebenden und alltags englisch sprechenden Polen untersucht. Die Befragten sollten im Internet einen Fragebogen ausfüllen und offene Frage beantworten, in welcher Situation sie während der Konversation am häufigsten die Sprache vom Englischen ins Polnische wechseln. Die Mengendatenauswertung zeigte auf, dass das Alter und die Gewandtheit des Fremdsprachengebrauchs die Frequenz des Sprachcodewechsels stark beeinflussten. Die qualitative Auswertung dagegen ließ erkennen, dass die Befragten die Sprache besonders in den durch Emotionen gekennzeichneten Situationen oder in den mit gut bekannten Personen geführten Gesprächen über private Sachen wechseln. Die hier angeführten Ergebnisse decken sich mit früheren Mengenauswertungen von code-switching (Dwaele, 2010), als auch mit quantitativer Analyse (Grosjen, 2010; Pavlenko, 2004; Wierzbicka, 2004).

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New Conceptualizations of Language Aptitude—The Potential of Working Memory in Second Language Acquisition (SLA)

Abstract: Foreign language (FL) aptitude is generally understood as a talent for foreign language learning. For many years, it has been researched and combined with intelligence and language proficiency. At present, foreign language aptitude construct is experiencing a growing interest in its memory component which was slightly bypassed in its research history.

The paper sheds light on new conceptualizations of foreign language aptitude by emphasizing the role of working memory (WM) in the second language acquisition (SLA) process. It is organized into 3 sections. The first section of the paper presents a brief historical overview of the research on language aptitude based on John Carroll's work. The second part elaborates on the working memory construct, discussing Baddeley's multi-component model of WM and its functions. Further discussion concentrates on a combination of two significant notions by proposing to incorporate working memory as a crucial component of language aptitude construct. In light of the issue mentioned above, the third section of the article focuses on the newest and original empirical studies which support the role of WM in different aspects of L2 learning, i.e. speaking and bilingual interpretation as well as vocabulary and grammar learning. Its concluding part reflects upon the relevance of language aptitude, paving the way for future research.

Keywords: language aptitude, working memory, Second Language Acquisition (SLA)

Language Aptitude—A Brief Overview

It is generally agreed that individuals have different capabilities for foreign language learning (Skehan, 1998, p. 185). Undoubtedly, there are people who acquire foreign languages in a fast and effective way. But on the other hand, some people have difficulties with this process no matter how hard they try and how high their motivation is (Carroll, 1981, p. 85). Gardner and Lambert

(1972, p. 2) point out that people could differ in the ease and rate of achieving a satisfactory level of mastery in foreign language acquisition. The issues mentioned above are strongly connected with the notion of language aptitude. As Oxford (1990, p. 74) emphasizes language aptitude seems to be a simple notion, but in fact it is complicated to define it. John Carroll, an American psycholinguist whose contribution to the development of foreign language aptitude research cannot be omitted, provided a comprehensive definition of language aptitude: "Foreign language aptitude is considered as the individual's initial state of readiness and capacity for learning a foreign language" (Carroll, 1981, p. 86). Gardner and Lambert (1972, p. 2) define this term as 'a knack' for learning a foreign language. Gardner and McIntyre (1992), however, name it a 'cognitive sponge' meaning that new knowledge and skills are associated with those already acquired. Language aptitude can also be described as a specific talent for learning languages (Dornyei & Skehan, 2003). As we can see, there are many attempts to clarify this notion which slightly differ from each other and as a result we still do not know precisely what language aptitude is (Arabski, 1998, p. 9; Grymska, 2015, p. 30).

The golden period of language aptitude research. Research on language aptitude had its golden period in the 1950s and 1960s (Rees, 2000) thanks to the work done by Carroll, who provided the following three theses referring to language aptitude: there is a distinction between language aptitude and other cognitive abilities, including intelligence; aptitude is relatively fixed and hard to change; and it is componential (Skehan, 2014, p. 381). His fundamental contributions can be subdivided into two areas: he is the author of a four-component view of language aptitude, and the second area refers to the measures of language aptitude. Carroll (1981, p. 105) indicated that there are four major components of language aptitude:

- phonetic coding ability—the ability to make distinctions between sounds, to associate sounds and symbols representing them and keep them in mind;
- grammatical sensitivity—the ability needed for recognizing grammatical functions of words in sentences;
- rote learning ability for foreign language materials—the ability to distinguish sounds and meanings at a fast rate and to retain them;
- inductive language learning ability—a talent to induce both explicit and implicit rules from the chaos of language material (Arabski, 1998, p. 9) and to be able to produce language based on the generalizations (Skehan, 2014, p. 381).

The second area of his work and contribution was more practical. As Skehan (2014, pp. 381–382) indicates, Carroll developed a large number of foreign language aptitude tests. Together with Stanley Sapon, he was the author of the *Modern Language Aptitude Test* (the MLAT) (Carroll & Sapon, 1959)

which was devised to measure several separate components that form an individual's aptitude to learn a foreign language (Parry & Child, 1990, p. 37). As Gregersen and MacIntyre (2014, p. 66) note, the MLAT measured the rate at which a person could learn a foreign language, but, which is worth emphasizing, it did not predict whether an individual could learn a language at all or not. The battery consists of five sub-tests: *Number Learning*, *Phonetic Script*, *Spelling Clues*, *Words in Sentences* and *Paired Associates* (Skehan, 2014, p. 382; Dornyei, 2005, p. 37). Carroll's particular view of aptitude construct and the MLAT have been employed since the 1950s, beginning the new period of language aptitude research (Rees, 2000).

Language aptitude—Post-Carroll research. After the publication of the MLAT we can observe the culmination of further test development as aptitude measurement tools, e.g., the widely used PLAB (the *Pimsleur Language Aptitude Battery*, Pimsleur, 1966), the *York Language Aptitude Test* (Green, 1975), the *Defense Language Aptitude Battery* (Petersen & Al-Haik, 1976), the *German Aptitude Test* (Miller & Phillips, 1982) and *VORD* (Parry and Child, 1990). Another instance of aptitude measurement is *CANAL-FT* (Grigorenko et al., 2000) which in contrast to the MLAT is theory driven, especially based on the theory of intelligence (Sternberg, 2002). It is generally agreed in the literature that the new batteries did not exceed the MLAT in its superiority (Dornyei, 2005; Sparks & Ganschow, 2001; Sawyer & Ranta, 2001). Parry and Child concede: "the MLAT was the best overall instrument for predicting language-learning success" (Parry & Child, 1990, p. 52). In order to deepen and enrich our understanding of the research on language aptitude, it is worth adding that the MLAT was somewhat modified. On Polish ground it functions as FLAT-PL (Foreign Language Aptitude Test-Polish) and consists of 6 parts emphasizing the role of inductive language learning ability (see Rysiewicz, 2011).

Most of the research studies referring to language aptitude, which spread after the creation of the MLAT, can be subdivided into three areas: the research aiming at measurement of language aptitude and publication of aptitude tests; research referring to the components of aptitude construct as proposed by Carroll; and research on the relationship between language aptitude and treatment (Wen & Skehan, 2011, p. 18).

It is worth adding that even though language aptitude was criticized in the 1970s and 1980s, it is still essential in the research concerning second language acquisition (SLA). Wen and Skehan (2011, p. 18) emphasize that the research concentrating individually on the components of language aptitude construct is scarce, especially with the memory component. As Dornyei (2005, p. 63) observes, the role of working memory in second language acquisition (SLA) as well as language aptitude is an area of future research which is now revealing

a growing interest. More attention referring to working memory and its role in SLA as the component of language aptitude will be drawn in next sections.

Working Memory (WM) Construct

For the purposes of illustrating what working memory is, we must look at the following explanation by Ellis (2005, p. 338): "If I ask you what 397 x 27 is, you do not look up the answer from long-term memory, you work it out." Working memory has its origin in unitary short-term memory that is the site of temporary storing of small amounts of material in short periods of time (Baddeley, 1992; 2009). Baddeley (1992) explains that working memory is 'a brain system' which is needed to hold information (the storage function of working memory) and to manipulate new information with known material (processing function). As Baddeley adds, the system is necessary in keeping information in mind while performing everyday cognitive tasks, for example, remembering a phone number or doing mental arithmetic (Williams, 2014, p. 427) as well as problem solving, academic achievement, mapping, language comprehension, learning and reasoning (Baddeley, 1992; Rysiewicz, 2013; Profozic, 2013).

Working memory, like language aptitude, is a multi-component construct (Wen & Skehan, 2011, p. 21). A current model of working memory was worked out by Baddeley (2015, p. 21) and consists of four components: *central executive*, *phonological loop*, *visuo-spatial sketchpad*, and *episodic buffer*. Central executive is described as the core which controls entire system of working memory (Baddeley, 1998, p. 50). Different authors have tried to enumerate the most significant functions of the central executive and they are the following:

- the central executive coordinates information coming from different sources (Baddeley, Pressi, Della Sala, Logie, & Spinnler, 1991; Baddeley & Logie, 1999);
- it controls two tasks which are performed simultaneously (Baddeley, 1986);
- supervising operations which are performed in mind (Baddeley, 1996; 1997; Miyake, Friedman, Emerson, Witzki, & Howeter, 2000);
- the central executive enables us to get to information stored in our long-term memory (Baddeley & Logie, 1999).

The second component of WM—*phonological loop*—is responsible for storing and rehearsing phonological information. In order not to forget the information which is needed, it must be kept in a special place in our mind—this means *processing*, and apart from this, information must be constantly rehearsed, which is called *rehearsal*. If the information is not rehearsed, it disappears from our

memory system. This phenomenon is called *retention*. Thanks to the functions mentioned above, phonological loop has the influence on the understanding of language and both L1 and L2 acquisition (Service, 1992).

The third component, *visuo-spatial sketchpad*, handles information referring to spatial location, color and shape as well as information concerning touch and kinesthesis. Similarly as in phonological loop, in visuo-spatial sketchpad information is in constant motion (Piotrowski, 2004, p. 25). The last component of WM, *episodic buffer*, is a new component which was added to the model a few years ago by Baddeley (2000). It is a buffer kind of memory which links information between different components of WM. Furthermore, it also combines information from working memory with long-term memory.

Baddeley and Hitch (1974) add that working memory is the place of executive control as well as consciousness. Furthermore, it functions as "the home of explicit induction, hypothesis information, analogical reasoning, prioritization, control, and decision-making" (Ellis, 2005). It must be highlighted that this is the place where metalinguistic insights referring to L2 are developed, improved, and applied (Ortega, 2009, p. 90). To deepen and enrich our understanding of working memory, two features must be analyzed. First, working memory is of limited capacity (Baddeley, 2007), in contrast to long-term memory, meaning that in normal conditions, the information can exist in WM for two seconds, and after that it is forgotten unless it can be rehearsed in the phonological loop (the component of working memory that has been discussed above). The second feature of WM is called temporary activation. Cowan (2005) observes that activation is a central characteristic of working memory, meaning that it is a part of the entire memory system and WM is activated in a processing event. It is important to note that working memory functions as a kind of gateway to our long-term memory, because the material we store and process in WM may become a part of long-term memory. This is the reason why WM is different from short-term memory (Wen & Skehan, 2011, p. 22).

Working memory in SLA process. As was indicated in the section *The golden period of language aptitude research*, the height of the research on language aptitude was the 1950s and 1960s, but in those days the role of memory in foreign language learning was considered to be nothing but rote learning which takes place mechanically or refers to creating associations between information (Wen, 2015, p. 10). But, the growing interest in working memory in SLA has occurred since the mid-1990s (Ortega, 2009, p. 90). It has been combined with one of the aspects of SLA—individual differences. It is obvious that WM, being dependent on developments in modern cognitive science, may be a crucial point to evolve the concept of foreign language aptitude. Wen (2015, p. 10) adds that this proposal should be based on the following condition: there are individual differences among learners in their WM which can be measured.

Furthermore, Miyake and Friedman (1998, p. 340) propose that "WM may be one (if not the) central component of language aptitude." There are some reasons why this concept is so significant. First, the elements of language aptitude construct proposed by Skehan (the model of language aptitude presented by Skehan in 1998)—language analytic capacity, memory ability, and phonetic coding ability—function as cognitive elements and are strongly connected with WM. Second, based on the available research findings, the process of developing skills and achieving proficiency in L1 is strongly related to the role of WM. Therefore, it is likely to influence learning of L2 in a significant way. Third, for adults who learn L2, the stage of language acquisition can be limited, for example, from phonological or syntactic points of view, because maturational changes occur in the critical period (Johnson & Newport, 1989). Because of this, the L2 learning process may be based on general learning mechanisms and principles more than L1 acquisition. It is the working memory which plays an important role in the acquisition of knowledge and development of skills, for example, logical problem solving or computer programming (Shute, 1991; Kyllonen & Stephens, 1990) and this is the reason why it can be a 'candidate mechanism' (Miyake & Friedman). Wen and Skehan (2011, p. 24) provide that a number of SLA and cognitive psychology researchers built their arguments for incorporating WM as language aptitude component on the following three assumptions:

- first language acquisition is based on universal grammar while second language acquisition is built on general learning mechanisms where working memory is one of them.
- first language acquisition is based on "automatic processing" while SLA is strongly connected with "controlled processing" in which cognitive resources dependent on WM are necessary (Wen & Skehan, 2011, p. 24).
- the role of WM in SLA is self-evident because the elements of WM take part in different stages of SLA which are "input processes, central processing and output processing" (Skehan, 1998; Wen & Skehan, 2011, p. 24), as well as cognitive processes and operations in SLA (pattern recognizing or noticing).

Both SLA and cognitive psychology researchers have proposed to implicate WM as the crucial component of the language aptitude model, aiming at modifying Carroll's language aptitude construct or even replacing it by emphasizing the role of WM in the entire process of foreign language learning (Miyake & Friedman, 1998; Wen, 2007; Sawyer & Ranta, 2001).

Working Memory and Different Aspects of L2 Development—Research Studies Overview

In order to understand the significant role of working memory in SLA and to support the proposal for incorporating WM as a language aptitude component, it is necessary to analyze the research findings devoted to this subject. The following part of the paper will analyze the role of WM in the learning of new vocabulary and grammar in L2. Further discussion will present research findings supporting the importance of WM in the development of two L2 skills: speaking and bilingual interpretation, which learners encounter from the beginning of their experience in foreign language learning. The paper will present how WM influences the speed and quality of L2 learning as well.

Working memory and vocabulary learning. Available research shows that phonological working memory, which functions as a gateway for storing linguistic knowledge into long-term memory (Baddeley, Gathercole, & Papagno, 1998), plays a pivotal role in vocabulary learning. Baddeley et al. (1992) proposed that the phonological buffer of working memory functions as a device which is significant in the learning of new vocabulary in L1 by children. The above-mentioned thesis was based on research conducted by Gathercole (1999). According to Gathercole and Thorn (1998, p. 142) the phonological loop influences the learning of sounds of vocabulary in a foreign language. The claim was extended from L1 to L2 vocabulary learning in the study by Service and Kohonen (1995)—L1 Finnish students learnt English words. Similar results were achieved by Cheung et al. (1996) with L1 Cantonese and L2 English. Furthermore, Papagno and Vallar (1995) had similar observations for older students with the following languages: L1 Italian and L2 Russian. Masoura and Gathercole (1999) conducted another research project in which they measured short-term memory and skills at learning vocabulary in children whose L1 was Greek and L2 English. There was a significant correlation between phonological memory and vocabulary measures both in L1 and L2. The findings of the research studies presented above confirm that the phonological component of working memory has a crucial influence on vocabulary acquisition.

Working memory and grammar learning. The following section is going to discuss the role of phonological aspect of working memory in L2 grammar acquisition. Ellis and Sinclair (1996) found correlations between phonological working memory and learning of morphology basing on their theoretical work which focused on chunk learning and emphasized the role of frequency. The research conducted by Williams and Lovatt (2003; 2005) proved that phonological working memory has an influence on the learning of familiar morphemes

which is significant in grammar learning. There are also research findings on phonological memory and L2 grammar relationships which both emphasize and reject the role of vocabulary learning and its measures. French and O'Brien (2008), however, claim that phonological working memory correlates with the learning of grammar in L2 which is not dependent on vocabulary learning measures. However, another study conducted by Martin (2009) confirmed the importance of vocabulary in memory measures. The study measured both phonological short-term memory (PSTM) and working memory, and these measures correlated strongly with grammar and vocabulary measures. The analysis confirmed that "the relationship between grammar and memory measures was mediated by vocabulary knowledge" (Martin, 2009, p. 2).

Skehan (2014, p. 386) emphasizes that the research findings mentioned above do confirm the correlation between working memory and measures of language development, meaning that working memory can be a central component of language aptitude construct. Chan et al. (2011) observe that a significant issue in the process of L2 learning refers to understanding and acquisition of a syllable structure in the target language. Acquiring syllable structure refers to keeping it in mind and remembering sequences of sounds in L2, which is connected with phonemic coding ability. This is the reason why Chan et al. (2011) propose incorporating non-words for repetition into the tests measuring phonological working memory, because those non-words refer to the syllable structure in the L2. In a non-word repetition task, a student needs to repeat non-words after the examiner who presents them orally. The non-words usually contain a single consonant or consonant cluster (Comblain, 1999). The scholars note that there is a very domain-specific phonological element characteristic of language learning, and phonological working memory and the element of language aptitude—phonemic coding ability—shall be brought together to make the measures more specific and effective.

The paragraph highlighted the role of phonological component of working memory in grammar learning which was usually based on vocabulary knowledge and its measures. The importance of vocabulary knowledge is strongly emphasized in phonological memory measures.

Working memory and L2 speaking. In order to understand the process of speaking better, it is necessary to analyze the language production process. According to Fields, the meaning can be produced by creating and expressing it (Fields, 2004). The process of speech production is much more sophisticated from a neurological and psychological perspective than other linguistic processes (Scovel, 1998). In everyday life people of course are usually unaware of this process. One of the most popular models of speech production was developed by Levelt (1989) and consists of four stages which are the following: conceptualization, formulation, articulation, and self-monitoring. In the

first stage of speech production, we must have an idea of what we want to say (conceptualization). In the second stage, a speaker needs to change the idea into a particular linguistic plan (formulation). Then the idea and plan can be expressed on the basis of articulators—the organs of speech production (Roach, 2009, pp. 8–10)—this phase is called articulation. The final point in the model is called self-monitoring, because a speaker controls the speech meaning, checking what is said and how it happens.

Now our attention will be focused on the role of phonological component of working memory in the speech production process in L2. This component refers to phonological short-term memory. Campoy (2008) provides a good clarification of the term: the phonological loop is subdivided into a phonological store and a subvocal rehearsal process. The store is the place where verbal material is held in phonological form. The material is usually stored for a few seconds.

According to Wen (2015, p. 50) it is possible to predict narrative vocabulary at the early stage of learning L2 on the basis of phonological short-term memory (PSTM). Another component of working memory construct—Executive working memory (EWM)—refers to L2 speech accuracy. As Payne & Whitney (2002) note both for fluent and less fluent L2 speakers it is necessary to use their WM resources while speaking, for example, less fluent speakers need to use their attentional resources in deciding which lexemes or phonological elements they need in utterance, checking the correctness of syntax, or in looking for suitable words in their mental lexicon. What is more, the processes mentioned above need the phonological loop to keep their calculations in mind referring to the Levelt's model (Wen & Skehan, 2011, p. 30). The central executive of working memory is also needed in checking whether chosen lemmas and sound structures are correct. Furthermore, Profozic (2013, p. 66) adds that while speaking, a learner must choose words which are suitable for the intended idea from a semantic point of view. Both storage and processing functions of WM as well as their cooperation are used in the process mentioned. We also need WM to decide what information must be used and retrieved from our long-term memory. For fluent speakers, the above-mentioned processes do not occur so consciously, meaning that their attentional resources can be used in "greater subtleties of expression" (Skehan & Wen, 2011, p. 30).

Now we will put greater emphasis on some empirical evidence supporting the importance of WM in L2 speech production. The research conducted at the beginning of the 20th century confirmed that on the basis of WM, it is possible to predict L2 oral development both in computer meditated communication (see Payne & Whitney, 2002; Payne & Ross, 2005) and in the traditional classroom (Mizera, 2006; O'Brien, Segalowitz, Collentine, & Freed, 2006; 2007). The phonological loop can be used differently in various stages of L2 oral development: at the early level of L2 speech production it helps in the development

of narrative skills and at more advanced L2 levels it also contributes to the correct use of function words in (O'Brien et al., 2006; 2007). These research findings were similar to the study conducted by Payne and Whitney, suggesting that WM plays a different role at different levels of fluency of L2 speakers. Another study conducted by Fortkamp (1999) examined the relationship between working memory capacity (WMC—"the limited capacity of a person's working memory" (Wilhelm et al., 2013) and L2 speech production in a group of learners whose L1 is Portuguese and L2 English. The research revealed that learners with larger WM capacity have faster speech rates.

Working memory and bilingual interpretation. The last skill that will be discussed in the article is bilingual interpretation which is a complex task because it involves language processing (Christoffels & de Groot, 2006). In the process of Simultaneous Interpretation (SI) a learner has to listen to and understand input utterance in a particular language and retain this material in WM until it can be produced in the target language. Each of the tasks mentioned above needs WM resources (Mizuno, 2005, p. 741). Bilingual interpretation involves constant control of two languages and a person needs to understand and produce speech at the same time, and this is the reason why the role of Executive Working Memory must be emphasized (Wen & Skehan, 2011, p. 33).

As Wen and Skehan (2011, p. 33) indicate, there have been few studies addressing the relationship and role of WM in Simultaneous Interpretation. Padilla, Bajo, Canas, and Padilla (1996) emphasize that interpreting practice contributes to the development of WM meaning that professional interpreters have a higher working memory capacity than, for example students. Kopke and Nespolous (2006) presented empirical support regarding the significant role of Executive Working Memory (EWM) in interpreting and found the differences between interpreters and a novice group in a free recall task. The research conducted by Timarova et al. (2014) emphasizes the significance of EWM as well. The study confirmed that there is a relationship between working memory and simultaneous interpreting, meaning that different functions of WM are predictors of simultaneous interpreting processes. Furthermore, particular features of simultaneous interpreting are connected with the central executive component of working memory. This field is still awaiting further research.

Working memory and speed and quality of L2 learning. As Miyake and Friedman (1998, p. 347) point out, the SLA research confirmed the interest in the role of WM and the level of L2 proficiency as well as the process of L2 learning itself. There are not many research findings concerning the issues already mentioned, but it is important to have a look at these providing the answer for what the influence of WM on speed and quality of language acquisition is. First, available research findings suggest that: "older children are capable of

juggling more information in their minds than are younger children" (Miyake & Friedman, 1998, p. 347). This means that they can develop knowledge in L2 more quickly than younger children do. Siegel (1994) examined children's performance in the reading span test (the measure of WM in which students need to read the sentence, state if it is true or false and remember the last word in each sentence (Daneman & Carpenter, 1980) and claimed that it increases between 6 and 18 years of age. Miyake and Freidman (1998) suggest that a larger WM capacity influences faster L2 learning.

Another study is associated with the quality of WM capacity associated with L2 learning. In this study (Ando et al., 1992) Japanese learners studied English for 20 hours, but they had not attended any English classes before. The English instruction focused on grammar and required learning new abstract rules and using them in language situations. The outcome of the research was the following: "children's reading and listening spans in L1 before English tuition were best predictors of their post-test performance in L2" (Miyake & Friedman, 1998, p. 347).

Conclusion

The current article attempted to combine two areas of research, namely, language aptitude and working memory, and to reveal the role of working memory in the SLA process. Presented research findings showed that different components of WM play a significant role in L2 skills development. Phonological component of working memory is a crucial element both in acquisition of L2 vocabulary and grammar. L2 speaking can be developed thanks to the role of phonological and executive components of WM. As far as Simultaneous Interpretation is considered, the significance of Executive Working Memory was confirmed in the development of this L2 skill. We have also noted that WM capacity influences the speed and efficiency in L2 learning. On the basis of the research findings cited from recent studies, it is clear that working memory may be a crucial component of language aptitude, because thanks to it learners can develop their L2 skills. It is obvious that working memory should be a subject of further research to follow, because it will allow a detailed clarification of how WM influences and correlates with the development of particular L2 skills.

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Beata Grymska

Neue Betrachtungsweise der Sprachbegabung – Leistungsfähigkeit des Arbeitsgedächtnisses im Prozess des Zweitsprachenerwerbs

Zusammenfassung

Die Sprachbegabung (eng.: *language aptitude*) heißt Talent für Fremdsprachenlernen haben. Viele Jahre lang wurde sie samt Intelligenz und sprachlicher Gewandtheit zum Forschungsgegenstand. Heutzutage konzentrieren sich solche Forschungen auf das Gedächtnis, das früher von den Forschern kaum behandelt war.

Der vorliegende Beitrag präsentiert neue Betrachtungsweise der Sprachbegabung, die die Rolle des Arbeitsgedächtnisses beim Zweitsprachenerwerb (eng.: *Second Languuage Acquisition*) hervorhebt. Der Beitrag besteht aus drei Teilen. Der erste von ihnen stellt in Grundzügen die Forschungen über Sprachbegabung dar und basiert dabei hauptsächlich auf John Carrolls Leistungen. Der zweite Teil handelt von dem Begriff „Arbeitsgedächtnis“ und betont die Bedeutung und die Funktionen des Mehrkomponentenmodells des Arbeitsgedächtnisses von Baddeley. Der Verfasser bemüht sich, zwei bisher behandelte Begriffe – Sprachbegabung und Arbeitsgedächtnis – zu verbinden: das Arbeitsgedächtnis wird zwar ans Modell der Sprachbegabungseigenschaften als Hauptelement des Modells angeschlossen. Im dritten Teil werden neue und originelle Ergebnisse der Forschungen präsentiert, die die Bedeutung des Arbeitsgedächtnisses für die Entfaltung verschiedener Aspekte des Zweitsprachenerwerbs: Sprechen, bilinguales Übersetzen, Wortschatz und Grammatik bestätigen. Im Resümee des Beitrags wird die Wichtigkeit der Sprachbegabung im Prozess des Zweisprachenerwerbs unterstrichen.

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