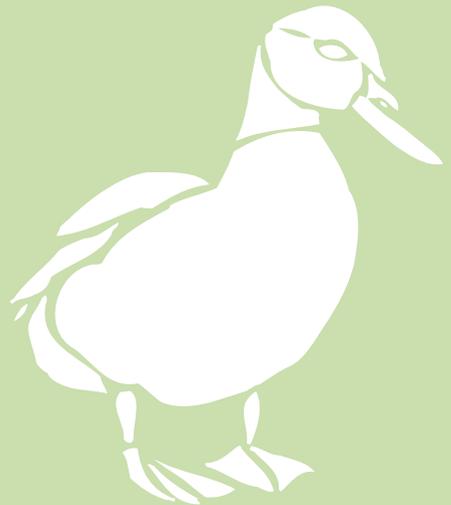


UNIVERSITY *of York*

Abstracts



EUROSLA 24
European Second Language Association

Eurosla 24

is organised by the Centre for Language Learning Research (CLLR) of the Department of Education, University of York.

Book of Abstracts

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Programme Overview

Wednesday 3 rd September	
8.30-18.00	Registration
Doctoral workshops	
9.00-10.30	Doctoral workshops
10.30-11.00	Morning break
11.00-12.30	Doctoral workshops
12.30-13.30	Lunch break
Language Learning Roundtable	
13.30-17.30	<i>Language learning theory and practice – bridging the gap</i> Convener: Leah Roberts Discussant: Rosamond Mitchell Contributions from: Laura Collins, Emma Marsden, Lee Osterhout & Gabriele Pallotti
17.30-18.30	Welcome drinks
Thursday 4 th September	
8.30-18.00	Registration
9.00-9.30	Conference opening: Professor Deborah Smith, Pro-Vice Chancellor for Research, University of York
9.30-10.30	Plenary - Natasha Tokowicz <i>Translation ambiguity in language learning, processing, and representation</i>
10.30-11.00	Morning break
11.00-12.30	Parallel sessions
12.30-13.30	Lunch break
13.30-15.30	Parallel sessions
15.30-16.00	Afternoon break
16.00-17.00	Parallel sessions
17.15-18.15	Plenary - Sharon Unsworth <i>Age and input in language acquisition: Insights from children growing up with two languages</i>
18.15-18.30	Eurosla Distinguished Scholar Award
19.30-22.00	Welcome reception at the Museum Gardens (The Hospitium & The Yorkshire Museum)



Friday 5th September

9.00-10.00	Plenary - Albert Costa <i>Those who know nothing of foreign languages, know nothing of their own</i>
10.00-10.30	Morning break (Posters available to view)
10.30-11.30	Parallel sessions
11.30-13.30	Poster session & Lunch served 12.30-13.30
13.30-15.30	Parallel sessions
15.30-16.00	Afternoon break (Posters available to view)
16.00-17.30	Parallel sessions
17.40-18.40	Eurosla Annual General Meeting
19.30-22.00	Conference dinner at the National Railway Museum

Saturday 6th September

9.00-10.30	Parallel sessions
10.30-11.00	Morning break
11.00-12.00	Parallel sessions
12.10-13.10	Plenary - Leah Roberts <i>Grammar, parsing and second language acquisition</i>
13.10-13.30	Conference closing

Conference opening

Thursday 3rd September, 9:00-09:30, RCH 037.



Professor Deborah Smith
Pro-Vice-Chancellor for Research,
University of York

Plenary Talks

In order of presentation

Natasha Tokowicz	Translation ambiguity in language learning, Pprocessing, and representation	Thursday 4th Sept, 9:30-10:30
Sharon Unsworth	Age and input in language acquisition: Insights from children growing up with two languages	Thursday 4th Sept, 17:15-18.15
Albert Costa	Those who know nothing of foreign languages, know nothing of their own	Friday 5th Sept, 9:00-10:00
Leah Roberts	Grammar, parsing and second language acquisition	Saturday 6th Sept, 12:10-13:10

Natasha Tokowicz

(University of Pittsburgh)

***Translation ambiguity in language learning, processing, and representation***

This plenary describes a body of work exploring translation ambiguity, which occurs when a word in one language has more than one translation into another language. For example, the Spanish word "muñeca" translates to both "doll" and "wrist" in English. Our research demonstrates that such ambiguity leads to: (1) slower translation, (2) less accurate translation, and (3) less robust word learning. Furthermore, knowledge that a pair of words share a translation in a later-learned second language impacts the level of perceived relatedness between those words in a first language. For example, native English speakers who learn Spanish as a second language may consider the words "doll" and "wrist" to be more related than native English speakers who do not know Spanish. These findings will be discussed in terms of the ways that the relationship among word meanings across languages influences language learning, processing, and representation.

**Albert Costa**

(Universitat Pompeu Fabra)

Those who know nothing of foreign languages, know nothing of their own

We are constantly making decisions of many different sorts. From more mundane decisions such as which clothes to wear every morning or where to go for lunch, to more relevant ones, such as whether we can afford the price of a nice holiday on a Pacific island, or whether an investment plan is too risky; decision making is an everyday-life activity. It is well-known that frequently our decisions often depart from a purely rational cost-benefit economical analysis, and that indeed they are biased by several factors that prompt intuitive responses that often drive the decision made. In this talk, I will describe several studies in which there is a pervasive effect of the language in which problems are presented on decision making. These studies cover economic, moral and intellectual decisions. Together the evidence suggests that a reduction in the emotional resonance prompted by the problem leads to a reduction in the impact of intuitive processes on decision making. This evidence not only helps to understand the forces driving decision making, but it also has important implications for a world in which people are commonly faced with problems in a foreign language.

Sharon Unsworth

(Radboud University Nijmegen)

***Age and input in language acquisition: Insights from children growing up with two languages***

Two of the age-old debates in the field of (second) language acquisition concern the role of input and age. More specifically, whilst most researchers would agree that age of onset and ultimate attainment are in general inversely related, the extent to which this results from a critical period for second language acquisition remains controversial. Likewise, whilst researchers from all theoretical persuasions would agree that input is crucial for language acquisition to take place, the extent to which properties of the input drive the language acquisition process is subject to considerable debate. In this paper, I address these two issues from the perspective of children growing up with two languages. Reporting on a series of recent studies on successive and simultaneous bilingual children, I will consider cases where effects of age of onset and input are expected and, crucially, where they are not. I will argue that (a) in order to assess the role of age of onset, the role of input cannot be ignored, and (b) in order to assess the role of input, we need to examine acquisition across a range of linguistic domains. Finally, one further factor, the role of children's output, or language use, will also be considered.

**Leah Roberts**

(University of York)

Grammar, parsing and second language acquisition

It has been nearly twenty years since Juffs and Harrington published their paper 'Parsing effects in L2 sentence processing' in *Language Learning*. Subsequently there has been a dramatic increase in the number of studies investigating how learners process sentences in real time. Such research typically focuses on how L2 learners' grammatical processing or parsing may or may not be different to that of native speakers. More recently, however, researchers have begun to ask critical questions about how parsing the input in real time may lead to L2 learning. In my presentation, I will discuss my own and others' L2 processing research. Taking current debates in psycholinguistic discourse into account, I will examine how grammar is characterised in various studies, and will discuss how grammatical knowledge might be related to parsing mechanisms. Thereafter, I will argue that it is crucial to have a clearer understanding of this relationship in order to investigate how parsing the input can lead to L2 grammatical development.



Language Learning Roundtable

Wednesday 3rd September, 13:30-17:30, RCH 037

Language learning theory and practice – bridging the gap

Convener

Leah Roberts (University of York)

Discussant

Rosamond Mitchell (University of Southampton)

Speakers

Laura Collins (Concordia University)

Emma Marsden (University of York)

Lee Osterhout (University of Washington)

Gabriele Pallotti (Università degli Studi di Modena e Reggio Emilia)

Abstracts

Laura Collins

Enhancing the contributions of classrooms to language learning: insights from corpora analyses of instructional input and learner output

One of the contributions of recent research from a usage-based perspective on language learning has been a better understanding of the relative contributions of frequency and saliency to the acquisition process. Of particular relevance for pedagogy are corpus studies providing fine-grained analyses of selected features of language (e.g. tense-aspect) as they occur during exposure and practice opportunities. In this talk I will offer evidence-based insights for enhancing instructional input and student output, with a particular focus on task types and activity phases that increase both quantity and quality encounters with challenging linguistic features.

Emma Marsden

How can research into 'how learners process the input' inform (or not inform) foreign language teaching?

The talk will draw together my own and others' work that has investigated the implications of particular cognitive theories relating to processing the input for the (input-poor) FL classroom. The main focus of the discussion will be on research into 'learned attention' and 'communicative redundancy' and their effects on learning morphosyntax. Classroom activities that make form-meaning/function connections essential and that use 'failed parsing' to promote acquisition will be critically evaluated. Areas covered will include the challenges of designing such activities for particular morphosyntactic features, and the relevance for the classroom of outcome measurements used in research to date.

Lee Osterhout

What the brain's electrical activity can tell us about how we learn (and forget) in a second language classroom

Second language learning is a dynamic process, in which the learner gets better over time at processing L2 sounds, words, and sentences. In our lab, we track changes in brain activity that occur as novice learners progress through their first or second year of classroom-based L2 instruction. The goal is to determine how much L2 experience is needed before learners incorporate L2 knowledge into their on-line comprehension systems. In many learners these gains are gradually lost once the period of L2 instruction is over, a phenomenon known as language attrition and our findings suggest that attrition is just like the language learning process – but in reverse. I will discuss the findings from our neurolinguistic studies in the context of prevailing theories of language acquisition and attrition and ask how such findings can inform pedagogical approaches.

Gabriele Pallotti

Applying interlanguage research to teaching contexts

This presentation will discuss how the notion of interlanguage as construed in recent SLA research can be employed in developing effective programmes of (second) language education. Interlanguages are language varieties constructed by learners in their active search for regularities in the input (Selinker, 1972). An interlanguage approach means focusing on what learners think and do, on understanding their processes rather than evaluating to what extent their products match the target language norms.



Doctoral Workshops

In alphabetical order of first author

Teresa Barberio

(University of Munich)

Multiliteracy: The interrelation between textual competences in L1 and L2 and extralinguistic factors.

The increase in migration processes in Europe has led leads to an increase in multilingual individuals who need multilingual writing competence. According to Cummins (1979, 2000) and Riehl (2013), children with a migration background who have an unsatisfactory command of their L1 show difficulties in achieving good written language skills in their L2.

The present study analyses the textual competence of bilingual Italian-German pupils in Munich, Germany in grade 9 in their L1 (Italian) and their L2 (German). One of the foci of the analysis will be the interdependence and the impact of extralinguistic and cognitive factors, for example, the pupils' language use and attitudes. The aim of my study is twofold: first, to investigate the mutual influence of textual competences in L1 and L2, and second, to determine the effects of extralinguistic factors on textual competence in both languages. In order to answer these research questions, the pupils are asked to fill in a questionnaire about their language use and attitudes and to write both an argumentative and a narrative text in their L1 and L2. The micro- and macrostructure of the text organization (Riehl 2001; Berman & Nir-Sagiv 2007) form the theoretical framework of the present study. The data for this paper are collected as part of an ongoing project on multiliteracy conducted at the University of Munich, Germany. The project investigates the interdependence of the textual competences of bilingual pupils in their L1 and L2 and extralinguistic and cognitive factors. The results of this study will contribute to a better understanding of the written competence of bilingual children in order to improve their multiliteracy. I would like to get some feedback particularly on methodological issues and data analysis. The major questions I would like to discuss are the following:

- What can be considered as extralinguistic factors?
- How can I correlate the bilingual subjects' textual competence in both languages with the extralinguistic factors?

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Andrea Bicsar

(University of Innsbruck)

Elusive, intensive and context sensitive: Emotions in L2-communication. Implications of a pilot study

Emotions are deeply rooted, fundamental elements of everyday life and are, accordingly, often related verbally in interaction as well. How do learners of a foreign language verbalize such vital experiences as feelings in their L2? Empirical research engaged in answering this question faces a number of methodological challenges in the elicitation of L2-speech production about emotionally charged events.

These challenges arise predominantly from the nature of emotions themselves: feeling states are short, highly elusive and spontaneous experiences (cf. Ekman 1994: 56), which can hardly be elicited deliberately for the sake of linguistic data collection. Consequently, the initial question to be answered from an empiric point of view is what kind of stimulus to use in order to trigger L2-speech production about emotionally charged events. Further careful thought about the choice of a stimulus is needed, if the ability to talk about emotions is not only located in the domain of lexicogrammatical skills, but also viewed as a sociopragmatic competence influenced by discourse norms and preferences governing interaction in a given speech community (cf. Dewaele 2011: 32). Since verbal accounts of emotions seem highly sensitive to contextual factors in social interaction (Dewaele 2008: 1762), the method of data collection needs to ensure that the inclusion of certain pragmalinguistic parameter into the analysis is rendered possible. In addition, the analysis needs to take into account the paramount diversity of feeling states and, therewith, the varying shades of emotion intensity, which impact the lexical choices we make when narrating emotion experiences (cf. Fiehler 2002: 88).

The presentation addresses these methodological challenges by introducing a pilot study conducted with the purpose of testing different methods of data collection and analytic criteria in the study of emotion verbalization in EFL. Results of the investigation are intended to stimulate a discussion concerning methodological issues in the study of emotion expression in a foreign language, thus, making an inspiring as well as supportive contribution to future research in this field. The study is part of a broader project investigating tendencies of verbal communication of emotions in the speech of Austrian EFL-learners in their target language.

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Maja Čurčić, Sible Andringa and Folkert Kuiken

(Universiteit van Amsterdam)

PhD project: The interplay between learner, language, and input characteristics in second language acquisition

It is commonly observed that adult second language learners display large individual differences in the success with which they master a new language, and no foreign language teacher would disagree about that. One of the commonly mentioned sources of individual differences between adult language learners is so-called language learning aptitude. But what constitutes this aptitude? Answering this question is relevant from both theoretical and practical points of view. Theoretically, it would help us understand what is involved in the process of adult second language acquisition and on what mechanisms it relies. Practically, it would allow educators to know beforehand what they can expect from their learners, and to adjust language instruction in such a way to maximize the chances of their learners' success.

Most of the previous research on individual differences in SLA has focused on relating aptitude components that tap into more explicit and language-related learning processes (e.g. grammar learning ability) to final levels of L2 proficiency (as measured by tests of explicit knowledge, most often grammaticality judgment tasks). However, it should be noted that, when studying individual differences in ultimate L2 attainment, it is impossible to control for the kind and amount of input learners had received in their L2, but such differences can crucially contribute to differential levels of attainment. Therefore, it is also necessary to investigate the relationship between aptitude components and immediate learning outcomes upon language instruction. Another important but insufficiently explored area is the relation between domain-general (more implicit) aptitudes and language learning outcomes as measured by not only explicit but also online processing tasks.

In the first experiment of my PhD project, I investigate if and to what extent adult learners' sequence/statistical learning ability (measured by a serial reaction time task) can determine the success with which they acquire determiner-noun agreement structure upon brief, implicit instruction in a new language, as measured by 1) an online processing task and 2) tasks that tap into explicit knowledge. In addition, the study investigates if input/target structure characteristics (fully reliable vs. unreliable) modulate the degree to which sequence learning ability is involved in the successful acquisition of determiner-noun agreement.

In the EUROSLA workshop, I would welcome feedback on potential future directions of the project and what would be most relevant to focus on. Some of the potential directions could include: 1) Investigating whether different types of learning (e.g. explicit vs. implicit) rely on different aptitude components, and how is the relation between aptitude and language learning modulated by the presence of rules in the instruction, 2) investigating how language instruction can be adjusted so as to help lower-aptitude learners, and thus soften individual differences in learning success.



Alexander Fay

(University of Mannheim)

Teaching English Intonation in German Secondary Schools

Teaching foreign languages is one of the most important objectives secondary schools have to meet today. All the greater are the expectations on what this teaching is in fact supposed to achieve, and on those who have to teach the skills in question. As regards phonological competencies to be acquired, pupils are supposed to learn the segmentals and suprasegmentals of a foreign language in order to eventually develop an authentic and clear pronunciation, according to the CEFR.

However, at only a cursory examination of learners' actual phonological competencies, this indeed rather ambitious goal raises serious doubts about its attainability. Why do phonological, in particular suprasegmental, competencies lag far behind fairly good skills in syntax and vocabulary?

Firstly, there are only a few (if any) didactic concepts to teach L2 suprasegmentals (e.g. intonation, sentence stress, pitch range) which can successfully be (and indeed are) applied in schools. Secondly, this area is rarely covered in teacher training.

As L2 suprasegmental acquisition is still a relatively new research area, the number of studies dealing with the acquisition of L2 suprasegmentals in secondary school education is virtually non-existent. Most foreign accent studies which include suprasegmentals do not draw didactic conclusions which could be useful for teaching. Also, the small number of studies in applied linguistics which do include aspects of suprasegmentals in foreign language teaching only suggest that a top-down-approach to pronunciation training could improve segmental skills as well.

The current production study wants to fill this gap by focusing on teaching suprasegmentals, i.e. intonation and pitch range, in a German secondary school context. To this end, recent findings from cross-language L2 prosody research will be included in a treatment which will be implemented with pupils in German secondary schools at different grade levels. Data will be collected before, immediately after, and after an interval of 2-3 weeks after the treatment. The following questions guide the study: 1) Can foreign language into-national features be successfully acquired in a school context 2) Do learners sound more native-like after the treatment? 3) Does the focus on suprasegmentals lead to an improvement of phonological competencies in general?

In the doctoral workshop, feedback and comments on the following questions (amongst others) would be highly welcome: 1) Which experiences with collecting data in a school setting do people have that they would like to share, i.e. which pitfalls can occur and should be avoided? 2) As it may be hard to find enough participants, how many should ideally be included?

Mirjam Günther-van der Meij

(Fryske Akademy / University of Groningen)

Third Language Development in Fluent and Non-Fluent Bilingual Young Adolescents

This PhD-study looks at the development of English as a third language that is closely related to the first and second language, which are either Dutch or Frisian. The aim is to find out if the degree of bilingualism has an impact on third language development.

Two groups of first year high-level secondary school pupils (N=77, mean age 12,45) – fluent Frisian-Dutch bilinguals and non-fluent Dutch-Frisian bilinguals – are compared on their English language development over a period of one school year. They were tested 3 times on their language proficiency in Frisian, Dutch and English through a writing and a speaking task. In addition to fluency, we looked at processing as measured by two reaction time priming experiments (lexical decision and naming task) comparing the following language pairs: Frisian-English / English-Frisian and Dutch-English / English-Dutch.

In this workshop the focus will be on the experiments, which were used to research the lexical processing of the participants in comprehension (lexical decision) and production (naming task). With the experiments we wanted to explore the connections between word forms and languages. Based on previous studies, we hypothesised that faster response times represent stronger connections between word forms, and therefore more shared conceptual representations between languages.

The data analysed so far suggests that being fluent in two languages does not necessarily imply that a third language is learned easily. Looking at the reaction times on the lexical decision task, the Frisian-Dutch bilinguals showed slower reaction times on the Frisian-English and English-Frisian language sets for the first two measurements. At the third measurement the differences between the two groups had disappeared. The same goes for the Dutch-Frisian bilinguals; they were slower when their L1 was involved in the first measurements, and again this difference had disappeared by the third measurement. The same trend is found in the reaction times on the naming task, except for the English-Frisian language set where the Frisian-Dutch bilinguals are faster throughout the 3 measurements.

The results are contrary to what we expected to find, leading us to the following discussion. Firstly, could these findings be explained by assuming that the participants are hampered by their L1 due to an inhibition effect in which suppressing their L1 takes so much effort that it slows down their response? Secondly, we ask ourselves whether other factors than the degree of bilingualism has had an impact on the results. For example, are the two participant groups equally motivated to learn English and also, do they experience the same amount of English language exposure? We have collected data on this and other language background issues through repeated questionnaires.

In this workshop we would like to discuss possible explanations for the results of the study.



Haiyan Men

(Birmingham City University/Shanghai Sanda University)

Vocabulary increase and Collocation Acquisition: A Corpus-based Cross-sectional Study of Chinese EFL Learners

For learners of a second or foreign language, a good command of collocational knowledge is identified as the key to native-like fluency. Yet collocation acquisition constitutes a problematic zone for non-natives even of fairly high proficiency levels and is acknowledged to lag far behind acquisition of other aspects of SLA (Henriksen 2013; Schmitt and Carter 2004; Wray 2002). A great deal of previous research involves a description of L2 learners' collocational development and use, revealing the quantitative and qualitative deviation in collocations produced by L2 learners. However, it remains unclear what contributes to the collocation lag. The current study finds worsening verb + noun (VN) collocation performance in L2 learners with rising proficiency levels. It addresses the relationship between vocabulary increase and L2 collocation acquisition, aiming to identify whether increasing lexemes in a syn(onym)set (Fellbaum 1998) is the main factor responsible. For this purpose, a corpus-based cross-sectional study was undertaken on the written production of verb + noun collocations produced by Chinese EFL learners from three proficiency levels. Analyses were performed of error frequency in all contexts for verb + noun collocation uses.

Results show that for verbs in the VN collocations produced by all levels of learners, collocation errors are seldom made where there is no increase in verb synsets. But for synsets (e.g. verbs of creation, fulfil verbs) where there is an increase of verbs, collocation errors involving increased verbs are significantly more than errors with old verbs. In addition, in the production of verb + noun collocations, two separate factors such as the use of newly acquired nouns and a shortfall in verbs for certain nouns are investigated. Results indicate that the proportion both of collocation errors involving the acquisition of new nouns and of those involving the non-acquisition of target verbs remains constant at all levels. However, the proportion of errors in synsets where new verbs have been acquired increases markedly. This finding is discussed with a view to a clearer understanding of the process of second language collocation acquisition, and to pedagogical implications.

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Jingyue Qian

(Goethe-University Frankfurt am Main)

Foreign language competence and identity changes of Chinese international students in Germany: a pilot study

Against the background of rapid globalization today, a large number of Chinese students have been enticed to study abroad. Since 2004, China has been ranking first among Germany's important countries of origin of foreign students. As a part of a PhD project, this pilot study aims to examine Chinese international students' identity (re)formation with relation to their English as a lingua franca (ELF) experience and their multilingual competence in Germany.

This study is a cross-sectional, longitudinal multiple cases design, employing qualitative research methods. Seven Chinese postgraduate students having been studying in Germany for 1-5 years participated in the study voluntarily and answered open-ended, flexible questions in two rounds of individual interviews (1-2 hrs) which were conducted over a period of 4-5 months. E-mails as a supplementary method were also adopted between the two rounds of interviews.

A hermeneutic, phenomenological approach was then used to interpret the students' language socialization process by looking at relationships among language, identity and context. The focus was on the (re)formation of the students' linguistic and cultural identity during their intercultural communication.

The findings suggested that most of the ELF users demonstrated positive transformation of identities in academic context. However, ELF impeded these students' socialization process and led to a role of "bystander" outside the university, while their German-user counterparts showed more positive identity changes when facing the society. In the multilingual context, the proficiency level of the students' English and German played an important role in their multiple identity negotiation process. The distinct language system of their mother tongue and the attrition of the second and third languages in most cases exerted negative influence on their multilingual competence. Although the German society is tolerant or friendly towards diverse cultural backgrounds, the huge cultural difference still inhibited most of the students' integration, and students sought to adapt by constructing a third place between cultures. These findings have practical implications for Chinese international students and their educators.

Questions:

1. The data were only obtained through the interview with the students, so there might be an ethnocentric slant in reporting findings – via the students' comments only (Kingerer 2009). Is there a better way for me to be more objective? What modifications can there be in the methodology part?
2. How can I effectively generate deeper and more significant abstractions from the coding of the interview transcriptions, as there was an enormous amount of data and there might be variations of the generation of themes in the data analysis part?

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Jitka Sedláčková

(Masaryk University)

Reading in L2: deaf learners of English as a Foreign Language

The present study focuses on reading skills development of adult deaf learners in English as a foreign language. Its aim is on the one hand, to observe the factors that have been generally recognized as influencing individual success of reading development of the deaf (such as early language development, family or attitudes), in the particular individuals and their reading in a foreign language (English). And on the other hand, to investigate the impact of explicit L2 reading strategy instruction on the students' L2 reading comprehension results and their reading process practice.

When problems in L2 reading occur the instruction can, based on existing theoretical debate and relevant empirical findings, take various courses. Apart from supporting L2 language knowledge, it is reading skills instruction either in the L2 or even in the students' L1. Research has suggested that a part of L1 reading skills may, under certain conditions, be transferred into L2 (Alderson, 2000). However, particularly in case of unsuccessful or at-risk L1 readers, explicit L2 reading skills and strategy instruction has been recommended (Paul, 1998; Sparks & Ganschow, 1993).

The question of L1 influence on L2 reading holds a place in the centre of the L2 reading development debate. However, with deaf learners in connection to reading skills determining the L1 is not a straightforward subject. For the purpose of drawing upon existing theoretical findings (such as the Linguistic Coding Differences or Linguistic Interdependence Hypotheses), is it possible to include both, the national sign language (in case of a predominant SL user) and national spoken language (which represents the first experience with reading), under the L1 label?

The situation of deaf foreign language readers is therefore complicated by various issues, be it the L1 development and different language modalities involved, the proficiency attained in L1 and L2 or the long recognized deaf learners' general underachievement in reading development. The study assumes a qualitative approach with 2 – 3 prelingually deaf participants. The planned research design includes a pre-test stage and post-test and delayed post-test stages after L2 reading strategy instruction, which will be a part of a semester-long practical English course. In all stages data will be collected using written verbal protocols applied during a reading task, interviews and standardized reading comprehension tests. The research methodology has been tested in a pilot study in spring 2013.

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Hannelore Simoens

(Vrije Universiteit Brussel)

The Effects of L2 Instruction on the Noticing, Processing and Learning of L2 Difficulty

This PhD project aims to investigate the link between L2 instruction and L2 difficulty from a cognitive perspective. It starts from the premise that the effect of instruction on L2 development is not invariable but depends on the type of instruction and the type of language feature, in interaction with the cognitive mechanisms involved in the SLA process. To this end, it builds upon and expands the findings of meta-analyses such as Norris & Ortega (2000) and Spada & Tomita (2010) by examining the effects of implicit and explicit form-focused instruction on the noticing, processing and learning of easy and difficult L2 morphemes in an artificial language. It further holds that L2 learning difficulty is essentially determined by the salience of the language feature, because salience impacts on how learners interact with the input (Goldschneider & DeKeyser, 2001). Non-salient L2 features are more difficult to notice and hence more difficult to process and learn (Schmidt, 2001). The primary role of instruction is therefore to promote the noticing of non-salient L2 features so as to make them more easily available for subsequent processing and learning.

The study consists of two stages. To determine whether salience can explain L2 difficulty, I conduct a pilot study in which artificial L2 morphemes are created that differ in salience, as dictated by their perceptual, psycholinguistic, structural and experiential characteristics. L2 difficulty is behaviourally operationalised with the help of eye tracking as the quantity (measured by eye fixation duration) and quality (measured by pupil dilation) of attention that is required to notice the various L2 morphemes in incidental reading tasks. It is assumed that non-salient morphemes demand more and deeper attention than salient ones for further processing to occur. Based on the results of the pilot study, four L2 morphemes that differ in degree of difficulty/salience are selected for the main study. In this main study, then, I investigate the effects of implicit and explicit form-focused instruction on the noticing (measured by eye movements), processing (its quantity and quality, measured by respectively eye fixation duration and pupil dilation) and learning (measured by implicit and explicit knowledge tests) of easy and difficult L2 features.

Some important challenges remain, however. One deals with my operational definition of L2 difficulty as salience. Can salience adequately capture the difficulty with which an L2 morpheme is learned from a theoretical viewpoint? And can eye tracking accurately measure L2 difficulty? Another is related to the distinction between noticing and processing. Both are proposed as closely related yet distinct steps in the chain of cognitive mechanisms that comprises SLA. Is such a distinction theoretically and empirically useful and plausible? A final issue is whether the proposed instruments can reliably measure noticing and processing?



Samiha Tighilet

(Paul Sabatier University)

The Effects of L2 Instruction on the Noticing, Processing and Learning of L2 An analysis of oral strategy use of learners' with different willingness to communicate levels in EFL classes

Willingness to communicate (WTC) is one of the most currently discussed individual difference variables in second language acquisition research. Believed to be the main predictor of actual language production, WTC is even considered the ultimate goal that should be targeted by any language instruction programme. WTC has been the focus of many studies which have revealed that this variable is influenced by a number of factors; however, most of these research works, as the literature indicates, tend to be oriented toward the investigation of the influences of learners' cognitions, personalities and emotions on WTC, and there has been no attempt to link the latter and the learners' actions, more specifically learners' strategies, which are shown to play an important role in facilitating the language learning as along with the language production tasks. Our presentation will deal with the main theme of our doctoral thesis which examines oral communication strategy use of students with different levels of WTC in the English language to be able to provide a classification of communication strategies used by learners having different WTC tendencies. Firstly, we will state the research problem on which our study is based. Then, we will provide an overview of the theoretical framework used in the study. The methodological procedure for data collection will also be discussed.

Considering data analysis issues, we would like to hold a discussion on the following questions during the workshop:

How best to treat the collected data statistically?

Is correlational analysis best suited for?

Tetyana Vasylyeva

(University of Paderborn)

The Role of Grammatical Aspect in the Acquisition of Narrative Competence by Russian-German Bilinguals

The dissertation study investigates the use of tense and aspect while structuring events in film retellings by 24 early Russian-German bilinguals aged 7-14 years in both their languages. It focuses on how bilingual children, compared to monolinguals and advanced L2 speakers, use grammaticalised temporal means available in both languages to mark the chronological order of events in a storyline.

Monolingual L1 speakers structure events according to available grammaticalised temporal means, so that language-specific patterns can be found: adult and child speakers of German and Russian use a single tense in their narrations and switch between tenses to mark special discourse functions such as episode borders (Halm 2010); because aspect in Russian is grammaticalised, Russian speakers also mark the imperfectivity and perfectivity on Russian verbs (Schmiedtová & Sahonenko 2008). Cross-linguistic study of advanced Russian L2 speakers of German has shown that their German L2-patterns are especially apparent for aspect: some of them transfer the aspectual distinction of perfectivity and imperfectivity into their L2 by using the German perfect tense for events but other tense forms for non-events (e.g. descriptions), showing an L1 specific pattern of event structuring (Schmiedtová & Sahonenko 2012). Thus, the focus of the present study is not only to analyze the use of tenses by bilinguals compared to monolinguals and advanced L2 speakers, but also the role of grammaticalised aspect in event structuring in German narratives of bilingual speakers.

Data was gathered from the bilingual participants in retellings of different intervals of a silent film, used in previous studies for data collection with monolingual and L2 speakers, in both languages. In the quantitative analysis, the use of tense in Russian and German data of the bilingual subjects was compared to the use of tense by monolingual Russian and German speakers of the same age. The qualitative analysis of the functions of tense forms in German and Russian bilingual data identifies the role of aspectual knowledge for structuring events in narrations, and its role for the acquisition of narrative competence by bilingual subjects of different ages. Differences between the monolingual and bilingual groups are expected to lead to better understanding of the bilingual conceptualization processes, which, in turn, has implications for further studies of bilingual language acquisition and processing. After the short introduction into the framework of analysis some data will be used to discuss the issues of data interpretation, which concern the use of different strategies by the same subject and some cases of inaccurate usage of verbs in Russian data.



Thanh Vi Son

(Lund University)

Acquiring English as a second language: a comparison of learning and teaching English in Swedish and Vietnamese primary schools

The thesis attempts to investigate how children (at particular ages, 11-12 years old children at grade 5) learn English as a second language and to examine the differences between the approaches to English learning and teaching in classrooms of Swedish and Vietnamese children and whether these affect the learning output, specifically on the lexical knowledge and grammar knowledge in term of procedural and declarative knowledge of English as a second language. I am going to compare the two groups and look into the following factors: i.) Teaching of English in the classroom; ii.) Exposure to English outside the classroom. This aims to see if there is a correlation between declarative and procedural knowledge and whether the teaching methodology may have an influence on it in the two contexts (Sweden and Vietnam). In this aspect, I try to compare the English language competencies of the learners in the two groups. Therefore, besides the classroom observation that helps to see how the children learn the language in the classroom, I am going to test the linguistic knowledge of the learners. A case study will be conducted to see how Swedish and Vietnamese children at grade 5 acquire subject-verb agreement in their speech. How well do they acquire S-V agreement in terms of 3Sg-s and what errors tend to occur and what are the reasons for them? This has the pedagogical value of keeping the teachers informed about their learners so that they can adjust their teaching to be suitable for the learner's level. In this part of the study, I will look at two aspects: the "procedural knowledge" (Anderson 1985:198) of the children - what they actually produce - in which their lexical knowledge (based on the production of token and types) can be revealed and compared to see how many words the children in the two groups can produce in a picture describing task and the "declarative knowledge"- if they are able to describe the rules and how they explain the reason of their choices.

Research questions

- (i) What are the key features of English language teaching in Swedish and Vietnamese primary school and of the learning contexts in which the teaching takes place?
- (ii) Is there a relationship between performance on lexical knowledge, measures of procedural and declarative knowledge of English as a second language and particular groups of learners (primary Swedish and Vietnamese children) and contextual factors, specifically classroom activities with teaching practices and the contexts of their English learning outside the school?

The relation between the learners' type of knowledge may provide some insights about how these types of knowledge develop and how teaching can support the learning of a second language.



Colloquia

In order of presentation

Colloquium 1: Thursday 4th September, 13:30-15:30, RCH 037.

Conveners

Patrick Rebuschat¹ and Sible Andringa²

(Lancaster University¹, University of Amsterdam²)

Implicit learning and second language acquisition.

A question that has attracted considerable attention and debate in second language (L2) research is whether implicit learning is possible in the case of L2 acquisition. Initially, the discussion centred on Schmidt's (1990) Noticing Hypothesis and on whether L2 information is learnable without awareness at the time of learning (e.g. Hama & Leow, 2010; Rebuschat et al., 2013; Williams, 2005). This question has proved difficult to resolve because of the methodological challenge involved in establishing absence of awareness at the exact time of learning. More recently, the focus in implicit L2 research has shifted to two related questions, namely: (i) What is the nature of the learning mechanism(s) involved in implicit and explicit learning? and (ii) How is the acquired knowledge represented in the mind? Research on the first question often focuses on possible constraints of implicit learning (e.g. what aspects of the L2 can and cannot be acquired implicitly) and on the implicit-explicit interface (e.g. how does explicit knowledge affect implicit learning). Research focusing on the second question has tackled two issues in particular, namely is the acquired knowledge really implicit (unconscious) and what type of knowledge do learners acquire (rules, patterns or chunks)? These questions are relevant for several reasons. Theoretically, it is important to develop a better understanding of both the process and the product of L2 learning. The questions also have more practical significance as they can inform pedagogy about which aspects of the language might benefit from more explicit treatments.

The purpose of this colloquium is to address the two questions outlined above. The colloquium brings together researchers from applied linguistics and cognitive psychology in order to discuss current trends in implicit learning research and to outline future directions to take, both in terms of topics and novel methodologies. The four talks in this colloquium will approach the topic from a highly innovative and interdisciplinary angle. They highlight the strong tendency, within SLA research, for methodological diversification, as data are presented from online and offline experiments as well as results of computational modeling. Sible Andringa and Maja Ćurčić used eye tracking in an artificial language learning paradigm in order to investigate how learning with and without knowledge of the target rule impacted on how it was processed online. Simon Ruiz-Hernandez, Patrick Rebuschat and colleagues focused on the simultaneous acquisition of words and syntax under incidental and intentional learning conditions. Zoltan Dienes investigated to what extent adult learners of Chinese are able to implicitly learn complex structures (cross serial dependencies and centre embeddings). Finally, John Williams investigated constraints on implicit learning of L2 semantics. The colloquium concludes with a brief general discussion.



Sible Andringa and Maja Ćurčić

(University of Amsterdam)

How Metalinguistic Information affects online L2 processing: Evidence from Differential Object Marking (DOM) Acquisition

Studies that have investigated the effect of explicit and implicit instruction have generally found that the former tends to lead to larger gains than the latter. This was confirmed by several meta-analytic studies. However, these meta-analyses also show that there has been a bias in testing methods towards tests of controlled language, tests that favour the use of explicit or declarative knowledge. As a result, little is known about how explicit instruction affects language processing in situations that do not readily allow for the application of explicit or declarative knowledge and there is little solid evidence that explicit knowledge leads to better performance in situations of uncontrolled language use.

This study investigated how metalinguistic information affects the initial stage of adult second language acquisition, and it used a measure of online processing in addition to the commonly used grammaticality judgment task. 51 adult native speakers of Dutch were exposed to an artificial language based on Esperanto. Their task was to learn the language by listening to sentences describing pictures they saw. The language included a differential object marking (DOM) structure according to which animate but not inanimate direct objects are preceded by a preposition. For half of the participants, the instruction was complemented by metalinguistic information (i.e. a brief explanation of the DOM rule). Following the instruction, the learners' knowledge of DOM was checked by means of two tests. Test 1 measured their online processing of DOM in a visual world eye tracking paradigm (to see whether learners anticipated direct objects of a certain animacy status based on the DOM rule), and test 2 measured their explicit knowledge of DOM by means of grammaticality judgments and certainty ratings. Both tests were translated into Spanish to check whether speakers of Spanish use DOM to predict the upcoming direct object.

DOM-based predictive gazes were found for the Spanish speakers. The results also showed metalinguistic information promoted learners' explicit knowledge considering that on test 2 explicit learners performed significantly better than the implicit learners. When it comes to online DOM processing, neither explicit nor implicit learners showed DOM-related anticipatory eye-movements. Thus, according to gaze data, metalinguistic information did not promote learners' online processing of DOM. However, an interesting finding was that the two groups differed in their RTs on test 1 (i.e. explicit learners were faster than implicit learners), which suggests that metalinguistic information did affect performance on test 1.

Simon Ruiz-Hernandez¹, Sarah Grey², Kaitlyn Tagarelli³, Kara Morgan-Short⁴, John N. Williams⁵ and Patrick Rebuschat⁴

(Lancaster University¹, Penn State University², Georgetown University³, University of Illinois, Chicago⁴, Cambridge University⁵)

Simultaneous acquisition of L2 syntax and vocabulary under incidental and intentional learning conditions

The topic of implicit learning plays a central role in SLA research, and recent years have witnessed an increasing amount of research dedicated to this issue. However, comparatively little research has focused on the implicit learning of vocabulary and, to our knowledge, no study has examined whether syntax and vocabulary can be acquired simultaneously. This is an important question, given that in language acquisition outside of the experimental lab, subjects are exposed to (and learn) many linguistic features at the same time. This paper reports the results of an experiment that investigated the implicit learning of second language (L2) syntax and vocabulary by adult learners. The linguistic focus was on verb placement in simple and complex sentences (Rebuschat & Williams, 2012). The novel vocabulary items were ten pseudowords, taken from Hamrick and Rebuschat (2013).

Thirty native speakers of English were exposed to an artificial language consisting of German syntax and English words, including ten pseudowords that followed English phonotactics. Subjects in the incidental group ($n = 15$) did not know they were going to be tested, nor that they were supposed to learn the grammar or vocabulary of a novel language. The exposure task required subjects to judge the semantic plausibility of 120 different sentences, e.g. “Chris placed today the boxes on the dobez” (plausible) and “Sarah covered usually the fields with dobez” (implausible). The task thus required subjects to process the sentences for meaning. Subjects were provided with a picture that matched the meaning of the pseudowords, in the examples above with a black-and-white drawing of a table underneath the sentence. Subjects in the intentional group ($n = 15$) read the same 120 sentences but were asked to discover the word-order rules and to memorize the meaning of the pseudowords. In the testing phase, all subjects completed two tests, a grammaticality judgment task to assess whether they had learned the novel syntax and a forced-choice task to assess their knowledge of the pseudowords. In both tasks, subjects were also asked to report how confident they were and to indicate what the basis of their judgment was. Confidence ratings and source attributions were employed to determine whether exposure had resulted in implicit or explicit knowledge (Rebuschat, 2013).

Data collection has recently concluded but data have not yet been fully analysed. Given our previous research, we predict that subjects will be able to acquire both the syntax and the vocabulary of the artificial language simultaneously and that the amount of implicit and explicit knowledge will vary depending on the learning context, with subjects in the incidental group acquiring primarily implicit knowledge and also some explicit knowledge, and vice versa in the intentional group. The paper concludes with implications for future research.



Zoltan Dienes

(University of Sussex)

Tang poetry redefines the limits of implicit learning

Implicit learning research has identified a number of structures that people can unconsciously learn, including chunks and fixed patterns of repetition. Language and music appear to involve structures more complex, indeed higher than finite state, for example symmetry structures that are simply generated by recursive rules (e.g. centre embedded, cross serial dependency structures). The implicit learning of such structures by adults presents an interesting challenge to existing models of implicit learning, such as the simple recurrent network (SRN). We build on our earlier work in music and movement, by looking at symmetries in the tonal structure of Chinese poetry. We show that people can acquire unconscious knowledge of both cross serial dependencies and centre embeddings in tonal poetry, with the former being easier than the latter. The unconscious status of the structural knowledge was confirmed by subjective measures. We also show that people can generalize their unconscious knowledge from being trained on strings of a certain length to test strings of a different length, suggesting learning of the symmetry itself rather than fixed long distance associations. We also show the SRN can model many of the details of this learning.

John N. Williams

(University of Cambridge)

Linguistic naturalness and implicit learnability

Is implicit language learning an unconstrained process that allows us to pick up any regularity, or are some regularities more likely to be learned than others? If so, do learning biases derive from general cognition, or knowledge of universal properties of language? One way of investigating these issues experimentally is to compare the relative implicit learnability of different semi-artificial linguistic systems. I will describe two sets of semi-artificial language studies, performed on adults, which attempt to do this. The first concerns implicit learning of natural and non-natural bases for agreement between novel article-like morphemes and their accompanying nouns. The second is a study of ergative systems, comparing the relative learnability of two case and agreement patterns, one of which is symmetric and relatively frequent in the world's languages, whilst the other is asymmetric and extremely rare. In both cases a learning deficit was observed for the unnatural or rare systems. The results are discussed in terms of the tension between universal linguistic and domain-general cognitive constraints on learning.

Colloquium 2: Thursday 4th September, 13:30-15:30, RCH 204.

Conveners

Parvaneh Tavakoli and Clare Wright

(University of Reading)

Fluency in speech production: What we know and what we need to know?

The investigation of L2 fluency over the past decade has brought significant progress in understanding its complex nature, and its role in SLA research, clarifying its relationship to L1 fluency, and bringing rigour to models and measures of L2 speech production. Segalowitz (2010) has provided a new perspective to understanding L2 fluency by highlighting the importance of all three aspects of fluency, i.e. perceived, utterance and cognitive fluency, and looking at how L2 is processed in the brain (Segalowitz, 2012). Recent research findings highlight fluency as a reliable predictor of L2 proficiency (de Jong et al., 2012), but a characteristic that retains many traits of L1 speech production, with implications for SLA research on L2 development and ultimate attainment. Notwithstanding the progress research has made in this area, L2 fluency still remains a complex research construct in SLA, an aspect of performance difficult to define and measure consistently, and a characteristic of language use that many L2 learners may find difficult to develop in and out of the classroom.

The proposed colloquium focuses on these themes, starting with paper 1 setting the scene for what we already know about fluency, but indicating areas to explore in future research, particularly in distinguishing separate effects of conceptual and syntactic complexity in L1 and L2 fluency. This perspective is expanded by paper 2, including a synthesis of fluency studies, in order to more clearly analyse dimensions and correlates of L1 and L2 fluency. Taking these ideas into the empirical domain, paper 3 examines task effects on the development of L2 fluency during immersion, to show how triangulating different types of performance measures over time gives a richer understanding of the underpinning constructs involved. The final paper 4 looks at effects of intervention on L2 fluency, highlighting individual and task variation in how different aspects of fluency develop.

The colloquium provides a timely opportunity to revisit some of the many unknowns about L2 fluency, to explore what may affect variability in performance and development over time, to illuminate the relationship between cognitive and utterance fluency, and to standardise the way these measures are operationalised. By bringing together researchers investigating different aspects of L2 fluency, inviting both theoretical and empirical discussions, this colloquium aims to shed light on the complexities involved in defining and measuring fluency, and to drive forward the research agenda on L2 fluency and its place in SLA research.

Timings: first speaker 30 minutes, 5 minutes clarification questions, second, third, fourth speakers 20 minutes with 2/3 minutes clarification questions (total 1 hour 40), then 20 minutes general discussion.



Nivja de Jong

(Utrecht University)

The Separate effects of conceptual and syntactic complexity on L1 and L2 fluency.

Speech production proceeds from conceptualizing the intended message, to formulating the message linguistically, to articulating the linguistic plan, and finally to monitoring one's own speech (Dell et al, 1997; Levelt et al., 1999). At each of these levels of speech production, the processes might be more or less difficult. This holds for speech in the L1 as well as in the L2.

For the purpose of measuring progress of fluency that is related to L2 proficiency, we need to disentangle speakers' (dis-)fluency aspects that are related to personal speaker style and only take into account those disfluencies that are related to difficulties in L2 processing that are above and beyond the difficulties a speaker would have in his L1. For this reason, we need to compare L1 and L2 speech within speakers. Furthermore, we need to disentangle aspects of L2 (dis-) fluency that come about due to difficulties in conceptualizing a message and aspects that come about due to difficulty in formulating the message linguistically. Therefore, in this presentation, we will investigate the effect of conceptual and linguistic complexity on L1 and L2 fluency separately, by manipulating either conceptual or linguistic complexity and by comparing their effects between L1 and L2 speech.

Pauline Foster and Peter Skehan

(St Mary's University College, London)

Dimensions and correlates of native and non-native speaker fluency.

Segalowitz (2010), in a major review of fluency, suggests that measures of fluency that distinguish clearly between native and non-native speakers have particular validity. The presentation will report on an extensive database of native and non-native spoken task performance, drawing on a wide range of measures (speed, flow, breakdown, repair) and will examine these measures for the extent to which they distinguish between these two groups. In addition, the database will be explored for the sub-dimensions of fluency, to examine how they differ between these two groups, and also how they differ in different sorts of tasks, and under different sorts of performance conditions. Looking at these different tasks and different conditions will also enable us to probe what influences have a positive or negative impact on these different fluency dimensions. A particular concern here will be to relate features of speech, such as lexical difficulty influences, and formulaic language to the level of fluency that is attained. We will distinguish between macro and micro influences on fluency. It will be argued that macro influences on performance, such as planning, use of more complex syntax, i.e. which focus on propositions and meaning, promote greater fluency and the capacity to use longer runs, whereas micro influences, such as difficulties in lexical selection, lead to dysfluency which originates within the clause and which disrupts flow.

Clare Wright

(University of Reading)

Development of L2 fluency: effects of immersion.

Current research into effects of immersion on linguistic proficiency for L2 learners, such as in international study settings, generally shows positive benefits on L2 fluency. However, these improvements often mask complex interacting effects, such as individual cognitive constraints (such as Working Memory) on rate of improvement, task effects on performance, and sociocultural contexts promoting opportunities to practice speaking (Pallotti 2009, Tavakoli 2009, Wright & Schartner 2013). This study seeks to contribute to this debate by investigating changes in fluency in a Question and Answer task and a Story Recall task, among a group of 28 postgraduate Chinese students during a year's Masters' study in UK universities.

General fluency measures (total utterances, mean length of utterance, type-token ratio, hesitations) showed little material development overall. There were, however, marked task effects, with significant improvements in reduced hesitations, and length of utterance ($p < .001$) only on the Story Recall task. Question Production by contrast showed significant change only in type-token ratio ($p < .05$). Temporal fluency measures (speech rate, articulation rate, silent pauses) also indicated significant changes, though not always in the expected direction. Systematic change in language monitoring was also observed, e.g. verbal inflections were reduced or omitted in both tasks at Time 2. Working Memory was significantly correlated with improvement, but only on Question Production ($p < .05$). The lack of marked general improvement in the quantitative data were compared to self-reports on quantity and quality of interaction during the year's immersion; while no significant correlations were found between quantity of interaction and degree of improvement, qualitative responses indicated a very high sociocultural threshold to interaction which even proficient students were unwilling to cross. We therefore argue that a more nuanced approach is needed in researching L2 fluency development, to take into account the complexity of interacting task effects, cognitive and sociocultural factors when assessing language change.



Parvaneh Tavakoli, Colin Campbell and Joan McCormack

(University of Reading)

Development of L2 fluency: effects of intervention

Over the past decade, researching L2 fluency has been identified as an important area of second language acquisition research with highly significant implications for language learning and teaching. Fluency research has gained currency for a number of reasons including the need to unpack the complex and dynamic nature of fluency (Segalowitz, 2010), to understand the relationship between fluency and the development of language proficiency (de Jong et al., 2012), the impact of task complexity on fluency (Skehan, 2009) and the differences between L1 and L2 fluency patterns (Tavakoli, 2011). An important research area that needs attention is the way in which L2 fluency develops over time and whether fluency is sensitive to instruction. The study reported in the current paper aimed at exploring the effects of pedagogic intervention on the development of L2 fluency among second language learners at a university in the UK. The study also attempted to find out which aspects of fluency were more receptive towards the pedagogic intervention. The participants were 37 EAP students at B2 level (CEFR) from a range of different L1s, enrolled on a pre-session course prior to embarking on their degree. The participants performed a monologic and a dialogic task twice, once before and once after the intervention. While all the participants received general instruction on improving listening and speaking skills, the experimental group received a four-week intensive instruction on how to improve their speech fluency. The results of the statistical analyses suggest that while fluency in general tends to develop gradually over time, certain aspects of fluency are more sensitive to instruction. The effects of task type and the relationship between fluency and other aspects of performance, e.g. syntactic and lexical complexity need further consideration and discussion. These findings have significant implications for second language acquisition research in general and for fluency studies in particular.



Paper presentations

In alphabetical order of first author

Theodora Alexopoulou¹, Jeroen Geertzen¹, Anna Korhonen¹ and Detmar Meurers²

(University of Cambridge¹, University of Tübingen²)

Analyzing data from large educational corpora for SLA research: relative clauses in L2 English

“Big data” becoming available in education present new opportunities for SLA research but also significant challenges. We identify a range of methodological issues raised by big learner corpora for SLA research and explore how they can be addressed with NLP-based methods to support the use of such data for SLA. In particular, we investigate the recently released EF-Cambridge Open Language Database (EFCAMDAT) focusing on relative clauses (RCs), a structure critical to a range of SLA approaches (Flynn et al. 2004, Gass et. al. 2007, Quintero 1992; Mellow 2006).

EFCAMDAT consists of writings submitted to Englishtown, the online school of EF Education First (Education First 2012; Geertzen, Alexopoulou & Korhonen 2013). It stands out for its size (33 million words, 85k students), the diversity of student backgrounds and topics covered (128 different topics/tasks distributed across 16 CEFR-aligned proficiency levels) and the longitudinal data included for individual learners. Freely available at <http://corpus.mml.cam.ac.uk/efcamdat>, EFCAMDAT will continue to grow.

How can such a large, structured database of L2 writings collected as part of a comprehensive curriculum be beneficial to SLA research? Data produced in a real-life educational environment include a range of variables potentially affecting production: different tasks can elicit different types of language, leading to over- or under-representation of structures; learners may lift ‘unanalyzed’ or ‘frozen’ chunks from the input material or use productively linguistic patterns primed in their input. Yet, identifying productive use is paramount for uncovering the nature of (potential) learner abstractions and generalisations (Myles 1995).

Investigating these questions in “big data” resources is significantly facilitated by Natural Language Processing (NLP) technology for automatic identification of lexical and syntactic patterns (Granger et al. 2007, Meurers 2009). We use the syntactically parsed version of EFCAMDAT (Geertzen et al. 2013) to automatically extract RCs.

To identify task effects (e.g. lifting, over-/under-production of patterns), we combine recurrent n-gram analysis as used in corpus annotation error detection (Dickinson and Meurers 2013) with measures targeting productivity in learner production (e.g., degree of variability in head nouns). To identify ‘unanalyzed’ pieces of language, we explore measures combining raw frequencies, sharedness among learners/scripts/tasks and coherence (Ellis et. al 2008). In lower proficiency levels, use of chunks lifted from the input reaches 50% of RC production.

On this basis, we investigate linguistic characteristic of RCs such as grammatical function (subject, object), relativizers (who, that, which), head-noun features (e.g. animacy, definiteness). Results indicate a strong L1 effects on the type of RC used (e.g., relativizer, head noun animacy). Some L1 biases involve non-target generalisations, which nevertheless are not due to (direct) transfer from L1. We investigate such patterns longitudinally as a first step towards a methodological framework for researching big data resources for SLA.



Abdulrahman Alzamil
(Newcastle University)

The acquisition of the English Article System by L1 Arabic and L1 Mandarin Chinese Learners

This study examines the second language (L2) acquisition of English articles, which is notoriously difficult for learners whose native language does not have an article system (Mandarin-speaking learners). It compares their acquisition to Arabic-speaking learners. The Arabic article system is similar to English in that Arabic distinguishes articles on the basis of definiteness: the Arabic al- and English the are always used in [+definite] contexts. Arabic, like English, also has a phonologically covert indefinite article Ø. However, Arabic differs from English in that it does not have a phonologically overt indefinite article (English has a/an). Arabic also differs from English in that generics are always definite, whereas in English, generics can be definite or indefinite. The variations between Arabic and Mandarin create a suitable environment for examining the role of L1 background on the L2 acquisition of English articles as the key independent variable affecting attainment, together with proficiency level as a secondary independent variable.

Data collection involved 142 participants (56 Saudi Arabic speakers, 66 Mandarin speakers and 20 English-speaking controls). Participants were placed at three proficiency levels: lower-intermediate, upper-intermediate and advanced, according to the Oxford Quick Placement Test. Two article tasks were administered: a) a forced-choice elicitation task; and b) an oral task. Four hypotheses were tested for effects of transfer: a) the Representational Deficit Hypothesis (RDH) (Hawkins and Chan, 1997; Hawkins and Liszka, 2003); b) the Missing Surface Inflection Hypothesis (MSIH) (Haznedar and Schwartz, 1997; Prévost and White, 2000a; Prévost and White, 2000b; White, 2003); c) the Full Transfer/Full Access Hypothesis (FT/FA) (Schwartz and Sprouse, 1996; 1994); and d) the Fluctuation Hypothesis (FH) (Ionin et al., 2004; Ionin et al., 2008). Results support to different extents the FH, MSIH and the RDH but refute the FT/FA claims. First, there is some fluctuation as the Mandarin Chinese speakers tend to link use of the to specificity and not definiteness and Arabic speakers do so in singular contexts, in support of the FH. Both groups, unexpectedly, based on their L1s, use the indefinite article a correctly, but with some overuse of the. L1 Arabic speakers did not benefit as much as expected from the fact that generics in Arabic are always definite as they showed a high rate of omission errors; Mandarin speakers did the same, indicating that semantics affects article choice more than the L1.

Annika Andersson, Marianne Gullberg and Susan Sayehli

(Lund University)

Today read she the paper: An ERP study of the processing of word order in Swedish L2

There is ample evidence that word order is a problematic domain in L2 usage, in particular the production of verb-second (V2, i.e., a finite verb in second position in main clauses; Ganuza, 2008 for an overview). This difficulty is only partially modulated by L1 background. In Swedish, a further complication for L2 users is that even native speakers occasionally produce V2 violations depending on the preposed adverbial (e.g., Bohnacker, 2006). Despite this body of research, we know very little about how these structures are processed online. This study therefore examined how advanced German (n=14) and English (n=14) adult learners, matched for proficiency and age of acquisition (AoA), process word order in Swedish compared to native speakers (n=20) depending on language background (L1 with [German] or without [English] V2). We further explored effects of preposed adverb frequency (frequent idag 'today' vs. infrequent hemma 'at home'), and length of the preposed constituent (short vs. long prefield), both factors being relevant to processing. We examined responses to word order violations in an acceptability judgement task and an ERP experiment, and probed the production of word order in a sentence completion task.

Preliminary results from the acceptability judgement task indicate that native speakers were more accurate and faster than both L2 groups who did not differ. The more frequent adverb, idag, also affected accuracy and reaction times positively in all groups. The sentence completion task showed similar results. In contrast, the ERP data displayed different patterns. In native speakers V2 violations elicited a bimodal ERP response, an anterior negativity followed by a posterior P600. These effects were increased in amplitude and the anterior negativity was left lateralized (LAN) with long prefields. In the German group a bimodal response was detected only when V2 violations followed a frequent adverb in a long prefield. In other cases only a posterior P600 was evident. The English group, in contrast, showed an early anterior positivity, and a lateral parietal negativity in the N400 time window that was followed by a posterior P600. The amplitude of responses was affected by prefield length only.

Overall, the results indicate that, although the advanced German and English L2 users of Swedish performed similarly on behavioural measures of comprehension and production of word order, they nevertheless differed in online processing. Language background mattered: the German learners, whose L1 share V2 with target Swedish, showed similar ERP patterns to native speakers overall. In contrast, the English learners, whose L1 does not share V2, showed more variation in their ERP responses. We discuss the implications of these findings for theories of crosslinguistic influence and theories of nativelike syntactic processing.



Maria Andreou, Ifigeneia Dosi and Despina Papadopoulou

(Aristotle University of Thessaloniki)

Lexical and grammatical aspect in bilingual children: evidence from production and comprehension tasks

Our study investigates the development of lexical and grammatical aspect in Greek by 30 Greek-German, 30 Greek-English bilingual children and 30 monolingual Greek children between the ages of 8 and 12 years. Previous studies indicate that imperfective appears later than perfective (Andersen & Shirai, 1996; Bardovi-Harlig, 2000). Furthermore, Yap et al. (2009) claim that when the verb's lexical and grammatical aspect match, narrative comprehension is faster and easier. The following research questions are addressed in the present study: (a) whether bilingual children experience more difficulties with imperfective than perfective aspect, (b) whether lexical aspect affects performance on grammatical aspect and (c) whether comprehension and production improves when lexical and grammatical aspect match.

Demographic data from all children, elicited through a detailed questionnaire, allow us to determine age of onset, continuity of exposure to each language and input measures. Additionally, scores from standardized vocabulary tests were used as an independent measure of language proficiency (Greek: Vogindroukas et al., 2009; German: Petermann, 2010; English: Renfrew, 2001). Participants' performance on aspect was tested by means of a forced choice oral and an elicited narration task. The forced-choice oral task investigated comprehension of perfective and imperfective aspect. In particular, the participants listened to stories in which they were presented with the two aspectual forms of a specific verb. Their task was to choose the appropriate one in the story context. The elicited narration task employed two stories of the Edmonton Narrative Norms Instrument (ENNI) with 13 pictures; each story was adapted to Greek and the participants' task was to retell each story after they listened to them once (Schneider & Dubé, 2005). Our aim is on the one hand to compare comprehension and production of aspect and on the other to explore whether narration improves when lexical corresponds to grammatical aspect.

Our preliminary analysis from both tasks reveals that perfective aspect was successfully acquired by all groups by the age of 8 years, while problems with the imperfective aspect are still evident even by age 12 in monolingual and bilingual children, although monolinguals were significantly more accurate in the imperfective condition. Moreover, the children performed significantly better at the imperfective aspect in the retelling than the comprehension task. However, the children's imperfective uses in the narration task involved the feature [continuous] and not the feature [habitual], which can account for this discrepancy between the two tasks. In addition, the data from both tasks indicated that bilingual children tended to map lexical to grammatical aspect, preferring perfective with accomplishments and achievements and imperfective with activities and states. Our findings will be discussed in relation to the bilingual acquisition of aspectual features and the impact of lexical and grammatical aspect on children's language comprehension and production.

Tami Aviad, Elena Mizrahi and Batia Laufer

(University of Haifa)

A new test of active vocabulary size: Development and trial

Words are first and foremost units of meaning. Being able to link correct word forms with the concepts they denote is thus an essential dimension of word knowledge. The form-meaning link can be tested for passive knowledge (understanding the meaning of a given word form), or active knowledge (retrieving the word form for a given meaning), by means of recall or recognition (Nation, 2001). However, most vocabulary size tests are monolingual passive recognition tests (e.g. Meara and Buxton, 1987; Nation, 1983), with only several bilingual versions of Nation and Beglar's (2007) VST (Vocabulary Size Test) appearing lately. The few tests which measure active vocabulary size (Laufer and Nation, 1999; Laufer and Goldstein, 2004) share one major limitation; the test items have been sampled from only four BNC-based frequency levels (k2, k3, k5, k10) and the Academic Word List.

In this paper, we describe the development and trial of a new test of active vocabulary size, which differs from previous ones in two respects. Similarly to the VST, but unlike in other active size tests, ten test items per frequency level were sampled from a wider range of frequency levels (1000-14000). Additionally, each of the test items belongs to the same frequency level in two corpora - BNC and COCA. We developed two modalities of the test - recall and recognition, in two versions - monolingual (English-English) and bilingual (English-Hebrew). Eighty five university students, native speakers of Hebrew, of three different English proficiency levels, participated in the test validation. Each student was tested by either recall or recognition, monolingual and bilingual. Differences between proficiency groups were analysed by ANOVAs and post-hoc Tukey tests, item difficulty by Rasch item analysis, and test reliability by Cronbach Alpha. We found that all four versions discriminated between the three proficiency levels and showed internal consistency, and that most of the items displayed good fit to the Rasch model. The bilingual versions yielded higher scores than the monolingual versions, and recognition - higher than recall.

We discuss the problems of sampling from different word corpora, the importance of learners' L1 in L2 test design, and the contribution of active vocabulary size tests to pedagogy and research.

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Kathleen Bardovi-Harlig and David Stringer

(Indiana University)

Unconventional expressions: Productive syntax in the L2 acquisition of formulaic language

One influential view of the role of formulaic expressions in L2 development is as a bootstrapping mechanism into the L2 grammar; targetlike fixed expressions come first, eventually forcing the grammar to catch up. On this account, a repertoire of constructions is memorized, allowing eventual statistical induction of abstract grammatical categories (Ellis, 2003, 2012; Eskildsen & Cadierno, 2007; Myles, 2004; Wray, 2008). An alternative view is supported in work by Carroll (2010) and Bardovi-Harlig (2009), whose data suggest that even in the earliest stages of L2 acquisition, learners creatively construct formulaic expressions. This study brings evidence to bear on this debate from an extensive investigation of the acquisition of conventional expressions by L2 learners of English.

Conventional expressions are used by speech communities in specific discourse contexts, and include phrases such as “Nice to meet you,” “(I’m) sorry I’m late,” “I’m just looking,” and “I gotta go.” An aural recognition task and an oral discourse completion task (DCT) were completed by 122 learners of English at four levels of proficiency and 49 native speakers of American English. The recognition task ensured that learners could identify the target expressions; NS responses confirmed consistency of use in the speech community. The production task tested 32 scenarios and yielded 5,472 oral responses.

In one scenario involving a late arrival, NS responses reliably included “(I’m) sorry I’m late.” Learner responses included the expression “Sorry I’m late” at relatively low levels: 17% by low-intermediate learners, 32% by intermediate learners, and 48% by low-advanced learners. However, learner responses also included interlanguage forms such as “I’m sorry for late” / “I’m so sorry about my late” / “I’m so sorry to being so late” / “I’m sorry because I late,” and grammatical but not conventional forms (“Sorry for being late” / “I’m sorry to come late”). The use of sorry...late at a rate of 76% by low-intermediate learners and 96% by low-advanced learners shows that despite high rates of recognition of the target expression across proficiency levels, production of the exact expression shows very gradual convergence on the target, following rather than preceding syntactic development. Other expressions showed similar patterns of acquisition. A repeated measures logistic regression model shows that both proficiency and expression have a significant effect on production ($p < .001$).

Rather than acting as well-formed scaffolding around which the L2 grammar is built, the formulaic expressions in this study appear initially to take the form of strings with fixed lexical elements and fuzzy functional slots, whose later well-formedness is dependent on autonomous syntactic development. We argue that such strings are nevertheless stored as multi-word expressions in the mental lexicon, and develop an account of phrasal structure in long-term memory in terms of representational modularity.

Inge Bartning, Fanny Forsberg Lundell and Klara Arvidsson

(Stockholm University)

Complexity at phrasal level in native and non-native spoken French

There is at present an interesting debate on complexity in SLA. Taxonomies of different levels of linguistic and cognitive complexity have been presented (see e.g. Bulté & Housen 2012). Our contribution in this paper concerns linguistic structural complexity. Research on complexity has often concentrated on syntactic complexity, in particular subordination. Subordination, however, can be an ambiguous measure at high-level proficiency, since even early learners may use subordinate clauses in their search for 'le mot juste' resulting in many paraphrases including subordinate clauses which are not necessarily a sign of development. In this paper, we will focus on syntactic complexity at the phrasal level, i.e. in noun phrases, following the advice by Norris & Ortega (2009: 564). The present study thus examines pre- and post modification in the noun phrase in very advanced L2 French, compared to native speakers, in an online task consisting of a retelling of the video clip of Modern Times: NPs modified by prepositional phrases including *de* (post modification: *l'homme de l'équipe*), prepositional phrases including other prepositions than *de* (*une bague en or, une tarte à la crème*), adjectival phrases (pre-/post modification: *une belle femme, un air méfiant*), multi modified NPs (*l'homme de l'équipe de la machine*). However, in order to get the whole picture of complex NPs, we will also examine NPs including relative clauses in spite of the paraphrase strategy mentioned above. To the best of our knowledge, studies on phrasal complexity are nearly non-existing in SLA, especially in spoken French L2.

Hypotheses: The first hypothesis is that there will be differences in the type frequency of structures used between the two groups. The second hypothesis is that native speakers have more complex and modified NPs. Research questions: 1. Do NS and NNS differ concerning frequency of different types of NPs? 2. Do NS use longer NPs with more varying structures than NNS? 3. Are there different patterns of NPs with relative clauses in NS and NNS use? Preliminary results confirm expected patterns in NNS vs NS use but there still are some interesting unexpected tendencies between the two groups in the use of complex NPs.

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Benedetta Bassetti

(University of York)

L2 orthographic forms and L1 grapheme-phoneme correspondences result in a phonological contrast that is unattested in the target language

Evidence has been recently accumulating that L2 orthographic forms ('spellings') affect L2 learners' pronunciation. This study investigated whether the interaction between L2 orthographic forms and native grapheme-phoneme correspondences results in a phonological contrast in the mind of L2 English speakers that does not exist in the English language. In English, consonant length is not contrastive. Italian has a singleton-geminate contrast, and geminate consonants are represented with double consonant letters (e.g. *fato-fatto*, 'fate'-'fact'). We then predicted that Italian speakers of English as a Second Language (ESL) would pronounce English words with longer consonants if spelled with double than singleton letters, for instance producing a longer [t] in *kitty* than in *city*. This would be a consequence of the interaction between L2 words' orthographic forms containing double consonants, and learners' native grapheme-phoneme correspondences whereby double consonant letters represent geminates. Forty-two Italian high-school students with ten years of English language learning experience performed one of three word production tasks, which varied type of input (acoustic, orthographic or both) before and at production: delayed repetition with acoustic input, delayed repetition with acoustic and orthographic input, and reading aloud. The target voiceless stop consonants were presented inside nine word pairs. Each pair contained the same consonant, spelled with singleton or double letters. Participants produced each target word three times within a carrier phrase. Consonant length was analysed using acoustic and auditory analysis. Results revealed that the mean closure duration of consonants spelled with double letter was 1.53 times as long as the closure duration of consonants spelled with singleton letter. The same was found across tasks with different levels of orthographic and acoustic input. It appears that orthography can result in a phonological contrast in learners' minds that is unattested in the target language. Results have implications for models of second language phonological development.

Kristof Baten

(Ghent University)

Effects of explicit instruction on the acquisition of the German case system: methodological issues and empirical results

In the field of SLA there is a general consensus that different types of instruction have a different effect on L2 development. Research indicates that explicit types of instruction in particular promote the acquisition process. It remains unclear, however, (i) what types of knowledge benefit most from explicit instruction (explicit or implicit knowledge), and (ii) whether the benefits of explicit instruction vary depending on the complexity of the language feature targeted. Furthermore, (iii) it has been suggested that instruction will only work if it is provided when learners are developmentally ready to receive it.

This paper will discuss the results of a study focusing on the effects of instruction on morphosyntactic development. More specifically, the study examines the acquisition of the German case system, and it investigates to what extent the effect of instruction depends on (i) the type of knowledge, (ii) the complexity of the language feature, and (iii) the developmental readiness of the learners.

The study involves 18 first-year university students of German (L1 Dutch), who received explicit instruction, following the operationalization in, among others, Housen and Pierrard (2005). The participants were assessed during a pre-test, and following a treatment phase, all participants received an immediate post-test and a delayed post-test. Participants were administered a grammatical judgment task (which measured their explicit knowledge) and an oral production task (which measured their implicit knowledge) during each round of test phases. With regard to the complexity of the language feature, the tasks differentiated between simple and complex case rules: 'simple' referring to items where the use of case conflates with canonical word order (Er schenkt der Stiftung das Vermögen; SUBJ:NOM – IO:DAT – DO:ACC), while 'complex' is used for items where case is used functionally and thus independent of word order (Der Stiftung schenkt er das Vermögen; IO:DAT – SUBJ:NOM – DO:ACC).

The findings reveal a main effect of time, which indicates that there is a difference between the three test phases. This result shows that explicit instruction is effective in general. However, no interaction is found with 'type of knowledge' and 'complexity level'. This lack of interaction indicates that the effectiveness of instruction did not vary according to these two variables. However, an interaction effect with 'developmental readiness' suggests that the effectiveness of explicit instruction depends on the developmental stage of the learners (cf. the developmental stages found in German case acquisition; Baten, 2013). This effect is supported by a qualitative analysis of the data.

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Sina Bosch, Helena Trompelt and Harald Clahsen

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Morphosyntax in the L2 Mental Lexicon: A Cross-Modal Priming Study of Inflected Adjectives in German

Morphosyntax has previously been identified as one of the challenging areas for non-native speakers of a target language (DeKeyser, 2005). In particular, previous research has shown that low-proficiency second language (L2) learners do not reliably encode inflection, but rather rely on unmarked word forms (Meisel, 2011), and exhibit reduced sensitivity to morphosyntactic information in L2 language comprehension (Tokowicz & Warren, 2010). Against this background, the current study shows that late bilinguals with advanced proficiency levels demonstrate native-like performance patterns for the morphosyntactic features of inflected adjectives in German during on-line word recognition.

We examined priming effects between the morphosyntactic features of -e, -s, and -m forms (e.g. geheim-e, geheim-es, geheim-em) of German adjectives (e.g. geheim - 'secret'). Inflected adjectives of German have been claimed to be represented in inflectional paradigms with underspecified features (e.g. Blevins, 2000), with the -m marker as the most specific inflectional affix, followed by -s, and -e as the least specific inflectional marker of the paradigm:

- (a) /m/<-->[-PL, -FEM, +OBL, +DAT]
- (b) /s/<-->[-PL, -FEM, -MASC, -OBL]
- (c) /e/<-->[-OBL]

To examine how morphosyntactic feature specifications affect non-native word recognition, the cross-modal lexical priming experiment presented in Clahsen et al. (2001) was performed with thirty Russian-speaking L2 learners of German (mean age: 25;9; AoA of German: 13;4; CEFR level of German: C1 or above). This experiment tests for priming effects between different inflected forms of the same adjectives (geheimeà geheimes /geheimem; geheimesà geheime /geheimem; geheimemà geheime / geheimes), relative to controls with identical primes and target words.

The results for the L2 group replicate those of Clahsen et al. (2001) for L1 speakers of German. We found (i) a paradigmatic specificity effect, with slower target response latencies for -m than for -e and -s forms, and (ii) a priming asymmetry effect, with -s primes facilitating the recognition of -e targets as effectively as the corresponding identity controls (-e --> -e = -s --> -e), but -e primes facilitating -s targets less than identity controls (-s --> -s < -e --> -s). The first effect is due to the processing cost incurred by the specific feature content of the -m affix. The second effect is due to the fact that in -e --> -s pairs the features [-PL, -FEM, -MASC] of the -s target affix are not available from the prime, whereas in the -s --> -e condition the target form does not contain any features that are not already available from the prime. In this way, these subtle priming patterns can be straightforwardly explained in terms of the affixes' paradigmatic representations. We conclude that L2 learners at least at high levels of proficiency show native-like sensitivity to morphosyntax of the kind represented in inflectional paradigms.

Paper Presentations

Vaclav Brezina and Dana Gablasova

(Lancaster University)

New-GSL English vocabulary tool: Reconceptualising lexical text coverage in SLA

Lexical text coverage is an important measure both in reading research, language testing and pedagogical practice (cf. Laufer & Ravenhorst-Kalovski 2010). Most of the research in this area so far (e.g. Schmitt et al. 2011, Webb & Rogers 2009, Adolphs & Schmitt 2003, Hirsh & Nation 1992) has been concerned with establishing a vocabulary threshold – a proportion of lexical items in the text that need to be acquired by learners in order to comprehend a written or spoken text “reasonably well” (Laufer & Ravenhorst-Kalovski 2010:16). These studies rely largely on methods and tools that provide information about overall representation of word-family-based vocabulary bands in the text without looking at more detailed structure of lexical coverage.

This paper reports on an evaluation study of a new online vocabulary coverage tool that calculates lexical text coverage in different bands of the New General Service List (Brezina & Gablasova 2013). Unlike tools traditionally used in text coverage studies such as RANGE (e.g. Nation & Heatley, 2002) or LEXTUTOR (Cobb, 2014) which analyse word families, the New-GSL English vocabulary tool (<http://corpora.lancs.ac.uk/vocab/>) operates with lemmas as the basic units of lexical analysis. It first provides word class analysis of each lexical item in the text and matches it with the appropriate new-GSL entry. In this study, we selected four sets of texts with each set representing a different genre (fiction, newspaper language, academic prose and informal speech). We analysed these texts using New-GSL English vocabulary tool to establish both the overall text coverage and the structure of word coverage according to the individual word classes. We also looked at the length of the texts as a variable to investigate whether this has some effect on text coverage estimates.

The results show that the overall lexical coverage of all texts was above 80 per cent. In addition, the variation between the individual text-types was relatively small with the range 84% (newspaper article) – 81% (fiction book). More interesting, however, was the structure of lexical coverage. In particular, the percentage of nouns, verbs and adjectives covered by the new-GSL differed significantly according to the specific type of text. Surprisingly, the lowest coverage by nouns was in speech and fiction, whereas the highest coverage was in newspapers and academic texts. Verbs, on the other hand, had largest coverage in speech and newspapers. The coverage of adjectives was likewise highest in these two genres. The length of the texts did not play a role, but this was only the case when we excluded proper nouns and numbers from the token counts.



Aafke Buyl and Alex Housen

(Vrije Universiteit Brussel)

Revisiting Developmental Stages in L2 Grammar Acquisition: A Look at the Receptive Side of Grammar Acquisition

The proposed paper deals with developmental stages in the receptive acquisition of English morphemes by L2 learners. Several studies have documented developmental regularities in L2 grammar acquisition, and this in different L2s and among learners with different L1s (R. Ellis, 2008; Ortega, 2009). However, a few exceptions aside (e.g. Spinner, 2013), most of these studies have looked only at productive learner data. Likewise, only few of the available explanatory accounts of developmental stages have reflected on the relationship between the receptive and productive side of grammar acquisition. Yet looking at receptive learner data (and comparing it to productive data) can, arguably, enhance our understanding of the origin and nature of developmental systematicity, as well as of L2 grammar acquisition and knowledge more generally.

To this aim, the present paper presents a study on the order in which adult learners of English learn to receptively process the following English morphemes: 3SG -s, genitive -'s, -ing-form, past participle -ed, past tense -ed and plural -s. A self-paced, word-by-word reading task tested learners' sensitivity to the ungrammatical omission of the six target morphemes. For each morpheme, reading times on critical words in ungrammatical versus grammatical trials were compared. Significantly slower reading times on ungrammatical trials were interpreted as evidence of receptive knowledge of the targeted morpheme. In addition, participants' receptive knowledge was tested using a timed (online) grammaticality judgment task, in which learners' judged the grammaticality of the test sentences also included in the self-paced reading task.

Seventy L2 learners with different proficiency levels and L1 backgrounds completed the tests. Results, which were analysed using group score analyses and implicational scaling, show considerable individual variation, but a general tendency for 3SG -s, -ing and plural -s to become processable first in receptive grammar knowledge. The findings are discussed against the frameworks of Processability Theory (Pienemann, 1998) and frequency/saliency-accounts of developmental stages in L2 English morpheme acquisition (N. C. Ellis, 2002; Goldschneider & DeKeyser, 2001).

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Clause linking in L2 French and English: The interaction of syntax and semantics

The acquisition of clause linking mechanisms in a second language has been an important topic in applied linguistics recently, with research mostly focusing on specific types of complex structures, such as finite complement clauses (Diessel & Tomasello 2001), relative clauses (Giacalone Ramat 1999) or circumstantials (Benazzo 2004). These approaches, while essentially based on the development of different categories of subordinate clauses as distinguished by traditional grammar, do not provide a unified view of clause linking as a whole. This contribution intends to consider all forms of clause linking, including intraclausal relations between multiple predications and their arguments. It departs from the hypothesis that the process of acquisition of syntactic relations between clauses and predicates is determined by the relative complexity of the combined elements.

The validity of this hypothesis will be evaluated based on a unified theory of propositional complexity, both syntactic and semantic, i.e. Role and Reference Grammar (RRG; Van Valin & LaPolla 1997, Van Valin 2005), which advances a number of hypotheses related to the development of clause linking. We will attempt to verify the validity of these ideas in the field of second language acquisition, comparing pupils' acquisition of the clause linking system in two different L2s.

For this purpose, both French and English data have been collected among Belgian secondary school pupils approximately 11 to 18 years old, more precisely semi-spontaneous oral retellings (frog stories, Mayer 1969). All inter- and intraclausal links, were then analyzed according to the specific RRG framework. The current contribution aims to verify a number of hypotheses concerning the order of acquisition of links both within and between predicates and clauses, in particular the idea that strong syntactic links represent strong semantic relations between events, and attempts to draw a comparison between French and English as L2s in this domain. It will discuss preliminary analyses, which appear to confirm the main hypothesis for both L2s, though a number of mismatches between syntax and semantics can be observed: certain semantically 'weak' links are realized by means of syntactically 'strong' complex structures and vice versa.

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Late Bilinguals' Attrition in the Third Tone in Mandarin

Tone in Mandarin is used to differentiate lexical items or to express morphological functions. Among the four tones in Mandarin, the tone considered to be the most complex is the third tone (T3), which includes a rise and fall. Sandi also occurs on T3 where for two adjacent T3, the first T3 is realized as the second tone (T2) (Yip 1980). In the acquisition of tone by native Mandarin children, T3 is the last to be acquired (Li & Thompson 1976). For L2 learners, T3 is also the last tone to be acquired (Lin 1985). This indicates it might be vulnerable to attrition.

For bilinguals, using an L2 every day and/or residing in the L2 community leads to native language attrition. The majority of the research on L1 attrition has been on the lexicon, morphology and syntax (Schmid 2002), but in recent years, attention has moved to phonology. In Mandarin, phoneme attrition has been found in second generation Chinese in California due to L2 influence (Young 2007) and among L1 Hakka Chinese speakers living in a Mandarin-speaking area for five years, tone undergoes attrition (Yeh, 2011). Less is known about what happens when tone language speaker moves to a non-tone language environment.

The present study addressed whether the most complex tone, T3, undergoes attrition for Mandarin speakers who live in an English-speaking environment. In an exploratory study, 20 Mandarin-English late bilinguals who had lived in the UK from three months to more than two years were compared to Mandarin monolinguals. Their production of T3 at word and sentence level was tested by interview task, story-telling task and questionnaires, and in both formal and casual speech. The data were analysed acoustically using Praat, and statistical measurement revealed that late bilinguals who had lived in an L2 environment for over two years showed signs of T3 attrition. Moreover, L1 attrition occurred more in casual conversation than formal speech.

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A problem shared is a problem halved: how does congruency between languages affect idiom processing in bilingual speakers?

Formulaic language (idioms, collocations, clichés, etc.) represents a considerable challenge to language learners. As an essential part of native-like proficiency, a key goal in modern applied linguistics is to better understand how non-natives process and acquire such expressions. In the current research we examine how formulaic expressions are represented in the mental lexicon of bilingual speakers. Must such items be learned from scratch in the L2, or might existing L1 structures and phrases be utilised to aid learning and communication? In other words, can the dual route model of novel/formulaic language proposed for monolingual speakers (Wray & Perkins, 2000) also be utilised by bilinguals in an L2?

Eye-tracking was used to investigate how a group of high proficiency Swedish-English bilinguals processed idiomatic phrases presented in English. They read congruent (those that exist in both languages) and incongruent (those that exist in one language only) idioms in minimal sentence contexts. Our research question was: Is knowledge of an L1 idiom automatically activated when the same sequence is encountered in an L2? Previous research suggests that congruent collocations are processed more quickly by bilinguals (Wolter & Gyllstad, 2013). There is also evidence to suggest that bilingual speakers respond more quickly to translations of idioms than matched control phrases (Carrol & Conklin, 2014). These studies presented items in isolation and used lexical decision or acceptability judgement tasks to assess processing speeds. In the present research idioms were embedded in short passages to ensure that the processing required as part of normal reading behaviour was more natural. We expect congruency to strongly affect how idioms are read by bilingual speakers: items that exist in both languages should be recognised as formulaic – therefore be read more quickly – although we also expect some level of facilitation for L1 only idioms (idioms translated from Swedish), in line with Carrol and Conklin (2014).

We discuss our results in terms of the bilingual lexicon and implications for models of second language acquisition. In particular, we discuss how lexical items might be represented and linked in the L1 and L2 lexicons, how existing L1 structures could be utilised in second language acquisition, and how a better understanding of the link between L1 and L2 representation might contribute to better learning and teaching.

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Juli Cebrian

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Cross-language categorization of Catalan vowels by British English listeners

Current models of second language (L2) acquisition propose that in order to categorize target language sounds separately from native sounds, learners need to be able first to discern differences between native and non-native categories (Flege, 1995; Best & Tyler, 2007). Therefore, the starting point in a L2 speech study often involves an evaluation of the degree of similarity between native (L1) and target (L2) sounds. The current study tested the perceived similarity between English and Catalan vowels by testing native English speakers' perception of Catalan and English stimuli. Perceived similarity was tested by means of a perceptual assimilation task, in which listeners identify target stimuli in terms of native categories and provide goodness of fit ratings, and also a rated dissimilarity task, which requires listeners to rate on a Likert scale the degree of dissimilarity between two members of a pair of vowels. The objective was threefold: first, to complement previous data on cross-linguistic perceived similarity obtained from Catalan listeners; second, to assess the suitability of each method by comparing the results of the two tasks; and third, to explore the effect of L1 inventory size on cross-linguistic mapping given the differences in inventory between English and Catalan (12 vs. 7 vowels).

Thirty native English listeners participated in the study. The stimuli used in the two tasks were bVt syllables elicited from several Catalan and English talkers. The results of the perceptual assimilation task indicated that native vowels obtained higher goodness ratings than non-native vowels, although some non-native vowels reached assimilation rates of 90% or higher. Further, the vowels with the highest assimilation scores were among those that obtained the lowest dissimilarity ratings when paired with the closest native vowel in the dissimilarity ratings task. This indicates that on the whole the two perceptual measures of cross-language similarity converged in their results. A few Catalan-English pairs obtained relatively low dissimilarity ratings, showing that some non-native sounds may be readily assimilated to L1 categories. Still, the lowest dissimilarity scores corresponded to same-category English pairs. Taken together the results show that non-native vowels differ in the extent to which they are assimilated to native vowels and that a larger vowel inventory does not necessarily imply a more consistent pattern of cross-language mappings. The results will also be discussed in light of earlier results involving Catalan listeners.

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Sevdeger Cecen and Sebnem Yalçın

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The role of WM capacity, task modality and task stimulus in assessing L2 morphosyntactic attainment

Research on second language (L2) has recently focused on the construct validity of the measures of explicit/implicit knowledge in relation to task stimulus and task modality (Bowles, 2011; R. Ellis, 2005; Granena, 2013; Gutierrez, 2013; Loewen, 2009). There has been an interest to see whether the knowledge type measured by grammatical and ungrammatical sentences reflect implicit and explicit knowledge respectively. Similarly, task modality (aural vs. written) has been hypothesized to interact with different types of L2 knowledge. Additionally, individual learner differences, such as WM capacity, can play an essential role in this complex relationship between task modality and task stimulus. The current study investigates the role of different levels of WM capacity (high vs. low) under different task stimulus (grammatical vs. ungrammatical sentences) on assessing L2 users' morphosyntactic attainment with three different tests claimed to tap implicit and explicit knowledge in different modalities i.e., aural (elicited oral imitation) versus written (timed/untimed grammaticality judgment test). Participants were 84 late adult learners of English with a B2 level of proficiency. They completed two grammaticality judgment tests (i.e., timed/untimed), an elicited oral imitation test and a reading span task administered in L2. Results of a 2x3x2 mixed analysis of variance showed significant main effect for all three factors. There was a significant interaction between WM capacity and task modality but the analysis yielded no significant relationship neither between WM capacity and task stimulus nor between task modality and task stimulus. There was no significant interaction among three factors. The findings will be discussed in relation to the implications for assessing implicit and explicit knowledge.

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The Relationship between Phonological Short-term Memory and L1 Transfer in L2 Vowel Production

The use of spectral cues in the perception and production of English /i:-l/ presents relative difficulty for Catalan-Spanish bilingual EFLs (Cebrian 2007, Morrison 2009). Spanish EFLs often assimilate English /i:-l/ into the single Spanish category /i/ (Flege 1991). This assimilation might be due to the influence of L1 sounds (Flege 1995), and degree of segmental transfer might be accounted for by learners' cognitive abilities. Phonological short-term memory (PSTM) has been shown to influence L2 speech learning and perception of L2 vowel contrasts. However, less research has focused on the relationship between PSTM and vowel production. The present study investigates Catalan EFLs' degree of L1 phonological transfer in the production of English /i:-l/, and aims to assess the extent to which PSTM plays a role in native-like production of this contrast. 30 Catalan EFLs taking a degree in English Studies at The University of Barcelona participated in this study. To examine /i:-l/ production, two versions of a Delayed Sentence Repetition Task were used (words with L1 /i/ and minimal pairs with L2/i:-l/). To test PSTM, a Serial Non-Word Recognition task (SNWR) containing non-words in the L1 was administered. 24 same-different non-word sequences were presented in blocks of increasing length (5, 6 and 7 items). Participants were divided into High and Low-PSTM groups through median split. The results showed that the High-PSTM group presented greater spectral distance in the production of /i:-l/ than the Low-PSTM group. L2 proficiency was controlled for using the X/Y-lex vocabulary test. These results suggest that PSTM plays an important role in production of /i:-l/, and that further research looking into EFLs' L1 phonological transfer in the production of English vowel contrasts should take PSTM into account as an important factor in L2 phonological acquisition.

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Maria Clements and Laura Domínguez

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Acquiring syntactic and referential properties of null subjects in a second language

This study examines the L2 acquisition of referential and pragmatic properties of null (NP) and overt subject pronouns (OP) by advanced English learners of Spanish, aiming to demonstrate that NP are indeed as problematic as OP for L2 learners. It is widely assumed that certain properties linked to the null subject parameter (e.g. postverbal subjects) remain problematic for L2 speakers at advanced levels of learning, whereas others (e.g. null subjects) are readily acquired (White, 1985; Licerias 1988, 1989; Phinney, 1987; Hilles, 1986; Al-Kasey & Pérez-Leroux, 1998), despite the fact that such properties are linked to the existence of the same (uninterpretable D) feature in I (Sheehan 2006). The prevalent explanation for this asymmetry claims that postverbal and OP are persistently difficult because they are phenomena at the syntax-pragmatics interface (Sorace, 2005; Sorace, 2011; Sorace & Filiaci, 2006; Tsimpli & Sorace, 2006). As a result, L2 learners fail to use overt forms appropriately in [+T(opic) S(hift)] and [-TS] contexts. On the other hand, NP are regarded as referentially simpler and easy to acquire, as they only convey topic-continuity, [-TS] (Sorace, 2000).

In this study, we argue that Spanish NP have similar syntactic and pragmatic properties as OP, meaning that they have an equal status at the syntax-pragmatic interface. We claim that both OP and NP can be used in both [+/- TS] contexts, provided the referent is salient enough (Lubbers Quesada & Blackwell, 2009; Licerias et al. 2010, Domínguez, 2013) which implies that NP should be as difficult to acquire as OP. Crucially, we predict problems in the L2 acquisition of NP, as learners need to learn that NP can be used in [+TS] contexts.

Our hypothesis is tested on a group of 20 advanced English speakers of Spanish who participated in two comprehension tasks; i) Picture Verification Task (PVT) and ii) Context-Matching Preference Task (CMPT). In the PVT, learners had to select the picture that best described the potentially ambiguous sentences with intra-sentential anaphora, to test whether they prefer a subject or an object antecedent for NP, compared with the control group (see Tsimpli et al. 2004). In the CMPT, learners had to rate the appropriate use of 2 sentences (with and without NP) in a given context, to test their acceptance of OP and NP in [-/+TS] contexts (see Rothman, 2007).

The results corroborate our predictions, showing that null subjects are allowed in some [+TS] contexts; furthermore, L2 speakers show less felicitous judgements in their use of OP and NP, for example, allowing NP in contexts in which native controls reject them in favour of OP. These results show that the acquisition of null subjects is not completely problem-free and that interface-based accounts cannot appropriately explain these results.



Frederik Cornillie, Kris Van den Branden and Piet Desmet

(KU Leuven)

The acquisition of English grammar through computer-assisted practice tasks and meaning-focused reading—beyond drill-and-kill?

In current-day L2 pedagogy, the power of some kind of focus on form is undisputed, preferably incidental upon meaning-oriented L2 use, and only there where it is psycholinguistically relevant, undistruptive of communicative flow, and needed for communication to succeed. Yet, there is little scope in language teaching programmes for continued and controlled practice of specific linguistic constructions, accompanied by consistent feedback. Controlled practice may help to automatize knowledge in implicit memory, which could in turn free up attentional resources for higher-order skills during complex learning tasks. The state-of-the-art in SLA theory assumes a dynamic interface between explicit and implicit knowledge, and hence provides support for various attention-raising techniques, including controlled practice (Ellis, 2005; Hulstijn, 2002). Further, proponents of strong-interface theories have argued on several occasions that computer-assisted language learning is *the* field that holds promise for the future of practice (DeKeyser, 2007), as it allows for massive and fine-grained data collection in longitudinal experimental designs, potentially in ecologically valid settings.

This presentation will report on an eight-week intervention study in secondary education in which Dutch-speaking learners of English practised the constraints on quantifiers and the double object construction in computerized practice tasks, which were embedded in meaning-focused reading and discussion activities. These particular linguistic constructions were chosen for three reasons: [a] they are frequent in English; [b] the constraints on their use do not apply in Dutch; [c] ungrammatical instances of these constructions are frequent in the interlanguage of Dutch-speaking learners. Additionally, L2 acquisition of the double object construction is considered to require negative evidence, for instance in the form of systematic practice with negative feedback (Carroll & Swain, 1993). Furthermore, the two constructions differ in complexity, which could determine how learners may benefit from explicit instruction (Hulstijn & de Graaff, 1994). Before learners practised these constructions, all learners were given explicit instruction, but metalinguistic error-specific feedback was available to only half of the participants during practice; participants were assigned at random to one of either conditions. The practice tasks involved learners in performing grammaticality judgments about utterances drawn from a detective story that was read in class, which was intended to focus learners' attention on meaning in addition to form.

The practice groups (N=125) and a control group (N=61) completed language tests before, immediately after, and four weeks after practice. These tests included a timed grammaticality judgment test and a written discourse completion test. A selection of participants from the practice groups (N=69) also completed an oral elicited imitation test. Further, the system tracked learners' reaction times and accuracy rates during practice, which allowed to control for the quantity and quality of practice. We will present results, and will conclude with implications for design and future research.

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Effects of Aging and Bilingualism on Language Development in the Absence of Grammar Instruction

We report on a study that contributes to the growing body of literature on the role of cognitive individual differences (IDs) in explaining the variation that characterizes adult SLA. We investigated the effects of bilingualism and aging, two IDs currently understudied, in the absence of grammar instruction since IDs play a bigger role under pedagogical conditions that leave learners to their own devices (e.g., Sanz et al., under second review; Skehan, 2002).

Fifty adults who were either (1) younger (age 18-27) or older (age 60+) and (2) monolingual English or bilingual English/Spanish speakers completed a computer-based lesson on Latin morphosyntax. All learned the three cues for assigning thematic roles to Latin nouns (word order, noun and verb morphology) via task-essential practice (Loschky & Bley-Vroman, 1993) with yes/no feedback only. A battery of four tests counterbalanced across participants in a pre/post/delayed experimental design measured learning. Results show that older adults were not disadvantaged and bilinguals of both ages had an advantage over their monolingual peers. Finer-grained analyses examining growth by processing cue showed advantages in retention for older adults in noun morphology and for bilinguals of both ages at all testing times in word order and verb morphology.

This study makes novel contributions to research showing advantages for adult L2 learners (e.g., Salvatierra & Rosselli, 2010) and to research on older adult multilinguals (de Bot & Makoni, 2005; Lenet et al., 2011; Mackey & Sachs, 2012). Findings have implications for reducing societal stereotypes of aging and for the education of experienced language learners and older adults.

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Do child L2 learners use case marking incrementally to resolve structural ambiguities or not?

Case marking in German is used to assign grammatical function such that word order is flexible. Subject-Verb-Object (SVO) and Object-Verb-Subject (OVS) surface orders are thus possible, but not always immediately distinguishable due to inflectional syncretism. More precisely, case morphology can be ambiguous requiring speakers to wait for disambiguating case marking later in the sentence, or sentences can be globally ambiguous. The production of case marking has been shown to be a source of errors until the end of elementary school (age 10), especially for Turkish-German children (Grießhaber, 2007). This study investigates how monolingual German children (n=20) and adults (n=25) and Turkish-German children (n=10) (mean age= 7,2) perform during a sentence-picture matching task while hearing SVO or OVS sentences with female case ambiguous initial NPs and disambiguating male 2nd NPs (1), (2) and SVO or OVS sentences presenting already a clear disambiguating case marking on the 1st (male) NP (3), (4). While participants listened to the sentences, their eye-movements to the two possible pictures were monitored.

(1) SVO, first NP female Die Oma hat am Mittag den Opa aus Versehen geweckt.

(2) OVS, first NP female Die Oma hat am Mittag der Opa aus Versehen geweckt.

The grandma ((1) (2) female, ambiguous) has in the afternoon the grandpa ((1) male, accusative (2) male, nominative) accidentally woken up.

(3) SVO, first NP male Der Opa hat am Mittag die Oma aus Versehen geweckt

(4) OVS, first NP male Den Opa hat am Mittag die Oma aus Versehen geweckt.

The grandpa ((3) male, nominative (4) male, accusative) has in the afternoon the grandma ((3) (4) female, ambiguous) accidentally woken up.

%	SVO	OVS	SVO	OVS
	NP1 female	NP1female	NP1 male	NP1 male
L2 Children	92	8	63	25
L1 Children	86	8	92	45
L1 Adults	98	55	95	93

The results show that both L1 and L2 children have strong difficulties to comprehend OVS sentences with a female first NP, where the disambiguating case marking appears later in the sentence. Even adults perform poorly in this condition.

OVS sentences with a male first NP are in contrast well understood by the adults. L2 children rely more strongly on word order than on case marking. L1 children perform better, but do not show adult like patterns, contrary to results reported in Dittmar et al., 2008. During SVO sentences the L1 groups reach ceiling while surprisingly, the L2 children have difficulties with SVO sentences when the first NP is male. The results will be discussed together with eyetracking data revealing an online reaction to the grammatical cues by all three groups before selecting the picture.

Cecile De Cat and Ekaterini Klepousniotou

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Representational deficit or processing effect? An RT and ERP study of noun-noun compound processing by very advanced L2 English speakers

Noun-noun compounds (NNCs) are syntactic structures that vary cross-linguistically in terms of headedness and productivity (Libben 2006; Zipser 2013). The interpretive relation between the nouns is determined by phrasal semantics, and does not depend on information structure or pragmatics. In English, no morphology is needed to encode that relation. NNCs are a core-grammar phenomenon par excellence, predicted not to induce L1 effects in highly proficient L2ers (Slabakova 2008; Sorace 2011).

We investigate the processing of NNCs in adult L2 in terms of accuracy, reaction time (RT - Study 1) and Event Related Potentials (ERP - Study 2). The aim of the studies is to distinguish potential representational deficits from processing difficulties.

METHODS: In each study we tested 2 x 10 very advanced learners of English (with German/Spanish L1) + 10 controls; henceforth GermGr, SpanGr, controls. German and English feature productive compounding and head-last word order in the DP. The reverse is true in Spanish. Participants evaluated the grammaticality of 120 irreversible English NNCs (featuring 4 types of semantic relation (N = 30 for each)), presented visually in 2 Word-Orders (grammatical (as in 1a) vs. ungrammatical (as in 1b)), following masked priming of the intended head noun (total N = 240).

- (1) a. concert ticket (Grammatical Word Order: modifier - head)
 b. *knife bread (Ungrammatical Word Order)

ANALYSIS: The data are analysed by Mixed-Effect Modelling (accuracy and RT data) and Generalised Additive Modelling (ERP data), for their advantage over classical methods in dealing with correlation patterns. In both studies, response accuracy is predicted by L1 and Word Order but not Proficiency. Accuracy in the Ungrammatical Word Order condition is significantly lower for SpanGr (but not GermGr) compared with the controls. L2ers are significantly slower than the controls in both conditions, with no significant difference between L2 groups (Study 1). The type of semantic relation has no significant effect (in accuracy or RT). Analysis for Study 2 is nearly complete, and will result in a decompositional non-linear model, combining a hypothesis about a non-linear trend (i.e. time) with contrast curves for the various factors that prove to contribute significantly to explaining the variability in the data. This will enable us to investigate potential differences in how NNCs are processed by each group.

INTERPRETATION: We argue that target-like acceptance of compounds in the grammatical order rules out a representational deficit in the L2. We propose the Inhibition Hypothesis, according to which L2ers will continue (marginally) accepting/producing ungrammatical structures that are licit in their L1 because their processor is not capable of fully inhibiting these structures. This predicts (i) a correlation with inhibition abilities (Executive Function) and (ii) that "false alarms" predominate even when "misses" are below significance (Detection Theory).



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Are perfectionists more anxious foreign language learners and users?

Gregersen & Horwitz (2002) were the first researchers to look at the link between the personality trait perfectionism and Foreign Language Classroom Anxiety (FLCA), comparing the feedback from four highly anxious and four low-anxiety foreign language students. Both groups differed ‘vastly’ (p. 568), with the high anxiety students showing evidence of perfectionism such as high personal performance standards, procrastination, emotional responses to evaluation, and error-consciousness. The present study is the first large-scale quantitative investigation into the link between perfectionism and FL(C)A. Three different groups of English Foreign Language learners and users filled out Perfectionism and FL(C)A scales: 552 Japanese university students filled out the MSPS (Sakurai & Ohtani, 1997) and a part of the FLCAS (Horwitz, 1986); 69 Saudi students filled out the FMPS (Frost et al 1990) and the FLCAS; and 85 adult multilingual Londoners filled out the FMPS and a questionnaire on Foreign Language Anxiety (Taguchi et al. 2009).

Statistical analyses revealed a significant positive relationship between perfectionism and FL(C)A in the three groups. Further analyses showed a strong relationship between FLCA and the subscales ‘Fear of negative evaluation’ and ‘Perfectionistic inefficiency’ in group 1, ‘Parental criticism’, ‘Doubt about Actions’ and ‘Concern over Mistakes’ in group 2, and ‘Doubt about Actions’ and ‘Concern over Mistakes’ in group 3. We conclude that Gregersen & Horwitz’s (2002) qualitative findings from a small sample are backed up by statistical evidence extracted from this large database based on data from EFL learners and users on three different continents. It confirms the finding that FL(C)A is linked to a wide range of higher-order and lower-order personality traits (Dewaele, 2012, 2013).

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Thinking in a second language reduces the illusion of causality: Further evidence on the Foreign-Language effect

Previous studies have demonstrated that people are more rational and less biased when they are required to make decisions in a foreign language (Costa, Foucart, Arnon, Aparici, & Apesteguia, 2014; Keysar, Hayakawa, & An, 2012). The main purpose of the present study is to investigate the foreign language effect in a causal learning task that usually drives people to develop an illusory perception of causality. When an event occurs with the same probability in the presence and in the absence of the potential cause, there is no causal relation between them, but people often tend to develop the illusion that a causal relationship exists (Matute, Yarritu, & Vadillo, 2011).

Forty participants volunteered for this experiment. They were all native speakers of Spanish (L1) and had a high proficiency in English (L2). The study was divided in two experimental sessions. In the first one, participants completed a self-evaluation questionnaire for language proficiency (L1 and L2), a comprehension test to assess L2 understanding, and the 'Cognitive Reflection Test' (Frederick, 2005). After the first session, participants were divided into two experimental groups with no statistically differences in language proficiency, comprehension or cognitive reflection. In the second session, participants performed an adaptation of the causal illusion task (e.g. Matute et al., 2011), one group in Spanish, and the other one in English. Participants were asked to imagine being a medical doctor and to observe a number of records of fictitious patients affected by a disease which might be cured by a new and experimental medicine. In each trial, participants saw whether a given patient had taken the medicine (i.e. cause present or absent), and whether that patient felt better or not (i.e. effect present or absent). In total, each participant saw 40 patients. Seventy-five percent of them felt better no matter whether they took the medicine or not. Therefore, the objective contingency between the medicine and healing was zero. Once participants had seen all patients, they had to answer an effectiveness judgment question.

Overall, the results showed statistical differences in the causality perceived between the medicine and the healing in both groups. Specifically, participants that performed the task in their second language judged the medicine as less effective than the participants that performed the task in their native tongue. That is, these results provide further evidence in favor of the foreign language effect: the illusion of causality, like other heuristic biases, can be reduced by presenting the problem in a foreign tongue.



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Lexically-guided perceptual learning in a non-native language

Previous studies demonstrated that native listeners use their lexical knowledge to successfully adapt to an ambiguous input. This adaptation, termed lexically-guided perceptual learning (Norris et al., 2003), manifests itself in a shift in the phoneme category boundaries. For lexically-guided perceptual learning to occur the listener should regard the item containing the ambiguous sound as a lexical unit (Norris et al., 2003; Scharenborg & Janse, 2013), and the sound needs to be ambiguous ‘enough’ to induce retuning.

The question that arises is whether lexical information in a non-native language is specific enough to induce phoneme category retuning. To our best knowledge, only one study so far (Reinisch et al., 2012) has shown that lexical knowledge in a non-native language induces lexically-guided perceptual learning, at least when the sound contrast ([f]-[s]) is similar in the native (German, L1) and non-native (Dutch, L2) language. The present study further investigates whether category retuning is possible when listening to a non-native language, focusing on the question whether lexical representations containing sounds that have larger differences in their pronunciation between the native and non-native language can induce category retuning ([l]-[r]). Retuning might not occur, however, since not only do L2 listeners typically have a smaller vocabulary, when the sound contrast differs from the pronunciation in the native language, lexical representations might be phonetically less specified so that an ambiguous sound might not be deviant enough to induce retuning.

A two-phase experiment was conducted. During the exposure phase, 27 native Dutch participants listened to a story in English, where either all (19) words containing an /l/ or all (19) words containing an /r/ sound were made ambiguous. Subsequently, participants performed a phonetic categorization task on a range of ambiguous sounds from the [l]-[r]-continuum.

The phonetic categorization results revealed that listeners exposed to the version of the story where all the /r/-sounds were replaced by the ambiguous sound gave significantly more /r/-responses than the listeners exposed to the version of the story where all /l/-sounds were replaced by the ambiguous sound ($p < .01$). This difference in number of /r/-responses between the two listener groups is the lexically-guided perceptual learning effect. Listeners are thus able to exploit lexical information necessary for phoneme category retuning when listening to a non-native language, even when the sound contrast differs from the pronunciation in the native language.

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Reference to entities in a narrative discourse: Comparative study of English L2 and L3 among Lebanese learners

Our study focuses on the influence of source languages, Lebanese (L1) and French (L2) on the acquisition of English L2 and L3 (Trévisiol, 2012) observed during the introduction of entities in a narrative discourse. This analysis demonstrates the specificity of studied languages and the variation of their linguistic processes. In addition, it contributes greatly to the understanding of the Lebanese dialect, never studied until now in terms of introduction of entities in a narrative discourse.

Two groups of Lebanese students (82 subjects) aged 10, 13 and 16 relate orally a narrative film (Watorek, 2004a) in English L2 (first foreign language after Lebanese L1) and English L3 (second foreign language after French L2). This panel of learners allows us to compare the acquisitional sequences emerging from their productions. Francophones, Libanophones and Anglophones native adults were submitted to the same verbal task in order to identify the role of source languages.

Our research is part of the functionalist approach (Perdue, 2002) and is based on the model of the quaestio (Klein and von Stutterheim, 1991) that allows us to analyze the relation between informational structure of the discourse and the clausal structure of utterances.

The source languages' influence is detected on several different levels.

At a discursive level, learners introduce mainly one of the two protagonists in the background as in Lebanese (L1).

At a morpho-syntactic level, they realize the introduction by an existential structure in the past attested in their mother tongue (Lebanese L1). In addition, the progressive aspect (V- ing) is typically observed among learners aged 10 and 13 while native English speakers do not introduce the protagonists with this form.

At a lexical level, the English L3 learners borrow lexemes from the source languages and build idiosyncratic units.

The NP structure in English L3 is marked by French L2 influence only at the age of 10 where learners precede the English noun by a French determiner. They notice the resemblance between the French and English determiner's system which is clearly far from the L1 system. In English L2, the overuse of indefinite article at the age of 10 and 13 years disappears at 16 years.

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Word writing as a means of improving quality of L2 lexical representations: Does it make a difference?

In L2 lexical development, perhaps the most obvious hurdle is the writing system, especially when native speakers of a logographic language (e.g., Chinese) are learning an alphabetic language (e.g., English), and vice versa. However, few studies have investigated whether word writing as a means of focussing learners' attention on L2 word forms has a positive effect on the development of L2 lexical representations. In learning L2 (English), Thomas and Dieter (1987) found advantages for L2 word writing with a group of French learners. Barcroft (2007), however, reported less encouraging results for L2 (Spanish) word learning. To our knowledge, all English learning studies on this topic were conducted with speakers of alphabetic languages, and the question remains whether the act of writing helps speakers of logographic languages to establish more robust orthographic representations for an alphabetic L2 (e.g., English). This question is addressed in the present study.

Participants (Chinese speakers) were recruited primarily from the University English Proficiency Programme, and their L2 (English) proficiency was at 5.5 – 6.5 IELTS. In the study, they learned 48 previously unknown English vocabulary items under two counterbalanced conditions: (1) focus on meaning (guessing the meaning from context) and (2) focus on form (writing items to learn their spelling). After the learning phase, participants completed an immediate test of word knowledge (form and meaning). The following day, they completed three priming tasks to evaluate the quality of L2 lexical knowledge achieved for the two learning modes. Supplementary data about participants' linguistic background was collected using a short background questionnaire and two vocabulary size tests (receptive and productive). A short interview was conducted after the delayed post-test to elicit participants' view on the two approaches to word learning. The test data (accuracy of responses and reaction times) were analysed using mixed effects modeling, with participants and items treated as crossed-random effects. The learning conditions were used as primary interest predictors in the models, while participant and item characteristics were used as secondary interest predictors.

The results of the study extend our knowledge about the merits of writing down words as part of the vocabulary learning process, specifically in relation to Chinese students learning English. By using both traditional tests and psycholinguistic measures of lexical knowledge the learning outcomes of different instructional approaches can be examined more fully (probing both explicit and implicit lexical processing).

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Linguistic capital in non-elitist CLIL

Content and language integrated learning seeks to, by definition, foster language learning (Dalton-Puffer 2011). This demands a clear focus on vocabulary acquisition/learning and vocabulary growth. CLIL proponents have repeatedly pointed out that such growth can be expected to happen as part of an immersive or incidental language learning methodology (Perez-Canado 2011). However, there seem to be two challenges to such a view. First, positive evidence for linguistic growth appears to be restricted to selective and elitist environments (Bruton 2011, Coyle, Hood & Marsh 2010, Dalton-Puffer 2011). Second, there is a growing body of evidence on the rather limited effect of incidental language growth in instructed settings (Laufer & Nation 2012, Nation 2011, Rebuschat 2013). In other words, today's prevalent optimistic expectations regarding the linguistic impact of a language bath through CLIL, as reported by teachers and other proponents in the field, may need to be carefully re-evaluated.

This paper presents findings from a study on possible linguistic capital induced by a non-elitist, school-wide CLIL project in an Austrian lower secondary school. Based on both qualitative and quantitative data, vocabulary learning was traced in terms of implicit word learning potential and actual vocabulary growth. The qualitative data comprised 10h of semi-structured interviews, classroom observations, stimulated recall reflections as well as detailed analyses of a teacher's instructional input. The quantitative data came from a standardised orthographic vocabulary size test (Meara & Milton 2003) in order to tap into possible vocabulary growth. The analysis of the teachers' input indicates a redundancy of high-frequency words in the instructions. And although this might seem pedagogically justified with respect to the entrenchment of basic vocabulary (Ellis 2013), advanced word learning through rich input is not very likely to materialise. The results of the quantitative data reveal a comparably poor performance of the CLIL group over time as well as considerable and partly significant effects for context variables on the vocabulary scores.

Overall, the data may point towards some sort of "Matthew" – or threshold-effect for CLIL's linguistic capital (Rigney 2010, Sundquist 2009, Sylven & Sundquist 2012, Zydaniß 2012). In other words, language baths or language flooding might be insufficient when catering for pupils in non-elitist CLIL settings. One way of compensating for such threshold effects could be complementing incidental language learning by deliberate and form focused vocabulary instruction, especially for low achievers (Loewen 2011, Milton 2009, Nation 2011).



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Cognitive Load Measurement in Task-Based Research: Advantages and Caveats of Subjective Time Estimation and Self-Ratings

Task-based language teaching (TBLT) - a form of instruction in which communicative tasks serve as central units in an L2 curriculum planning - has gained much prominence in the recent years. In this context, several operational taxonomies, striving to provide guidance for task-based syllabus design, have appeared, such as the Cognition Hypothesis (Robinson, 2001). In this model, intrinsic cognitive demands of a task - termed by Robinson as task complexity - are proposed as the sole operational basis in the design and sequencing of language learning tasks. Provision of evidence for the validity of task complexity manipulations during task design is one of the main concerns for the researchers and syllabus designers who draw on Robinson's theorising. In this regard, the employment of tools capable to measure task complexity (ie., to measure the cognitive load of a task) efficiently and validly, becomes crucial.

In this paper, the multidimensional construct of cognitive load is discussed (Xie & Salvendy, 2000), followed by the review of the current state of the cognitive load measurement in the TBLT context (Révész et al., 2013). Next, we present an empirical study in which subjective time estimation (Thomas & Weaver, 1975) and self-ratings (Paas et al., 1994) were employed to assess and compare the cognitive load imposed by the simple versus complex conditions of an L2 writing task. At test, N=51 EFL learners (L1 Catalan and L1 Russian) performed during two sessions, the simple and the complex versions of an L2 writing task. After each session, the subjects rated the perceived cognitive load on a nine-point Likert scale, and also estimated (in minutes and seconds) the perceived duration of the task performance. The analysis of the Likert-scale ratings revealed that the subjects perceived the cognitive load to be higher in the complex task, as it was predicted. In contrast, time estimation failed to discriminate between the task conditions. We conclude by providing tentative explanations for the insensitivity of the time estimation technique in our study (e.g., familiar environment, etc.), and finally single out the added value of combining various cognitive load measures in the same experiment.

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Construct validity of grammaticality judgment tests: An eye-tracking perspective

Grammaticality judgment tests (GJTs) have a long tradition in second language acquisition as a measure of L2 learners' linguistic knowledge. Following Ellis (2005), the construct validity of the test has received increasing attention. Researchers have claimed that test properties such as time pressure and the grammaticality of test items affect the type of knowledge measured, whether implicit or explicit (Bowles, 2011; Gutiérrez, 2013). However, because current evidence is based on analyses of accuracy scores, alternative explanations (e.g., in terms of test or item difficulty) cannot be ruled out. Therefore, the present study seeks to corroborate performance-accuracy-based claims about what the tests measure with processing data obtained through eye-movement registration.

Twenty native and 40 nonnative English speakers of varying proficiency levels participated in the study. Participants first judged 68 sentences under time pressure and then judged the same 68 sentences without time pressure. Following an inductive qualitative analysis, we identified a number of sentence-reading patterns which we hypothesize to be associated with more and less implicit types of processing. We report the occurrence of these reading patterns among correct trials in the timed and untimed, and grammatical and ungrammatical conditions. We expect that time pressure will affect the proportion of regressions (i.e., rereading earlier parts of the sentence), with more regressions occurring in the untimed condition and more straight passes in the timed condition. Grammaticality is predicted to affect the launch and landing sites of regressions and the point at which participants make a decision (and hence stop reading) in straight passes. All eye-movement measures are expected to interact with participants' proficiency level.

The proposed analysis could help reconcile the mixed findings reported in previous studies about the roles of time pressure and grammaticality on test performance. Furthermore, this study is methodologically innovative in that it does not analyze eye-movement data for a single region of interest but considers the scanpath for the whole sentence (cf. Von der Malsburg & Vasishth, 2011). We argue that processing data in the form of eye movements can make a valuable contribution to understanding the types of knowledge that different types of GJTs measure.

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Gender feature transfer from L2 Spanish to L3 Arabic

Recent work on third language (L3) acquisition has indicated “some level of transfer can be assumed” (Rothman et al. (RIJ), 14), both from the L1 and the L2; several studies have investigated transfer of uninterpretable features such as grammatical gender, an area previously explored in Indo-European languages (references in RIJ special issue). Rothman’s Typological Proximity Model (TPM) holds that Proximity facilitates transfer. The present study compares L1 and L2 influence or transfer of grammatical gender in subjects with L1 English (no gender feature), L2 Spanish (nominal gender), and non-Indo-European L3 Arabic (nominal and verbal gender), ascertaining 1) whether these L3ers outperform Anglophone L2ers learning Arabic and 2) whether L2-L3 gender transfer is restricted to a specific functional head.

Both Spanish and Arabic have gendered nouns (interpretable gender [igen]) and agreeing adjectives with uninterpretable gender ([ugen] on A): la mesa blanca ‘the-fem table-fem white-fem’ / al taalib-a jeyida-a ‘the student-fem good-fem’. Unlike Spanish (or English), Arabic also shows gender agreement on the verb ([ugen] on T): al taalib-a ta-drus ‘the student-fem fem-studies’. For Anglophones, L3 transfer of [ugen] to Arabic could be restricted to DP (as in L2 Spanish) or could generalize to both DP and TP.

Subjects included 14 college age students of beginning Arabic (2.5 months instruction), six with 3+ years of L2 Spanish (Experienced Spanish, ExpSp), eight with little or none (Minimal Spanish, MinSp); grammaticality judgment tasks of 60 items each were administered in both Spanish and Arabic. Results indicated a significant effect of ExpSp for both overall proficiency ($t(9) = 0.341, p < .05$) and DP-TP gender agreement in L3 Arabic ($t(9) = 0.149, p < .01$) Table 1.

The results (Table 1) show 1) a significant role of L2 ExpSp for both overall proficiency and DP-TP gender agreement in L3 Arabic, indicating a general facilitation of language learning for L3 over L2 learners of Arabic. Furthermore, 2) the results suggest specific transfer of the [ugen] feature (absent in L1 English, but present in L2 Spanish) to both DP (A) and TP (T) in a typologically distinct L3 Arabic. While typologically similar languages have been shown to facilitate transfer, our results show that L2 ufeatures may generalize transfer to a distinct and new functional head in L3.

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Table 1. Proficiency measures

	Arabic scores		Spanish scores	
	Overall	Gender (DP, TP)	Overall	Gender (DP)
	Min Span	(n=8)	Min Span	(n=8)
Score	324/624	169/288	170/640	93/320
%	52%	59%	27%	29%
	Exp Span	(n=6)	Exp Span	(n=6)
Score	334/468	158/216	391/480	201/240
%	71%	73%	81%	84%

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DPs as conflict sites in Papiamento-Dutch-Spanish multilingualism

Papiamento is generally SVO (Kook & Narain, 1993) with post-nominal modifiers and no gender (example 1). Dutch, in contrast, is considered to be a language with no dominant word order with regard to S, V and O (Dryer, 2008) but it has pre-nominal modifiers and a gender system distinguishing common and neuter gender (example 2a-b). Spanish generally is SVO and has a binary masculine/feminine gender system (example 3a-b), and adjectives may appear pre- and postnominally depending on their semantics (example 3c) (Bernstein 1993, 2001; Demonte, 2008; Zagona, 2002). Following Hartsuiker, Pickering and Veltkamp (2004), amongst others, we wish to investigate how much syntax is shared amongst these three languages within the mind of a multilingual speaker in a language contact situation.

More concretely, this cross-sectional study aims to explore whether bilingual competence can indeed be identified as showing different effects leading to instability in the bilingual speakers' competence in one or all languages at play, specifically when they are compared to monolinguals. We designed two off-line tasks (i.e., a 60 items grammaticality judgement task and a 20 items context based collocation production task) and two online experimental tasks (i.e., sentence verification task and event-related brain potentials (ERPs)) measuring gender concord and adjective placement. All participants also completed an ethno-linguistic questionnaire that sought information concerning their mother tongue, languages spoken and the frequency with which each language is spoken, age of first exposure to each language, together with a proficiency test in their respective languages. 24 (age mean=27) early Papiamento-Dutch-Spanish trilinguals originating from Curacao and Aruba but living in the Netherlands participated together with two monolingual speaker groups (24 Spanish (age mean=26) and 24 Dutch (age mean=23) monolinguals). Group results show that our bilingual speakers are subject to different effects in the morpho-syntactic domain, some of which we argue result from processes of interference. Our ERP results provide further support for the hypothesis that the bilingual mind has spontaneous, implicit access to the grammars of the different languages. We discuss the implication of these findings in reference to current heritage language acquisition debates (i.e., whether the differences observed amongst the groups are due to incomplete acquisition and/or heritage language attrition), and conceptualize such effects as part of broader processes of morpho-syntactic change and contact-induced language change innovation (Kootstra & ?ahin, 2013).

Examples:

- | | | | |
|-----|------------|--|------------------------|
| (1) | Papiamento | un kabai blanku
a horse white | = "a white horse" |
| (2) | Dutch | a. Het witte paard
The white horse | = "the white horse" |
| | | b. De witte deur
The white door | = "the white door" |
| (3) | Spanish | a. Esta mesa negra | = "this black table" |
| | | b. *Estos mesa negros | = "these black tables" |
| | | c. Un amigo Viejo vs. Un viejo amigo | |
| | | 'An old friend' vs. 'An elderly friend | |



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The Development of the Verb Phrase in French as a Foreign Language: Complexity, Variation and Systematicity

In the field of SLA, second language development and proficiency have often been related to Complexity (as part of the CAF triad, cf. Housen, Kuiken & Vedder, 2012), Variation (Verspoor, De Bot, Lowie, 2011) and Systematicity (Pienemann, 1998). Measures of complexity, such as subordination ratios, have been used as indicators of language proficiency and language development. Various scholars (e.g., Ortega, 2003) question the assumption, however, that complexity will always develop linearly. In other words, complexity may be a valid measure for describing linguistic performance with all of its variation, but not for investigating language development itself (see Pallotti, 2009). In order to examine the systematic process of language development other measures are needed.

In light of this background, written L2 French data was collected cross-sectionally (the corpus consists of three groups with L1 Dutch: Group I/14-yr olds; Group II/16-yr olds; Group III/18-yr olds). We administered a semi-structured writing task. The data was analyzed with measures targeting the lexical, morphological and syntactic complexity of the French verb phrase. As expected, the results show variation between and within groups. However, focussing on the insertion of pronouns in the VP, and in combination with the emergence criterion (see Processability Theory, Pienemann, 1998), we found a systematic, and stage-like, development. The results suggest that pronouns are gradually inserted in the VP, according to increasing complexity levels of the VP.

We conclude that complexity measures are valid measures to picture the variation in second language development, but are not useful to capture systematic developments. The fact that these measures do not show systematic developments should not be interpreted as definitive proof against systematic development altogether. Following Pallotti (2009: 590), we believe that research should not only be concerned with variations but also with constants and similarities. With this paper, we want to counterbalance the recent appeal and greater importance that is granted to variation as an explanatory variable in SLA research.

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Segmental Acquisition by Japanese Learners of English in Foreign Language Classroom Conditions: A Longitudinal Study of Vowel Production

Studies on second language (L2) phonetic learning (e.g., Flege, Takagi & Mann, 1995) show that segmental acquisition in adult learners can occur over time through experience with the L2. Furthermore, a number of researches suggest the effect of the experience is most evident in the first year of living in an L2 environment (Flege & Fletcher, 1992; Munro & Derwing, 2008), and the quality and quantity of L2 experience play a significant role of L2 phonetic learning (e.g., Liu & Flege, 2001). However, previous work in this area has been conducted mostly in L2 environment in which the target language is predominant, therefore; it remains uncertain whether or not the findings will apply to the L2 phonetic learning in a foreign language (FL) environment in which the use of L2 is limited mainly in classrooms. This study investigates took longitudinal approach towards investigating the extent to which and in what way L2 experience can facilitate FL vowel acquisition by 30 first-year Japanese students who had first massive spoken exposure to English after enrolling an English-medium university program where almost all instruction was conducted In English.

The participants' productions of 10 English vowels in CVC contexts (/pVt or bVt/) were elicited via a delayed repetition task at four different point over one academic year (1 months, 3 months, 7 months, 9 months), and analysed acoustically. The results show that during the one academic year of the program, Japanese students were found to shift their English vowels in order to make a contrast each vowel without explicit pronunciation instruction. However, the separation of each vowel was not complete, showing different development trajectories among vowels. The results can suggest that although in FL conditions L2 phonetic learning can be possible even in the FL condition with a limited amount of L2 use, difficulty in the acquisition of L2 vowels varies probably due to L1 influence, and more L2 experience and/or language focused instructions may be needed for FL learners to acquire target-like production of L2 vowels.



Hanna-Ilona Härmävaara

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Using cross-linguistic knowledge for understanding and learning a cognate language in interaction

This paper investigates how Finns and Estonians with no formal instruction in the cognate language navigate in conversations conducted in Finnish and Estonian. It aims to shed light on the process of understanding a cognate language and to show how these informal conversations can function as a forum for language learning. The data consist of 12 hours of naturally occurring, multilingual multiparty conversations between Finns and Estonians (altogether 35 informants). The data are analyzed by using the tools of conversation analysis. Analyzing participants' linguistic actions in conversations opens up a view to their socially shared cognition, and makes it possible to detect events through which learning is constituted in interaction (see Sahlström 2009).

As relatively closely related languages, Finnish and Estonian are mutually intelligible to some degree. However, the actual linguistic closeness does not guarantee recognizing and understanding linguistic items; in interaction the participants operate with perceived similarity and metalinguistic awareness (see de Angelis 2007, Ringbom 2007). The participants do not necessarily have accurate knowledge about the cognate language, but they operate with a constantly reshaping working hypothesis about cross-linguistic equivalences, that I call cross-linguistic knowledge. This study focuses on the moments when cross-linguistic knowledge becomes evident on the surface of the interaction; when the participants comment on their thinking process or when the knowledge is being jointly constructed by discussing and comparing the languages.

By analyzing the interactional data the following categories of cross-linguistic knowledge arise: The participants assume that in addition to the dissimilar, mutually non-intelligible elements the languages have 1) similar elements that mean the same, 2) similar elements that mean almost the same, 3) elements that sound similar, but their meaning differs, 4) loanwords that can be understood via the donor language. They also assume that 5) an item in the cognate language can be intelligible through a dialect of one's mother tongue, 6) there are phonological correspondence rules that can be used for deriving an item in one language from an item in the other language. Furthermore, the analysis shows that cross-linguistic knowledge allows the participants to make creative inferences that often serve well in understanding the cognate language. Sometimes a wrong assumption causes problems in the interaction, but declaring one's hypothesis allows it to be tested, which in turn serves as a platform for learning. Often a participant who shares their hypothesis, position themselves as a learner, which can lead to a teaching activity.

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Holger Hopp

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Prediction in L2 Sentence Processing: Semantics versus Morphosyntax

Recent findings in sentence processing show that prediction plays a central role in language comprehension in that listeners actively anticipate upcoming information based on morphosyntactic, semantic and other cues (e.g. Altmann & Mirkovic, 2009). Against the backdrop of current models of L2 sentence processing (e.g. Clahsen & Felser, 2006), this study investigates whether adult L2 learners also use morphosyntactic and semantic information for on-line prediction.

In a visual-world eye tracking experiment modelled on Kamide, Scheepers & Altmann (2003), twelve native and 45 L1 English intermediate to near-native late L2 speakers of German listened to transitive sentences as in (1) while looking at displays featuring all possible referents and distractors. In contrast to the SVO sentence in (1a), (1b) has OVS order, where accusative case marks the first NP as the object.

- (1) a. Der Wolf tötet gleich den Hirsch.
 TheNOM wolf kills soon theACC deer
 ‘The wolf will soon kill the deer.’
 b. Den Wolf tötet gleich der Jäger.
 TheACC wolf kills soon theNOM hunter
 ‘The hunter will soon kill the wolf.’

We measured whether listeners make anticipatory eye movements to the referent of the second NP after hearing the case-marked first NP and the verb. Native speakers show an interaction of sentence structure and referent, i.e. they launch anticipatory looks to the patient in (1a) and looks to the agent in (1b) before they hear the second NP. Natives thus combine case marking and verb semantics for prediction. In contrast, the L2 group only shows a main effect of referent, i.e. they make predictive looks to the patient for both (1a&b).

Predictive processing does not change as proficiency rises; i.e. even advanced-to-near-native L2 learners do not use accusative case on the first NP and look to the agent. However, as proficiency rises, L2ers are faster to recover from an erroneous prediction in (1b) when integrating the second NP. These findings suggest that proficiency moderates the integration of information (see also Hopp, 2006; Hoshino & Kroll, 2008), yet not the prediction of syntactic structure.

In sum, we find that intermediate to near-native L1 English learners of German use only (lexical) semantic, yet not morphosyntactic information for prediction in on-line comprehension. This stands in contrast to results from reading studies on comparable L2 samples (e.g. Hopp, 2010; Jackson, 2008), where even intermediate L2 learners were sensitive to case marking flagging object-first orders.

In this talk, we discuss reasons for why adult L2 learners experience greater difficulty in predicting than in integrating morphosyntax in on-line comprehension, and we situate the findings in the context of current approaches to prediction in (L2) comprehension (e.g. Grüter & Rohde, 2013; Kaan, in press; Kamide, 2008).



Amy Fang-Yen Hsieh and Teresa Parodi

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The role of first language in second language syntactic processing

The role of first language (L1) in second language (L2) processing is a controversial issue. Some researchers argue for an influential role of L1 in L2 processing, suggesting every linguistic element is filtered through the L1 parser in some way (e.g. Juffs, 2005), whereas some others minimise its role in real-time processing and propose that processing is not affected by L1 morpho-syntactic structures but instead relies more on some universal strategies, such as lexical and pragmatic strategies (e.g. Clahsen & Felser, 2006) or strategies related to “structural distance” (e.g. O’Grady, 1999). This study re-examined this issue with the case of L2 processing of relative clauses (RC).

Several theories have been proposed to explain the asymmetry between processing subject-extracted RC (SRC) and object-extracted RC (ORC). In terms of English RC, which is a head-initial structure, all the theories predict processing SRC is easier and this prediction has been confirmed by many studies. However, as for Chinese RC, which is a head-final structure, some theories (e.g. Active Filler Strategy, Incremental Minimalist Parser) will predict SRC is easier to process while some others (e.g. Syntactic Prediction Locality Theory, Canonical Word Order Theory) will indicate an ORC preference, and there are mixed findings in the literature. The present study aimed to first find out the processing preference of RC by native Chinese speakers and then further investigate the L1 influence in processing L2 RC in English.

The participants were 15 native Chinese speakers and 48 Chinese L2 learners of English. They completed a syntactic priming comprehension and production task in Chinese and in English, respectively. The results showed there was no significant difference between processing SRC and ORC in Chinese by native speakers. However, a significant SRC preference was found in L2 processing in English, regardless of the L2 proficiency level. These findings appear to weaken the role of the L1 in L2 processing. Even though Chinese speakers do not have a clear preference in processing Chinese RC, Chinese learners show the same RC processing preference as native English speakers. However, it does not suggest that L2 learners use the same processing strategies as native speakers, since a few structural errors, such as missing relative pronouns in SRC, were found in the production data. It echoes Clahsen and Felser’s (2006) assumption that the syntactic representations in L2 processing are shallower and less detailed than those of native speakers.

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Testing language learners' cognitive skills - what is the effect of the language of the instruments on the validity of results?

For several decades researchers have been interested in the role of basic cognitive skills such as phonological processing and speed of lexical access in L1 reading acquisition and prediction of reading disabilities. However, this kind of approach is not yet common in SLA although some research on the cognitive basis of the broader linguistic and communicative aspects of language proficiency and learning exists (e.g. Sparks et al., 2008). Such research investigates, e.g., if working memory capacity or phonological efficiency predict proficiency in L2, and if they can help identify struggling learners.

This paper addresses a fundamental assumption in the measurement of 'basic cognitive skills', namely that it should be done by using measures in the informants' first or dominant language to avoid inaccurate results due to a low level of language proficiency (Lezak, Howieson & Loring, 2004). We argue that while this recommendation has some validity, it is sometimes impossible to identify learners' dominant language. Furthermore, using only one language only may give an incomplete or biased view of these basic skills and of their relationship with language skills.

Our data come from four different groups of young learners (about 200 per group), representing foreign and second language contexts. The learners took a range of measures of basic cognitive skills (e.g., working memory, phonological processing) similar to those used for detecting L1 dyslexia but in two language versions: in learners' L1 and in their second / foreign language. They also took a number of L1 and L2 language tests, motivation and background questionnaires.

Statistical analyses of the data show that, first, the correlations between L1 and L2 versions of the cognitive tests were far from perfect suggesting that they only partly measure the same constructs and, second, the L1 and L2 measures (of purportedly the same constructs) formed separate factors that can best be explained by the different languages used in them. Thirdly, L1 and L2 cognitive measures also related somewhat differently to measures of L2 reading and writing. Some interesting variation existed between the groups. We discuss the implication of the results for instrument design and the validity of the results of studies on the relationship between cognitive skills and language proficiency, as well as for the testing of language aptitude where the test tasks often resemble measures of basic cognitive skills.

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Morphosyntactic development in a second language: An eye-tracking study on the role of attention

One widely held assumption within second language (L2) acquisition research is that attention to specific forms in L2 input allows for development of those forms. However, the majority of evidence supporting this claim, specifically with regard to morphosyntax, derives from studies without concurrent measures of attention or from studies with think-aloud protocols, which may be subject to underreporting and reactivity. Critically, to reliably assess attentional allocation and its relationship to L2 morphosyntactic development, a valid, concurrent measure of attention should be employed.

The present study takes such an approach by utilizing both theory and methodology from cognitive psychology in its research design and interpretation of results. The study is theoretically informed by an account of attention that distinguishes between external and internal attentional mechanisms, which tightly align with L2 instructional interventions that have been designed to manipulate attention. More specifically, input enhancement allows for examination of external attention on L2 development whereas structured input practice allows for examination of internal attention. Regarding methodology, the present study utilizes participant eye-movements as a measure of attention as they interact with these instructional interventions.

Three groups of novice Spanish learners learned a novel target structure: direct object pronouns—e.g., *lo in lo besa Maria* ('Maria kisses him')—which represents the theme in the sentence. All participants were exposed to this form through a picture-sentence matching activity in which a sentence was presented followed by two images, one of which depicted the sentence's meaning. After completing 30 items with no attentional manipulation, which served as a baseline measure, participants completed an additional 30 items under one of two attentional conditions (external/internal) or under a control condition with no attentional manipulation. The external attentional condition consisted of the presentation of the target form in a different color than the rest of the sentence, as in input enhancement. The internal attentional condition consisted of an initial presentation of two images which differed only in the theme, followed by the sentence containing the target form, which encoded the relevant linguistic information, as in structured input practice. Finally, L2 development was assessed with immediate and delayed interpretation tasks.

Preliminary results (N=11) suggest that both the external and internal attentional conditions led to increased attention to the target form as compared to baseline, at least descriptively. For the internal attentional condition only, regression analyses revealed that increased attention (measured by total number of fixations, $p=.037$ and skipping rate, $p=.009$) could reliably predict learning gains. Full results of the study (data collection ongoing) are expected to show how externally and internally directed attention contribute to L2 morphosyntactic development, which should have implications both for L2 and cognitive psychology theory as well as for understanding the effectiveness of particular instructional interventions.

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Beyond the "armchair" method of rating scale construction: Validating an empirically-derived L2 comprehensibility scale

Most rating scales in use today were derived using the "armchair" method (Fulcher, 2012)—an intuitive or experiential approach to scale development in which experts' impressions of the way that a second language (L2) ability incrementally manifests at different levels is superimposed on a linear scale or spectrum. Naturally, the quest for a perfect scale that is an exact representation of an L2 performance is futile. For example, scales necessarily underrepresent the complexity of learners' performances and, for the most part, bear little relation to learners' (possibly nonlinear) acquisition processes (Lumley, 2005). These limitations notwithstanding, in the case of pronunciation, consequences of the intuitive approach have led to considerable shortcomings in the quality of the descriptors in existing scales. For example, intuitively-derived pronunciation descriptors compiled from numerous scales were excluded from the global CEFR scales in a measurement-driven decision (erratic statistical modelling; North, 2000), partially reflecting the inadequacy of the descriptors themselves. Thus, pronunciation is relegated to the status of a stealth factor in cases when it does have bearing on evaluations of speech (Levis, 2006). Speaking scales that do include pronunciation are also problematic. Some haphazardly reference behavioral indicators across scale levels (e.g., ACTFL), whereas other so vague or general that the specific linguistic features that constitute level distinctions are often unclear, particularly when the notion of "comprehensibility" (listeners' perceptions of how easily they understand L2 speech, sometimes referred to as "intelligibility") is evoked (e.g., IELTS). Still other scales indiscriminately equate increasing intelligibility with a more native-like accent, contradicting robust evidence that, in fact, perfectly intelligible speech does not preclude the presence of a detectable L2 accent, whereas a heavy accent is a hallmark of unintelligible speech (Derwing & Munro, 2009). Thus, the constructs of intelligibility and accent need to be unpacked and not conflated in scale descriptors (Authors, XXXX). Developing an evidential basis for operationalizing pronunciation features in rating scales is essential for advancing the field and for generating more valid assessments.

This presentation reports on a research program on validating an empirically-derived L2 comprehensibility scale to guide teachers' identification of the linguistic features most conducive for learners' production of comprehensible English. After presenting results of an initial scale development effort involving 60 raters' judgments of 40 L2 French learners' comprehensibility, a synthesis of findings from Authors' subsequent studies, involving ratings of 180 L2 speakers from different L1 backgrounds, are presented. Taken together, results of statistical analyses of listeners' ratings, auditory analyses of the speech, and content analyses of focus group debriefings extend the original findings, shedding light on the linguistic factors that best discriminate between different comprehensibility levels, the generalizability of scale descriptors across L1s, and teacher assessment literacy issues in devising and interpreting pronunciation scale descriptors.



Rafal Jonczyk

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The bilingual brain and perception of emotional language: An ERP study

Current research on bilingualism suggests that late bilinguals may process emotions differently in their respective languages. This finding, however, is based on inferences from studies using behavioral and psycholinguistic methods and on bilinguals' self-reports (Pavlenko, 2012). Neurolinguistic studies can provide further insights into affective processing in bilingual speakers but the few studies to date have produced inconsistent results. The key weakness in this research is the focus on single decontextualized words that are not representative of everyday communication. The present study addresses this problem by introducing communicative context as an independent variable in two EEG experiments conducted with Polish-English bilinguals living in Poland and immersed bilinguals living in the UK. This is the first methodological approach to use ERPs with the same set of emotional stimuli in both languages that are exposed to the gradual increase of context saturation. An ERP component of interest in the study is the N400, which indexes the degree of stimulus predictability from the context as well as its emotional evocativeness, independently (Wu, Athanassiou, & Dorjee, 2012). Experiment 1 examines the processing of word-pairs consisting of a neutral, positive, or negative prime followed by a semantically related/unrelated positive or negative target, e.g.

funeral – devastated leaf – devastated* person – devastated luxury – devastated*

Experiment 2 examines the processing of neutral, positive or negative sentences ending in a semantically congruent/incongruent positive or negative target from experiment 1 e.g.

When her son was injured in the accident Claire was devastated / sexy* When Lily learnt what had happened to her dog, she was devastated / sexy* It is not the body but personality that makes one sexy / devastated* Katy's amazing curves and her great taste make her so sexy / devastated*

The study hypothesizes that with semantic congruity/incongruity being equal in both language contexts for bilinguals (1) a greater N400 to Polish stimuli reflects greater emotional reaction to stimuli in the native language (2) no N400 difference between languages indicates that with enough contextual information emotional stimuli in the L1 and L2 of bilinguals are similarly evocative.

The findings in the study provide important insights into the way bilingual speakers process emotions in everyday communication as well as into the role of context, L2 proficiency and context of acquisition in affective processing in bilingual speakers, which has implications for future research and language teaching.

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The development of complexity, accuracy and fluency (CAF) during study abroad: Investigating the Trade-off Hypothesis.

With an ever increasing number of learners participating in study abroad (SA) programs, this unique learning context has been established as a widely discussed theoretical issue within SLA research. Despite the popularity of SA, it remains unclear whether all participants stand to gain equally, in terms of language development, from a sojourn in the target-language community. This paper reports on a study of the extent of progress made in speaking skills by two groups of French (n=10) and Chinese (n=8) learners of English over a nine month SA period. Initial, medial and final Sociolinguistic Interview data were collected longitudinally and analysed in terms of complexity, accuracy and fluency (CAF) which have long been regarded as important features of L2 proficiency, and as a means by which L2 development can be measured (Housen and Kuiken, 2009). Following earlier research, CAF is viewed as a multidimensional and dynamic system of interrelating subsystems, conditioned by external factors such as context and time (Norris and Ortega, 2009). In relation to investigations of CAF, Larsen-Freeman (2009: 582) states that: "if we examine the dimensions one by one we miss their interaction and the fact that the way they interact changes with time as well". This interaction can be explained by means of the Trade-off Hypothesis (Skehan, 2001, 2003; Skehan & Foster, 2001), which theorizes that there is an inherent competitiveness between the three components of CAF. Put differently, raised levels in one component of CAF may lead to lowered levels in another. This paper will address the research question: "Is the trade-off effect equally evident among all learners and measures of CAF?" The results of the study suggest that learners both progress and regress based on the component, and measure, of CAF investigated. By means of quantitative results, the paper will illuminate the interplay and trade-off effects evident within CAF, among these two learner groups.

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The Effects of Recasts on L2 Pragmatics: The case of Korean honorifics

There have been the theoretical claims and research supporting the relationship between conversational interaction and language learning (Mackey 2007). However, the effects of recasts on the acquisition of pragmatic competence has received little attention. This paper investigates the relationships among recasts, learner uptake during task-based interaction, and L2 pragmatic development. The research questions are: 1) Is there a relationship between the provision of recasts and pragmatic development? 2) Is there a relationship between the occurrence of learner uptake and pragmatic development?

Twenty-five English-speaking learners of Korean at high beginning and intermediate-levels participated. The study employed a pretest-immediate posttest-delayed posttest design and featured both control and experimental groups. Korean honorifics were selected as the L2 pragmatics target because the grammatical pattern of Korean honorifics is the most systematic among all known languages (Sohn, 1999). Specifically, subject particle -kkeyse, verbal suffix -si, and their agreement were the focus of the Korean honorifics in this study. In NS-NNS dyads, participants completed a series of communicative tasks, which served as pretests, treatments, and two posttests.

The results showed no correlation between the number of recasts learners received during treatment and their gains in the accurate oral production of honorific subject marker -kkeyse, verbal suffix -si and their agreement. Also, no correlation was found between the rate of uptake and learners' accuracy gains from pretest to posttests in these pragmatic targets. The results suggest that learners' response to recasts may not be an indicator of linguistic development especially in pragmatics. These finding also indicate task-based interaction may not be effective in facilitating pragmatic development. Instead, explicit teaching (with metalinguistic feedback or explicit correction) may be more helpful. Learners' low gains in learning Korean honorifics may be due to the nature of the tasks used. That is, participants were asked to assume a hypothetical situation which required the use of honorifics, which may be different from real-life situations where the non-use of honorifics actually offends interlocutors.

Rosa M Jiménez Catalán

(University of La Rioja)

Looking at the role of CLIL on Spanish EFL learners' vocabulary performance in a fluency task

In the last years, Content and Language Integrated Learning (CLIL) has experienced a dramatic growth in many countries in Europe. Spain has not been an exception as nowadays most Spanish regions and communities have implemented in primary and secondary schools. CLIL is believed to enhance learners' motivation towards languages and to increase language exposure. It is a practical and inexpensive way of promoting bilingualism or multilingualism in classroom contexts. However, research on the effectiveness on CLIL is still scarce, inconclusive and has focused mainly on primary school children. More studies are needed, particularly on EFL learners coming from the same school context as to control for social variation. This study examines the vocabulary production of CLIL and non-CLIL EFL learners enrolled in a middle class high school. Our first objective was to investigate whether CLIL students retrieve a higher number of words than non-CLILs in a time controlled fluency task. As a second objective, (currently in progress) we look at the characteristics of the words recalled by learners in each type of instruction. Specifically for this objective, we set out to investigate the quality of the first word responses to each prompt retrieved both by the CLIL and by the non-CLIL group. To accomplish our goals we carried out two comparisons. In the first one, we looked at the number of words retrieved by fifty 8th form EFL learners in two instant classes, one CLIL and another non-CLIL. At the moment of data collection, students in both classes had studied English as a subject for a total of 839 hours. In addition, the CLIL group had been taught History and Sciences in English for a total number of 350 hours. In the second comparison, we looked at the words retrieved by the above 8th CLIL group and compared them to the words retrieved by an English as a subject group made up of sixteen students at 10th form. In this comparison, both groups amounted the same number hours of English exposure. In the two comparisons, students were required to write as many words as possible in response to the following cues: Parts of the Body, Dirty, Hold, The environment, Food & Drink, The earth, School, Town, and Countryside. We conclude that the CLIL group retrieves a significant higher number of words than the non-CLIL group. However, differences in favor of the CLIL group were significant in six out of ten prompts used as elicitation task. Moreover, when we compare the groups at the same number of hours, the preliminary qualitative analysis of the first word responses suggests the existence of more similarities than differences between the CLIL and non-CLIL groups concerning word association and word frequency.



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Negative evidence incites tacit L2 knowledge: Evidence from learning a novel grammatical rule

The acquisition of tacit L2 properties with inadequate explicit rules is often used as evidence for the role of UG in shaping implicit L2 knowledge, as well as the dissociation between implicit and explicit knowledge. While recent evidence suggests permeable modularity between the two knowledge bases and that explicit instruction significantly increases target-like outcomes (Toth & Guijarro-Fuentes 2013), what implicit and explicit knowledge amount to in highly-advanced L2 grammars is understudied. Furthermore, it is disputable whether positive evidence alone suffices for grammar acquisition and to what extent negative evidence may supplement it. Here we investigate how precisely these two types of evidence influence the recognition of tacit rules. In particular, we test (i) whether EFL learners approximate to native speakers in redeploying their implicit knowledge about English when confronted with a novel phenomenon (a-prefixing), and (ii) in what ways different types of evidence can change these “initial” intuitions. A-prefixing, attested in Appalachian English, is subject to several constraints that adopt core properties of English – e.g., it is illicit with vowel-initial verbs (*a-eatin’) or after prepositions (*from a-workin’), constituting an ideal natural language phenomenon for testing implicit knowledge and learning.

In an online grammaticality judgment study, we asked 41 dialect, 36 non-dialect native English, and 56 highly-advanced EFL speakers without prior exposure to a-prefixing to rate sentences with a-prefixing on a five-point grammaticality scale. We created 16 sentences for each of the 5 previously-established constraints, (50% ungrammatical), equally distributed to a pre- and post-test. The non-dialect and EFL groups were divided into 3, reflecting the input type given prior to the post-test: the positive-evidence group with only grammatical instances of a-prefixing, the negative-evidence group with explicit instruction about ungrammaticality, and the control group with no input.

Results reveal that all of the ungrammatical items were rated significantly worse than the grammatical ones by all groups ($ps < 0.05$). Group differences however emerged in the strengths of the constraints, as well as the magnitude of ungrammaticality (dialect > non-dialect > EFL, $ps < 0.05$). We also found significant differences among the different input groups (for both EFL and non-dialect speakers): The negative-evidence groups punished ungrammatical sentences significantly more in the post-test than the controls and positive-evidence groups ($ps < 0.001$), the latter groups showing no sign of development.

Our results suggest that advanced L2 learners employ native-like grammatical intuitions when confronted with novel complex patterns. However, positive exemplars alone fail to strengthen those prior intuitions (albeit adversely heightening tolerance for grammaticality) while explicit instruction in the form of negative evidence prevents learners from constructing overly general rules. We will discuss the implications of our findings for the dynamics of advanced L2 grammars and the interaction between input types and grammatical intuitions.

Marie Källkvist

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L2 users' agency in classroom interaction: the effect of drawing on their own languages

It is well known that interaction is a crucial source of input and serves as a pre-requisite for learning (Ellis 2008), and that L2 users' engagement levels in interactive tasks enhance learning (Tudor 2001; van Lier 2008). Recent interaction research has shown that drawing on L2 users' entire linguistic repertoires can enhance students' levels of engagement in class discussions (cf. Author 2013), and that flexible, multilingual practices enhances learning (Hall & Cook 2012; Hornberger 2002). We also know from a number of recent studies that multilinguals naturally activate other languages known to them as they engage with L2/L3/L4 learning tasks (Cenoz & Gorter 2011; Falk & Bardel 2010; García 2013).

Building on this research and framed by the Interaction Hypothesis (Gass 2003) and task-based language teaching (e.g. van den Branden 2007), the present study presents a detailed, qualitative analysis of teacher-led interaction aimed to enhance the learning of L2 morphosyntax in three bilingual classrooms at a Swedish university. It forms part of longitudinal study, combining ethnographic data collection with an experimental design. Three groups of students (CEFR level B2) were taught L2 grammar over one semester by the same instructor, who also audio-recorded the lessons. Two of the three groups were formed by matched-pair random assignment, while the third group was an intact group. In two of the groups, bilingual grammar tasks were used, typically involving L1-to-L2 translation tasks, whereas in the third group exactly the same grammar structures were covered using tasks without involving L1-L2 comparison or translation, except for the end-of-course exam preparation session. The analysis focuses on examining student and teacher agency as an effect of the whether the tasks were bilingual (L1-to-L2 translation) or monolingual (in L2 only), and as an effect of properties of the three different groups. The data were examined using Nexus Analysis (Scollon & Scollon 2004), which is (critical) discourse analysis of ethnographic data, focusing on social actions in groups (in this case student-initiated communicative turns). The results reveal that student interaction patterns in the three different groups differed as an effect of the different tasks. Consistently across all three groups, student-initiated turns were more common when students drew on their L1, and there was a tendency for students who otherwise remained quiet to initiate discussion in the L2 when having the opportunity to draw on their L1. The analysis also shows a certain amount of variation between the groups when engaging with the same task. The nexus analysis of the interaction patterns presented offers a socio-culturally context-sensitive way of understanding why and how teacher-student and student-teacher interaction developed and differed between the three groups.



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Differential effects of input on clitics and gender agreement in bilingual children

Language input is one of the key factors responsible for differences in the performance of bilingual children. However, it is unclear whether or not all linguistic phenomena are affected by input to the same extent. Our study investigates the production of object clitics and gender agreement in Greek by 40 Greek-English, 40 Greek-German bilingual children and 40 Greek monolingual children between the ages of 8 and 12. Our study investigates gender attribution and agreement along with clitic production. Clitics and gender are both morphosyntactic phenomena; however, clitic production is sensitive to discourse-reference constraints, while gender production to lexical knowledge.

We established an input baseline for the participants' lexical knowledge by administering independent vocabulary measures, which we then connected with ethnographic data from extensive questionnaires to determine their type of bilingualism (simultaneous vs. successive) and their (bi-)literacy skills. Their lexical abilities were screened with an expressive vocabulary test in Greek (Vogindroukas et al. 2009), German (Petermann 2010) and English (Renfrew 2001), as well as an online visual lexical decision task. To evaluate the role of discourse context in the accuracy of clitic and gender production, the Edmonton Narrative Norms Instrument (Schneider et al. 2005) was used. Narrative data were compared with clitic data elicited with the COST IS0804 task and with four tasks eliciting gender; two for novel and two for real nouns in determiner-noun and adjective-noun contexts respectively. Lastly, to investigate the interaction between bilingualism and cognition we employed a working memory task (digit backwards, Alloway 2007).

Preliminary findings show that higher accuracy scores in clitics and gender correlate with a higher degree of lexical knowledge. Input measures show limited effects on accuracy of gender and clitic production in narratives, but they do in the elicited production tasks with stronger effects on gender than clitic use. Furthermore, age and extent of exposure reveal differentiating effects, such that Greek-dominant bilinguals show the strongest role for lexical cues. Schooling and majority language are stronger predictors of performance than home language in older bilingual children.

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The effect of vocal production on word learning in an unknown L2 in adults

We report on results from a study aimed at finding out how vocal production affects adults' memory for novel words with unfamiliar phonotactics, considering that vocal practice has been shown to affect listening to input and memory for words in children (Schwartz & Leonard, 1981, Keren-Portnoy et al., 2010, DePaolis et al., 2011).

Two groups of 30 native English speaking adults were taught 20 Hebrew words with unfamiliar onset clusters (e.g., [kvaʔsim] sheep). In order to control for the quality of the input, the participants in the two groups were paired. Each participant in the producer group was shown images of objects, and heard their names produced by a native speaker. They then repeated the word, and so heard it in their own voice as well. Participants in the second group (non-producers) heard the native speaker and the production of the non-native participant with whom they were paired. Following the training cycles, all participants were tested through picture identification (choosing one of three pictures when hearing the word) and with word identification (choosing one of three words when seeing one picture). Participants returned the following week for testing, which involved listing all the words they remember without any prompts, followed by production when seeing the picture, picture identification, word identification and again production when seeing the picture.

We predicted that, as we were controlling for the quality of the input, producers would perform better in the learning task, due to production leading to a stronger/more lasting memory trace.

The results do not support our prediction: The groups' performance on both comprehension and production tests were not different from each other (average production score: Producers = 1.45, non-producers = 1.43, $N = 30$, ns).

However, we did find some moderate correlations between the performances of the two members of the pair, in the average production score ($r = .3$, $n = 30$, $p = .05$, one-tailed) and in RT to the correct responses in the word identification task ($r = .46$, $N = 30$, $p < 0.01$, one-tailed).

Since the only variable on which the participants in the two groups could be said to be paired was the auditory input that they had received, this correlation is interesting. We interpret it as showing evidence for production affecting learning indirectly, by supplying the learner with additional auditory input. This input, which could in principle have been "tagged" by both groups of learners as non-native and therefore unreliable (for the non-producers, based on accent and on mismatches to the native target heard just prior to it), nevertheless affected the success of learning and was not rejected as an unreliable source of information.



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Featural (under)specification in the L2 acquisition of Tense

This study re-examines the contrast between the two simple tenses with past reference in Spanish, the preterit and the imperfect. In light of an analysis of the contrast in terms of the features of Tense (Cowper 2005), we discuss data obtained through our experimental design, and re-examine findings from previous studies, which assumed an aspectual analysis of the contrast.

L2 studies on Spanish past tenses by L1 English speakers have shown trends for the preterit to emerge before the imperfect, and for the development of these tenses alongside specific aspects (e.g. the imperfect with states). As pointed out by Dominguez et al. (2013), however, previous studies are problematic in two areas: 1) they do not test for comprehension of the meanings of the forms, and 2) they report production trends associating the tenses with an aspectual class, which is a tendency also seen in native speaker production (this association is non-categorical, however, since both preterit and imperfect are compatible with all aspectual classes of predicates). Our study investigates past tense morphology and its meaning in L2 Spanish independently from lexical aspect. We assume, following Cowper (2005), that Spanish preterit is specified with the features [Precedence] and [Entirety] (i.e., all the moments associated with the event precede the moment of speech) while the imperfect only encodes [Precedence]. English does not mark [Entirety] and the simple past only encodes [Precedence].

Recent studies in L2 morphosyntax have uncovered a general pattern in L2 production: L2 learners tend to overuse the least specified form as a “default” form in contexts consistent with the more specified form (Underspecification Theory (UT), McCarthy 2006, 2008). The featural analysis of the contrast preterit-imperfect coupled with UT predicts that if L2 speakers have not acquired the distinguishing feature [Entirety] they will overuse the preterit (due to transfer from English). Once they acquire the feature, however, they will overuse the underspecified imperfect in preterit contexts. These predictions were tested with two tasks performed by 10 intermediate and 10 advanced L1 English L2 Spanish speakers, as well as 5 L1 Spanish controls. Comprehension tasks investigated the acquisition of the tense feature [Entirety]. Production tasks give an opportunity to see where the learners make errors. Preliminary results of the comprehension task show that the L2 participants (advanced) have acquired the feature [Entirety]. The production task showed that L2 learners do, in fact, overextend the use of the imperfect to a preterit context (9.8% errors), but not vice versa (0.006% errors). These results are consistent with Dominguez et al (2013), who found that the few errors made by more advanced L2 speakers and the results of a grammaticality judgement task favoured the imperfect in preterit contexts. This constitutes preliminary evidence for our proposal.

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Native and non-native speakers' intuitions about grammatical gender: More on the status of the 'analogical criterion' in code-switched structures

The 'analogical criterion' has been proposed to account for the use of code-switched concord or agreement structures in which the English Noun is assigned the gender of the Spanish translation equivalent (Radford et al. 2007; Liceras et al. 2008; Valenzuela et al. 2012). Bilinguals that abide by this criterion systematically prefer switches in which the article or adjective matches the gender of the equivalent Spanish Noun for concord (1a vs. 1b) and for agreement (2a vs. 2b).

(1) a. MATCHING La [theF] door [puertaF] El [theM] pencil [lápizM]

(1) b. NON-MATCHING El [theM] door [puertaF] La [theF] pencil [lápizM]

(2) a. MATCHING The door [la puertaF] es bonita [is beautifulF] The pencil [el lápizM] es bonito [is beautifulM]

(2) b. NON-MATCHING The door [la puertaF] es bonito [is beautifulM] The pencil [el lápizM] es bonita [is beautifulF]

Two issues surrounding this criterion need to be addressed. One is whether language nativeness plays a role in the strength of this preference. While spontaneous data is not clear-cut, experimental data from acceptability judgments (Liceras et al. 2008) has shown that adult native Spanish speakers significantly prefer matching structures but non-native (L1 English) Spanish speakers are not sensitive to this distinction. The second issue is whether these preferences are the same in both concord and agreement switches. Valenzuela et al. (2012) argue that Spanish-dominant bilinguals treat both structures alike while English-dominant bilinguals are closer to native Spanish speakers in agreement than in concord structures. Klassen et al. (2013) argue that concord and agreement switches are dealt with differently by non-native speakers due to the different syntactic mechanisms involved (directionality of gender assignment in concord vs structural complexity in agreement) and to the type of task (acceptability judgments vs. sentence production).

In our study, 35 L1 Spanish-L2 English adult speakers in Spain and 43 L1 English-L2 Spanish adult speakers in Trinidad and Tobago performed an acceptability judgment task in which they rated switched concord and agreement structures as in (1) and (2). Results show that while both groups prefer concord and agreement structures that follow the 'analogical criterion', L1 Spanish speakers demonstrate an increased sensitivity to violations of the 'analogical criterion' and thus rate mismatch significantly lower than match ($p < .001$) in comparison to L2 Spanish speakers. Furthermore, both groups rate switched agreement structures significantly higher than concord ones ($p = .005$). We interpret these results as evidence that: (i) native and non-native speakers differ in terms of their intuitions about grammatical gender since only the former classify the English Nouns according to the grammatical gender of the Spanish 'translation equivalent'; (ii) native and non-native speakers alike are sensitive to the syntactic mechanisms and the type of task involved in the processing of concord versus agreement structures.



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Register variation and communication strategy use by Spanish users of English

Interlocutors with different linguistic backgrounds often use English to communicate. The situational context for this lingua franca use of English (ELF) may range from formal (e.g. academic lectures) to informal (e.g. international student parties). While previous studies have documented how native speakers adapt their language to the formality of the speech situation, little is known about non-native register variation. Register variation can be found at a general discourse level (e.g. amount of laughter, amount of overlapping speech) and in speakers' use of communication strategies (e.g. paraphrases, approximations) that serve to overcome linguistic difficulties. Communication strategies are particularly salient for users of an L2 (e.g. ELF). We investigated register variation at both levels for native speakers of Spanish communicating in English.

Our studies were based on the Nijmegen Corpus of Spanish English, which contains speech from 34 Spanish undergraduate students talking in English with Dutch confederates. The speech was recorded during two separate, one on one settings: an informal, peer to peer conversation and a formal interview. Spanish speakers' perception of the formality of both settings showed their awareness of the formality switch. The speech was orthographically transcribed into short chunks (1.96s, 4.21 words on average), which we coded for communication strategies.

We first observed that the amount of laughter and the amount of overlapping speech were higher in the informal conversations. Moreover, the language in the formal interviews showed more “informational” features (e.g. nouns, longer words), which allow for dense information presentation. In contrast, the informal conversations contained more “involved” features (e.g. 2nd person pronouns), which mark interactiveness (all ps < 0.001). These results form a first indication of register variation.

With respect to the communication strategies, we found that speakers showed more searching and rephrasing behavior (e.g. “the companies breaks brokes down breaks down”); used more foreignized words (e.g. “majory absolute” from “mayoría absoluta”); used more approximations (e.g. “voice” for “singer”); and used more all purpose words (e.g. “thing”, “stuff”) during the formal interviews. In contrast, code-switches and repetitions for expressing emphasis (e.g. “the other university is far far far”) occurred more often during the informal conversations (all ps < 0.005).

In conclusion, the Spanish speakers in our study showed register variation at multiple levels. First, the informal conversations were more interactive, whereas the formal interviews showed a higher information density. Secondly, in the formal setting, Spanish speakers used more informative communication strategies in order to ascertain some degree of accuracy, whereas in the informal setting, they used more code-switches and word repetitions, which may lead to less accurateness. Our results resemble the findings of previous research regarding register variation by native speakers, which suggests that our L2 speakers applied their L1 knowledge on register variation to their L2.

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Tip-Of-the-Tongue in a second language: The effects of brief first-language exposure and long-term use

One of the most frustrating difficulties bilinguals experience during production is the Tip-of-the-Tongue (TOT) state (Brown & McNeill, 1966), which is a temporary difficulty in retrieving words in one of the languages they speak. Interestingly, TOT incidents are not confined to bilinguals, but bilinguals consistently exhibit higher TOT rates than monolinguals (e.g., Gollan & Silverberg, 2001). The research that investigated bilingual TOT has initially focused on general long-term differences in language experience between bilingual and monolingual speakers (e.g., Gollan & Acenas, 2004). However, many bilinguals shift flexibly from one language to another, and such brief language exposure may similarly affect bilinguals' TOT rates. In the current study, we examine how TOT rates are modulated by both long term and very recent short-term language exposure. Further, we test to what extent global, non-item-specific, effects may result from such brief language exposure. Russian-Hebrew bilinguals who acquired Hebrew either early (<5 years, n=24) or late (>11 years, n=24) were compared to Hebrew monolinguals (n=24) on a picture naming task in Hebrew. TOT rates were examined in two blocks, before and after viewing a short 10-minute movie in Russian. Both transient context factors and long-term language experience modulated TOT rates: Before the movie, late bilinguals exhibited significantly higher TOT rates than monolinguals and early bilinguals. Early bilinguals, however, did not significantly differ from Hebrew monolinguals. Critically, following the Russian movie, bilinguals in both groups differed from the monolinguals. Thus, exposure to the non-target language, which did not involve participants' production or exposure to the particular items to be named in the following task, exerted a global, non-item-specific, cross-language interference effect. The findings highlight the dynamic nature of the bilingual system in which both transient and sustained language factors operate to influence bilingual performance.

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The assessment of functional adequacy in L2 writing: towards a new rating scale

In studies in SLA often general measures for assessing linguistic performance, such as complexity, accuracy and fluency (CAF) have been employed (for an overview see Housen, Kuiken & Vedder 2012). In this paper we will argue that the assessment of linguistic performance in L2 is not possible without taking into account the functional dimension of L2 production. A new rating scale of functional adequacy will be presented, which is independent from linguistic descriptors in terms of CAF.

The importance of functional adequacy as an essential component of L2 proficiency has been observed by several authors (Pallotti 2009; Kuiken, Vedder & Gilabert 2010; De Jong et al. 2012). Until now, however, there has been no unanimity as to how functional adequacy is to be defined or assessed and by which features it is determined (Iwashita et al. 2008). Functional adequacy has successively been interpreted in terms of success of information transfer (Upshur & Turner 1995), socio-pragmatic appropriateness (McNamara & Roever 2007), coherence and cohesion of text (Knoch 2009) and successful task completion (Kuiken, Vedder & Gilabert 2010; De Jong et al. 2012).

In this paper the focus is on the assessment of L2 writing. Our main research question is: How can functional adequacy as a construct be defined and measured? In a first analysis the functional adequacy of two argumentative texts written by 32 L2 learners of Dutch and 39 of Italian at an intermediate level of L2 proficiency was assessed by raters (four for Dutch and three for Italian) on a holistic six-point Likert scale. The performance of 17 native speakers of Dutch and 18 of Italian on the same tasks served as a base-line and were judged in a similar way by the same raters. Based on these findings, a new rating scale has been developed, in which four distinct dimensions of functional adequacy are distinguished: 1) relevance of content, 2) task requirements, 3) understandability, 4) coherence and cohesion.

This new scale was then tested out by another group of raters (four for Dutch and four for Italian), who judged the same set of data on the four dimensions of functional adequacy. Interrater reliability on the four dimensions of the scale turned out to be high. We further looked at correlations of the ratings on the four dimensions of the rating scale, at differences in the ratings of the texts produced by L2 and L1 writers, and at differences between the raters of Dutch and Italian. We will conclude by discussing the applicability of the scale in language teaching practice and in future research.

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Acquisition at interfaces: the case of focus marking

We investigate the acquisition of information structure (IS) in L2 English by Russians regarding the following questions:

1. Is the acquisition of the phonology/IS interface a challenging area of L2 acquisition, as predicted by the Interface Hypothesis (IH) (Sorace 2011)?
2. Are particular IS-prosody mappings in the L2 system more challenging than others (Baker 2011)?
3. Are there L1 effects on L2 IS markings?
4. What is the longitudinal trajectory of L2 prosodic IS marking?

Two experiments were conducted with 36 Russian learners of English of varying proficiency (CEFR: A2, B1, B2). On a par with English, Russian marks focus nuclear pitch accent (NPA) which can be shifted from sentence final to sentence initial positions. We first tested learners' ability to reliably identify NPA in out-of-context sentences realizing varying prosodic patterns (Svo, svO, Sv/sV, svO with both prenuclear de-accenting and prenuclear accents). Since both Russian and English shift NPA, we predicted strong L1 transfer enhancing learners' perception from beginner levels. This prediction was confirmed. Learners can identify NPA from A2 (scoring well over 80%) with one exception: for patterns involving pre-nuclear accents performance dropped to 40% at A2.

We then evaluated learner's ability to judge prosodic patterns in context. The prosodic patterns used in the perception experiment were presented (acoustically) in question-answer pairs involving three discourse conditions: subject narrow focus, object narrow focus and sentence broad focus. The prosody of the answer matched the IS requirements of the question (e.g. Svo for subject narrow focus) in half of the items and in the other half it did not (e.g. Svo for object narrow focus). Subjects were asked to judge the naturalness of the question-answer pair on a 7point scale. We found that well into B2, learners appear oblivious to context-prosody mismatches (despite ceiling performance in perception and unlike native controls). But learners do show progress, rejecting mismatched pairs from B2. Such findings broadly confirm the IH. However, the picture is more complex. Narrow focus patterns are acquired before broad focus, lending support to Baker's hypothesis that direct (one-to-one) prosody-IS mappings (e.g. narrow focus) are less challenging for learners than indirect ones (e.g. broad focus). We will present an analysis combining Sorace's IH with Baker's "L2 Challenge" hypothesis, incorporating development from A2 to B2). We are currently collecting data from more B2 learners for a mixed effects analysis.

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Age & Experiential Effects on Complexity, Accuracy, & Fluency (CAF) in L2-Dominant Speaker's Spontaneous Speech

In this study we are looking at the effects of Age of emigration (AoE) and continued L1 Exposure (Exp) on the language proficiency of long-term German-Jewish immigrants in the US, the UK, and Australia. Their language proficiency is assessed by means of detailed linguistic analyses of oral history testimonies in which the participants talk about their childhood in Nazi Germany before 1938/39, their emigration, and their lives in the respective host countries. Their AoE ranges between 7 to 17. Their Exp after emigration was rated on the basis of the interviews and ranges from 1, indicating no/little exposure; to 7, indicating high/frequent exposure. Additional background variables considered in the analyses are Length of residence (LoR), Interview age (IntAge), Level of education (Edu), and Gender.

The interviews were analyzed along the dimensions Complexity, Accuracy, and Fluency (CAF) (e.g., Housen et al., 2012). Complexity is the ability to use a wide and varied range of sophisticated structures and vocabulary in the L2. Accuracy is the ability to produce target-like and error-free language. And fluency is the ability to produce the L2 with native-like rapidity, pausing, hesitation, or reformulation. For each of these dimensions we generated multiple measurements. On the basis of the theoretical models underlying CAF and/or by means of principal component analyses we reduced the number of measurements to a limited set of standardized scores per dimension and per participant. We then applied Multiple Regression and Mixed Model analyses to assess the role of the hypothesized predictor variables.

The results indicate that neither AoE or Exp are significant predictors for complexity and fluency. Instead, Edu proves to be a significant predictor for both grammatical and lexical complexity, as well as fluency. That is, the higher the level of education, the more complex and the more fluent their speech. However, AoE is a significant predictor of foreign accent, i.e. the later our participants emigrated, the more likely they were rated as non-native speakers of English. I argue that apart from the domain of phonological accuracy, the usual predictors such as AoE and L1 interference do not play a significant role for complexity and fluency, given this particular group's motivation to let to let go of their German heritage and their extensive LoR. Instead, it is Edu which affects their language proficiency as we would also expect for native speakers. I conclude that native-like L2 proficiency on the productive level of complexity and fluency can still be obtained by older learners up to an AoE of 17 if they are personally motivated to do so. Phonological accuracy on the other hand clearly underlies age constraints.

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Development of nominal inflections in L2 Polish: evidence from early processing and production.

The processing and acquisition of morpho-syntax at the early stages of L2 development have received growing interest in recent SLA research, as some sensitivity to form has been found from the very beginning of the acquisitional process (Rast 2008). Breaking into the morpho-syntactic system of a new TL, initial learners tend to attend to meaning over form (VanPatten 2004) and to rely more on lexical than grammatical information (Bardovi-Harlig 1992). However, they also seem capable of ‘parsing’ and producing morphological cues (Hinz et al. 2012). Our study aims at a deeper understanding of the steps involved in the acquisition of Polish nominal morphology and of their interactions with other domains of cognition and grammar. We focus on the results of two linguistic tasks designed to investigate the development of TL nominal morphological marking in two groups of initial learners with Italian and French L1 respectively.

Picture Verification is a comprehension test examining how learners assign case (Nom. vs. Acc.) and interpret argument roles (agent vs. patient) in TL sentences with different word orders. Sentence Imitation is a production task requiring learners to repeat target sentences as accurately as possible. The test does not involve a comprehension component but tackles the Nom.-Acc. distinction which was also at issue in the former task.

The results, analyzed at the average and individual level, show that just after very limited exposure to the meaning-based input, containing no explicit information on Polish morpho-syntax, learners develop the ability to assign morphological case and produce target items with their correct inflections. At the group level, the predominant tendency to adopt an SVO interpretation of target sentences is clear evidence of still ‘not fully’ acquired morpho-syntactic distinctions. However, the learners’ rapidly increasing capacity to adequately interpret diverse TL structures and produce inflection markers as well as slightly dissimilar developmental patterns indicate that learning of morphological cues is taking place. At the learner level, a great variability of accuracy levels and developmental paths in both learner groups is observed. Generally, high accuracy performances in the receptive task positively correlate with the correct productions of target items in the productive task.

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Extending the value of conversational interactions: The case of young Spanish learners of English in a CLIL context

Numerous studies have shown that interaction greatly facilitates language acquisition by providing learners with opportunities for feedback, comprehensible output and comprehensible input (see Mackey, 2007, 2012 for a review). The benefits of interaction have been widely shown among adults and also among children learning English as a second language (ESL) in English speaking communities. Accordingly, interactive tasks have become commonplace in ESL lessons. However, the value of interaction has not been sufficiently tested with young children who learn English as a foreign language (EFL), and studies are even scarcer with children in a new learning context that is becoming prevalent in Europe: content and language integrated learning (CLIL).

In order to fill this research niche, the aim of the present study is to provide a detailed description of the conversational interactions of 20 Spanish learners of English as a foreign language (age 11) while resolving a picture placement task in pairs in a CLIL school in Spain. Our analysis of their conversational interactions focused on their ability to resolve the task autonomously as well as on their ability to use interactional strategies in order to reach mutual understanding. Following previous studies, our analysis includes conversational adjustments, repetitions, L1 use and provision of feedback.

The results show that, although less frequently than adults and ESL children from previous studies, the learners made wide use of negotiation strategies and successfully understood each other throughout the task. Also, we found that the learners used different and creative linguistic strategies when facing lexical gaps and only resorted to L1 terms rarely. However, some limitations were also reported. The learners were unable to provide feedback to each other and structural transfer from Spanish was very common and resulted in abundant errors. As these transfer errors did not cause communication breakdowns among the participants, they were also unable to notice them and repeatedly communicated with utterances that would be unintelligible or difficult to interpret by native learners.

In light of the results, we suggest that, while interactive activities seem to have provided our learners with great opportunities to use the target in a meaningful way, it is necessary to understand their limitations when learners share the L1 before they make their way into EFL classrooms.

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Writing motivation: A study of self-determination and self-efficacy in the context of peer collaboration in second language process writing

In L2 writing, collaborative learning (CL) has earned a noteworthy place since the paradigm shift from a teacher-directed, product-based instruction model to a student-centered, process-oriented approach, predominantly in peer feedback research and practice. A pressing concern in L2 process writing research is that motivation in CL environments has been inadequately investigated; previous studies that reported on L2 writers' motivational attributes in CL contexts have mostly referred to an intuitive understanding or an impressionistic account of motivation. This study centers on two well-established theories in motivational psychology that have been theoretically and empirically linked with CL, namely Self-Determination Theory and Self-Efficacy Theory; it examines the motivational consequences of conducting CL in L2 process writing, and attempts to unravel the links between motivation and the use of learner strategies by L2 writers, specifically response strategies employed in peer feedback discussions. The inquiry includes a comparison of two CL settings, including computer-mediated communication (CMC), which has drawn much attention in educational research on CL and L2 process writing in recent years, and face-to-face (FTF) interaction.

This study adopts a quasi-experimental design and involved two CL treatment groups (FTF and CMC) and a comparison group (no CL) comprising Chinese undergraduate learners of English (N=110). All three groups participated in four writing cycles throughout a semester. The CMC group conducted asynchronous peer feedback discussions in Google Docs, whereas the FTF group in a synchronous classroom setting. A motivation questionnaire, the Writing Motivation Inventory (WMI), was developed for the study; the WMI consists of both contextual and situational scales and was validated via measurement and structural modelling in a pilot (N=411).

A mixed factorial ANOVA of the pre-post WMI data showed that the two treatment groups exhibited to a similar extent higher perceived self-determination and self-efficacy relating to L2 writing than the comparison group after the interventions. Responses in student interviews indicated a dynamic interplay between writing self-efficacy and social cognitive factors at different stages of CL; in a broader sense, they depicted how CL environments allowed satisfaction of the needs for autonomy, competence and relatedness, which is in theory essential for facilitating learners' self-determination. Pertaining to strategy use (tapped by a strategy questionnaire), regression analyses showed that there was a significant interaction between situational writing self-determination and L2 proficiency in predicting the use of peer-directed response strategies in preference to using non-collaborative options in the two treatment groups; a fine-grained analysis further revealed that the type of discrepancies between L2 writers and peer reviewers regarding feedback validity moderated the interaction effect. Based on the findings, implications for writing instruction and catering for individual differences are discussed.



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Voice Onset Time production in adult simultaneous bilinguals (German-French) and the role of childhood environment

This study analyzes the Voice Onset Time (VOT) in 14 adult speakers who grew up speaking German and French simultaneously from birth (2L1ers) as well as 10 monolinguals (L1ers). Our study has three goals: (i) to establish whether our speakers' VOT corresponds to the VOT of L1ers in each of their two languages, (ii) to determine the role of the language of the childhood environment for the development of VOT by comparing 2L1ers who grew up in Germany (French being their minority language) with 2L1ers who grew up in France (German being their minority language), and (iii) to examine the role of the language spoken in the environment during adulthood by comparing 2L1ers who left their home country (i.e. moving from France to Germany) with 2L1ers who never changed their place of residence.

In monolingual French, /k/ is produced with a short lag (voiceless unaspirated), and in monolingual German with a long lag (voiceless and aspirated). Studies on VOT have shown that 2L1-children differentiate the phonetic systems of their two languages from early on (Kehoe et al. 2004, Deuchar & Clark 1996, Watson 1990), although the development of target-like values may be delayed compared to monolinguals (Kehoe et al. 2004). Studies with adults are less conclusive. For English-French bilinguals in Canada, some studies report that their VOT productions do not differ from those of monolinguals (Sundara et al 2006, Mac-Leod & Stoel-Gammon 2009), while others found significantly longer VOTs in French and shorter values in English compared to monolinguals, suggesting that these speakers had developed compromise values (Fowler et al. 2008). The relative amount of language input and use has not been investigated in these studies.

In this study, we compare 2L1ers speaking their majority language and 2L1ers speaking their minority language and L1ers. Our analysis is based on the VOTs with word-initial /k/ in their spontaneous speech in German and French. Results show that all 2L1ers produce different VOTs in their two languages with those in German being longer (67ms vs. 41ms for 2L1ers from Germany, 53ms vs. 40 ms for 2L1ers from France), suggesting distinct categorizations for each language. While French VOT values do not differ between the three speaker groups (40ms, 41ms and 42ms), 2L1ers generally produce shorter VOTs than L1ers in German, but only minority speakers of German and L1ers differ significantly (53ms vs. 77ms); majority speakers of German are within the range of L1ers (67ms vs. 77ms). Speakers who grew up in France but moved to Germany during adulthood maintained native-like VOTs in French (contra Major 1992). We conclude by discussing the difference between the speaker groups in more detail, taking into account further linguistic and extra-linguistic factors, including vowel quality, schooling and language use.

Angelos Lengeris and Katerina Nicolaidis

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Phonological short-term memory and perception of L2 English consonants in quiet and noise by Greek listeners

Phonological short-term memory (PSTM) has been found to play a crucial role in second-language (L2) vocabulary and grammar learning (e.g. Martin & Ellis, 2012) and in L2 fluency and proficiency in general (e.g. O'Brien, Segalowitz, Freed & Collentine, 2007). Previous research also reports some connections between PSTM and L2 consonant and vowel perception (MacKay, Meador & Flege, 2001; Cerviño-Povedano & Mora 2011, but see Safronova & Mora, 2012 for evidence against the relationship between PSTM and L2 vowel identification).

The current study aims to (a) explore the role of PSTM in L2 consonant perception, (b) examine the influence of quiet vs. different noise conditions on L2 consonant perception, and (c) identify those English consonants that Greek listeners find difficult to perceive and that might be appropriate for computer-based phonetic training. English consonants were presented for identification in quiet and in two noise types, a competing talker (SNR = -6dB) and an 8-speaker babble (SNR = -2dB). The stimuli were VCV tokens (V = /i:/, /æ/, /u:/) containing all 24 English consonants (Cooke & Scharenborg, 2008) and were presented to twenty Greek university students who had received formal instruction in English. PSTM was assessed in Greek via a serial non-word recognition task.

The results showed that Greek speakers' identification scores in quiet were significantly higher than in noise. Identification scores did not differ significantly for the two types of noise but since the competing talker had a much lower SNR value than the 8-speaker babble the latter had a more deteriorating effect in L2 consonant identification than the former. PSTM correlated with English consonant identification in quiet and in the two types of noise extending previous research in quiet to L2 perception in adverse listening conditions. In line with previous literature, the results suggest that PSTM may play a role in L2 speech learning.

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Differential effects of SA and intensive AH courses on teenagers' L2 pronunciation

Second language (L2) acquisition research on the differential impact of learning contexts such as study abroad (SA) and at home (AH) programs on the development of L2 phonological competence is scarce and has thus far produced mixed results, attesting superior L2 pronunciation gains in the SA context, but only for specific aspects of L2 pronunciation or, in the case of studies examining overall degree of foreign accent (FA), attesting modest gains in accent reduction characterized by large inter-subject variation. Most of this research has compared the benefits of short-term immersion (SA) to those of regular language courses AH with university student populations and adults (Avello et al. 2012; Mora, 2008; Muñoz & Llanes, 2014).

The present study compares the effects of two learning contexts, SA vs. an intensive AH language course, on the L2 pronunciation of a group of adolescent EFL learners. The participants in the study were 37 Catalan/Spanish bilingual learners of English as a foreign language aged 10-17 ($M=13.50$, $SD=1.69$). 14 learners engaged in a 3-week SA experience in the south of England, whereas 23 learners enrolled in a one-month intensive English course in the participants' home country. Both learning contexts provided comparable amounts of EFL instruction.

A delayed sentence imitation task was used to elicit sentence-sized speech samples from the learners modelled after a native English talker before (T1) and after (T2) the learning periods. The participants' L2 pronunciation was assessed through voice onset time (VOT) measures of voiceless oral stops (/p t k/) in the onset of word-initial stressed syllables and through overall FA ratings. Learners' FA ratings were obtained from a panel of 27 native English listeners who rated a randomized set of 222 sentences (37 learners \times 3 sentences \times 2 testing times) for degree of FA on a 7-point scale (1=no FA, 7=very strong FA).

Results revealed significant main effects of testing time ($F(1,35)=15.5$, $p<.001$) and an interaction between context and testing time for VOT ($F(1,35)=5.33$, $p=.027$), indicating that VOT became significantly more target-like (24 to 37 msec) at post-test for the SA group only ($t(13)=-4.473$, $p=.001$). The main effect of testing time was significant ($F(1,35)=6.09$, $p=0.19$) for FA, but that of context was not ($F(1,35)=.032$, $p=.860$) suggesting that learners had significantly reduced their FA at post-test irrespective of learning context. FA and VOT scores were unrelated, showing that judges' ratings of perceived FA were not dependent on how accurately speakers produced voiceless oral stops. However, VOT gains were significantly correlated with amount of FA reduction, suggesting that speakers who had reduced their FA at post-test had also developed a more target-like laryngeal timing. We discuss the implications of these results for the development of the L2 phonology of instructed adolescent EFL learners.

Marta Marecka, Donata Janiszewska and Anna Jelec

(Adam Mickiewicz University)

Is phonological sensitivity language specific?

Phonological sensitivity (henceforth PS), a.k.a. phonological awareness, is the skill of extracting phonological units from words. Examples of tasks measuring this ability include games in which participants are asked to divide words into syllables or say a given word without one phoneme. Deficits in PS are linked to dyslexia and SLI and are thought to impair reading abilities. Recently, a few studies have found that PS might also be important for learning new words. In particular, studies by Hu (for instance Hu, 2008) indicate that children with higher PS scores learn words of a foreign language faster. This might be explained by the need to create phonological representations of the newly heard words. Children with lower PS scores can have problems with dividing new words into phonological units and thus creating their phonological representation. It is important to note, however, that PS, especially at the early stages of language development, can be different for different kinds of words. For instance, words with more frequent phonological structures are easier to divide and process for children than words with less frequent structures (Storkel & Morissette, 2002). It is therefore logical to assume that in learning new words of a foreign language, PS to the structure of this language would be particularly important.

To examine this hypothesis, we tested 26 Polish third-graders learning English at school on their PS with three tasks in English and three analogical tasks in Polish. We also assessed their English vocabulary knowledge with two picture naming tests and their speed of learning new English words with an experimental paired-associates task. We expected to find particularly strong correlations between English PS scores and the results of tests measuring efficacy of English vocabulary learning. Our results confirmed the hypothesis. English PS results correlated significantly with the scores of both English vocabulary tests (in both: $r = 0.45$, $p = 0.02$), while correlations between Polish PS scores and English vocabulary scores were non-significant (in both: $r = 0.25$, $p = 0.21$). Moreover, English PS scores correlated with the word learning task ($r = 0.38$, $p = 0.05$), while Polish PS scores did not ($r = 0.08$, $p = 0.72$). This indicates that PS to foreign sounds and structures is particularly important for foreign word learning. The finding also suggests that teaching children explicitly about the phonological structures of the language they acquire might help them learn words of this language more efficiently.

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Agreement morphology, word order bias and working memory in English-Spanish emerging bilinguals.

Previous studies in SLA (Montrul, 2010; Sanz & Morgan-Short, 2004; VanPatten, 1984) have shown that beginner and intermediate Spanish learners persistently misinterpret O-cliticV sentences as SVO by mapping the syntactic roles assigned to nouns in English. Due to transfer effects, preverbal object clitics are interpreted as the subject of the sentence, which has been described as the ‘word order bias’. In this study we explore whether advanced English-Spanish bilinguals are also prone to these misinterpretation errors, and also, whether agreement morphology can help them overcome the word order bias.

In a previous study we manipulated a match / mismatch in number agreement between the clitic and the verb: in 50% of the sentences, agreement was not a useful cue to overcome the word order bias (i.e., the clitic and verb matched in number) whereas in the other 50% they mismatched, with agreement providing a useful cue to correctly interpret the clitic as the object. Results showed that English-Spanish emerging bilinguals improved their accuracy throughout the experiment; crucially, the improvement was more pronounced when the morphological cue indexing an agreement mismatch was on the verb (ClsgVplSpl), as shown by an experimental trial order x condition interaction and confirmed by the participants’ tendency to present longer reading times in the verb region of ClsgVplSpl structures.

While these results support the idea that sensitivity to agreement mismatches can help learners overcome misinterpretation of clitic sentences more quickly, they also support the idea that agreement cues are more salient (or more informative) when seen in a verb, as opposed to attached to functional categories like clitics. In the present experiment, we explore this possibility by enhancing the saliency of the morphological cues provided (i.e., using agreement markers on verbs in the past tense, which are morphologically more salient in Spanish) and we address the time course of these morphological effects by using a word-by-word self-paced-reading task. In addition, we measure working memory (WM) capacity to explore whether individual differences constitute a good predictor of learners’ ability to process and interpret preverbal direct object clitics more efficiently, as suggested by previous research (Sanz & Morgan-Short, 2004).

Kazuko Matsuno

(Shizuoka University)

Parallel processing of collocations: Do native speakers and second language learners access prefabricated patterns and that of each word simultaneously?

The purpose of this study is to examine whether native speakers of English and Japanese learners of English access pre-constructed patterns and that of each single word in a parallel way when the meanings of collocations are retrieved. Previous studies showed that collocations are stored as a unit in the mental lexicon of native speakers and that their meanings are holistically retrieved (Pawley & Syder, 1983; Sinclair, 1991; Wray, 2002). Whereas, learners lack enough knowledge of ready-made phrases to understand collocations but they process expressions word by word (Kjellmer, 1991; Underwood, Schmitt & Galpin, 2004; Jiang & Nekrasova, 2007; Yamashita & Jiang, 2010). The previous studies have focused on solo processing, that is to say, processing holistically or analytically. However, there is further possibility that the knowledge of the single words is simultaneously activated while the prefabricated patterns are being accessed. Therefore, the current study discusses collocational processing including the parallel viewpoint.

In order to determine the experimental collocation items, the present study took two steps. Firstly, "Verb + Noun" expressions with high G-scores were extracted through the American National Corpus. Secondly, a questionnaire regarding familiarity of collocations and free combinations was conducted on a scale of 1 (not common) to 5 (very common) for native speakers, and the expressions with high familiarity were chosen as collocation items (the average scale of collocations was 4.439 and significantly higher than that of free combinations [$Z1=8.127$, $p<.01$; $Z2=4.668$, $p<.01$]). This study conducted two experiments for 30 native speakers of English and 30 Japanese learners of English with advanced proficiency. The first experiment examined whether the collocations were processed as a unit. The second experiment investigated whether single words which constitute the prefabricated patterns were accessed or not. Experiment 1 compared the reaction time to 51 collocations and that of 51 free combinations (e.g. blow my nose vs hurt my nose). Experiment 2 employed a priming paradigm and a lexical decision task. After a collocation or a free combination was displayed as a prime, an associated word with the single word which constituted the collocation was shown as a target. Each target was the same word between a collocation and its compared free combination (e.g. prime1: blow my nose, target1: wind vs prime2: hurt my nose, target2: wind). The stimuli were counterbalanced and displayed at random.

Consequently, the following conclusions were obtained: (1) native speakers generally process collocations in parallel but some kinds of collocations are solely processed; (2) learners solely process collocations and utilize less prefabricated patterns than native speakers. It is apparent that collocational processing by learners differs from native speakers even after the ready-made expressions are acquired, and it appears to be challenging for learners to conduct several processes simultaneously.



Kim McDonough and Pavel Trofimovich

(Concordia University)

The role of cognitive abilities in pattern detection and extension

According to usage-based approaches to acquisition, novel constructions are initially acquired through exposure to low-variability input and the engagement of cognitive mechanisms, such as fast mapping and category formation (Tomasello, 2003). Second language (L2) researchers have found that low-variability input with equal token frequency (balanced input) is most effective for the detection of novel patterns (Nakamura, 2012; McDonough & Trofimovich, 2012; Year & Gordon, 2009) and the extension of existing patterns (McDonough & Nekrasova-Becker, 2012). Despite the overall positive findings, considerable variation exists in L2 learners' ability to benefit from balanced input tasks. For example, in a series of studies involving the Esperanto transitive construction, fewer than 30% of the L2 participants (N = 320) could extract its key morphological (accusative case marking) and structural (variable word order) features, despite a variety of experimental manipulations to enhance the aural and visual input (Fulga & McDonough, in review; McDonough & Trofimovich, 2013; McDonough, Trofimovich, & Fulga, in review).

Therefore, the current study investigated whether cognitive factors (statistical learning, auditory recognition, and working memory) help account for variation in L2 speakers' ability to detect and extend patterns through exposure to balanced input. Thai EFL university students (N = 140) were exposed to the transitive construction in Esperanto, marked by -n (pilko [ball, subject] - pilkon [ball, object]) with flexible word order (kato pelas pilkon [SVO], pilkon pelas kato [OVS], "cat chases ball"). They were also exposed to a non-prototypical extension of the English double-object dative construction, where both the recipient and the object undergoing a transfer of possession are inanimate NPs (e.g., the man brought the truck some paint). Both input tasks involved a forced-choice picture discrimination task with 24 learning items and 12 test items for each construction. To measure their cognitive abilities, the students completed aural tests of statistical learning and pattern recognition, and a spoken backward digit-span test of working memory.

The results revealed different performance for the detection of the novel Esperanto pattern and the extension of the English double-object datives. Whereas both statistical learning and auditory recognition were positively correlated with Esperanto test performance, neither factor was related to the students' ability to extend the double-object dative construction. However, when the dative learning items were revised to include exemplars of the non-prototypical pattern, students' test performance was positively correlated with their statistical learning abilities. The findings are discussed in terms of the impact of low-variability input and the engagement of cognitive abilities during various phases of L2 acquisition.

Kevin McManus and Emma Marsden

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The effectiveness of L1-L2 contrastive instruction for remapping meaning in a second language

L1 influence on L2 learning is reported to be most persistent when the L1 and the L2 pair meaning and form in different ways, especially when evidence in the input suggests that the L1 and the L2 do function similarly in some ways (Izquierdo and Collins 2008; McManus 2013; Sugaya & Shirai 2007). For example, French morphologically differentiates perfectivity (for one-time completed events) from imperfectivity (for both habitual and ongoing events) with *Passé Composé* and *Imparfait* aspect morphology, respectively (Wilmet 2007). In contrast, English lacks a perfective-imperfective morphological dichotomy: the *Progressive* marks ongoingness (one feature of imperfectivity) whilst the *Simple Past* marks both perfectivity and habituality (another feature of imperfectivity). Therefore, although English and French both express aspect morphosyntactically, the precise mappings between meanings and forms are critically different.

This poses a learnability problem despite considerable exposure (Dekeyser 2005, 2007; Slobin 1973, 1985). Multiple factors may confound form-meaning remapping, including insufficient exposure and influence of a shared L1 in the classroom (Ammar, Lightbown, Spada 2010). To address this problem, some research has used explicit L1-L2 contrastive instruction to force learners to notice L1-L2 differences (Spada, Lightbown and White 2005; Kupferberg 1999). However, we do not yet have a clear understanding of the impact of different types of explicit instruction on a range of measures of learning, especially over a substantial period of time.

The current experimental intervention investigated the learning of the French *Imparfait* by L1 English learners at a British university (n=50). Learners were assigned using matched randomization to one of three groups: (1) L1-L2 contrastive instruction, (2) L2-only instruction and (3) test only. The L1-L2 contrastive instruction included explicit information and repeated practice about differences and similarities in form-meaning mappings between English and French for habitual and ongoing meaning. The L2-only group were given explicit information and practice about only the L2 form-meaning mappings for the *Imparfait*. Practice in both conditions was based loosely on referential activities from *Processing Instruction* (Marsden 2006; VanPatten 1996, 2004), and lasted approximately 4 hours over 3 weeks. Pre, post and delayed post tests (at 7 weeks after the intervention) included semi-spontaneous oral production, sentence interpretation, sentence completion with source of knowledge probes, and a self-paced reading.

Preliminary results suggest that similar learning gains were made following both interventions, with slight differences on measures that allowed more access to explicit knowledge. We will discuss challenges of eliciting both habitual and ongoing meanings of the *Imparfait*. Our findings inform our understanding of the cues in the input that might drive (or inhibit) the learning of these meanings, which has implications for how they might be taught.



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Eye tracking L2 interaction during written synchronous computer-mediated communication – a qualitative exploration

This paper investigates interaction among second language (L2) learning peers via written synchronous computer mediated communication (SCMC or text chat) by using a combination of eye tracking technology, screen-recordings and chat-logs. We explore what L2 users notice and attend to in the linguistic input from their L2 interlocutor given the specific medial context of SCMC and how this affects learner language development.

During a six weeks intervention six advanced L2 learners of English (all MA students of TESOL/TEFL) interacted in dyads using written SCMC. Their weekly task was to discuss with each other the content and setup of an academic paper based on a bullet-pointed summary they received as task material. After a twenty-minute text chat interaction they individually wrote the introduction (week one and two), middle part (week three and four) or ending (week five and six) of an abstract for the study they had discussed about. During all task performances, screen-recordings logged the online chat interaction and eye movements of participants were captured using eye tracking methodology. In addition, impact of collaborative chat discussions on L2 development was monitored by a pre- and post-intervention writing task.

The analysis takes a qualitative approach by triangulating the information taken from the chat logs, screen-captures and eye movement in order to identify what L2 learners notice and attend to in the input from their L2 interactant and/or the task material during the text chat interaction. Furthermore, we analyse what information (task material and/or chat log) participants use during the individual abstract writing task.

Results will be discussed within recent frameworks of noticing and uptake during interactive peer interaction in CMC contexts (Smith 2005, 2012) and are put in relation to L2 development. From a methodological point of view, this study explores the value of eye tracking methodology for our understanding of learner-learner written SCMC interaction (Smith 2008) and language learning.

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“It’s just a matter of time”: The development of grammatical accuracy during residence abroad

Residence abroad (RA) has long been believed to provide ideal conditions for L2 learning. RA empirical research has however been developing a more nuanced picture, in which learning outcomes are variable, and with reference to grammatical accuracy in particular, some studies have found little detectable benefit (e.g., DeKeyser, 1991; Collentine, 2004; Isabelli-Garcia, 2010), though others have found RA students out-performing at-home students (e.g. Isabelli & Nishida 2005). These mixed findings contrast with more clearly positive results on oral fluency (Segalowitz & Freed, 2004), pragmatics or vocabulary (Dewey, 2008; Foster, 2009). Length of stay is one variable that could potentially help explain these differences. That is, grammatical accuracy may take longer to develop whilst abroad. Many studies investigating language learning during RA focus on stays of one semester only, so that little is known about how far grammatical accuracy changes as learners spend more time abroad. However, studies investigating the impact of length of stay on other outcomes such as vocabulary (Ife et al, 2000) and literacy skills (Fraser, 2002) found that an academic year was more beneficial than a semester abroad.

The current study investigates the influence of length of stay on grammatical accuracy by examining longitudinal data from 56 UK undergraduates majoring in L2 French or L2 Spanish who were spending an academic year in France, Spain, or Mexico. Within the cohort, 17 participants took part in student exchanges and were receiving variable amounts of formal L2 instruction. The rest were undertaking teaching assistantships (n = 31) or work placements (n = 8), and were not receiving any formal instruction. Participants’ self reports in oral interviews stressed perceived learning gains in oral fluency, vocabulary and pragmatics rather than in accuracy.

A range of oral data including picture-based narratives were collected six times over 18 months, including three test points during the year abroad (in November, February and May). In this study, the narrative data from all six test points are used to assess grammatical development over time. Accuracy is operationalized in 3 ways: 1) the proportion of error-free AS-units (Foster et al, 2000), 2) the proportion of error-free clauses, and 3) accurate use of past tense morphology (preterite and imperfect). The analysis traces longitudinal development on all three accuracy measures, and explores interactions between these. Particular attention is paid to learner gain scores at interim phases of the study (pre-test to early/ late tests abroad, early/late tests abroad to post-tests). The results demonstrate ongoing long-term improvements on all measures, regardless of placement type. These clear gains in grammatical accuracy will be contrasted with findings from previous research and the adequacy of increased length of residence as an explanation will be assessed.



Elena Mizrahi, Tami Aviad and Batia Laufer

(University of Haifa)

Estimating vocabulary size of L2 learners: the effect of cognates on test scores

Most L2 vocabulary size tests include words that are cognates in learners' L1. McLean (2013) suggested that cognates in the Vocabulary Size Test (Nation and Beglar, 2007) may have inflated the estimates of Japanese learners' vocabulary size. However, we are not aware of any quantitative research that measures the effect that cognates have on test scores.

In our study we investigated the contribution of cognates to active vocabulary size test scores: to the entire test and to the specific word frequency levels, in two test modalities (word form recall and recognition), for three L2 proficiency levels (basic, intermediate, advanced), and in two language versions (monolingual and bilingual). Eighty five learners of English (EFL and English majors), native speakers of Hebrew, took a new BNC/COCA based active vocabulary size test, which measures the knowledge of 14000 lemmas by 140 items. Due to random item sampling, 16 items are English-Hebrew cognates. We added 16 non-cognate items to the test, and compared the original test with the "non-cognate" test version by replacing 16 cognates with 16 non cognates. Paired t-tests showed that tests with cognates yielded significantly higher scores in both language versions, both test modalities, at most word frequency levels and all L2 proficiency levels.

Subsequently, we extracted Hebrew-English cognates from the most frequent 5000 English lemmas and calculated a representative number of cognates in a test of 5000 words. We used our original data to analyze the first 5000 part of the test in the three resulting variations: without cognates, with a representative number of cognates, and with an inflated number of cognates. Repeated Measures and post hoc tests showed that the representative number of cognates always contributed to a higher score when compared with the non-cognate test version, but it was not always different from the test with an inflated number of cognates.

In light of our results, we raise the questions whether, and to what extent, cognates should be included in vocabulary size tests, and whether identical vocabulary tests should be given to different L1 groups.

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Incidental and intentional vocabulary learning through video with glossed captions

While numerous studies have investigated the effectiveness of enhancing target words (TWs) in written text for second language (L2) vocabulary learning, e.g. by means of, highlighting TWs (e.g. De Ridder, 2003), providing access to meaning (e.g. Hulstijn, Hollander, & Greidanus, 1996), or test announcement (e.g. Peters, 2007), research on the use and effectiveness of such techniques in video-based activities is scarce. This presentation reports on the results of an experimental study investigating the effect of two techniques to increase the incidence and quality of L2 word learning through audio-visual input. The first technique is type of captioned video (i.e. video with L2 on-screen text) and refers to full, keyword or glossed keyword captioning. The latter gives the learner the opportunity to activate the keyword's meaning (L1 translation). This type may answer the need to provide students with access to meaning while watching video (Webb, 2010). The second technique is test announcement, which refers to forewarning or not forewarning students of upcoming vocabulary tests.

The present study adopted a 2 (test announcement) X 4 (type of captioning) between-subject design, resulting in eight experimental groups. Type of captioning referred to the presence of full, keyword, glossed keyword captions, or no captions (= control group). The gloss consultations of the glossed keyword conditions were logged, which enabled us to investigate look-up strategies. Test announcement was used to create incidental (not forewarned) and intentional (forewarned) learning conditions. Having seen three short clips in one of the conditions, 227 Dutch-speaking learners of French completed four vocabulary tests at different levels of sensitivity (e.g. form recognition, meaning recognition, translation) to assess knowledge of 18 predefined TWs.

Results revealed that students with access to meaning achieved the highest scores on the four vocabulary tests. Groups with on-screen text outperformed the control group. Access to meaning also aided students' meaning recall of the TWs. The relation between gloss consultation and word learning was directly proportional. Test announcement did not induce more or deeper word learning, nor did it affect look-up behaviour.

Findings and pedagogical implications will be discussed in relation to theories on attention and noticing, and enhancement techniques for word learning through audio-visual input.

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Joan C. Mora and Anja Ludwig

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L2 learners' intelligibility, comprehensibility and accentedness of native and non-native speech.

Previous research [1, 2, 3] has demonstrated an interlanguage speech intelligibility benefit (ISIB) for non-native listeners predicting greater intelligibility for L2 speech produced by non-native talkers than by native talkers when listener and talker are matched for L1 background. However, it is unclear at present whether this ISIB holds true when listeners are mismatched for L1.

The present study examined the intelligibility benefit of an L1 match between talker and listener and its interaction with listeners' L2-proficiency in a foreign language learning context. Instructed L2-English learners (N=40) differing in L1 (Catalan, German) and L2-proficiency (High, Low) and L1-English listeners (N=10) performed intelligibility tasks on English speech samples produced by talkers differing in L1 (Catalan, German, English). Intelligibility was operationalized as speed of processing (response latency scores) on a word animacy judgment task and a true-false sentence decision task. In addition, listeners rated the sentence stimuli for degree of accentedness and comprehensibility.

The results provided evidence of an L1-matched (but not an L1-mismatched) speech intelligibility benefit modulated by L2-proficiency. ANOVAs on intelligibility scores revealed significant main effects of accent and L2-Proficiency ($p < .001$) and significant L1 x accent and L2-Proficiency x accent interactions ($p < .001$). Non-native listeners found English utterances by non-native talkers more intelligible than those by native talkers when matched, but not when mismatched for L1, whereas accented English was more intelligible to high-proficiency listeners than it was to native listeners. Accentedness and comprehensibility were related to intelligibility, but listeners' L1 and L2-proficiency were related to accentedness and comprehensibility differently: sentences were perceived to have a similar degree of accentedness irrespective of type of accent but were judged to be easier to understand when spoken in the listeners' accent. Regression analyses revealed that non-native listeners' L2-proficiency, but not L1, accounted for a significant amount of variance (55-87%) in the intelligibility and comprehensibility of native English speech, whereas they appeared to make a much smaller contribution to explaining accentedness ratings (10%). However, L1 explained a larger percentage of unique variance (52%) than did L2-proficiency (30%) in the intelligibility of accented English sentences. Similarly, L1, but not L2-proficiency, accounted for a significant amount of variance (37%) in the comprehensibility ratings. Implications for language testing and pedagogy are discussed.

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Florence Myles

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The role of formulaic sequences at different stages of foreign language learning

Native speakers often rely on formulaic sequences (FS), i.e. ready-made chunks of language which are retrieved whole from memory without having to be assembled online (Wray 2002; 2008). In second language acquisition, FS are also common, but the role they play at different stages of development remains poorly understood. In early stages, FS enable learners to communicate before they have acquired the grammatical knowledge necessary for constructing (complex) sentences. But do learners simply discard these FS when their generative grammar has developed sufficiently to assemble their constituent parts online (Krashen and Scarcella 1978; Schwartz 1993), or do they analyse and adapt them to construct their emergent grammar (Myles et al. 1999; Myles 2004)? In later stages, FS use often distinguishes L2 learners from native speakers: although they are frequent in learner productions, they lack the idiomaticity of native language (Forsberg 2009).

This paper will compare and contrast the use of FS in beginner and advanced learners, drawing on two longitudinal studies of English learners of French in similar instructional contexts (Myles et al. 1998; 1999 and Cordier 2013). The first study investigated the development of FS in 14 classroom learners over the first two years of learning French. The second study tracked the use of FS in 5 advanced university learners before, during and after 9 months of immersion in France.

Both studies adopt a psycholinguistic learner internal definition of FS, that is a string retrieved from memory as a whole unit (as determined by a range of identification criteria)

The following questions are investigated in each group:

- How common are FS in beginner and advanced learners of French?
- What role do they play in learner productions? (e.g. communicative crutches; processing shortcuts; planning tools)
- How do FS develop over time?
- How do FS relate to lexical diversity and fluency?

Findings show that in both groups, FS are very common and share many characteristics:

- FS do not disappear when lexical diversity increases: they become more varied and sophisticated;
- FS use and lexical diversity correlate: the more learners use FS, the more diverse their lexis is, and the more they improve on both counts over time
- FS use and fluency correlate: the more learners use FS, the more fluent they are overall
- Advanced learners still rely on the FS they learned in beginner classrooms

This comparison suggests that at both ends of the continuum, FS are used to facilitate speech production, but in different ways: beginner learners use them as communicative crutches when their grammar is underdeveloped, and advanced learners use them as processing shortcuts and to buy planning time.



Hossein Nassaji

(University of Victoria)

The Intensity of Recasts and its Effects on the Acquisition of English Articles

An extensive body of research has recently investigated the effects of recasts on L2 acquisition. However, the results of these studies are mixed. While some have found a positive effect for recasts, others have shown little effect for such feedback. There are many factors that can be responsible for such differences, one of which could be the nature of the recast itself and how the recast is provided. While in some studies recasts are provided extensively on a wide range of errors, in others, recasts are provided intensively on one single error. It has been suggested that intensive recasts may be more effective than extensive recasts (e.g., Ellis & Sheen, 2006). However, little research has directly compared these two types of recasts. The present study was designed to investigate this issue. It examined and compared the differential effects of extensive versus intensive recasts on ESL learners' acquisition of English articles. Intensive recasts were operationalized as recasts provided on article errors only. Extensive recasts were provided on a range of errors including article errors. Forty eight adult intermediate ESL learners were randomly and equally divided into three groups: an intensive recast group, an extensive recast group, and a control group. Learners carried out two communicative tasks in dyadic interaction with a native speaker. They were pretested and posttested (immediately and after two weeks) on their knowledge of English articles, using an oral picture narration task, a written grammaticality judgment task, and a written story description task. On the grammatical judgment and oral picture description tasks, the extensive recast group significantly outperformed the control group. On the written storytelling task, both recast groups outperformed the control group (though the difference was not statistically significant). These findings, particularly from the grammaticality judgment and the written storytelling tasks, suggest that learners benefitted more from extensive than intensive recasts. This finding does not support the generally held assumption that intensive recasts might be more effective than extensive recasts. The advantage of extensive recasts over intensive recasts is discussed in terms of feedback frequency and its effects on enhancing the noticing of implicit recasts.

Tokiko Okuma

(McGill University)

L2 acquisition of bound variable interpretation of Japanese demonstrative pronouns

This study investigates L2 acquisition of bound variable interpretations of Japanese demonstrative pronouns (so-series DPs) by adult L1 English speakers. It is known that overt pronouns cannot take a bound variable interpretation in null subject languages (the Overt Pronoun Constraint in Montalbetti 1984). Spanish overt pronouns cannot be bound by quantified antecedents where null/overt alternation occurs. Similarly, Japanese overt pronouns (e.g., *kare* 'he') cannot take a bound variable interpretation, irrespective of the availability of null/overt alternations. However, if Japanese pronominal expressions are closely observed, the Overt Pronoun Constraint is not necessarily accurate. Japanese so-series DPs, including *sono* '(of) that'+NPs, do have a bound variable interpretation, just like *zibun* 'self' and *pro*, as in (1) (Hoji 1991, Noguchi 1997, Kurafuji 1998).

(1) *Dono titoiyai-mo kare-no**i/j/*sonoi/j/ano**i/j/*zibun-noi/*j/proi/j itibansita-no musume-o kawai-garu*

Every father- \forall he-Gen/*sono*/*that*/*self*'s/*pro* youngest-Gen daughter-Acc love
'Every father_i loves his*_{i/j}/*sonoi/j*/*that**_{i/j}/*self*'s/*pro* youngest daughter.'

(Note. *ano* in (1) is a distal demonstrative which does not allow a bound variable interpretation, unlike *sono* (Kuno, 1973))

In Japanese language classrooms, *sono* is introduced as a medial demonstrative, an equivalent to 'that' in English, and the bound variable use of *sono* is not taught. The English demonstrative 'that' generally does not allow a bound variable interpretation. Therefore, it is interesting to investigate whether L1 English speakers of L2 Japanese can acquire this property. Previous studies (Kanno 1997, Marsden 1998) show that L1 English speakers of L2 Japanese successfully acquire the bound variable use of overt pronouns (*kare* 'he'). The present study extends these findings to the domain of demonstrative pronouns. To the best of my knowledge, no previous study has investigated the bound variable use of *sono*+NPs. Through examining it, the applicability of the Full Transfer/Full Access Hypothesis (Shwartz & Sprouse 1994, 1996) is tested. This hypothesis predicts that L1 English speakers of L2 Japanese would not initially allow the bound variable interpretation of *sono*+NPs, transferring their L1; nevertheless, they will allow it as they are exposed to the L2.

15 L1 English speakers of L2 Japanese with intermediate levels of proficiency were compared with 15 native Japanese speakers in two tasks. The first task was a sentence interpretation task adapted from Kanno (1997), in which the participants read sentences like (1) and indicated the antecedents of *sono*+NPs. The second task was a truth value judgement task in which the participants answered if the sentences like (1) matched the meaning of the bound or disjoint contexts illustrated by pictures. The results so far suggest that the L2ers with lower proficiency accepted the bound variable reading of *sono*+NPs significantly less than the controls, transferring interpretation of English demonstratives. Nevertheless, the L2ers with higher proficiency accepted it just like the controls, supporting the Full Transfer/Full Access Hypothesis.



Matthew Patience

(University of Toronto)

L3 acquisition of the Spanish rhotics by L1 Mandarin L2 English speakers: The effects of cross-linguistic influence on development

The present study investigates the role of cross-linguistic influence on the production of the two Spanish rhotics (the tap /ɾ/ and the trill /r/) by L1 Mandarin L2 English speakers. While several studies have analyzed the production of the Spanish rhotics by native English speakers, few studies have been conducted on speakers of other languages. Mandarin has one rhotic consonant which differs greatly from the Spanish rhotics (in place and manner). Mandarin also has an alveolar /d/ and a dental /l/, two segments that bear some similarity to the tap perceptually and articulatorily (in terms of place and voicing); such similarities could impede acquisition (Flege, 1995). In contrast, native Mandarin speakers who have acquired the English flap may have an advantage producing the nearly identical Spanish tap, a finding observed in L1 English L2 Spanish speakers (Olsen, 2012).

12 L1 Mandarin-L2 English-L3 Spanish speakers of beginner and intermediate Spanish proficiency were recorded performing a repetition task in Spanish and English. Duration, voicing, and manner of the Spanish rhotics and the English flap were measured and compared to the values of control speakers. Preliminary results for the tap indicate that learners experience difficulty articulating the target manner, as 2 of 3 participants tended to produce a brief approximant (80% occurrence) in place of the tap (17% occurrence). Interestingly, the duration of these approximants match that of a native-like tap, and these approximants are perceptually very similar to a tap. The one Mandarin speaker who produced the tap with some regularity (50% accuracy) also consistently produced an accurate English flap, while the other learners demonstrated difficulty articulating the flap. Preliminary results for the trill indicate that Mandarin speakers experience relatively more difficulty acquiring the trill, as only one participant produced trills that were native-like along all three parameters. The other two participants produced a variety of non-target segments – approximants, stops, fricatives, and taps.

The fact that Mandarin speakers produce a non-target yet perceptually similar segment in place of the tap suggests that learners may aim for native-like percepts as opposed to native-like articulations. It also appears that the Mandarin rhotic is more perceptually distinct than the English rhotic: English L2 Spanish learners tend to substitute their L1 rhotic for the tap and the trill until they acquire the target manner (Johnson, 2008), yet no Mandarin-like rhotics were observed. L2 English-based transfer was also observed. Only the learner who was able to produce a native-like English flap was able produce a native-like Spanish tap and this only occurred in post-tonic syllables, the same context in which the English flap occurs. This suggests that the presence of L2 allophones facilitate the acquisition of L3 phonemes, provided the phonetic contexts are the same.

Elke Peters, Tinne Van Rompaey and Tom Velghe

(University of Leuven)

An English and French vocabulary size test for Flemish learners

This presentation reports on the design and development of an English and French vocabulary size test, specifically designed for Dutch-speaking learners in Belgium. More specifically, we aim to develop form-recall and meaning-recognition tests for both English and French which (i) rely on up-to-date frequency information, (ii) pinpoint the vocabulary level of (upper-)intermediate learners in an accurate, valid way and (iii) are tailored to the Flemish context.

In the development of the English test, our purpose is to take into account limitations of previous vocabulary size tests (see also Schmitt et al., 2013). The French vocabulary size test is created from scratch, as a valid French test is not available at present. Such a test is, however, of particular relevance to Flemish learners given the status of French as the second official language in Belgium.

Firstly, the item selection for the tests is based on recent frequency lists extracted from the 450-million-word Corpus of Contemporary American English (COCA, Davies 2008-) and the Frequency Dictionary of French (Lonsdale & Le Bras 2009, based on a 23-million-word corpus). The detailed frequency data enable us to define a more adequate representative noun-verb-adjective ratio which, in contrast with Nation's (1990) 3:2:1 ratio and Schmitt et al.'s (2001:58) 5:3:1 ratio for the English VLT test, differs per frequency band (e.g. the COCA data display a 6:3:2 ratio in the 1 to 1,000 band versus 3:1:1 in the 4,001 to 5,000 list).

Secondly, we address the sampling rate and differentiation within the frequency bands, viz. 1-2,000, 2,001-3,000, 3,001-5,000, and 5,001-10,000, a concern also raised by Schmitt et al. (2013) regarding the Vocabulary Size Test (Nation & Beglar 2007). Preliminary results of Schmitt et al.'s VLT test administered to Flemish undergraduate students show that the VLT might not be sensitive enough to measure learners' vocabulary size of the frequency bands between 3,000 and 5,000. Therefore, the English and French tests differentiate between the 3001-4,000 and 4,001-5,000 frequency bands.

Thirdly and crucially, our test design is adapted to Dutch-speaking learners in Flanders. The VLT contains a considerable number of cognates and loanwords, including items that are orthographically identical to Dutch (e.g. sport). Consequently, the VLT runs the risk of overestimating learners' vocabulary size (Schmitt et al. 2013). This may even more so be the case for Flemish, which is prone to English borrowings and known for its historical influence from French – especially in regional variants. Therefore, the item selection for both the English and French test was preceded by a careful screening for Germanic and Romance cognates. In this poster, we will discuss the design and item selection of the French and English tests in more detail. In addition, we will present the first results of the pilot study.



Diana Pili-Moss

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Access to explicit knowledge and disfluency phenomena in L2 oral production.

In the SLA research of the last fifteen years the implicit/explicit distinction has acquired prominence as a central theoretical construct in relation to the definition of linguistic knowledge, types of instruction, learning processes, retrieval of linguistic information and corrective feedback (DeKeyser 2003, 2013, De Jong 2005, Ellis 2005, Ellis and Loewen 2007, Hulstijn 2005, Long 2007, Long et al. 2011). As a consequence of this trend, the discipline has witnessed an increased theoretical and methodological interest in identifying reliable test measures of implicit and explicit knowledge (Han and Ellis 1998, Ellis et al. 2009).

Though the relationship between disfluency (self-correction, pauses) and monitoring phenomena has been established in the literature (Levelt 1983, Kormos 1999, 2000a, 2000b), the former has not received much attention as a potential indicator of access to explicit knowledge in the light of the implicit vs. explicit debate.

The aim of this study is to analyze the occurrence of disfluency phenomena in oral production under two experimental conditions:

- (1) a picture description task with no verbal cues;
- (2) a picture description task similar to the task in condition (1), with added verbal cues.

The data was collected from 47 participants (37 Intermediate learners of Italian and 10 native speakers) and the linguistic target elicited was the oral production of sentences containing *passato prossimo*, a compound Italian past tense, an example of which is given in (3):

- (3) Maria è arrivata a Londra alle 2
[Maria is3ps arrivedfs in London at 2]
'Maria arrived in London at 2'

The following two phenomena were considered indicative of access to analysed knowledge during online oral production:

- (i) self-correction (whether targetlike or not)
- (ii) pauses in the verbal phrase (between auxiliaries and past participles and in the past participle)

The research questions the study addresses are the following:

- (a) How does the presence vs. absence of verbal cues correlate with the presence of different types of disfluency phenomena?
- (b) Does analysis of access to explicit knowledge, in terms of monitoring, confirm previous findings indicating that tasks including an element of constrained response are a better measure of explicit knowledge than free production tasks?

The collected audio data was transcribed and coded for speech analysis using the CLAN/PRAAT software. A statistical analysis was subsequently run to determine the correlation between self-correction episodes and the presence vs. absence of verbal cues. Pauses and filled pauses longer than 300ms (DeJong and Bosker 2013) occurring between auxiliaries and past participles and internal to past participles were measured for both experimental conditions and a second analysis

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Introducing CLIL alongside EFL in minimal input contexts: Development of receptive skills in early L2 learning.

The emerging focus on the study of Young Language Learners and the various ways in which early L2 learning takes place (Nikolov and Mihaljevic Djigunovic, 2011; Dalton-Puffer, 2011; Edelenbos et al. 2007) requires rigorous research on whether the introduction of CLIL alongside EFL instruction in minimal input contexts is as effective for L2 language development as it has been claimed to be in contexts in which exposure is more intensive.

Within the context of a funded two-year longitudinal study on the implementation of CLIL and its effect on the students' foreign language development and attitude in four primary schools, the present paper explores how 10 year-old students exposed to EFL instruction alone (control groups) and to EFL+CLIL instruction (experimental groups) in minimal input situations developed their L2 receptive skills over two school years. Two of the four schools taking part in the study implemented CLIL in their Science classes (N=165) and the remaining two did it in their Arts and Crafts classes (N=51). Control and experimental groups had been exposed to the same amount of input at the time of testing, which is crucially important if real language gains are to be determined. Exposure to English previous to the study, extra-curricular exposure to English during the study and whether the students were high or low achievers prior to the study were taken into account in the statistical analysis, which are all claimed to be key variables in new research agendas for CLIL (Pérez-Cañado, 2012).

Results of the listening and reading tests indicate significant language gains in both EFL and EFL+CLIL groups in both the Science and the Arts schools. Yet L2 gains are greater in the EFL groups than in the EFL+CLIL groups in all schools, with significant differences in favor of EFL students in Arts and Crafts schools. This difference in favor of EFL students in all schools becomes more noticeable among those students who attend extracurricular English classes and among high-achievers, whereas low-achievers in English seem to benefit more from limited exposure to CLIL.

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The effects of bilingualism on grey and white matter structure

Recent studies have suggested that learning and using a second language (L2) can affect the brain structure, including the density of the grey matter (GM) and the structure of white matter (WM) tracts. Luk et al. (2011) reported higher WM integrity for elderly bilinguals, compared to monolinguals, measured as higher Fractional Anisotropy (FA), in the corpus callosum (CC) and surrounding tracts. Similarly, Pliatsikas and colleagues (2014) reported greater GM volume in the bilateral cerebellum for young bilinguals, compared to monolinguals, which was significantly correlated to their performance in a grammatical task. These findings suggest a significant restructuring of the brain as a result of bilingual education, reflected in altered patterns of language processing. Based on the above findings, we wanted to test whether the reported FA differences (Luk et al.) will also be found in younger bilinguals that are everyday L2 users, who also demonstrate GM changes (Pliatsikas et al.). Additionally, we wanted to investigate whether any WM and GM changes are related to the amount of their L2 immersion.

We acquired a DTI scan and a high-resolution structural MRI scan from 20 highly-proficient nonnative speakers of English (L2 group, female=13, mean age: 31.85, SD: 8.06) with a minimum immersion of 13 months (mean: 91, SD: 84, range: 13-374), and 25 native speakers (NS group, female=14, mean age: 28.16 years, SD: 5.33). We performed TFCE-corrected whole-brain between-groups analyses on our data (TBSS for the DTI data and VBM for the structural data), with age and gender included as covariates. We also analysed the L2 data separately with immersion was added as a predictor.

Our TBSS analysis revealed greater FA values for the L2 group at the CC and surrounding tracts, closely replicating Luk et al. The immersion analysis did not give any significant results. Our VBM analysis revealed greater GM volume for the L2 group in the left Frontal Pole in the corrected data, and also in the RIFG, the left cingulate gyrus and bilateral cerebellum in the uncorrected data. The immersion analysis revealed that immersion was a predictor of the size of the left globus pallidus (IGP) of the L2 group in the uncorrected results. We subsequently extracted the volume of the IGP and found a significant positive correlation with the amount of L2 immersion.

Our results are the first to demonstrate bilingualism-induced WM and GM structure changes in the same group of participants, and we also replicated the Luk et al. findings in a younger population. This suggests an early benefit of learning and using a second language, which may assist in preserving WM integrity in older age. We also suggest that the volume of subcortical structures like the IGP may be directly affected by the amount of L2 immersion.

Amanda Post da Silveira

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Investigating the role of visual word recognition on L2 word stress representation: cross-linguistic similarities do not always help

This study investigates the role of the L1 and L2 orthography on the acquisition and processing of L2 word stress. The languages of interest here are Brazilian Portuguese (L1, BP) and American English (L2, AmE). In order to test the role of orthography in L2 stress production, we designed three experiments: i) a bilingual list speeded word naming test, ii) an L1 orthography masked prime in L2 speeded word naming test, and iii) an L1 phonetic prime in L2 speeded word naming test. We expected the L1 orthography and phonetics to prime L1 word stress patterns in L2 production, causing differences in response onset time according to the different stimulus categories we created. Eight low-frequency and moderate-frequency word categories were constructed by systematic combination of i) word length (disyllabic, trisyllabic), ii) form similarity (cognates, non-cognates – defined on the basis of normalized Levenshtein distances, Scheppens et al. 2012) and iii) stress pattern (same or different in English and BP). 45 Brazilian advanced learners of English performed the tests. Results showed no overall significant effect for the cognate status of words. We found a clear effect of L1 dominance in the bilingual list experiment, since L1 words were produced faster than L2 words. We also found a strong interaction of cognate status and stress pattern on L1 cognate words, which shows that prosodic priming occurs in L1 & L2 similar words. The monolingual tests showed that reaction times were inversely proportional to similarity: the more similar the L1 primes were to L2 targets, the longer were the RTs. It indicates that in speech production, the degree of similarity between prime and target creates an extra challenge to the working memory to disentangle L1 and L2 representations. Besides inhibitory effects of the cognate status, we also found inhibitory effects of semantic similarity between L1 prime and L2 target. Facilitation effects were found when stress patterns matched between L1 prime and L2 target, but mismatched in meaning. The present results corroborate previous studies in L2 (Dijkstra & van Heuven 1998, 2002; Costa et al. 2004; Brysbaert et al. 1999, among others) which indicate that similarities at multiple levels of linguistic representation are associated and activated in parallel in the bilingual lexicon. Specifically, there is evidence that L2 stress processing is affected by – as well as affects – the multiple representations of words in L1. L2 stress acquisition turns out to be mediated and co-defined by the orthographic representations from L1 and L2 bi-directionally.

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Anat Prior, Tamar Degani, Sehrab Aawady and Rana Yassin

(University of Haifa)

L2 proficiency and executive functions predict individual differences in cross-language interference

Interference from L1 is a major source of difficulty for L2 learning and processing. Indeed, there is abundant evidence that both languages of bilinguals and language learners are active during language comprehension and production (e.g. Kroll, Dussias, Bogulski & Valdes-Kroff, 2012). These findings suggest that at least some of the variability in second language achievement could be attributed to individual differences in the ability to successfully overcome interference from the L1 during L2 processing. Additionally, growing proficiency in the L2 might be expressed by reduced susceptibility to L1 interference. Recently, it has been claimed that bilinguals and language learners recruit domain general executive functions (EF) to manage language competition and selection. These same mechanisms could also assist in overcoming L1 interference. In the current study, therefore, we examined both L2 proficiency and executive functions as possible predictors of susceptibility to L1 interference during L2 processing.

Seventy university students who were native speakers of Arabic and proficient learners of Hebrew as an L2 participated in the study. Cross language interference (from L1 Arabic to L2 Hebrew) was assessed in two language domains. To assess lexical interference, participants judged the semantic similarity of pairs of Hebrew words. In the critical condition, the first word was a false cognate between Hebrew and Arabic (shared phonology, different meaning), and the second word was related to the Arabic, but not the Hebrew, meaning of the first. Thus, in order to correctly rate the Hebrew words as unrelated, participants needed to overcome interference from Arabic. In the syntactic domain, participants performed grammaticality judgments on Hebrew sentences, in a self-paced reading paradigm. This task indexed participants' ability to overcome interference from their L1 (Arabic) by manipulating the similarity of the grammatical structures across the two languages. L2 proficiency was assessed using a self-report questionnaire and two objective measures. EFs were examined using the Simon arrows task and the numeric Stroop task as indicators of inhibitory function, and a task switching paradigm as an index of mental shifting abilities.

We found evidence of significant L1 interference across the lexical and syntactic domains, even across languages that do not share orthography and in advanced learners. Interestingly, individual differences in grammatical interference were significantly associated with L2 proficiency overall, but susceptibility to lexical interference was better explained by domain general EF abilities. Thus, both linguistic knowledge and higher-order cognitive mechanisms contribute to learners' ability to overcome L1 interference during L2 processing.

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Tom Rankin

(WU Vienna)

Syntactic Transfer and Agreement Cues in L1 German-speakers' Comprehension of English wh-questions

English and German share identical constituent orders in a range of wh-questions. Such structures may, however, be parsed differently in each language, see

(1) and (2).

(1) Which animal chases the dog? – subject-verb-object

(2) Welches Tier jagt der Hund? – object-verb-subject

L1 transfer has been identified in bilinguals' comprehension of these structures. Native speakers of English may misparse German input, and vice-versa (Grüter 2006; Rankin 2013). This paper investigates the role of agreement morphology in comprehension in L1 German-L2 English. German indicates thematic roles with case and agreement while interpretation in English is always transparent from the word order.

18 advanced-proficiency learners of L2 English and 10 native English speakers completed a picture verification task which investigated interpretation of English wh-questions. Cartoon scenes presented animals chasing or catching each other. The scenes were accompanied by questions relating to the content of the pictures. The questions, illustrated in (3) to (6), manipulated similarity to the constituent order of questions in the learners' L1 German (+L1, -L1) and the grammaticality of the agreement pattern(+agr, *agr). Participants chose responses from a multiple choice answer sheet.

(3) Which animals has the dog chased?/Which animal chases the dogs? (+L1,+agr)

(4) Which animals have chased the dog?/Which animals does the dog chase?(-L1,+agr)

(5) Which animals have the dog chased?/Which animals chases the dog? (+L1,*agr)

(6) Which animals has chased the dog?/Which animals do the dog chase? (-L1,*agr)

Responses to grammatical clauses were coded as target or non-target. For ungrammatical clauses, the dependent variable was response type: (i) licensed by agreement, (ii) licensed by word order, or (iii) 'don't understand the question'.

Learners provided target responses to grammatical sentences at a rate of 93%, similar to natives (99%). For ungrammatical sentences, natives never provided responses licensed by agreement; they relied instead on word order (71%) in comprehension, or indicated they could not understand the question (29%). Overall, learners provided interpretations licensed by agreement significantly more often (38%). This effect is modulated by the similarity of English word order to German structures. Learners are significantly more likely to attend to agreement morphology in clauses such as (5) (56%), which share an identical linear order to German, compared to those in (6) (22%).

Learners are thus more sensitive to morphological cues for interpretation than English native speakers. In their comprehension of wh-questions, learners appear to continue to have recourse to their L1 syntax to license non-target agreement patterns. This is discussed from the perspective of learnability assuming that the first language grammar constitutes the initial state of second language acquisition.



Andrea Revesz¹, Nektaria Kourtali¹ and Diana Mazgutova²

(Institute of Education, University of London¹, Lancaster University²)

The effects of task type and task complexity on L2 writing behaviour and text quality

The effects of task-related factors on the end products of writing tasks have been the object of a considerable amount of research in the area of instructed second language (L2) acquisition research in recent years. However, considerably less research has been conducted on how task factors may influence the processes in which L2 writers engage, and how these online processes may be linked to text quality. Using Kellogg's cognitive model of writing and Robinson's Cognition Hypothesis as theoretical bases, the goal of this study was twofold. First, it aimed to explore the relationships of task type and cognitive task complexity to L2 writing processes, such as online pausing and revision behaviour, with the help of online keystroke-logging software. Second, it intended to examine how these task factors influence the linguistic characteristics of the text produced.

The participants were 72 students with B2-C1 levels of proficiency. They all performed two computerised writing tasks, a less or a more complex version of a formal letter-writing and an argumentative task. Inspired by Robinson's Cognition Hypothesis, the cognitive complexity of the tasks was manipulated in terms of reasoning demands. Under the complex task condition, participants received detailed guidance about what to include in the written product, whereas under the simple condition they were given no such guidance. The validity of the task complexity manipulations was assessed by self-ratings of mental effort. Task type and cognitive task complexity were counterbalanced across the participants.

Participants' online writing behaviour was investigated based on the log files obtained by the keystroke logging software Inputlog 5.2. Pausing behaviour was expressed in terms of number of pauses and mean length of pauses. Pauses were also classified according to whether they occurred between words, sentences, or paragraphs. The length of bursts occurring between pauses was used to capture fluency. Revision behaviours, such as deletions and substitutions, were measured by computing the number of edits and considering the location of the revisions (word, clause, or sentence level). The resulting texts were analysed in terms of lexical and syntactic complexity and accuracy. Lexical complexity was gauged using measures of lexical frequency, density, and diversity. Syntactic complexity was assessed in terms of four types of indices: complexity by subordination, phrasal complexity, overall complexity, and incidence of negative expressions.

A series of two-way repeated measures ANOVAs revealed that, when task complexity was increased, participants paused more often, wrote less fluently, and made more content-related revisions. Also, increased task complexity led to more linguistically complex but less accurate production. Task type did not appear to affect the writing processes and outcomes tapped by our measures. These results will be discussed in terms of Kellogg's model of L2 writing and Robinson's Cognition Hypothesis.

Anne Dorothée Roesch and Vicky Chondrogianni

(Bangor University)

Child-internal and child-external factors in the comprehension of wh-questions in simultaneous and sequential German-speaking bilingual children

Monolingual (L1) children with typical development have been shown to have better performance on subject compared to object wh-questions (e.g. Tyack & Ingram, 1977). Additionally, the presence of cues, such as number or gender, in complex structures is known to facilitate comprehension (Adani et al., 2011). In German, comprehension of subject and object wh-questions in L1 children (Rösch & Chondrogianni, 2014) and in adults (Jackson & Bobb, 2009) is facilitated by case-marking cues. The acquisition of complex structures in bilingual children remains rather unexplored (Chilla, 2008). The present study investigates the effect of child-internal factors, such as knowledge of L2 morphology, working memory and age, and of child-external factors, such as age of onset (AoO) and length of exposure (LoE) to the L2 (Paradis, 2011), on the comprehension of subject and object wh-questions in simultaneous (2L1) and sequential bilingual (L2) children.

32 4-to-5-year-old 2L1 French-German children (mean age: 5;1), 33 L2 German-speaking age-matched children (L1 French) (mean age: 5;2) and 32 L1 German-speaking age-matched controls (mean age: 4;11) participated in a comprehension experiment examining German subject and object *welcher*-('which?') questions in three conditions: (i) morphological cues on both the wh-element and the 2nd NP (i.e. cues appeared sentence-initially and sentence-finally), (ii) on the wh-element only (i.e. cues positioned sentence-initially only), and (iii) on the 2nd NP only (i.e. cues positioned sentence-finally only). Standardized assessments were used for case and working memory, and a parental questionnaire for LoE and AoO.

Across groups, children performed better on subject than on object wh-questions, and better on wh-questions with double cues than with the wh-cue only, with the lowest accuracy when the cue was at a sentence final position (NP-cue condition). The 2L1 children had similar accuracy to the L1 children, and both groups outperformed the L2 children. Regression analysis for the (2)L1 and L2 children revealed that performance on wh-questions was predicted by a combination of child-internal and child-external factors. For the bilingual children, 80%-90% of the variability in performance on subject wh-questions was accounted for by knowledge of case-marking only, while 60%-74% of the variability in performance on object wh-questions was explained by a combination of knowledge of case and LoE. For the L1 children, up to 90% of the variability in performance on wh-questions across cue-conditions was explained by a combination of knowledge of case-marking, working memory span and current age.

These results show that 2L1 and L2 bilingual children are sensitive to the same morpho-phonological cues as the L1 children. For preschool bilingual children, the acquisition of complex structures relies mainly on knowledge of relevant morpho-syntactic information (case-marking) and less on LoE. Additionally, working memory seems to be more important for L1 than for L2 children of this age.



John Rogers

(Qatar University)

Incidental learning and online processing of L2 case-marking: a self-paced reading study

A growing seam of research has demonstrated that various aspects of second language (L2) grammar can be reliably acquired as a result of incidental exposure. However, recent reports have suggested that the incidental learning of L2 case-marking might not be as straightforward as the learning of other areas of grammar, such as L2 word order. Despite the fact that concurrent measures of learning have been suggested to be more sensitive to incidental learning effects than offline instruments, research in this area (e.g., Rogers, Rebuschat, & Révész, 2013) has only assessed learning offline, for example through grammaticality judgment tests. As such, it is unclear if the results of these studies necessarily reflect the quality and quantity of learning which has taken place. The present study builds upon previous research into the incidental learning of L2 case-marking with the novelty of assessing learning both online, using reaction time data from a self-paced reading task, and offline via an untimed sentence completion test.

Participants were exposed to an artificial morphological system under incidental learning conditions. First, they read 144 sentences via a self-paced reading task, each of which consisted of English phrases and a Czech inflected noun, e.g. Last summer /the cat /chased /the myšku /in the house. There were two syntactic patterns (in the example, NPtemp- NPsubj-VP-NPobj-PPloc), and the Czech noun was inflected according to one of two cases (nominative -a, accusative -u) depending on its function in the sentence (subject, object). The training set consisted of 48 sentences (24 nominative, 24 accusative) which were repeated across three training blocks for a total of 144 exposures. The exposure task required participants to read the sentence, then answer a yes/no comprehension question based on its content. The critical data in this experiment came in the fourth and final block in which differences in reaction times to grammatical (correct case-marking) and ungrammatical (incorrect case-marking) sentences served as the primary measure of learning. Next, participants completed a sentence completion task along with subjective measures of awareness. Finally, participants were prompted to describe any morphological rules or patterns they might have noticed.

Running counter to previous findings, the results of this study indicate that the learning effect demonstrated on both the self-paced reading and the sentence completion tasks was largely driven by conscious (explicit) knowledge of the underlying rule system. These results will be discussed further in light of findings from previous research and the instruments which were utilized to determine the conscious status of the knowledge acquired in these experiments.

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Vivienne Rogers, Rachel Aspinall, Louise Fallon, Thomas Goss, Emily Keey
and Rosa Thomas

(Swansea University)

Testing aptitude: investigating Meara's (2005) LLAMA tests

Meara (2005) developed the LLAMA language aptitude tests as a free, language-neutral, user-friendly suite of aptitude tests. They test four separate elements – vocabulary learning (LLAMA B), phonetic memory (LLAMA D), sound-symbol correspondence (LLAMA E) and grammatical inferencing (LLAMA F). These tests are based on the standardised MLAT tests developed by Carroll & Sapon (1959), but have themselves not been standardised (cf. Granena 2013). In recent years, the LLAMA tests have become increasingly popular in second language acquisition research (e.g. a recent edited volume by Granena & Long (2013), papers at the 2013 EUROSLA conference by Roberts & Marsden, Erçetin, Çeçen & Yalçın, and Kepinska, Caspers, Struys & Schiller). However, Meara (p.c.) has expressed concern about the wide use of these tests without validity testing. This pilot study investigates several areas relating to the LLAMA tests.

1. The language neutrality of the tests.
2. The influence of general education level.
3. The effect of age.
4. The role of playing logic puzzles.
5. The role of previous language learning experience.
6. The length of time allowed for each test.

In order to examine these areas, participants (n=200) from a range of language backgrounds, aged 10-65 with various education levels have taken the LLAMA tests. In order to examine language neutrality, participants with typologically distinct L1s, e.g. English and Chinese, have been tested. Participants have also been age-matched with different education backgrounds, e.g. group 1: left school at 16, group 2: left school at 18, group 3: educated to degree level and group 4: postgraduate degree level qualifications. Participants also include monolingual and bilingual learners as well as second language learners at various proficiency levels. A subset of participants will be re-tested with varying timings for the tests and will be compared with new participants who have only taken either the longer or shorter test. Data collection is ongoing but initial results from the L1 English group (n=40) suggest that there is no effect for age or education level. There is a significant effect of playing logical puzzles (n=20), versus not playing logical puzzles (n=20) for vocabulary learning (LLAMA B) and grammatical inferencing (LLAMA F). In both measures those who played logic puzzles, even if only occasionally, outperformed those who did not (see table of means below).

	LLAMA B (vocabulary)	LLAMA F (grammar)
Plays logic puzzles	53.75 (s.d.= 27.904)	54.0 (s.d.= 25.215)
No logic puzzles	37.50 (s.d.= 17.505)	32.50 (s.d. = 22.213)

These initial results counter Kepinska et al's (2013) findings of age effects, but this is only a partial analysis. The extent to which the final results conform to previous research findings and the implications for aptitude testing will be discussed.



Frank Romano

(Sabanci University)

Morphological Variability and L1 transfer in the acquisition of the L2 Italian IP

In this talk I demonstrate that differences in abstract L2 knowledge of the functional category IP at different L2 proficiency levels are best represented by a theory that recognises the construction and inclusion of target-like lexical items in the L2 numeration as central to L2 development. Two key issues in the literature were empirically investigated, morphological variability and L1 transfer. In order to test which of three theories, Organic Grammar (Vainikka and Young-Scholten 2011), Full Transfer/Full Access (Schwartz and Sprouse 2011), and Lexical Learning/Lexical Transfer (Wakabayashi 2009), best explains the acquisition of the IP in L2 Italian, two I-related properties were examined: phi-features and null/overt subjects.

Present tense verb inflection and null/overt subjects in the preverbal position were elicited from 15 native controls and 14 L1 English and 16 L1 Spanish adult learners at different levels of L2 Italian proficiency. An oral test and a three experimental tests were employed. Distributional and accuracy analyses of the oral data were completed to specifically test Organic Grammar's predictions that the acquisition of IP properties in individual L2 learners is gradual and that L1 functional features do not transfer, contra Full Transfer. The experimental tests, an untimed grammaticality judgment, a speeded gap-fill, and a speeded sentence completion test, instead, differed in terms of task-pressure and construct so as to tease apart the computational versus representational predictions of variability made by Full Transfer vs. Organic Grammar.

Gradual acquisition and no L1 transfer of I's phi-features was observed, favoring Organic Grammar. Moreover, variability was consistent across test conditions, indicating representational accounts fare better in accounting for patterns in richly-inflected L2s like Italian. I propose that imperative-like morphemic chunks are L2 Italian default verb forms at earlier L2 stages, similar to L2 English bare verbs. Lastly, L1 transfer, was found in the domain of null subjects, consistent with Full Transfer. These apparently conflicting results are, however, compatible with Lexical Access/Lexical Transfer.

Hanne Roothoof

(University of Navarra)

Comparing the effects of elicitation and metalinguistic feedback on the acquisition of the English past simple tense

A substantial number of studies have shown that corrective feedback can have positive and durable effects on the acquisition of L2 grammar (Russell & Spada 2006). In classroom studies, feedback-types that push students to self-correct their errors (i.e. prompts) have been found to be more effective than recasts, which provide students with the correct form (Lyster, Saito & Sato 2013). However, prompts comprise a number of techniques which vary in explicitness and may therefore affect acquisition differently. Nevertheless most studies comparing the effects of different types of feedback have contrasted recasts to prompts as a group, without trying to tease apart the effects of individual prompts. In order to compare the effects of two types of prompts, elicitation and metalinguistic feedback, on the acquisition of the English past simple tense, we designed a quasi-experimental study involving two intact classes of university students (n= 31) enrolled on an intermediate English course. The study, carried out over a period of two weeks, consisted of a pre- and post-test, in which the students completed a grammaticality judgment test and an oral test based on picture stories, and two treatment sessions of one hour each in which the students told different fairy tales in groups. During the treatment, the 18 students in group A received feedback in the form of elicitation after their past tense errors (e.g. “a long time ago the prince...?”), while the 13 students in group B were given metalinguistic feedback by the teacher every time they made an error against the regular or irregular past tense (e.g. “you need to use the past tense”). The immediate effects of the two prompts were compared through an analysis of the amount of uptake and repair following the corrective feedback. It was found that the students in the metalinguistic feedback-group were able to repair their past tense errors in 83.1% of all cases, whereas elicitation only led to repair 47.5% of the time. When comparing the pre- and post-test results, both groups were found to have significantly improved their accurate use of the past tense. Moreover, there were some indications that metalinguistic feedback could be more effective than elicitation, as the difference between the two groups, calculated with an unpaired T-test using gain scores, approached significance ($p=0.0572$, $\alpha=0.05$).

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Sarah Rule and Rosamond Mitchell

(University of Southampton)

Learning and Remembering Vocabulary in the French L2 classroom: the effects of multimodal input

This paper investigates the influence of multimodal input on classroom L2 vocabulary learning. Data come from a corpus based study of young English L1 instructed learners of L2 French (aged 7 years), during the first 38 hours of instruction. Alongside regular measures of the children's French learning, all lessons were video recorded and transcribed, with systematic tagging of teacher's gestures, analysis of word frequency in teacher input and documentation of multimodal input. Young children are thought to rely on visual rather than verbal recoding of memory items (use of visuo-spatial sketchpad: Gathercole and Baddeley 1996). So multimedia learning can be efficient because it conveys both auditory and visual information (Moreno and Mayer 2000) and leaves a richer trace in working memory (Cohen and Otterbein 1992). It seems that enrichment of input through multimodality leaves richer traces that in turn help memorisation and retrieval. Studies of instructed adult L2 learning suggest that teacher gesture enhances classroom input (Lazaraton 2004). However, little is known about the significance of gesture and other forms of multimodal input for child L2 classroom learners (but see Tellier 2008).

In the lesson series understudy, novel lexical items were usually introduced accompanied by an image, gesture, action or song. Here we trace the introduction and practising of selected lexical items, which were included in a specially devised receptive vocabulary test. The target words were drawn from the teacher's classroom input and teaching plans, and the test was administered at mid-test, post-test and delayed post-test. For each target word, we tallied frequencies and contexts of occurrence in teacher input and in children's output, as well as the frequency of multimodal support through use of teacher gesture, images, print, and song. We draw on these analyses to investigate interactions between word frequency, multimodal input, and their combined influence on acquisition of particular word classes (e.g. colour adjectives, animate nouns, motion verbs).

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Laura Sánchez¹ and Camilla Bardel²

(University of Barcelona¹, Stockholm University²)

Psychotypology in L3 Acquisition. A Survey of (Dis)Similarity Perceptions in Non-Adult Learners

In this contribution, we review the field of studies on psychotypology in L2 and L3 learning. We propose different definitions of the construct and discuss theories about learners' perceptions of similarity that have been suggested in L2 and L3 research, from Kellerman's (1983) notion to recent studies (e.g. García Mayo & Rothman 2012). Psychotypology involves similarity, and more importantly, perceived similarity. Intuitively, this is an attracting way of trying to explain CLI between similar languages, but it is not clear from the literature to what extent learners are aware of themselves perceiving similarity and of the possibility to draw on this process in additional language learning. Crucially, in the process of learning a new language, learners may be aided by their multilingual metalinguistic knowledge (cf. e.g. Jessner, 2008), but their conscious or unconscious knowledge of the similarity between two languages can also, in particular cases, mislead the learner (Bardel & Falk 2012, García Mayo & Rothman 2012).

To obtain further insights into the relevance of these issues in third language acquisition, we present data on the psychotypology from different age groups of L3 English learners (n=88), who were Spanish/ Catalan bilinguals with L2 German aged 10-16. In order to measure their psychotypology, we administered them a typological perception questionnaire that was roughly based on Hall, Newbrand, Ecke, Sperr, Marchand & Hayes (2009). The items included in this questionnaire addressed the learners' beliefs about the existing similarity between the background languages and the target language when considering the language as a whole (Hammarberg, 2009), and also when looking at discrete areas of language (Cenoz, 2003).

The results indicate that learners tend to perceive English as closer to German than their L1s. This is true even though the overall similarity perceived between English and German does not correlate with the learners' perception of similarity when it comes to vocabulary or to grammar, and indeed the correlation between these two areas is certainly weak ($r_s = .233^*$, $p = .030$). Moreover, these perceptions differ between the age groups, suggesting there is a change in perceptions with increasing age and instruction, which helps learners become aware of objective (dis)similarities in this language pair.

In addition to this, younger learners (up to the age of 12) are less sensitive to differences between languages, and their choices are guided by their assumed similarities whether or not they exist objectively. After this age, a correlation exists between similarity perceptions in vocabulary and grammar ($r_s = .370^{**}$, $p = .007$). Furthermore, a significant change takes place between 10/11 and 14/15 ($p = .001$) or 15/16 ($p = .028$) year-olds, with older learners more aware of differences between English and German in grammar (e.g. verb placement) and of similarities between Spanish and English both in grammar and vocabulary.



Jacopo Saturno

(Università degli Studi di Bergamo)

Copular constructions and gender in initial polish L2

This contribution aims at providing some insights on the way adult initial learners process competing morpho-syntactic structures in a highly inflected L2 (Polish).

Within the VILLA project (Dimroth et al. 2013), 31 Italian L1 learners took a 14-hour Polish course whose input was recorded and transcribed, so as to thoroughly correlate its features with interlanguage development. The present study discusses the result of a picture naming task. Learners were asked to describe a referent using the appropriate copular construction and referential means ("to jest" + nominative: "this is" vs. "on/ona jest" + instrumental: "he/she is") according to the structure employed in the stimulus and to the gender of the referent.

Results show that the instrumental endings mainly combine with the required pronouns "on/ona", thus producing target structure; however, they also occasionally associate with "to", overextending onto the required nominative form of the noun. Further, the pronouns "on/ona" frequently overextend onto the competing form "to". This all is surprising in two respects:

- a) "to" requires the nominative case, on which the basic word-form of the interlanguage (Klein & Perdue 1997) is modelled, whereas "on" and "on a" require an inflected form; structures with "to", therefore, would appear formally less complex;
- b) copular constructions with "to" are much more frequent in the input and occur in a wider variety of contexts and functions. In sum, the structure "on/ona" + INSTR as well as its individual components seem favoured over the competing structure "to" + NOM, despite their formal complexity and lower frequency.

Results are interpreted in terms of naturalness and cue validity: both "on/ona" and the instrumental endings are univocal with regard to gender, so that the resulting construction is maximally explicit in this respect. "To", in contrast, combines with both genders: consequently, this feature is only specified by the nominal ending and the structure appears less transparent (Dressler 1987). Moreover, such structures require that learners associate the gender of a referent with its nominative ending, which is probably premature at this early stage: masculine nouns, for instance, are hardly groupable in that they feature numerous and not obviously related endings (Wurzel 1989).

It is suggested that semantic traits such as the inherent gender of human referents may be particularly urgent to initial learners, who will often employ univocal and explicit means to express them. This parallels the scale of accessibility of referential means (Givón 1983), as gender may well function as an anaphoric device (Frajzyngier & Shay 2003) and as such it may require a particularly explicit treatment in the interlanguage (Chini 2010). The appropriate linguistic means, in turn, will be identified on the basis of their cue validity rather than mere frequency in the input.

Derya Sekerci Aribas and Filiz Cele

(Istanbul Aydin University)

Acquisition of article system in L3 English by Turkish-German bilingual children: Evidence for positive transfer from L2 German

This study examines the acquisition of article system in the third language (3) English by Turkish-German bilingual children to explore whether similarities in realizing an overt article system and sharing the same semantic conceptualizing (of definiteness setting) (Jaensch, 2008; Lyons, 1999) in German and English result in positive transfer. In addition, the study tests whether the difference in the realization of an article system in Turkish and English (Kornfilt, 1997) leads to Turkish child learners of English fluctuating between the two settings of the Article Choice Parameter (ACP),- the specificity and definiteness setting (Ionin, Ko and Wexler, 2004). The data was collected from 36 Turkish-German bilingual children, 41 Turkish child learners of English and 10 native English speakers through a forced-choice elicitation task and a written-production task adopted from Ionin et al. (2004). The forced-choice elicitation task involved 10 [definite-non-specific], 10 [definite-specific], 10 [indefinite-specific] and 10 [indefinite-non-specific] article contexts in which participants were asked to choose appropriate article. In the written-production task, they were asked to provide written answers (3-5 sentences) to four English tasks. The experimental groups' proficiency levels in English were measured by the Oxford Placement Quick Test. The proficiency level in German was measured by standardized tests FIT1 and ZDJ1 from the Goethe Institute. Results from the elicitation task indicated that Turkish-German bilingual children having A1 level in English (A1 level) but B1 level in German outperformed those with equal proficiency (A1) in both German-English ($F(3, 90)=3,32, p=.023$) in choosing the appropriate articles in four contexts. Turkish learners of English with A1 proficiency were less successful than the other two groups ($F(3, 207)=3.296, p=.021$) in choosing articles appropriately. These findings provide evidence for positive transfer from L2 German to L3 English at the initial stage of the acquisition of the L3 English article system. Also, we found that Turkish child learners of English were less accurate on [+def, -spec] ($M=3.67$) and [-def, -spec] ($M=3.49$), and [-def, +spec] ($M= 3,05$, out of 10) than the other context: [+def, +spec]). This finding is consistent with the Fluctuation Hypothesis (Ionin, Ko and Wexler, 2004), and suggest that L1 Turkish children fluctuate between the two setting. Results from the written-production task revealed that the Turkish-German learners of L3 English were better than the Turkish learners of L2 English in the appropriate use of English articles. Turkish child learners were specifically less accurate on the appropriate use of the indefinite article (6, 76 %) than the use of definite article in written tasks in L2 English.



Louise Shepperd

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Influence of Orthographic Input on Phonological Representations of Nonnative Nonassimilable Contrasts: Adult Native English Speakers' Acquisition of Zulu Clicks

Unlike first language (L1) acquisition, adult second language (L2) learners are exposed to orthographic input (OI) from the earliest stages of development. A growing body of research has begun to investigate how this type of input influences L2 phonological development. Studies focusing on the difficulties surrounding L2 contrasts that can be assimilated to existing L1 categories report that OI promotes clarity of lexical representation and enhances memory of novel forms. Meanwhile, research investigating the influence of inconsistent grapheme-phoneme correspondences claim OI can lead to misperception, phonological misrepresentation and non-target production. To examine the effect of OI on early L2 phonological representation, aside from factors related to orthographic inconsistency and perceptual difficulties surrounding assimilable contrasts, the present study investigated the acquisition of nonassimilable contrasts, which are consistently represented in the orthography. The chosen contrasts were a selection of Zulu click consonants which have been found to be perceptually discriminable for native-speakers of English in previous research (i.e. /g/ /-/g||/; /lh/-/g|/). Adult native-speakers of English (N=28) with no previous exposure to Zulu were trained to learn 24 bisyllabic Zulu words with a combination of auditory and orthographic input. The experimental items belonged to one of four groups of minimal pairs, where two groups differed by native contrasts and two differed by nonnative click contrasts. A short AXB discrimination task was conducted with all participants to confirm the differences between minimally paired phonemes were perceptually salient. Immediately after this task, participants began the learning phase where each Zulu word was auditorily presented simultaneously with a picture depicting the matching pseudo-meaning. For each participant, orthographic input was presented below the picture alongside auditory input for one group of items differing by a native contrast and one group differing by a nonnative contrast. After reaching a learning criterion, an audio-picture matching task was conducted. This took place directly after training and then repeated two days later in a delayed posttest. Results revealed no significant difference in performance when identifying nonassimilable nonnative contrasts in the immediate posttest when OI was presented during acquisition. However, performance was marginally better in the delayed posttest with OI. Participant responses during testing and in posttest interviews suggested presentation of orthographic forms biased participants towards L1-based phonemic categorisation (e.g. <g> - /g/), even when L1 and L2 phonemes are perceptually distant. So, while findings suggested OI may support the establishment of novel forms in memory, it appears OI does not lead to more accurate L2 lexical representations. Thus, these findings support arguments against an over-reliance on OI during the earliest stages of L2 phonological development.

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The Relationship between L1 Fluency and L2 Fluency among Japanese Advanced Learners of English

This paper investigates the relationship between L1 fluency and L2 fluency among Japanese advanced learners of English. Some studies suggest that there is a correlation between L1 fluency and L2 fluency (Towel et al. 1996, Riazantseva 2001, Derwing et al. 2009, de Jong et al. 2013). However, this phenomenon seems to involve some different mechanisms: transfer from first language specific pause profiles, inference of individual speech behavior, and L2 'plateau effect'. Towell et al. (1996) reported that there was a correlation between L1 fluency and L2 fluency for speech rate and articulation rate among 12 advanced learners. He suggested that the correlation might be caused by a 'plateau effect', which means the attainment of L2 fluency development is determined by the speaker's own L1 fluency level. More recently, de Jong et al. (2013) reported that there was a significant correlation between L1 & L2 fluency among 48 intermediate and advanced learners, in respect to syllable duration, silent pause duration, number of silent pauses, filled pauses, repetitions, and repairs. The present study examined the relation between L1 & L2 fluency among 24 advanced learners, grouped as 1) 12 late bilinguals, 2) 12 early bilinguals, 3) a mixture of these 24 advanced learners. The results were very different among each group. For the mixed group of 24 advanced learners, a correlation was seen for most of the fluency measurements. For the group of 12 early bilinguals, there was a significant correlation for speech rate, mean length of runs, and phonation time ratio. For the group of 12 late bilinguals, a correlation was observed in respect to syllable duration, articulation rate, filled pause duration, and number of repairs. These results imply that the correlation is affected by the sample size and participants' experience of acquisition. The paper also reports that drawls (vowel lengthening) were often seen in the late bilinguals' group. The paper discusses the possible necessity of involving drawls as one of the disfluency measurements, as well as silent pauses, filled pauses, repetitions and repairs.

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Keapa bursting: L2 sound connectedness at word boundaries

Even highly proficient L2 learners are often rated as less fluent than native speakers. Factors underlying perception of fluency are both segmental and suprasegmental in nature. This paper explores the degree of sound connectedness at word boundaries in L2 speech. Specifically, it examines sequences of two stop consonants (S1-S2) spanning word boundaries (e.g. keep track) in speech of advanced Czech learners of English. While native speakers often produce no audible release of S1, in Czech-accented English S1 stereotypically has a release burst. Three sources of this difference are considered: (i) interference of L1 timing of articulatory gestures, (ii) greater word integrity in L2 and (iii) a slower rate of L2 speech.

The stimuli were 72 English sentences containing heterorganic S1-S2 sequences which resulted from combining factors Place of S2 (fronter than S1 or backer) and Boundary between S1-S2 (syllable, word). Additional 18 sentences contained homorganic stop sequences spanning a word boundary. Six Czech university students of English (level C1 in CEFR) and four native English controls recorded each sentence twice. Parallel 72+18 Czech sentences were produced by 6 near-monolingual Czech university students. Speaker Group codes are CzEn, En, and Cz, respectively. Percentage of unreleased S1s (% unreleased), speech rate (syllables/s), and S1+S2 closure duration normalized for local speech rate were submitted to (RM) ANOVAs and post-hoc Scheffé tests as appropriate.

We found a significant ($p < .001$) effect of Place of S2 on % unreleased across speaker groups: more S1s were unreleased before a fronter S2 than before a backer one, and even more in homorganic sequences. This probably reflects a phonetic universal.

More importantly, there was a significant effect ($p < .05$) of Speaker Group on all the three dependent variables. En had a higher % unreleased overall (about 75%) and shorter closure duration (indicating greater gestural overlap) than Cz (about 30% unreleased), CzEn being intermediate in both variables (50% unreleased), which is indicative of L1 interference. CzEn did not differ from En in speech rate, both groups being slower than Cz.

Interlanguage word integrity did not play a role. This is because the percentage of S1s unreleased before word boundaries and before syllable boundaries within words did not differ significantly. There was also no significant interaction between Boundary and Speaker Group which would indicate different treatment of word boundaries by learners.

Finally, for only one CzEn speaker did a logistic regression model fitted to released-unreleased include speech rate. The correlation between CzEn speakers' mean speech rates and % unreleased was significant ($r \sim .95$, $p < .01$) only after excluding one outlier (i.e. 16.66% of the data). The link between speech rate and the lower percentage of unreleased stops was thus unclear.

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Testing Two Models of Third Language Acquisition

Linguists working on third language acquisition (L3/Ln) have recently proposed several models accounting for whether the L1 or the L2 structure has an effect when acquiring the L3/Ln. We check the Cumulative Enhancement Model (CEM, Flynn et al 2004) and the Typological Primacy Model (TPM, Rothman, 2010, 2011, in press) with a combined data set from two new studies. Both models hypothesize that all previously acquired languages might be a source of transfer. The CEM argues that any previously acquired properties are potentially available to the L3/Ln learner to use in parsing, comprehending and producing language. Crucially, prior language experiences can either enhance subsequent language acquisition or remain neutral.

The TPM shares the claim that neither the L1 nor the L2 have a privileged status for initial state L3/Ln morphosyntactic transfer. However, Rothman (in press) has argued that interlanguage development is constrained by what the internal parser takes to be the (actual or perceived) structural similarity, among the three grammars. Potential cues such as similarities in the lexicon, phonetics/phonology, functional morphology, and syntactic structure influence the learners' perceptions of similarity.

Data for checking these predictions come from Authors (in press) and Authors (in press). We tested two trilingual groups: Basque native speakers with L2 Spanish (n=23) and Spanish natives with L2 Basque (n=25), both learning English, as well as a control group of native English speakers (n=24) and a bilingual Sp-E group (n=47). We discuss the relevant constructions; namely, English contrastive Topicalization and Object Drop.

There is no resumptive pronoun in English Topicalization (e.g., The fish, I haven't tried (*it) yet). Its equivalent in Spanish, Clitic Left Dislocation, has an obligatory resumptive clitic while Basque does not. Hence Basque and English are similar for this construction. The CEM predicts that Topicalization will be easy for both trilingual groups since either the L1 or the L2 coincide with English in lacking a resumptive element. The TPM predicts that Spanish will be perceived as the typologically closer language, and transfer from Spanish will make Topicalization hard to acquire. Actual results support the TPM: Topicalization is not acquired by our participants.

Object Drop in English is unacceptable (Q: Do you drink enough water? A: No, I don't drink (*any/much), while it is perfectly fine in Basque and only allowed in generic contexts in Spanish. Both models predict this construction will be hard to acquire fully. Actual results point to initial transfer from Spanish but eventual successful acquisition by both trilingual groups.

We conclude that the CEM is challenged by our results, while the TPM needs to be fine-tuned. The question is why one type of harmful transfer can be overcome but another type cannot. We discuss possible explanations of this issue.



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Pronoun processing in Anglophone late L2 learners of French: Behavioral and ERP evidence

This study investigated the cortical response in L2 acquisition of French clitic pronouns by Anglophone learners, a topic of recent research (Grüter & Crago), but up to now, not in terms of electrophysiological processing. In English, object pronouns behave morphosyntactically like full lexical Noun Phrases (I saw Bill/I saw him), whereas in French they are cliticized (attached) to the verb (J'ai vu Guillaume/Je l'ai vu/*J'ai vu le). We used ERPs, known to show P600 responses to word order and morphological violations in native speakers (Friederici et al.), to investigate neural responses to word order violations of in situ pronouns (attested in L2 production). RQs : 1) Do natives and Anglophone French L2ers show offline/online evidence of sensitivity to grammatical constraints on French clitic pronouns, and is proficiency level significant? 2) Do subjects process pronouns differently, based on online and offline measures?

The online task recorded the ERP response to 180 sentences (half with clitics) and the end of sentence behavioral response to these sentences, while the offline Grammaticality Judgment (GJ) task comprised 40 sentences (24 with clitics). Our results indicate Native speaker (n=14) sensitivity to ungrammatical in situ pronoun placement by offline (GJ) and both end of sentence and immediate online (robust P600 morphosyntactic ERP) responses. Our study furnishes a baseline indicating Native French reject in situ placement of clitic *le/les* and strong *lui/eux* (ungrammatical as object bare forms), and confirms that Natives react to morphosyntactic pronoun anomalies with a P600, (similar to documented morphosyntactic anomalies). The L2ers demonstrated distinct processing and offline capacities according to level. The Intermediate group (n=14) showed online sensitivity qualitatively similar to that of the Native controls, responding to in situ placement with a P600. Offline, they scored significantly better than Beginners for ungrammatical in situ clitics and strong pronouns. For the Intermediate learners as for the Natives, the similarity of their online and offline responses confirmed a grammaticalized representation and processing of the clitic pronouns.

The Beginners (n=14) did not exhibit patterns similar to the Intermediates or the Natives on either the offline or online measures. Nonetheless, they showed a stronger ERP response to in situ pronoun placement than their behavioral data would suggest. Despite offline acceptance of strong pronouns and clitics in situ, they showed a frontal positivity in the P600 window to both of these errors. While still apparently using their L1 English settings for pronoun placement, their cortical response clearly demonstrates that they are sensitive to French parameters even if not yet consciously.

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What (Diachronic) Construction Grammar can tell us about teaching and learning perfective aspect in the German EFL classroom?

Theoretically this paper aims to bridge a gap between the field of (Diachronic) Construction Grammar and TESL/TEFL. Insights from diachronic constructional research can help when teaching grammatical structures and ‘rules’. Understanding constructional schemata, their taxonomic relations and their diachronic emergence and competition can shed light on learning difficulties and should ultimately lead to changes in grammar instruction and text book design.

Constructional approaches (similar to Cognitive Grammar proposals) assume that Grammar is usage-based and that linguistic structures emerge through repetition, categorization and conventionalization rather than resulting from a pre-existent matrix. Grammar consists of surface-oriented and emergent form-meaning pairings (constructions) which have sequential structure and may include fixed, lexically filled positions as well as lexically underspecified ‘open’ positions (slots). ‘Rules’ (in the traditional generative sense) have been replaced by schemata (i.e. grammatical templates which have evolved over concrete tokens) (cf. e.g. Goldberg 1995, 2009; Tomasello 2003; Croft & Cruse 2004). Diachronically, ‘constructionalization’ (i.e. the emergence and entrenchment of a new form-meaning pairing) but also the potential marginalization of a construction is often not only influenced by discourse-pragmatic needs (functionally driven), but also by frequency effects and analogical reasoning skills (form-driven) (cf. e.g. Itkonen 1994; Israel 1996; Krug 2003; Hoffmann 2004; Noël 2007; Fischer 2009; Sommerer 2011, 2012, forthcoming; Traugott & Trousdale 2013).

The idea that frequency in input is crucial for the learning process and that speakers often operate by using preconstructed, formulaic lexico-grammatical sequences which are processed as collocational chunks is definitely not new in SLA research (cf. e.g. Sinclair 1991; Hudson 1991; Haiman 1994; Schmitt 2004; Ellis 2002, 2003, 2008b, 2009; Bybee 2003, 2010). Still, employing the notion of constructions offers the possibility to integrate these assumptions into a full-fledged model of pedagogical Construction Grammar (its acquisition and its change) (cf. e.g. Waara 2004; Gries & Wulff 2005; Abbot-Smith & Behrens 2006; Langacker 2008; Tylor 2008; Manzanares & Rojo Lopez 2008; Niemeier & Reif 2008; Tyler 2010).

Empirically, the paper reports on a research project which investigates suitable methods for teaching tense-aspect in EFL classrooms in Austrian Secondary Modern Schools. The paper rests on data from a pilot study with university students of English (n=60, L1=German, level B2/C1) who have been tested on their ability to use perfective aspect ([Aux+Past Participle]VP ; e.g. have worked). The students experience difficulty with perfective constructions (due to interference of their L1), prefer preterite alternatives (e.g. worked) and more often successfully use perfective aspect in meso-constructions (semi-lexical frames/ sentence stems) like [Have you ever...?] Or [I have never...] which include adverbials. The paper will try to explain why this result is not surprising if we take into account (among other things) factors like frequency, the nature of semi-lexical constructions or constructional competition.



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Case marking at first exposure in Polish: The role of source language (NL-FR-GE) & input frequencies

This paper investigates the acquisition of case morphology and word order for the interpretation of argument roles in Polish as a second language. For this study, true beginners with L1 Dutch, German and French were exposed to 14 hours of Polish in a monolingual class-room setting. Their input was kept constant as far as possible and recorded and transcribed for analysis (VILLA project, cf. Dimroth et al. 2013).

Polish is a highly inflected west Slavic language with nominal suffixes for seven cases and a relatively free word order (default SVO, OVS, OSV, SOV). German distinguishes four cases, but case is mainly marked on determiners and only marginally on nouns (depending on gender and inflection class). Word order is relatively free but has to obey the V2 constraint for declarative main clauses. The latter is true for Dutch as well, but due to the loss of nominal case marking freedom of word order is restricted to pronouns. French shows no case marking (with the exception of pronouns) and has strict word order (SVO).

A sentence picture matching task including SVO, OSV and OVS sentences, examined learners' ability to comprehend sentences that varied in case marking and constituent order. The task was administered after 9 hours and again after 13 hours of Polish instruction. Input frequencies of the relevant structures for each learner group and time point will be provided.

Results reveal the impact of L1 on task performance: Dutch and French learners start with a strong subject-first strategy, performing much better on SVO sentences than on the other two word orders, whereas the German learners do not rely on this strategy. Despite the high frequency of SVO sentences in the input, performance with the other word orders, i.e. reliance on morphological case marking significantly increases for Dutch and French learners after only four hours of additional L2 exposure.

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Usage-Based Effects of Construal Awareness on the Learning of Typologically Different L2 Grammar

Previous studies have shown cross-linguistic influence between topic-prominent language and subject-prominent language in learning second language (L2) grammar. The evidence includes misanalysis of the L2 English subject-predicate structure as the topic-comment structure by Japanese learners of English as a foreign language (EFL) (e.g., *The party enjoyed). This transfer may reflect differences in construing events between English and Japanese native speakers, referring to cognitive linguistics (CL) literature (e.g., Langacker, 2008; Ikegami, 2000; Oka, 2006) including CL comparisons of both languages. The current study hypothesizes that raising awareness of how events are construed in the target language may be effective in the learning of the English subject for Japanese learners. Three groups of 74 Japanese undergraduates learning EFL participated in the quasi-experiment: Construal Awareness (CA) Group, Traditional Group, and Control Group. The CA Group was made aware of the English subject as the head of a profiled action chain by use of its image schema and, then, engaged in oral production practice of the exemplars in a passage. The Traditional Group engaged in oral production practice of the same exemplars with the same frequency but was made aware only of the formal aspect of the subject-predicate structure instead of the construal. The Control Group was not provided with any treatment. For the pretest and the immediate and delayed posttests, the three groups of participants wrote English essays on a topic that was relevant to the passage given in the treatment. Pretest-posttest change was analyzed in terms of the percentage of suppliance of the subject in obligatory contexts in the essays by repeated-measures analyses of variance (ANOVAs). Furthermore, since the posttest essays written by the two treatment groups contained clauses based on the verbs used in the passage for the production practice, the percentages of the subject-suppliance in clauses with the practiced verbs and in the other clauses were calculated separately (i.e., the subject suppliance in clauses framed by the specific verb usage and the suppliance in non-framed creative clauses) and then were separately compared in each posttest between the two treatment groups by Mann-Whitney tests. The ANOVA results revealed that the CA Group outperformed the other groups in the immediate posttest but that the effect did not last in the delayed test. With regard to the Mann-Whitney results, the CA Group outperformed the Traditional Group in verb-framed production in the delayed posttest as well as the immediate posttest while the superiority of the CA Group in non-framed production was verified only in the immediate posttest. These results suggest that construal awareness helps memorize exemplars correctly and facilitates usage-based learning though it is not sufficient for sudden jumps into high levels of abstraction.



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Ultimate attainment in the use of lexical collocations among heritage speakers of Turkish in Germany and Turkish-German returnees

In this paper we show that heritage speakers and returnees are fundamentally different from the majority of adult second language learners with respect to their use of native-like lexical patterns. The SLA literature shows that second language learners (L2 learners) find it very difficult to acquire collocational knowledge (Foster, 2009b; Laufer & Waldman, 2011). Even at very advanced stages of acquisition, L2 learners of English underuse collocations involving delexicalized verbs such as *have a drink* or *have a swim*, which are very common among native speakers. So far, there are no studies which have focused on the ability of returnees (i.e. heritage speakers who returned to their country of origin in adolescence) to produce such structures. Turkish returnees are particularly interesting because they returned to their home country after the age of 12, at a time when L1 acquisition is normally completed. Data from this group can provide crucial insights into their ability to acquire new aspects of their heritage language in late adolescence, and reveal whether they are similar to L2-learners or to monolingual speakers of Turkish who have grown up in Turkey with respect to their ability to produce collocations. We compare the use of lexical collocations involving light verbs *yap-* “do” and *et-* “do” in transcripts of story tellings in Turkish among heritage speakers of Turkish in Germany (n=45) with those found among a group of recent Turkish returnees (n=30), who were recorded within one year after return, a group of older returnees (n =35) who had been back for seven years upon recording, and Turkish monolinguals (n=69). Results show that returnees who had been back for one year upon recording overuse *et-* and use some hypercorrect forms, which could be an indication that they are under considerable pressure to conform to Turkish norms for the variety that is spoken in Turkey (Fritsche, 1996). Returnees who had been back for seven years upon recording produce collocations that are quantitatively and qualitatively similar to those of monolingual speakers of Turkish. We discuss implications for theories of ultimate attainment and incomplete acquisition in heritage speakers.

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Improving vocabulary learning in second language speakers: An errorless learning approach

In foreign language learning contexts the meaning of new words can be given to learners in advance or the learners could be encouraged to guess the meaning from the context with corrective feedback (trial and error). The latter is often considered more progressive and learner-centred. However, the literature on learning and memory suggests that the traditional model may have some advantage over the guessing-from-the-context approach.

Learning via trial and error methods often lead to the creation of errors during encoding (hence, errorful learning), which may lead to interference and strengthening of incorrect associations. Methods that reduce the possibility of making errors during encoding (errorless learning; Terrace, 1963) often result in increased memory performance (Baddeley & Wilson, 1994). Recent work with adults and children revealed a significant advantage of the errorless over errorful learning for novel words (Warmington & Hitch, 2013; Warmington, Hitch, & Gathercole, 2013).

We report two experiments that adapted errorless learning to learning new words in L1 Chinese/L2 English speakers. Participants learnt novel labels for familiar concepts on the pretext of learning words in a new language (however, all items obeyed the phonotactics of English); half of the stimuli were presented in the errorless and the other half in the errorful learning condition. In the former, participants were introduced to the new label and immediately given its meaning:

- (1) Garry's eating his favourite fruit. It's a lunaf. A lunaf is a kiwi.
Can you say lunaf?

In the latter, participants had to guess the meaning before being given corrective feedback:

- (2) Garry's eating his favourite fruit. It's a lunaf. Can you guess what it is?
... A lunaf is a kiwi. Can you say lunaf?

The results of Experiment 1 suggest that L1Chinese/L2 English speakers benefit more from learning new words via errorless than errorful methods and that this benefit facilitates long-term retention of new vocabulary.

Experiment 1 materials were designed to induce errors (kiwi was an unlikely first guess, above). In real life, however, learners don't always guess wrong. Experiment 2, therefore, explored whether the errorful disadvantage stemmed from the act of guessing, or from guessing wrong. Sentential contexts were created to lead to the correct first guesses:

- (3) Jack is buying a piece of furniture. He will sleep in it. It's a drepnort.
(Can you guess what it is?...). A drepnort is a bed. Can you say drepnort?
More words were again learnt in the errorless than in the errorful condition.

This suggests that having to guess the meaning, even when the first guess is accurate, leads to a weaker retention of the form-meaning connection, possibly due to attention being taken away from the form of the new word at the point of encoding.



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The first language effects on processing second language morphology

Models of the mental representation of morphologically complex words include decomposition (Taft & Forster, 1975) and full-listing (Butterworth, 1983). While the former assumes that a complex form is parsed into morphemes prior to lexical access, the latter assumes no morphological parsing in word recognition. Can this issue be linked to first language (L1) transfer-dependent variability in the use of second language (L2) morphology (e.g. Lardiere, 1998a, b; White, 2003)? Some recent psycholinguistic studies suggest that unlike native speakers, L2 learners do not decompose regularly inflected forms due to problems in online grammatical computation (Clahsen et al., 2010; Silva & Clahsen, 2008). Therefore, they depend on the whole-word access route (i.e., full-listing) in processing multimorphemic forms. Nevertheless, cross-linguistic research suggests that the mental representation of multimorphemic words is tuned by morphological characteristics (e.g. richness/complexity) of a language (Frost & Grainger, 2000; Vannest et al., 2002). This implies that the pattern of processing of a language either as a L1 or a L2 will be influenced by its morphological characteristics. This suggests that inflectional richness/complexity of the L1 may influence processing of L2 morphemes, which, consequently, might affect the extent of variable use of L2 morphology.

Within this background, we investigated processing of L2 Turkish morphology by learners with L1-Russian and L1-English. Unlike English, Turkish and Russian are inflectionally rich languages. We predict that, while L1 English learners will rely more on full-listing, L1 Russian learners will employ decomposition (cf. Portin et al. 2008). In the unprimed lexical decision task, participants were asked to decide whether or not a given item is a word in Turkish. Items included 138 real words (case- and plural-marked multimorphemic words and monomorphemic words), 280 nonwords, and 173 fillers. The participants included 32 native Turkish speakers, 31 L1-English learners (17 intermediate; 14 advanced), and 31 L1-Russia learners (14 intermediate; 17 advanced). The results reveal no significant Reaction Time (RT) difference between monomorphemic and multimorphemic words in the native Turkish group, suggesting that they employ full-listing. For the L1-English learners, the proficiency level is a significant determinant for the processing route: While the intermediate learners use decomposition, the advanced learners employ full-listing like native Turkish speakers, possibly due to native-like automatization/proceduralization. The L1-Russian participants, however, are found to employ decomposition regardless of the proficiency level. The results of L1-Russian learners are in line with the findings of Kazanina et al. (2008), which show substantial decomposition in Russian native speakers' processing of L1 morphology. These findings imply that morphological properties of the L1 influence the recognition of inflected forms in L2 Turkish. These findings might account for potential L1-dependent variability in the use of L2 morphology, a phenomenon commonly observed in late L2 learners.

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Recognizing lexical forms in the speech stream at first exposure

This study investigates how adult learners break into a novel acoustic signal and transform it from a stream of incomprehensible noise into a sequence of segmented and recognizable sound forms. Although statistical studies using artificial language learning paradigms (e.g. Saffran et al., 1996) have examined this process, only a few studies based on natural language input have done so (e.g. Gullberg et al. 2010; Carroll 2012; Shoemaker & Rast 2013). One area of disagreement is the role of frequency in word recognition and the precise nature of frequency effects when they are found. Some claim an important role of frequency in extracting words from the speech stream, recognizing words or even learning words in the early stages of L2 acquisition, whereas some claim a limited effect of frequency at this stage (cf. Carroll 2012). The discrepancy in results appears to be partly due to the way frequency is measured and the specific source and target languages of the study, as well as its interaction with other factors, such as cognate status (referred to here as ‘transparency’).

The current study seeks to better understand the interactions between frequency and transparency in L2 word recognition at the early stages. The study examines word recognition at the first moment of contact with a new target language (Polish) and in subsequent hours of exposure by native speakers of four different L1s (Dutch, n=39; French, n=38, German, n=20, and Italian, n=29) with no previous exposure to Polish. The frequency of target items was carefully measured, cognates were carefully controlled, and effects of both were compared cross-linguistically and over time. Participants were tested on their ability to extract words from Polish sentences at three time intervals (T1: 0 hrs. of exposure; T2: 7.5 hrs. of exposure; T3: 13.5 hrs. of exposure) during a Polish language course. We focus on two variables: 1) the effect of frequency of forms in the input (absent vs. frequent, the latter being 20+ tokens); 2) the effect of phonological transparency (transparent vs. opaque), i.e. phonological similarity between the lexical forms in the L2 and the L1 (e.g. ‘transparent’ item - Polish profesor vs. Dutch professor, French professeur, German Professor or Italian professore ‘professor’; ‘opaque’ item - Polish tłumacz vs. Dutch vertaler, French traducteur, German Übersetzer or Italian traduttore translator’).

Results shed light on the impact of the L1 on word recognition (cross-linguistic comparison), as well as the effects of frequency in the input and transparency over time (from 0 to 13.5 hrs. of exposure), as seen through interactions between frequency, transparency and test. We discuss in particular the improved recognition of opaque words within the context of ‘word learning’.



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The Effects of Task Rehearsal as a Post-Task Activity

Besides the abundantly clear communicative and motivational benefits of TBLT (Ellis, 2003) both teachers and researchers express their doubts whether students can actually acquire language (structures) by performing a communicative oral task. These doubts go to the heart of the matter, whether one can focus on form in meaning-based TBLT.

In our experimental study we investigated the potential benefits of having learners repeat a task as a post-task activity to focus attention on form. Forty-eight ninth-grade students (intermediate and high proficiency) learning German as a foreign language at a Dutch secondary school were assigned to two conditions: a rehearsal (R) and a non-rehearsal (NR) group. Three tasks were designed for the study. Task 1 was a description task and targeted 'dative case after prepositions of place', Task 2 was a discussion task and targeted 'comparatives', and Task 3 was a narrative task and targeted 'present perfect'. The performance and rehearsal of each task was spread over a period of three weeks, during approximately 2 hours per week.

The effectiveness was measured on the acquisition of two new grammar structures performed in Task 1 and 2. First, both groups performed Task 1, then the NR group performed Task 2 and the R group Task 2 + Task 1 (highly similar content) as a post-task activity. After that, the NR group performed Task 3 and the R group Task 3 + Task 2 (with highly similar content). Research showed that Task 1 was significantly more difficult than Task 2. Pretests, immediate and delayed posttests of participants included metalinguistic knowledge, written and oral accuracy tests as well as oral fluency tests. Statistical comparisons of the learners' performance on the posttests showed that there were no significant differences between the groups on oral accuracy and fluency on both tasks. On written accuracy and metalinguistic knowledge the R group outperformed the NR group on both tasks. The study also enables investigation of Foster and Skehan's (1996) 'trade-off-effect'.

Results from oral accuracy and fluency posttests indicated a negative correlation between accuracy and fluency for the R group on Task 1: learners who scored relatively high on oral accuracy, scored relatively low on fluency. These effects were not found on Task 2. In sum, no significant effects were found on oral accuracy and fluency but indeed on metalinguistic knowledge and written accuracy. The results suggest that previous knowledge of the task is available for the learners to build on in subsequent performance, but not automatized enough to produce correctly in oral performance.

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Jan Vanhove and Raphael Berthele

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Cognate guessing across the lifespan: Cognitive and linguistic factors

Cross-linguistic similarities are highly conducive to second and foreign language learning (e.g. Ringbom 2007). Of particular interest, historically related words with similar meanings in different languages ('cognates') represent a huge potential for the spontaneous comprehension of unknown but closely related target languages. Due to their historical link, cognates show varying degrees of formal similarity that learners can capitalise on when making sense of a new language (cf. also the importance of lexical transparency in incipient second language learning; Rast 2006, Dimroth et al. 2013). However, some readers/listeners are more adept at unraveling cognate relationships than others. Researchers have tried to account for such interindividual variance in terms of, among other factors, the make-up of the participants' linguistic repertoire, sociolinguistic factors, and attitudes. We hypothesize that the cognate recognition process is also dependent on basic cognitive factors, specifically working memory (WM; short-term storage and manipulation of information), crystallized intelligence (Gc; accumulated knowledge) and fluid intelligence (Gf; capacity to solve novel problems). Thus, we speculate that interindividual differences in WM, Gc and Gf can directly account for interindividual variance in cognate guessing skills. We test these predictions using data from a cross-sectional study in which 159 German-speaking Swiss participants (aged 10 to 86) without competences in Swedish were asked to translate 90 Swedish words (all cognates) into German and, additionally, to participate in a number of cognitive tests. Of further interest, WM, Gc and Gf are age-dependent, though not in the same way: while WM and Gf reach their highest point in the mid-20s and show roughly linear decline afterwards, Gc tends to display modest increase throughout adulthood. To the extent that cognate recognition is indeed dependent on these cognitive factors, we therefore expect that the ability to recognize cognates in unknown foreign languages will also vary as a function of age. The results show a different age development of the cognate guessing skills depending on the modality: cognate guessing performance for written items increases sharply throughout childhood and adolescence and remain at a high level until the end of the lifespan. In the spoken modality, however, cognate guessing performance starts to drop from about age 50 onwards. Congruently with these differential age trends, written cognate guessing is found to be more reliant on Gc, whereas spoken cognate guessing is more dependent on declining cognitive resources (specifically Gf). The data of our cross-sectional study allow us thus to track the development of cognate recognition skills through the lifespan as well as to tease apart its cognitive driving forces.

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Irregular verb morphology in Austrian learners of English on A2-level

English irregular verb morphology constitutes a rather pertinacious problem both in the area of linguistics and language acquisition. In linguistics, English irregular verbs have often been assumed to be cognitively represented as idiosyncratic, rote-learned items in the mental lexicon (Chomsky & Halle 1968). In language acquisition, irregular verbs are dreaded by learners because of their seemingly erratic and thus error-prone patterns. Such views, however, disregard both the internal morphological patterns within this semi-regular word class and the repeatedly attested ability of speakers and learners to generalise productively from existing patterns to novel, unknown forms (Clahsen 1999). These observations have sparked the so-called “past-tense-debate” (Pinker 1999, Tomasello 1995), which has brought forward a number of theories and models to account for these phenomena. Most of the empirical evidence, however, relates to speakers’ L1, and only tentatively have models and methodologies been adapted for learner language studies (Chernigovskaya & Gor 2000, Flege, Yeni-Komshian & Liu 1999, Pliatsikas & Marinis 2013, Strobach & Schönplflug 2011). German-English L2 verb morphology has been examined with regard to adult speakers (CEFR C1) in two studies so far (Plag 2000, Wagner 2010), but data from younger or adolescent learners are missing.

The purpose of this study was to test in how far two hypotheses put forward in the literature can account for fresh L2 data on the CEFR A2 level. Hypothesis one claims that the internal organisation of irregular verb morphology is governed by an analogy-driven universal pattern associator (Eddington 2004, Pinker 1997). Hypothesis two states that irregular verb morphology follows a so-called universal apophonic path (Ségéral & Scheer 1998). In the present study, around 250 Austrian lower secondary pupils went through two paper-and-pencil experiments, eliciting past-tense and participle inflections to given nonce words, whose constituents varied systematically in terms of their prototypicality for non-default inflection. Pupils’ responses were analysed using generalised linear mixed models as well as classification algorithms. Preliminary results suggest that their responses are far from being random. It is obvious that learners build novel irregular forms based on morphological analogies and also follow predictions made by the apophonic path. In that way our data confirm earlier findings from both L1 and L2 studies. The way the nonce constituents interact with the type of inflection and vowel change, however, differs from previous studies and would need further investigation.

Possible educational implications of these results apply to the way verb morphology should be presented in standard school text books. If universal and analogy driven pattern associators or apophonic constraints turned out to be active even in an early L2 mental lexicon, contrastive explorations (Ellis 2006) as well as frequency based materials and activities (Bybee 2001) would be called for.

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Syntactic, semantic, and discourse constraints in L2 production: the case of English genitive constructions.

Language production is affected by the notion of Conceptual Accessibility (Bock and Warren, 1985). It is well known, for example, that native speakers of English prefer the element in first position of genitive constructions to be animate, thus more accessible at the conceptual/intentional level. In fact, if the possessor is animate and the possessum inanimate, the 's-construction is more likely (1a), while if the possessor is inanimate and the possessum animate, the of-construction is more likely (1b):

- | | | | |
|--------|--------------------------|-----|-------------------------|
| (1) a. | the student's room | vs. | the room of the student |
| | N[+anim] GEN N[-anim] | | N[-anim] GEN N[+anim] |
| b. | the cleaner of the hotel | vs. | the hotel's cleaner |
| | N[+anim] GEN N[-anim] | | N[-anim] GEN N[+anim] |

In our study we first investigated whether syntactic/semantic interface constraints of this type operate in non-native language production, whether one or the other syntactic construction is preferred when elements are matched for (in)animacy (i.e. the baker's mother, the cousin of the student, the blade of the knife, the canoe's paddle), and how animacy and syntactic construction are affected by priming of either construction in previous discourse since this may also affect preference in language production. Although discourse priming is known to have effects on the syntax and conceptual accessibility of other structures in native production (Prat-Sala and Branigan, 2000 for example), research is yet to look comparatively at non-native language production.

We tested 30 advanced Chinese speakers of English, proficiency range 70-100% according to Oxford Placement Test, on their ability to correctly recall short sentences containing either type of possessive construction via spoken production. Genitive constructions in Chinese encode possession via a de morphological marker between the two possessive elements, like English 's. Fifty-six sentences in a balanced 4 item by 16 block design controlling for syntactic ('s/of), semantic (N [+anim]-N[+anim], N[-anim]-N[-anim], N[+anim]-N[-anim], and N[-anim]-N[+anim]) and priming (prime/no-prime) effects were employed. A verbal/numerical memory distracter alternated every test item. A comprehension test of 25 items was also administered to check for basic knowledge of the meaning of the two genitive constructions.

Mixed-effect model analyses show that when the two elements are unmatched for animacy, correct recall is significantly higher if the animate element is in first position, consistent with natives' preferences, but when animacy is matched, recall does not differ by syntactic construction. As for interaction with priming, recall is significantly better for 's constructions when animacy is matched but worse when unmatched in both primed and non-primed items. When all three effects are considered, correct recall is significantly higher when the first element is animate and no priming occurred, suggesting an inhibitory effect of priming on conceptual accessibility. We discuss our findings in the wake of recent L2 studies on conceptual accessibility and draw implications for non-native language production.



Xin Wang and LiMeng Liang

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“Seat” or “Sit”: Do Mandarin Speakers treat them same or different?

In the literature of bilingual speech perception and spoken word recognition, several reports demonstrate bilinguals develop language-specific phonological representations (e.g., Pallier, Colome, & Sebastian-Galles, 2001). These results are consistent with Flege et al.'s SLM (1995), a model that proposes that L2 phonemes are learnable and L2 categorical perception depends on the phonetic distance between L1 phonemes and L2 phonemes. One of the predications of SLM is that L2 phonemes that are more similar to L1 phonemes are more 'difficult' to learn. Within this theoretical framework, our study aims to investigate 1) how accurate Mandarin speakers who learn English as a second language perceive English vowels that are contrastive in length (e.g., /i/ vs. /i:/, as in 'sit' vs. 'seat') and sound similar to Mandarin vowels, but this contrast does not exist in their L1 Mandarin. 2) how accurate these bilinguals perceive English vowels that are contrastive but do not exist in Mandarin vowels (e.g., /e/ vs. /æ/, as in 'bed' vs. 'bad'). To address these questions, we tested Mandarin-English bilinguals in an auditory lexical decision task, in which they needed to respond whether the stimuli they heard were words or nonwords in English as quickly and accurately as possible. Response accuracy and reaction times were dependent measures. The manipulation of this study was to present participants with auditory stimuli that were monosyllabic minimal pairs which share the same consonants but differ on the vowels. If we observe repetition priming (i.e., a prior auditory presentation of 'sit' can speed up a participant's response on the following item 'seat'), it can be concluded that bilinguals treat minimal pairs as the same word and thus are not sensitive to vowel contrasts in English. Our preliminary results show repetition priming for minimal pairs of all the vowel contrasts, however, vowel length contrasts generated less priming than vowel contrasts that do not exist in L1 Mandarin. These results partially support the SLM, showing the relative difficulty of perceiving vowel contrasts depending on their relations to L1 phonemes. We will include an English monolingual control group in the study, predicting no priming should be observed.

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Vocabulary uptake from reading illustrated text: An eye-tracking study

Marginal glosses are a common means in L2 materials to aid learners' comprehension of unfamiliar words they encounter during reading. It has been asserted in several publications that adding illustrative pictures to glosses is particularly effective in fostering retention of the words (e.g., Kost, Foss, & Lenzini, 1999). However, at the EuroSLA 22 conference, Boers (2012) reported findings from a series of experiments which suggested that learners' retention of (the orthographic form of) glossed words was actually better when the glosses did not have pictures. His tentative explanation for this finding was that the pictures attract attention that the learner might otherwise give to the target words themselves. As Boers' findings were based on pen-and-paper experiments rather than online processing data, this explanation needed to stay speculation at the time.

In our presentation we first report the results of an eye-tracking study conducted to ascertain whether pictorial glosses attract attention at the expense of the words they illustrate, as hypothesised by Boers (2012). Adult EFL learners' (N 25) eye-movements were recorded while they read a text accompanied by marginal glosses with or without pictures. Total fixation time on the target words was indeed shorter when pictures were present. This lends plausibility to Boers' (2012) explanation for the poorer word recall under the pictorial gloss reading condition, since fixation times are known to be positively associated with the durability of memory traces (Godfroid et al., 2013).

We then extend this line of research and evaluate the merits of sequencing verbal and pictorial input as a way of avoiding the aforementioned competition for attention. Adult EFL learners' (N >40) eye-movements were recorded as they read a text in which unfamiliar words occurred twice. Four glossing conditions were created: (1) verbal clarification only, (2) pictorial illustration only, (3) verbal clarification and pictorial illustration combined in the same gloss, and (4) verbal clarification on the first encounter with the word and pictorial illustration on the second encounter. Fixation data were subsequently triangulated with post-reading test data of the participants' recollections of the target words. Recommendations for L2 materials design will be distilled from the results.

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Effect of immersion on cognitive development in preschool children

Bilingualism is generally considered to positively influence cognitive control (e.g. Bialystok, Craik, Green, & Gollan, 2009). Bilinguals exhibit enhanced control over their monolingual peers in various executive control tasks. This control advantage has been found for bilinguals in different stages of life, even for children. It has been suggested that bilingual children develop their cognitive control skills sooner than their monolingual peers (e.g. Bialystok, 2005). The purpose of the present study was to determine how bilingual education contributes to the development of cognitive control advantages in second language learners.

A longitudinal experiment was conducted in the Walloon Region of Belgium with 51 French-speaking 5-year-old children enrolled in the first year of a French-Dutch immersion programme and 38 French-speaking 5-year-old children enrolled in a traditional monolingual programme. The children were tested at the beginning and at the end of the school year. The test battery included two control tasks assessing executive skills; the Simon task and the children's version of the Attention Network Test (ANT). Both groups were matched for performance on these executive tasks, but also for semantic verbal fluency, fluid intelligence (measured by Raven's Coloured Progressive Matrices), and socioeconomic status (SES).

After the second moment of testing (T1), results revealed that both groups improved significantly on speed and accuracy in the two control tasks. Furthermore, they were able to produce more words in the verbal fluency task and they performed significantly better on the intelligence test. When comparing the progress of both groups over time, we found that monolingual children and immersion children improved similarly on verbal fluency and on executive control. However, the immersion children advanced significantly more on the measurement of intelligence. These results show that, after only nine months of exposure to a second language, immersion children experience some of the cognitive benefits associated with bilingualism, albeit not on executive control, but in terms of general fluid intelligence.

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Magdalena Wrembel

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Metaphonological awareness and foreign language pronunciation performance; a correlational study

The contribution aims at exploring the relationship between metalinguistic awareness in the acquisition of third language phonology (hereafter referred to as metaphonological awareness) and perceived pronunciation performance. Metalinguistic awareness has been acknowledged as a significant component of language proficiency and ascribed a facilitative role in the foreign language acquisition (Gombert 1992). However, it has been rarely investigated from the point of view of foreign language pronunciation (Venkatagiri & Levis, 2007; Kennedy & Trofimovich, 2010).

In the present study the construct of metaphonological awareness was investigated from a multilingual perspective through the application of stimulated recall verbal protocols. The study involved 40 multilingual participants; native speakers of Polish with an advanced knowledge of English (B2-C1) as their first foreign language (L2) and beginner to intermediate command of French (A1-B1) as their third language (L3). The L3 speech samples were collected by means of introspective and retrospective oral protocols, in which the participants were to modify and comment on their French pronunciation after listening to an excerpt of their previous text reading recording in this language. The protocols were audio-recorded, transcribed and coded for the purpose of the objectivisation of the data analysis using a coding system designed by the author (see Author 2013). A proposed composite measure of metaphonological awareness was calculated on the basis of the observed instances of self-repair of L3 pronunciation, performed phonetic analysis, manifested self-awareness of problems in L3 pronunciation as well as metacognitive comments on cross-linguistic interactions.

In the second part of the study foreign language pronunciation performance was assessed by means of online ratings involving 3 components: foreign accentedness, comprehensibility and pronunciation accuracy judgements. The conducted online survey included 20 native French raters who evaluated short samples of read speech on 7-point Likert scales. The results were correlated with the participants' composite metaphonological awareness scores generated in the first part of the investigation. The findings point to intricate patterns of correlations between the participants' measures of metaphonological awareness and their rated foreign accentedness, comprehensibility and pronunciation accuracy. On the whole, the participants with higher levels of awareness were perceived as less accented, more intelligible and accurate in terms of their L3 pronunciation performance.

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Complementizer variation in spoken vs. written L2 production: a corpus study

This paper examines the factors governing the variable presence of the complementizer THAT in English object-, subject-, and adjectival complement constructions as in (1).

- (1) a. Drew thought (that) Jason likes chocolate.
b. The problem is (that) Jason doesn't like chocolate.
c. I'm glad (that) Drew likes chocolate.

Previous studies of native speaker production data revealed that various factors co-determine the realization of the complementizer, including syntactic weight, clause juncture, and verb frequency, among others. Furthermore, native speakers' choices have been argued to be highly register-dependent (Torres Cacoullos & Walker 2009). In contrast to the considerable amount of literature on native speaker production data, there are only few studies on complementizer variation in L2 production, and no study to date that investigates learners' sensitivity to register effects specifically.

The present study seeks to close this gap by presenting a corpus-based analysis of THAT-variation that contrasts native English speakers, intermediate-advanced German L2 English learners, and intermediate-advanced Spanish L2 English learners. 9,445 attestations of the three constructions were retrieved from native and learner English spoken and written corpora (the International Corpus of English; the International Corpus of Learner English; and the Louvain International Database of Spoken English Interlanguage). The data sample was coded for 12 factors, crucially including L1 background and register. A minimal adequate binary logistic regression model (Log-likelihood=5059.45; $df=28$; $p=0$) predicts all speakers' choices very well (Nagelkerke's $R^2=.55$; $C=.88$; prediction accuracy=80.63%). More specifically, the model suggests that (i) native speakers and learners alike are most strongly influenced by processing-related factors; (ii) intermediate-advanced level learners exhibit fine-grained exemplar-based knowledge of verb-construction associations, with Spanish learners adopting a more conservative approach towards dropping the complementizer than German learners; and (iii) register indeed impacts learners' choices, German learners more so than their Spanish peers. These and other results will be discussed through the lens of usage-based construction grammar in which L2 second language development is understood as a complex process founded on exemplar-based knowledge obtained from the input, modulated by preferences acquired in the L1, and heavily constrained (especially in spoken discourse) by processing demands.

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Pre-task planning, performance, and individual differences in L2 text chat

Task-based research has examined the effects of various design features, including planning time, complexity, and repetition, on learners' second language (L2) development with varying results on the quality and quantity of learner output (e.g. Ellis, 2005; Foster & Skehan, 1996; Yuan & Ellis, 2003). For example studies have shown that pre-task planning positively affects learners' complexity and fluency (e.g. Ellis, 2009; Ellis & Yuan, 2004; Kawauchi, 2005), with mixed results regarding accuracy (e.g. Mochizuki & Ortega, 2008; Skehan & Foster, 1997; Park, 2010). However, despite the growing use of technology in the language-learning classroom (Thomas & Reinders, 2010), few studies have investigated pre-task planning in synchronous computer-mediated contexts (SCMC) (although see Lai, Fei, & Roots, 2008). What research there is in SCMC has focused mainly on measures of complexity, accuracy, and fluency (Hsu, 2012).

The current research examines the relationship between pre-task planning and learners' production in written synchronous text chat. Intermediate ESL learner dyads completed three (counter-balanced) picture narrative tasks with pre-task planning times of 1 minute, 3 minutes, and no planning time. Text chats were conducted using GoogleChat, and were recorded using Camtasia software to produce video-enhanced chat scripts (Sauro & Smith, 2010). Although research has also suggested that SCMC may potentially reduce learners' anxiety (e.g. Chun, 1994; Kern, 1995), few studies have empirically examined this claim (see Baralt & Gurzynski-Weiss, 2011 for an exception). In order to gain a better understanding of the relationship between anxiety, pre-task planning, and performance in computer-mediated contexts, learners' state anxiety was measured using self-report surveys following each of the three tasks. In addition, this study sought to dynamically measure the effects of pre-task planning time and task-based interaction on learners' motivation. Adapted from Taguchi, Magid, and Papi (2009), the questionnaire used in the current study was designed to measure learners' motivational state immediately following each of the interactive tasks, providing a fine-grained assessment of changes in learners' motivation across task conditions. Learner perceptions' about the effectiveness of computer-mediated interactional tasks, and the relationship between their perceptions and individual characteristics, were also explored.

Quantitative analyses of learner language examine complexity, accuracy, and fluency, operationalized as T-units, percentage of error-free clauses and accurate use of grammatical verb forms, and number of dysfluencies. In addition, chat transcripts were examined for interactional features previously found to be facilitative of L2 development, including language related episodes (LREs), corrective feedback, negotiation, and modified output. Correlational analyses were used to examine the relationship between learners' individual differences, planning time, and performance. Preliminary results suggest interesting and nuanced differences in learners' performance, anxiety, and motivation based on pre-task planning time, and will be discussed in terms of pedagogical implications for the task-based L2 classroom.



Hendrikje Ziemann

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Do German adult L2 speakers of Dutch make use of syntactic or non-syntactic operations in processing pronouns in their L2?

L2 speakers have been argued to be unable to use syntactic operations in processing language and instead use non-syntactic operations (e.g. [1]). We examined this with a self-paced reading study testing how German L2-speakers of Dutch process Dutch reflexive and personal pronouns compared to L1-speakers (see item example). Examining pronouns enables us to differentiate between different processing strategies. For instance, in (a), but not (b), a co-argumenthood relation between the pronoun and the antecedent 'bioloog' exists.

Item example. Relevant sentence parts: 1. pronoun: zich/hem, 2. conjunction: terwijl, 3. spill-over: NP after conjunction

Introduction: De bioloog en de scheikundige stonden in de tuin.

(The biologist and the chemist were standing in the garden.)

(a) Coargument structure De bioloog die veel studies deed naar apen verbaasde zich/hem terwijl de vogels een vrolijk liedje floten.

“The biologist who did many studies on apes astonished himself/him while birds were singing a happy song.”

(b) Noncoargument structure De bioloog plantte een bloem met prachtige kleuren voor zich/hem terwijl de vogels

“The biologist was planting a flower with beautiful colours in front of himself/him while”

Reflexives in (a), which are not fully specified for phi-features, can form a syntactic relation with the antecedent. In all other cases here discourse operations are needed, which are computationally more costly than syntactic ones, as they incorporate more computational steps (see [2]). Thus, reflexives in (a) should lead to lower RTs than reflexives in (b) and than personal pronouns in general. However, if L2-speakers cannot use syntactic operations ([1]) no difference between reflexives in (a) and (b) is expected. Furthermore, in sentences like (b) the personal pronoun in Dutch, but not in German may refer to the subject. We hence expect L2-processing to be affected by L1 in (b), reflecting in longer RTs at the pronoun.

The results show an interaction of structure and group at the pronoun ($F(1,37)=5.53, p < .05$) indicating that, unlike L1 speakers, L2 speakers do not process (a) differently from (b). There is a significant interaction between structure and pronoun type at the conjunction ($F(1,37)=4.66, p < .05$) for L1 speakers. In (a), but not in (b) RTs on personal pronouns were higher than on reflexives supporting the idea that in (a) a cheaper syntactic relation can be established between the reflexive and antecedent. Finally, we found a three-way-interaction at the spill-over region ($F(1,37)=15.52, p < .05$): L2, but not L1 speakers process personal pronouns in (b) more slowly than reflexives which can be explained as an interference effect from L1 German.

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Poster presentations

In alphabetical order of first author

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English articles in child foreign language learning

L2 English articles have been extensively researched with adults and children of various L1s (García-Mayo and Hawkins, 2009). Commonly found errors consist mainly in article omission and overgeneralization of THE in [+specific, -definite] contexts. In Ionin et al.'s (2004) Article Choice Parameter and their related Fluctuation Hypothesis, THE-overgeneralization should be expected only from learners whose L1 lacks articles; at initial L2 stages, these learners will 'fluctuate' between the semantic properties of definiteness and specificity expressed by the English articles. In this theory we should also expect overgeneralization of A in [-specific, +definite] contexts. Studies employing written forced-choice elicitation tasks and mostly adult participants seem to support Ionin et al.'s theory. Still, in a story-telling task Zdorenko and Paradis (2008) found that children from immigrant families in US fluctuated in their use of English articles regardless of L1, overgeneralizing THE in [+specific, -definite] contexts, contra Ionin et al.

Despite many studies in L2 English articles, there is lack of research involving children who learn English as a foreign language. The present study attempted to fill this gap by investigating the use of English articles by primary school children in Greece. Most of our participants' L1 was Greek, a full article language, like English, and the few children with a different L1 were born and raised in Greece. We included three learner groups. Groups 1 and 2 involved 3rd graders (8-9 years old) and differed from each other as to the amount of English instruction each had received (208 and 400 hours, respectively). Group 3 was formed by 5th graders (10-11 years old) who had had 505 hours of English instruction. The data were elicited through three oral tasks: (a) Picture-based story-telling (Schneider, Dubé and Hayward, 2005), (b) Story-retelling and (c) Sentence Repetition with grammatical and ungrammatical sentences.

Our data revealed errors mainly of omission and of THE-overgeneralization in [+specific, -definite] contexts, which may disprove Ionin et al. Instead, THE may be overgeneralized because it has fewer specification restrictions than A regarding complement selection (Hawkins, 2001) or because it encodes fewer features, since THE does not encode [number], unlike A (Lardiere, 2004). Last developmental effects were evident in that Groups 2 and 3 fared better than Group 1.

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Ghazi Algethami

(Taif University)

Non-native speech rhythm (timing) and the perception of foreign accent

It has often been suggested that the non-native like production of English speech rhythm is one of the main perceptual cues that lead to the perception of foreign accent (e.g., Gut, 2003). However, very few studies have examined this empirically (Jilka, 2000; van Ellis & de Bot, 1987). These studies presented native listeners with low-pass filtered (i.e., segmental information removed) and monotonized utterances produced by native and non-native speakers, and found that the native listeners were able to distinguish between the native and non-native utterances. However, these studies are limited in two ways. First, they have not controlled for variation in intensity which could have cued the listeners' perceptions of the differences between the native and non-native utterances. Second, they did not examine which timing or rhythmic patterns had greater effect on the listeners' perception of foreign accentness. The current study attempted to fill these gaps.

Four English utterances were elicited from: 1) four native speakers of Standard Southern British English (SSBE), 2) four advanced L2 Saudi speakers, and 3) four intermediate L2 Saudi speakers, and were presented randomly to 23 native SSBE listeners in two modes; modified and unmodified, for foreign accentness ratings. The modified utterances were manipulated acoustically to reduce the effect of spectral (segmental) and intonational information on the listeners' judgements. Intensity values were also changed to a constant level of 75 dB. This was all done in an attempt to retain only the timing patterns of the utterances. The unmodified utterances were the same utterances, but without the acoustic manipulations. For the modified utterances, the English listeners were able to distinguish only between the native and non-native speakers. For the unmodified utterances, the listeners were able to distinguish between all the speaker groups. The ratings of the modified and unmodified utterances were found to be strongly correlated. The results clearly show that non-native speech rhythm or timing plays an important role in cueing listeners' perception of foreign accentness. A number of rhythmic measurements were then calculated for each elicited utterance, and regression analyses were then run to find out which of these temporal or rhythmic measures could predict the degree of foreign accent in the speech of the non-native speakers. Only "the durational ratio of stressed to unstressed vowels" was found to be consistently able to predict the degree of foreign accent in the speech of the non-native speakers.

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Talal Musaed J Alghizzi

(University College Cork)

CAF in L2 Writing: A Longitudinal Study of Saudi EFL Students in Different Classroom Contexts

In the field of SLA, the area of L2 writing skills has been investigated from various perspectives, extending to the characteristics of academic writing, writing in different genres, the effects of different teaching approaches such as those based on product, genre, process techniques, writing development in different classroom contexts, the impact of the learner's first language, and the nature of L2 written mistakes and errors. The more recent focus on writing development within the framework of CAF (Complexity, Acquisition and Fluency) has further enriched the field (see Housen, Kuiken and Vedder 2013). Within this framework, the focus has been on capturing L2 learners' written proficiency levels in relation to various variables, such as individual differences, learning contexts, teaching methods, task design/complexity, and planning. However, a much under-studied area is the role of technology in classroom instruction in the acquisition of L2 learners' writing skills. This contrasts sharply with the growing field of technology and L2 learning in general beyond the realm of SLA.

Against this background, this paper presents a longitudinal study which investigates the outcomes of writing skills development in three different classroom contexts: traditional, blended learning, and online, in relation to low and high proficient Saudi EFL undergraduate learners' CAF development in writing. 75 participants were recruited at two proficiency levels, level one (45 students), and level six (30 students). At each of these levels, three groups were generated with an equal number of participants, and were instructed individually in one of the above mentioned classroom environments. Over four months, the participants received instruction based on a process-genre approach, using different configurations of language-learning technology. Data were collected through written compositions in a pre-test, mid-term test, and post-test. A quantitative longitudinal analysis of CAF development across the tests suggests that the three contexts of classroom instruction had different levels of effects on the participants' CAF in writing. If these classroom contexts were to be put in hierarchal order of impact, the blended groups would be on the top with the greatest significant progression of the subjects' CAF, then online groups, and lastly, traditional groups with the learners showing least improvement in CAF. The findings will be discussed in relation to the acquisition benefits of diversifying L2 classroom instruction from a traditional one to a more synchronized/technical one.

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Rana Albark¹, Nadia Bouchhioua² and Sam Hellmuth¹

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Perception of English word stress by listeners from different L1 backgrounds

The phonetic correlates of stress vary cross-linguistically (van Heuven & Sluijter, 1996) and cross-dialectally, e.g. in Arabic(Bouchhioua, 2008; Zuraiq, 2005). Our (ongoing) study explores perception of English word stress by L2 learners of English from differing L1 Arabic backgrounds: Egyptian (EA) vs. Jordanian (JA). An earlier production study (Albark, Bouchhioua, & Hellmuth, 2014) found small differences in phonetic realisation of stress between EA and JA, but significant differences in both Arabic dialects compared to English ('over-use' of f0, lack of vowel reduction). Based on these results we hypothesise that: i) realisation of stress with non-native phonetic correlates may affect listeners' ability to identify stress position, but, ii) the effect of transfer will be lower when listening within own speaker group (non-native (NNS) vs. native (NS)).

The stimuli are nine disyllabic near-minimal pairs (e.g. ['prɔːjekt]~[prə'jekt]) produced in English by one male speaker each in EA, JA and English (NS). The target words were elicited in a carrier phrase in post-focal position, so that they bear correlates of word stress only, not sentence/phrasal stress (Bouchhioua 2008). Only the target word is presented to listeners. Three groups of 12 listeners (JA/EA/NS) completed an online AX test in which the task was to identify which syllable was stressed, first or second. The Arabic listeners had all studied English at school for at least 12 years and had not resided in an English speaking country. All listeners (JA/EA/NS) responded to all stimuli (JA/EA/NS), allowing us to compare performance when listening within speaker group (Arabic-Arabic/English-English) vs. outside speaker group (Arabic-English/English-Arabic). Preliminary results suggest that listeners do perform better on a measure of stress recognition accuracy when listening within speaker group (NS/NNS), but marginally better also within own dialect NNS group. Full results will be discussed in relation to the Lingua France Core (Jenkins, 2000).

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Muna Alshehri

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Incidental Vocabulary Acquisition from Listening: The Case of Young Saudi EFL Learners

Incidental vocabulary learning from meaning-focused input has received increased attention in second language acquisition research (Nation, 2007). Most L2 studies have measured the incidental learning of vocabulary from written input (reading) but few have investigated the role of oral input (listening) in acquiring word knowledge, especially in the case of young EFL learners. Moreover, most previous listening studies have focused only on measuring one dimension of word knowledge, usually the form-meaning link, which does not provide a broad picture of the type or degree of word knowledge that could actually be learned as a result of treatment.

To help address this gap, the present study measured the short-term word retention of young Saudi EFL learners after listening to a story from the three dimensions of spoken form recognition, meaning recognition, and meaning recall. It also examined the separate and joint effects of frequency of exposure and +/-elaboration on the degree of word retention in addition to the possible moderating effects of a number of individual differences on word retention from listening, namely that of prior vocabulary knowledge, listening competence, and working memory capacity. Using a between-groups experimental design, 128 young Saudi EFL learners were divided into a control group and four comparison groups who differed as to (1) whether they listened to the story one or three times (single vs. multiple exposure), and (2) whether or not they received explanations of the target words during listening (+/- elaboration). Participants in the treatment groups listened to a simplified story that employed non-words as target words to control for prior knowledge. A short English definition was provided after the first occurrence of each target word in the (+elaboration) condition only. Post-tests in story comprehension and word retention were administered immediately after the final listening session for each group.

Results showed that words could be learned incidentally from listening. Frequency of exposure seemed to affect the acquisition of the phonological form while explanation of target words seemed to affect the recognition and recall of word meaning. Prior vocabulary and listening competence correlated more with story comprehension than with word retention while working memory correlated with acquisition of meaning. Pedagogical implications will be also discussed in the light of these and other findings of the study.

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Marc Capliez

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A comparative study of the importance of segments and prosody in the acquisition of English by French speakers

A majority of learners – and sometimes teachers – of English as a foreign language in France are conscious of the phonemic differences between their native tongue (L1) and the target language (L2), which differ in many ways on the phonological level. However, the importance and role of suprasegmental features, i.e. the prosody (stress, rhythm and intonation), are often disregarded. In parallel, many linguists claim that these aspects have a greater role to play in comprehensibility and intelligibility than segments do (e.g., Birdsong 2003, Mennen 2006, Derwing & Munro 2005). Thus, there is a considerable lack of studies investigating the importance of suprasegmental features in comparison with that of segmental features in the acquisition of an L2, and none involves French learners of English.

Starting from the hypothesis that suprasegments have more importance than segments in foreign-accentedness and the comprehension of a message, as revealed in e.g. Derwing, Munro and Wiebe's (1998) study, a pilot experiment bringing empirical evidence of the roles that those two aspects play in the acquisition of L2 English by French speakers will be presented. The aim was to compare two groups of French-speaking learners – one receiving a basic training on English segments, and one focusing on prosodic aspects – in order to determine whether prosody had a greater impact on the production skills of the French speakers.

The results of the pilot experiment showed that both groups improved after their respective trainings, that their production skills reached similar levels, but the “segmental group” evinced a stronger improvement. Nonetheless, taking into account the numerous limitations of the study, further research and replication studies are still necessary. That is why an ongoing larger-scale study, involving more participants, but also production and perception abilities of French speakers, will be discussed. The outcome should prove to be of considerable interest to the field of phonology and L2 acquisition on the one hand, and the field of didactics on the other hand.

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Vasiliki Chondrogianni

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The role of frequency, morpho-phonology, L1 properties and L2 input in the acquisition of tense in English-speaking L2 children

Studies with sequential bilingual (L2) English-speaking children with fewer than three years of exposure have shown that their production of third person –s and regular and irregular past tense is influenced by word/lemma frequency, L2 vocabulary size, the stem's morpho-phonology and L1 properties (Blom, Paradis & Sorenson Duncan, 2012; Blom & Paradis, 2013). The effect of these factors in L2 children with more than three years of exposure has not been sufficiently investigated. The only study by Marinis & Chondrogianni's (2010) examined frequency and morpho-phonology and found only frequency effects in L2 children with the same L1 (Turkish).

The present study investigates the relative contribution of the above-mentioned factors in the production of third person –s and past tense in 46 6-to-8-year-old English-speaking L2 children with an average exposure of more than three years and two different L1s not yet examined, Polish (N=23, mean age: 7;8) and Welsh (N=23, mean age: 8;0). Welsh does not have an overt agreement marker on present tense lexical verbs; past tense verbs are highly regular. Polish has rich (ir) regular tense/agreement systems. Performance on past tense was examined using the Test for Early Grammatical Impairment (TEGI, Rice & Wexler, 2001). A parental questionnaire was also administered to assess SES, age of onset and length of exposure to the L2. Standardised assessments examined children's knowledge of grammar and vocabulary. L2 children were matched on age, SES, L2 grammar and vocabulary and cumulative exposure (Unsworth, 2013), but differed in terms of the bilingualism (indigenous vs. immigrant) and educational context (Welsh-medium education vs. English mainstream education).

Results showed that the Welsh-English children performed lower on third person –s (mean accuracy: 67%) than the Polish-English children (mean accuracy: 82%). Both groups had overall similar high accuracy on the regular past tense (between 92%-95%) and low accuracy on the irregulars (between 30%-40%). However, the two groups differed in the error patterns with irregulars. Polish-English children showed an effect of frequency and morpho-phonology with higher accuracy on high frequency verbs and with fewer overgeneralisations on verbs ending in /t/-/d/, similarly to what has been reported for L1 children (e.g. Marchman, 1997). Conversely, Welsh-English children overregularised across the board regardless of the verbs' frequency and morpho-phonology. L2 vocabulary predicted irregular verb accuracy in both groups.

These results argue for differential effects of frequency and of the L2 morpho-phonological properties on the acquisition of third person –s and past tense in children with lengthier exposure to the L2 (cf. Blom et al., 2012). They also suggest L1 transfer of morpho-phonology in older child L2 populations. Finally, they are discussed with respect to the differences in input quality and quantity in different bilingual populations.



Markus Christiner and Susanne Maria Reiterer

(University of Vienna)

A Pavarotti is not a Mozart: differences between singers, musicians and non-musicians with regard to second language pronunciation aptitude

In previous investigations we isolated a range of factors predicting good speech imitation skills of unknown foreign languages (e.g. Hindi), with the aim of simulating a pre-educational language learning situation. Among other things, we were able to isolate musical ability as one of the strongest indicators for accent imitation of foreign languages. We, therefore, decided to take a closer look at the subcategories of musical ability, instrument playing versus singing. In a behavioural experiment with singers/vocalists, singing capacity turned out to be a better speech imitation indicator than musical ability measured perceptually (AMMA). We concluded that singing is speech on the productive level and therefore available to language functions as well. From this, we found that singing seems to be a removed skill compared to instrument playing. However, we wanted to reinvestigate and find out if we could replicate these results if we compared the accent imitation skills of vocalists (N=33), instrumentalists (N=27) and non-musicians/non-singers (N=36) directly. Indeed, results indicated that vocalists are significantly better speech imitators of unknown languages compared to instrumentalists and non-musicians/non-singers in ANOVAs. Although instrumentalists are also better speech imitators than non-musicians/non-singers, we could not detect any significant differences between the perceptual abilities of instrumentalists and vocalists.

This indicates the following: 1. Kinaesthetic abilities and motor training are far more important in the production of foreign speech than previously believed. 2. Motor ability and motor training are an integral part of successful oral foreign language learning. 3. Kinaesthetic abilities are largely shared by both singing and speech production.

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Juul Coumans, Roeland van Hout and Odette Scharenborg

(Radboud University)

How do non-natives process speech? The role of word-initial and word-final information in word recognition

When listening in noisy conditions, word recognition seems to become much harder in a non-native language than in one's native language. What happens if one listens to a non-native language? In this study, we investigate the importance of word-initial and word-final phonetic information for word recognition in noise. Word-initial information has been found to be more important than word-final information when listening in clear conditions in one's native language. When part of the speech signal is masked by noise, though, word-final information becomes relatively more important (Slowiczek et al., JEP: LMC, 1987; van der Vlugt & Nootboom, JASA, 1987).

This study investigates whether non-native listeners show similar patterns in processing speech when listening to speech in clear or noisy conditions. More specifically, the central question is whether non-native listeners use word-initial and word-final information to the same extent, and whether this balance changes when listening conditions become harder. Twenty-two Dutch students (with minimally eight years of formal English education) participated in a word recognition experiment, where either a word's onset or offset was masked by speech-shaped noise. The participants had to type in the words they thought they had heard. The stimuli consisted of 42 sets of three partially overlapping English words (i.e., target, onset competitor, and offset competitor). The amount of onset and offset masking was tailored to each target word and onset/offset competitor pair, such that the overlap between the target word and the onset/offset competitor remained unmasked. For example, in the case of the onset competitors letter-lettuce, [æ] and [əs] are masked, respectively, while for the offset competitors letter-sweater, [l] and [sw] are masked, respectively. The experiment consisted of three parts. One part only contained words with onset-masking; a second part only contained words with offset-masking. The order of these parts was counterbalanced across participants. Part three, which always came last, consisted of all the words in the previous two parts without masking. Parts one and two were, furthermore, divided into three subparts with each subpart having a different Signal-to-Noise Ratio (SNRs: -12 dB, -6 dB, 0 dB), again counterbalanced across participants.

The results showed that when word onset was masked significantly fewer words were correctly recognized compared to when word offset was masked ($p < .01$; onset: 69.0% correct, offset: 71.1%). Moreover, significantly fewer words were correctly recognized with increasing difficulty of the listening conditions (all $ps < .001$; SNR = -12: 57.5% correct, SNR = -6: 70.1%, SNR = 0: 82.6%, clean: 88.2%). Word-initial information thus seems to be more important for non-native word recognition than word-final information, irrespective of the difficulty of the listening conditions.



Christine Czinglar, Katharina Korecky-Kröll, Kumru Uzunkaya-Sharma and Wolfgang U. Dressler

(University of Vienna)

Grammatical development in bilingual and monolingual children with different SES-backgrounds acquiring German

International studies like PISA confirm the fact that not only immigrant children, acquiring German as a second language (L2), but also children from families with low socio-economic status (SES), who acquire German as a first language (L1), score at lower levels on language competence tests (Schwantner & Schreiner 2010; Lloyd, Mann & Peer 1998). Moreover studies show that early experience from birth to age six lays essential foundations for success at school and that early delay cannot easily be made up for later on (Walker et al. 1994; Nelson et al 2011). The most important mediating factor between family SES and language competence in monolingual children is early child directed speech at home (Hoff 2003). Several US-based studies corroborate the fact that differences in the linguistic input lead to differences in vocabulary acquisition (Hart & Risley 1995, Weizman & Snow 2001, Rowe 2008, Weisleder & Fernald 2013) and in the rate of grammar acquisition (Gathercole & Hoff 2007). For bilingual children from immigrant families, more factors than just SES influence the amount and quality of the input they receive in the two languages and hence their linguistic development (Oller & Eilers 2002, Leseman et al. 2009, Unsworth et al. 2012).

In this talk, we present first analyses of the grammatical development of 48 kindergarten children, whose language development is thoroughly investigated in an ongoing research project (INPUT). 24 of the children are monolingual (L1 German) and 24 bilingual (L1 Turkish, L2 German). Both groups comprise children from high and low-SES backgrounds, where SES is operationalized by the main caretaker's highest education (Ensminger/Fothergill 2003; Hoff 2003, 2006) and occupational prestige (Hart & Risley 1995). Information on SES and other environmental factors (quantity of input, group size, literacy activities etc.) comes from interviews with the parents and kindergarten teachers. The grammatical development in German is measured by parts of the standardized test LiSe-DaZ (Schulz & Tracy 2011), which elicits different sentence types to measure word order, agreement and case properties and also comprises a receptive test on wh-questions. The children are tested twice, at the age of about 3;3 and at 4;6. As all bilingual children speak mainly Turkish at home, their first systematic contact with German starts with their entrance to child-care facilities.

Our results so far show that for the monolingual children there are clear SES-related differences regarding the rate of grammatical development (corroborating the results of Weinert & Ebert 2013). This argues against nativist assumptions that the development of core grammar is not affected by environmental factors (such as differences in SES and input). For many bilingual children, the time of exposure was too short to show clear-cut differences.

Poster
Presentations

Anna Denissenko Denissenko and Carmen Pérez Vidal

(Pompeu Fabra University)

Acquisition of written proficiency of Russian as a foreign language in adulthood

Developing written competence is thought to require a high amount of reflection, to be linguistically more complex than speaking, and to follow highly specific conventions, while allowing learners to better show their proficiency in vocabulary, morphology and syntax (Verspoor, Xu, & Schmid, 2012). As a result, writing seems to unquestionably provide a valid measure of foreign language (FL) learners' proficiency, since learners pay attention to both meaning and form, as they try to push their output beyond their current level (Sachs & Polio, 2007).

In spite of the attention given to writing in SLA research in recent years (Manchón, 2012), some languages such as Russian, the language analyzed in this study, remain fairly understudied. Pavlenko (2006, 2009) and Pavlenko & Driagina (2007) have examined it from the perspective of a heritage language in the U.S., and, to our knowledge, only Henry (1996) deals with writing in Russian as a FL. Consequently, the present investigation tries to bridge such a gap in SLA research, by examining written development by bilingual adult learners (Catalan/Spanish) of Russian in a formal instruction context in Barcelona (Spain). More specifically, we focus on linguistic progress as reflected in narratives (Kormos, 2011).

Longitudinal data were collected to examine the development of six groups of adult learners, following the six subsequent Russian courses (n=650) offered in an official non-main stream language school. Each course involves 150 contact hours. For each group data was collected at three subsequent times: April (T1), October (T2) and April (T3), over one natural year. Additionally, cross-sectional analyses were also undertaken to track development over the six years of the official curriculum with a total of 930 accumulated hours. All groups were asked to carry out a timed task (40'), consisting of a narrative written on the basis of a set of 5 pictures. The picture describes a scene in a public library with 3 main characters and a librarian. Baseline data from a group of native speakers of Russian was also collected (n=25).

The data was transcribed with the CLAN system. Friedl & Auer (2007) scale tapping on task fulfilment, organisation, grammar and vocabulary was used. Subsequently, statistical analyses have included mixed design ANOVAS, with time as a within-subjects factor (three levels), and group (native/non-native) and learner group (six levels) as a between-subjects factors. Preliminary results show that the acquisition process of Russian is not linear and that there is a significant decline in the second year in nominal declension and verbal aspect.



Yasmin El-Hariri and Julia Renner

(University of Vienna)

eTandem language learning via videoconferencing: Interaction, feedback and learners' perceptions

International studies like PISA confirm the fact that not only immigrant children, acquiring German as a second language (L2), but also children from families with low socio-economic status (SES), who acquire German as a first language (L1), score at lower levels on language competence tests (Schwantner & Schreiner 2010; Lloyd, Mann & Peer 1998). Moreover studies show that early experience from birth to age six lays essential foundations for success at school and that early delay cannot easily be made up for later on (Walker et al. 1994; Nelson et al 2011). The most important mediating factor between family SES and language competence in monolingual children is early child directed speech at home (Hoff 2003). Several US-based studies corroborate the fact that differences in the linguistic input lead to differences in vocabulary acquisition (Hart & Risley 1995, Weizman & Snow 2001, Rowe 2008, Weisleder & Fernald 2013) and in the rate of grammar acquisition (Gathercole & Hoff 2007). For bilingual children from immigrant families, more factors than just SES influence the amount and quality of the input they receive in the two languages and hence their linguistic development (Oller & Eilers 2002, Leseman et al. 2009, Unsworth et al. 2012).

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Estela Garcia-Alcaraz and Aurora Bel

(Universitat Pompeu Fabra)

Intrasentential pronominal anaphora resolution in L2 Spanish. A look from comprehension data

The study of interface instability in the linguistic performance of bilinguals and advanced L2 speakers is a growing body of research (see Sorace 2011 for a review). Pronouns are particularly interesting since they reveal how speakers integrate morphosyntactic and pragmatic information. Findings for null-subject languages show that speakers employ different strategies for linking subject pronouns to antecedents. Whereas in Italian null pronouns (NPs) select subject antecedents and overt pronouns (OPs) retrieve object antecedents (Carminati 2002), in Spanish and Moroccan Arabic (MA) NPs retrieve subject antecedents while OPs are not specialized (Filiaci 2011, Bel & García-Alcaraz, in press). Nevertheless, bilinguals and L2 advanced speakers of different backgrounds show a tendency to overaccept and to overproduce OPs retrieving antecedents in subject position (Licerias 1998, Lozano 2006, among others). In the light of these findings we want to determine whether MA learners of Spanish display antecedent biases for different pronoun types when the speakers' L1 and L2 are both null-subject languages. Three groups were tested. Two experimental groups consisted of 26 bilingual Spanish-MA speakers that learned Spanish in a naturalistic environment in Spain and 34 L2 advanced Spanish speakers (minimum B2 level according to CEFR) with MA as L1 that learned Spanish in a foreign language context (Instituto Cervantes of Marrakesh). The control group consisted of undergraduate students native speakers of Spanish.

Participants completed an acceptability judgment task to test the antecedent preferences of NPs and OPs in globally ambiguous complex sentences (the implicit causality of the main verb was neutralized according to Goikoetxea et al. 2008). Participants were presented with 32 experimental sentences (8 per condition) consisting of two clauses and 48 distracters. The first clause (either main or subordinate) introduced two same-gender characters (proper names) while the second contained either a null or overt pronoun in subject position. Each item was followed by a continuation conveying a possible interpretation favoring either the character in subject or object position: Cuando Tomás vio a Alberto, Ø/él estaba nervioso. 1) Tomás estaba nervioso; 2) Alberto estaba nervioso ('When Thomas saw Albert, Ø/he was nervous. 1) Thomas was nervous, 2) Albert was nervous.'). Participants decided on a 4-point Likert scale whether the continuation was a possible interpretation in the context provided.

Results indicate that native speakers of Spanish display a strong preference toward associating OPs with object antecedents regardless of sentence order. Besides, NPs only show a preference for retrieving subject antecedents when the subordinate clause precedes the main clause. The between-subject analysis results did not show an overall group effect. Therefore, the evidence of overacceptance of OPs found in previous studies was not attested and the three groups did not differ in their association of pronouns to particular syntactic positions.



Aline Godfroid

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Implicit and explicit learning of German semi-regular verbs

The scope of adult implicit language learning—that is, whether adults can learn grammar rules or patterns without awareness—has direct implications for how adults best learn other languages. However, research to date has relied on artificial (e.g., Morgan-Short, Sanz, Steinhauer & Ullman, 2010) or semi-artificial languages (e.g., Leung & Williams, 2012). While these studies have made important contributions, using artificial elements (e.g., morphemes) increases the salience of these forms, which may influence participants' cognitive processes. The present study aims to bring psychological research on implicit-explicit learning one step closer to the classroom by employing fully natural language.

Twenty upper-intermediate L2 speakers of German performed a sentence-picture matching task involving German regular and semi-regular (i.e., strong) present-tense verbs. Strong verbs are conjugated like regular verbs in the present tense but undergo an additional stem-vowel change (e.g., sprechen “to talk” → er/sie spricht “he/she talks”). While the participants had covered this rule in their language classes, they still had difficulty applying it during spontaneous production.

Participants listened to 220 sentences and selected, as quickly as possible, the picture (of two) that best represented the event. Pictures showed the same agent but could be disambiguated based on the verb, which was either weak or strong. In a violation block towards the end of the experiment, strong verbs appeared without the vowel change (e.g., * er/sie spricht; compare Leung and Williams, 2012). Participants' sensitivity to the target feature was measured as the difference in reaction time between the violation block and the preceding and following grammatical blocks.

I predict that participants' sensitivity will correlate with their pre- to post-test gains on an oral production test and a word monitoring task (cf. Granena, 2013). Of particular interest is whether participants who do not report awareness of the experimental manipulation (i.e., regularized verb forms) after the listening task still benefited from the extensive exposure to the target verbs. Following Leung and Williams (2012) this would constitute evidence for implicit learning and knowledge. I discuss the need for more ecologically valid research on implicit-explicit learning and point to the challenges it entails. Specifically, unlike in artificial-language studies, L2 learners of an existing language often have explicit knowledge of the target structure already, which makes it more difficult to isolate the effects of implicit learning.

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¿Qué compró Juan? or ¿Qué Juan compró?: Dutch native speakers acquiring Spanish Subject-Verb Inversion in Wh-questions

This study examines the L2 acquisition of Spanish subject-verb inversion in wh-questions on Dutch native speakers. In Spanish, subject-verb inversion occurs in matrix and embedded wh-questions. However, the fact that it is obligatory is determined by the argument vs. adjunct status of the wh-element (Suñer, 1994; Torrego, 1984, among others). Interestingly, Dutch also has subject-verb inversion, yet this operation is only obligatory in matrix clauses and is not subject to argumental restrictions.

Therefore, the two main differences between these languages are: in matrix interrogative clauses there is always subject-verb inversion in Dutch, independently of whether the fronted wh-element is an argument or an adjunct; the second difference comes from the fact that Dutch is a V2 language and Spanish is not: in Dutch subject-verb inversion only occurs in matrix clauses never in embedded ones, while in Spanish with argument wh- questions the main verb must always appear before the subject in both types of clauses. Given the fact that this contrast between these languages is never explicitly addressed in the classroom context, it is particularly interesting, from an acquisition point of view, to determine how L2 learners acquire these rules and where they may encounter difficulties in their application.

The empirical basis of this study comes from an experiment offered to a total of 46 participants: 13 advanced and 20 beginners L2 learners and a control group of 13 Spanish native speakers who were all tested on a Bimodal Grammaticality Judgment Task (timed) and a Dehydrated Task. The statistic results (ANOVA) from the Bimodal GJT show that there is a significant difference in performance between the Spanish control group and both L2 groups: $F(2, 2184) = 8,967, p < .001$. With argumental wh- words, both L2 groups fail to detect the ungrammaticality of non-inversion in embedded wh- questions and, surprisingly, they also do so in matrix interrogatives. Beginners also fail to judge the grammaticality of inverted embedded wh-questions. Moreover, there is a significant variability in the preference for inversion with the different wh- words, being 'Por qué' the odd one out among the adjuncts. In sum, even though the L2 learners improve their performance with proficiency, they do keep persistent problems with Spanish subject-verb inversion in interrogatives. These results are in line with previous studies with different L1s which have shown that acquisition of this construction is problematic even for advanced learners and heritage speakers (Goodall, 2004; Guijarro & Larrañaga, 2011; Cuza, 2012 among others). The acquisition path that the L2s seem to be following along with the theoretical implications of these results will be discussed.



Rowena Hanan and Emma Marsden

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Explicit grammar instruction and the young foreign language learner

Young second language learners are often considered to have access to implicit language learning mechanisms. However, within the foreign language classroom, very limited exposure means that learners may not be able to tap into these mechanisms. The classroom experiment reported here investigated the extent to which explicit grammar teaching is effective for the development of explicit and implicit knowledge amongst young L1 English learners (aged 9 to 11) of German as a foreign language. To date, research in this area has largely been with older learners, or in second language or laboratory contexts.

120 participants were randomly assigned to one of three groups: either 'Processing Instruction', 'Explicit Information + Enriched Input', or 'Test-Only'. The Processing Instruction activities made attention to the meaning (i.e. function) of the target forms essential (Marsden & Chen, 2011; VanPatten, 2002), whereas the Comparison Intervention did not. The target feature was nominative-accusative case marking on masculine nouns in German, and the processing problem predicted by the First Noun Principle, whereby the first noun is (mis-)interpreted as the subject. L1 English speakers have been shown to rely heavily on the most reliable cue in their L1, word order, overlooking the L2 case-marking cue, when comprehending sentences in the target language (German) (Jackson, 2008). Pre, post and delayed post-tests measured the learners' explicit and implicit knowledge, using elicited imitation, act-out comprehension, oral production, gap fill, sentence matching and a metalinguistic test. The design and use of these tests contribute to debate surrounding the means by which explicit and implicit knowledge can be elicited, particularly with this age group.

Preliminary findings suggest that both interventions were beneficial on all measures, compared to the test-only group, with greater benefits on the 'more explicit' measures. These findings have practical implications for whether, and how, foreign language grammar should be taught within the primary classroom, of heightened relevance given the addition of foreign languages to England's primary school curriculum from 2014.

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(CNRS)

How orthographic overlap in script affects cognate recognition in Russian-English bilinguals

This study examines the impact of the cross-linguistic similarity of translation equivalents on word recognition by Russian-English bilinguals, fluent in languages with two different writing systems. Certain models (e.g., BIA+) show that in bilingual word recognition, words in another language that are similar to the input become activated and are considered for selection (Dijkstra & Van Heuven, 2002). These activation models are consistent with empirical data on bilinguals who use different scripts, like Japanese and English (Miwa et al., 2014). As far as the combination Russian-English is concerned, studies show that the distinct character of the Russian and the English script does not prevent activation of the corresponding non-target language (Jouravlev & Jared, 2014).

Studies have shown that when words from two languages share orthographic and phonological word forms and map onto a joint meaning, they are processed more quickly than matched control words (e.g., Dijkstra et al., 2010). Words that significantly overlap with their translation equivalents in semantics, phonology, and/or orthography are known as cognates (e.g., marriage in English, mariage in French). Cognates used by Russian-English bilinguals are in a large part composed of letters with ambiguous phonemic mappings in one of the two languages. For instance, when reading the Russian word *pact*, a Russian-English bilingual might simultaneously experience the activation of two phonemic strings: /rast/ and /pakt/, as the Russian *p* maps on the phoneme /r/ and the Russian *c* maps on /s/.

Our hypothesis is that mismatching letters interfere with cognate recognition, and that ambiguous letters slow down processing for cognates and non-cognates alike. To test this hypothesis, Russian-English bilinguals are asked to visually process word lists in English composed of cognates (target words), non-cognates (control words), and non-words. Target and control words are matched in word length, word frequency, and degree of cross-linguistic orthographic overlap. Results of this study will contribute to the debates on the activation and inhibition mechanisms underlying bilingual word recognition, as well as to the theory of SLA. Its implications can potentially contribute to the optimization of language teaching (i.e. clarify the issue of L1 use in classrooms).

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Native and Non-native Teachers' use of English Discourse Markers

Although interest in discourse markers (DMs) has been on the increase in the last few decades, it has mostly focused on the theoretical description of their formal features, and there is still ample room for research of these units in the area of second language acquisition. DMs are recognized as central to the speakers' communicative competence, and their inadequate use may reduce communication effectiveness and cause failure in interpersonal and intercultural interaction (Wierzbicka, 1994; Martinez, 2004). Existing research comparing native (NS) and non-native speakers (NNS) indicates that NNS have a rather poor command of DMs (e.g. Fung and Carter, 2007; Iglesias Moreno, 2001), or use them differently than their native counterparts (e.g. Müller, 2005; Aijmer, 2004; Buysse, 2012). Some authors point to the teachers' input in the classroom as a possible factor influencing FL students' acquisition of DMs (e.g. Müller, 2005). The findings of the scarce research in the area seem contradictory, with some studies pointing to both NS and NNS teachers' low level of DM use (Hellermann and Vergun, 2007; Amador Moreno, 2006) and others describing the NNS teachers' effective use of DMs in classroom settings (Chapeton Castro, 2009). As this issue has not been extensively and elaborately investigated to date, and given that teacher talk represents a key source of language input in the classroom (Ellis, 2008), the present paper aims to shed additional light on the role of teachers in L2 DM acquisition, particularly relating to EFL teachers in Croatia whose DM use has not been researched yet. The paper focuses on a study carried out on a sample of ten EFL teachers, five native and five non-native speakers of English currently working in Croatia with adult advanced students (levels B2 and higher). The results obtained from quantitative and qualitative analyses of the transcriptions of the recorded classroom talk along with the data collected in a questionnaire are used to identify the main characteristics of the use of DMs by native and non-native teachers in Croatia, and allow for a comparison between the two groups. The results are further discussed in terms of the possible impact of native and non-native teachers' input on EFL students' acquisition of DMs.

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Convergence on the Syntactically-Constrained Distribution of Differential Object Marking in Spanish by Farsi-Spanish Adult Bilinguals

This study examines convergence on the syntactically-constrained distribution of differential object marking (DOM; Aissen 2003; Heusinger & Kaiser 2003; Leonetti 2004, 2008; Torrego 1998, 2002) in 8 L1 Farsi-speaking adult naturalistic learners of L2 Spanish as compared to 26 native Spanish speakers. Importantly, dialect was controlled for, with both groups speaking Argentine Spanish. Though both languages display DOM, Farsi straightforwardly marks all [+specific] direct objects (DO) (Ghomeshi 1997, 2008; Karimi 1990, 2003, 2005) while Spanish DOM depends on several factors such as animacy and specificity of the DO, animacy and agentivity of the subject and verb type (see Guijarro-Fuentes 2012 for review). To isolate the effect of animacy and specificity of the DO in Argentine Spanish, only animate subjects with stative and activity verbs were employed in the experimental task, a Grammaticality Judgment Correction Task (GJCT). The GJCT consisted of 48 tokens related to the distribution of DOM (+58 fillers/other tokens) that were divided into 4 token types with 12 tokens each: [+animate, +specific], [+animate, -specific], [-animate, +specific] and [-animate, -specific]. Half of each token type displayed the DOM a, half did not.

Results show that most native Argentine Spanish speakers differentiate between animate and inanimate DOs, accepting more DOM with animate DOs than inanimate DOs. Still, a non-trivial number accept DOM with inanimate objects. Additionally, and differently from standard Spanish, specificity was not a deterministic feature in DOM for all native speakers as some accept DOM with [+animate, ±specific] DOs. In general, the L2 speakers demonstrate the latter result, accepting DOM with animate DOs regardless of specificity. However, the L2 speakers accept significantly more inanimate DOs than native speakers, specificity aside. Two potential explanations for the results are explored: (1) the Feature Reassembly Hypothesis (Lardiere 2008, 2009), which claims that L2 convergence depends on accurately re-mapping features from the L1 to the appropriate lexical items of the L2 and (2) a change in the Argentine Spanish DOM paradigm (Montrul 2013). The former assumes that one grammar, to which the L2 speakers are compared, is present in Argentine Spanish while the latter allows for differences in the Spanish to which L2 speakers are exposed to explain the results.

This study's relevance is twofold. First, it informs debates surrounding adult naturalistic near-native L2 speakers and feature-reassembly in a previously untested language combination. Secondly, it sheds light on the variable distribution of DOM in native River Plate Spanish speakers and corroborates, somewhat, Montrul (2013) which found that DOM is extended to (non-doubled) inanimate DOs by some River Plate speakers (see Company 2001, 2002 for similar results in Mexican Spanish). This latter point highlights the necessity of controlling for dialect in L2 studies and indicates a change in progress in River Plate Spanish.



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Perceptions of morphological similarity between target language and formerly learned language

The study of similarity between languages has a close relation to target language (TL) learning, not only as a starting point but also as an underlying factor all through the TL development. Learning a new language is always based on the knowledge of the first (L1) or any formerly learned language (Ln). The starting point is what is similar between the TL and L1 or Ln. The similarity can be divided into actual or objective (as defined in contrastive linguistics), perceived (in reception), or assumed (in production). (Ringbom 2007) Particularly the comprehension of a closely related TL is greatly dependent on the learners' perceptions of similarity of words and grammatical relations across the languages.

However, little is known of what learners perceive as similar and to what extent, even less of how the similarity perceptions of L1 and Ln speakers of language A differ in the case of a closely related TL B. This proposal discusses perceptions of TL similarity to Ln, comparing these with former results on similarity perceptions of TL to L1 (Author 1, Author 2, forthcoming). We concentrate on perceived similarity of inflectional morphology between Estonian and Finnish by analyzing the results of a perception test of Estonian-Russian vs. Estonian learners of Finnish with Finnish vs. Finland-Swedish learners of Estonian. A test of 48 word pairs was constructed to contain four different levels of actual similarity from obvious similarity to pairs with little surface resemblance between the languages. 43 Finnish and 43 Estonian L1 speakers and 20 Finnish (L1 Swedish) and 20 Estonian (L1 Russian) Ln speakers with no previous exposure to Estonian or Finnish respectively were asked to rate each pair of words as similar, somewhat similar, or not similar. The participants were also asked to write reasons for their choices. To explore the symmetry between the choices of the participant groups, each "quite similar" answer was given two points and "somewhat similar" one point to create an index of perceived similarity. The "similarity lists" of the groups were then correlated. The focus of the study is mainly on the formal similarity, even if the similarity of function and form are not always easy to keep apart. The results will be discussed in the light of the comments provided by the participants, which show much interindividual variety and partly verify, partly contradict the statistical results.

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Polish-English bilinguals describing motion events: a qualitative and quantitative study

Speakers of satellite-framed languages tend to describe motion events differently than speakers of verb-framed languages (Talmy 1985). Satellite-framed languages prefer manner-oriented, dynamic descriptions, while the verb-framed ones focus on the path of motion, resulting in more static motion descriptions. Although Polish and English are both satellite-framed languages, recent research suggests that speakers of those languages differ in the perception of motion events and the usage of manner and path verbs while describing them (Ostrowska and Ewert 2012). These observations are in line with Slobin's remark that the division between satellite- and verb-framed languages is rather a continuum (Slobin 1996). This study is a conceptual replication of Brown and Gullberg's 2010 study and it offers an in-depth analysis of motion descriptions in Polish and English by Polish advanced learners of English.

20 bilingual Polish-English speakers were recruited among senior year university students of English and compared with Polish and English monolingual control groups. All the participants were asked to retell in detail a fragment of a Canary Row cartoon. Bilingual participants retold the story twice: in Polish and English. Participants were recorded using a high-standard video camera. Qualitative analysis includes the analysis of speech (following Brown and Gullberg 2010) involved in describing 9 motion events present in the cartoon.

It has been shown that in the descriptions of Voluntary motion speakers of Polish show greater propensity for using Manner verbs than the American speakers. Furthermore, a significant difference in the usage of Path verbs and General verbs in Polish and English has been reported. These findings are in line with Slobin (2004) and shows that the group of satellite-framed languages is not a monolith. Moreover, the trace of L1-L2 transfer in the domain of Path verbs has been reported. Bilingual participants showed a tendency of using more Path verbs than the American participants. Path verbs preferred by the bilingual group in English were of Latin origin and translatable into Polish: escape and enter. Further research is needed in order to confirm the results.

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Beauty is in the Ear of the Beholder: Monolinguals' and Bilinguals' Perception of Five Languages

Bilinguals have been found to have more complex attitudes towards familiar languages than monolinguals, but this is often based on socio-political factors, integration or matters of prestige (Dewaele, 2010). Furthermore, previous research has shown that speakers of multiple languages perceive their own languages with increasing positivity as they learn more languages (Dewaele, 2010). Crucially, perception of languages based only on their prosodic and segmental properties upon first exposure has not yet been tested in the literature. This study tested the hypothesis that bilinguals would exhibit more positive judgements than monolinguals when exposed to the sounds of a range of unknown languages, on the basis that bilingualism changes listeners' perceptions of languages. It sets out to determine the extent to which experience of language-learning influences listeners' perception of languages based solely on the acoustic properties of the language in question.

Participants were adult native speakers of British and US English, either a) monolinguals (n = 25), or b) self-reported competent speakers of one or more additional languages (n = 25). Participants heard 85 short extracts from translations of the same text recorded by male and female native speakers of five languages: Spanish, Dutch, Chinese, Arabic and Russian. English speakers' attitudes towards these five languages were established prior to the main experiment through a pre-pilot study, which showed that monolinguals present consistent language stereotypes when rating languages without any support from audio stimuli. Participants in the main study rated the audio extracts on 7-point Likert scales of pleasantness, harshness, warmth, and musicality, selected from Osgood et al.'s (1957) semantic differential framework of Evaluation, Potency and Activity. In Part 1 of the experiment participants were not told which languages they were hearing (unlabelled), while in Part 2 they were asked to rate named languages (labelled). Results were compared for unlabelled versus labelled ratings across bilinguals and monolinguals.

Results revealed a main effect of bilingualism for the unlabelled languages; however no differences were observed between the two groups' ratings of the labelled languages. This suggests that an individual's language experience positively affects their perception of other languages and overrides established stereotypes, thus supporting the original hypothesis. Additionally the results provide a new insight into the differing perceptions of monolinguals and bilinguals when presented with the same set of languages. An analysis based solely on their acoustic perceptions of unlabelled languages has enabled a bottom-up account of perception, highlighting the effect that language experience plays in the establishment of – or breaking-down of – cultural stereotypes.

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Overspecification in advanced learner discourse in L2 French: a study of nominal, temporal and modal reference

This paper explores the phenomenon of overspecification as a characteristics of learner discourse. We define overspecification as the packaging of more information than is strictly necessary to convey meaning. Though redundancy in native spoken language is a common phenomenon, often considered as a way to facilitate communication (Arts et al. 2010), many studies point to the fact that L2 learners tend to be overspecific compared to native speakers, especially as regards the use of nominal reference (Williams 1988; Ahrenholz 1998, 2005; Chini 2005, Hendriks 2003; Yusun Kang 2004.) Over-explicitation in the L2 data is easily observed at an intermediate stage (in the initial stages, discourse topics are often omitted in spontaneous speech production) but recent studies also identify this phenomenon in the productions of very proficient learners (authors 2013, So, Kita & Golding-Meadow 2013).

We used data from a film retelling task to study the way German, Polish and English advanced learners of French use markers of nominal, temporal and modal reference to show that overspecification occurs regardless of the properties of source languages. Our choice of languages was determined by the properties of their nominal reference system (Polish doesn't use articles while the three other languages do) and of their temporo-aspectual system (Polish has obligatory aspectual marking through a system of verbal prefixes, English and French mark perfective and imperfective aspect, while German doesn't use aspectual distinctions in oral narratives).

We argue that the phenomenon of overspecification is not restricted to the nominal domain of reference, but that it is also found in temporo-aspectual marking. In a previous study, we observed a tendency for learners of intermediary and advanced proficiency levels to use explicit tense and aspect markers where native speakers usually rely on the semantic properties of predicates (ex. 1).

- (1) Et après il a donné le patin à son copain et mais tout d'un coup la glace s'est brisée et le garçon est tombé dans l'eau. (ANC, PolL1FrL2)

In other words, learners make their choice of perspective on events more explicit than native speakers do. We wanted to check whether more explicit perspective-taking also implied overspecification in the use of modal markers (ex. 2, 3).

- (2) Il essaye de sonner. (PolL1FrL2)
 (3) Il a pu aider le garçon avec l'écharpe. (GerL1FrL2)

Our analysis shows that this is the case for German and Polish, but not for English learners of French.

On the whole, our results show overspecification in temporal and nominal reference as a cognitive strategy deployed by all learners to make sure their interlocutor interprets their message correctly. The domain of modal reference seems to be more sensitive to source language properties.



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The robustness of phonological categories in child L2 acquisition and input multiplicity: implications for pedagogy and phonological theories

Abundant research shows that even adults can acquire aspects of an L2 phonology given sufficient input, though this is mediated by factors such as age, length of residence, etc. (Piske, MacKay & Flege 2001). Studies on bilingual children who are acquiring two phonological systems from an early age concur with L2 speech findings by illustrating that these children, too, seem to eventually acquire the various speech systems upon language exposure (see Wren, Hambly, and Roulstone 2012). However, many of these studies implicitly assume the target to be monolithic, representing only one variety (Bohn and Bundgaard-Nielsen 2009; Leather 2003). Little is known about child L2 speech learning where numerous varieties exist alongside inter-speaker variations. Against this backdrop, this study investigates the nature of child L2 phonology acquisition in the context of input multiplicity with a particular focus on Filipino English (FE) which is relatively understudied.

The study looks at L2 English acquisition in Hong Kong (HK) and targets Cantonese-speaking youngsters who receive considerable pre-school input as Filipino-accented English from live-in housekeepers and then school and community input encompassing UK, US, and HK varieties. Results show that the 31 kindergarteners aged 4;6-6, and 29 1st year secondary school students aged 11-14 who had received/ were still receiving FE significantly outperformed 34 age-matched controls, who never received such input, on perception tasks (picture-choosing task; sound discrimination AX task) targeting FE plosives /p,t,k/ and fricatives /f,v/ - the plosive onsets are often unaspirated, while /f,v/ are sometimes rendered as [p,b] respectively in FE (Tayao 2008). The two groups do not differ in the other three varieties.

However, subsequent comparisons reveal participants' performance to be significantly worse than that of native FE speakers. This raises questions about the nature of informants' acquisition of this variety. This paper postulates that participants' limited input, from only one/ two Filipino housekeeper(s) in the household domain, which contrasts with the diverse input they obtained from various sources for the other three varieties, impedes the eventual development of robust categories essential for the processing of novel FE speech (Johnson and Mullennix 1997; Johnson 2005). This study highlights the insufficiency of the claim that acquisition for child L2 learners takes place upon exposure, and the necessity to scrutinise the nature of input a learner receives in relation to the diversity present in/ absent from it. A better understanding in this area has potential implications for language pedagogy (e.g. should different varieties of a language be introduced in a classroom?). Moreover, the paper also argues that acquisition situations involving multiple varieties provide a window to further our understanding of the nature of phonological representation, i.e. whether "speech sounds" are represented in a details-rich fashion or whether they are represented abstractly.

Sha Li and Robert Woo

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Second language decoding, word learning and vocabulary learning strategies: an exploratory study of advanced Chinese learners of L2 English

Research into the processing of second language (L2) writing systems by learners with typologically contrasting L1 writing systems has consistently underlined the importance of cross-linguistic transfer, interpretable as the automatic triggering of L1-entrenched processing mechanisms by L2 written input. Specifically, in an alphabetic L2 (e.g. English), print-to-sound decoding – defined as the sub-lexical process of ‘assembling’ pronunciations for written words or strings, using the systematic relations between written symbols (graphemes) and sounds (phonemes) – has been found to be facilitated amongst learners with an alphabetic L1 (e.g. Korean) compared to those with a morphemic L1 (e.g. Chinese). This may be because the latter are accustomed to processing words as visual wholes rather than engaging in intra-word analysis. Recently, the relationship between L2 decoding and word learning has also begun to be explored. There is strong theoretical support for a causal relationship between these variables: fast and accurate decoding of written forms provides reliable phonological representations which support the operation of phonological working memory; psycholinguistic evidence suggests that this, in turn, plays a central role in learning novel phonological forms. Further, knowledge of a language’s grapheme-phoneme correspondences allows the orthographic and phonological representations of new words to be mutually reinforcing. Previous studies (albeit few in number) have indeed found positive correlations between both the speed and accuracy of decoding on the one hand and success in intentional word learning on the other, amongst learners with alphabetic but not morphemic L1 backgrounds – consistent with the view that morphemic learners are more likely to process words visually as whole units.

To investigate these issues further, 60 advanced Chinese learners of L2 English completed the following: an L2 decoding test; a word learning task, followed by tests of written recognition, written production and aural recognition of the target words; and a working memory test. Further, to explore the possibility that the relationship between decoding and word learning is mediated by strategic memorization behaviour, participants also self-reported any strategies used on the word learning task. Despite their high L2 proficiency (IELTS band 7 or above), many showed serious weaknesses in L2 decoding. However, in contrast to previous findings, a strong positive correlation was observed between decoding scores and all three word recall measures, after controlling for working memory, despite participants’ morphemic L1 background. Possible explanations for this discrepant finding are discussed, including methodological differences between the studies. The most frequently-reported memorization strategies were visually oriented, involving the words’ graphic forms rather than pronunciations – again consistent with participants’ L1 background.

Only a handful of participants reported phonology-based strategies (e.g. subvocalization); however, these participants tended to score highly on the decoding and word recall tests. Theoretical, methodological and pedagogical implications of these findings are discussed.



Elaine Lopez

(University of York)

Theoretically informed grammar instruction and its impact on acquisition: the example of specificity in L2 English articles

This paper reports on an investigation into the role of explicit instruction on article acquisition in second language (L2) English. Bruhn de Garavito (2013) stresses that findings from generative L2 acquisition research are relevant to classroom instruction. However, results are rarely published in non-technical language, which can make them inaccessible to teachers without a generative linguistics background. This paper will demonstrate that theoretical L2 acquisition research can influence language pedagogy, by examining the results of providing specificity instruction to L2 learners of English. Article errors are a well-documented feature of L2 English which rarely improve following instruction (Snape and Yusa, 2013). A substantial body of generative L2 acquisition research (Ionin, 2003 and others) has found higher rates of errors within two contexts:

1. definite/non-specific, I read a very good book recently. I don't remember the name of the author.
2. indefinite/specific, Two ladies are sitting in a restaurant. They are waiting for a friend but she is late.

Specificity is not widely taught to L2 learners, and objections are that abstract properties of articles are too difficult to teach and that teachers, themselves, may not have detailed knowledge of these properties. However, I have devised such materials by working closely with L2 English teachers to ensure that, even without a generative linguistics background, they could present and practise the concept with their students. Pre-test and post-test data was collected from three groups of intermediate level Chinese learners of English (n=50). Data comes from an elicitation task and grammaticality judgements. The main group received instruction on specificity and definiteness using newly created teaching materials; a second group received instruction on definiteness only, using standard teaching materials; and a third group received no instruction on articles. Post-test group results show a significant improvement on the elicitation task but a decrease in accuracy on the judgement task for learners who received instruction on specificity. The results will be presented in relation to the afore-mentioned problematic contexts. Furthermore, differences between this group of learners and the other two groups suggest that instruction on specificity did alter their accuracy with English articles. I propose a possible interaction between what this group have previously learnt about articles, and the new instruction on specificity.

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(Waseda University¹, Keio University², Sophia University³)

Identification of English consonants by Japanese non-native listeners in background noise and/or reverberation

Background: When we listen to speech sounds in our daily lives, we do not hear them in a quiet, laboratory condition. Instead, we are surrounded by various background noise and reverberation. One may be able to perceive speech sounds in a quiet listening condition; however, speech perception is negatively affected in the presence of background noise and reverberation, even for native listeners and non-native listeners with high proficiency in the target language Mayo et al. (1997). Despite this fact, perception of foreign sounds is often trained under laboratory environments in language learning settings, and does not take real-life, adverse listening environments into consideration. Building on the previous research in this spirit, we aim to understand the mechanism of foreign language perception in adverse listening conditions such as under background noise and reverberation, and to make use of the results for developing perceptual training materials for language learners. In this study, we report a case study of this research enterprise, which investigates the perception of English consonants by Japanese learners. More specifically, the study examines correct percentages in English consonant identification, correlation with English proficiency, and similarities and differences in consonant confusion patterns among English native listeners and Japanese non-native listeners with varying English proficiency.

Method: Native and non-native listeners were presented with 23 English consonants in the context “You are about to hear a__a” (where the target consonants were surrounding by [a]) in four listening conditions: quiet, reverberation (Reverberation Time [RT]: 0.78, 1.12, and 1.43 seconds), and multispeaker babble noise (signal-to-noise ratio of 10 dB) + reverberation (RT = 0.78 s). The correct identification rates, as well as specific confusion patterns, were analyzed against each listener’s English proficiency. Individual proficiency is measured using TOEIC® examination scores, which is widely used in Japan for educational purposes such as English placement test in universities.

Results and Discussion: Analysis of variance found a significant difference in native and non-native listener groups as well as listening conditions. Correlation of TOEIC® scores and correct percentages in each listening condition became stronger as listening conditions became more adverse ($r=0.22$, $p > 0.1$ in Quiet, vs. $r=0.55$, $p = 0.05$ in noise + reverberation), which shows that English proficiency difference matters more under more severe listening conditions. Similarities and differences in confusion patterns among the listener groups were also observed. Confusions of [s] with /voiceless th/, [z] with /voiced th/, and [g] with /voiced th, l, t/ were specific to Japanese listeners regardless of their English proficiency. Also, the higher English proficiency group had an advantage over lower proficiency group and native listeners in the identification of [n], [voiceless th], and [voiced th].

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Midori Matsubara

(Nagoya University)

The effect of working memory on the gap between online and offline performances of production tasks

Working memory (WM) capacity and the allocation of limited attentional resources play a crucial role in processing in the second language (L2) because L2 requires a more controlled processing in contrast to the more automatic processing in the first language (L1). This is particularly true with regard to speech, which requires each necessary step involved with production to be processed online, with simultaneous monitoring of both forms and meanings. Thus, previous studies suggest that individual differences in WM capacity affect language performance in L2. Miyake and Friedman (1998) indicated that WM affects the efficiency and quality of language processing in real time.

Taking into account the cognitive load required for production processes, the present study examines the effect of WM capacity on the gap between Japanese EFL learners' online and offline production performances. The experiment is designed to investigate the following hypotheses: 1) The gap between online and offline production is greater for learners with lower WM capacities than those with higher WM capacities; 2) The heavier the cognitive load of the task, the greater the gap.

Thirty graduate and undergraduate students with proficiency levels ranging from lower intermediate to lower advanced participated in the study. Their WM capacities were assessed using the Japanese version of the reading span test (Osaka, 2002). Each participant completed three kinds of monologue production tasks that varied in their degrees of freedom: a translation task comprising fixed sentences, a storytelling task with a six-frame comic strip, and an opinion-stating task. "Degree of freedom" indicates the extent to which the participants were allowed to incorporate their intended responses in a task; the translation, storytelling, and opinion-stating tasks afforded low, medium, and high degrees of freedom respectively. We hypothesized that the higher the degree of freedom of the tasks, the heavier the cognitive load that was required, because learners had to simultaneously think about what they intended to say and how to say it.

For each task, participants were asked to first speak in L2 (English), and then describe what they intended to say in L1 (Japanese), and lastly write it in L2. The second step was skipped during the translation task, as a script was already provided in this task. The gap between participants' spoken and written L2 production data was analyzed in terms of the accuracy of the meaning conveyed. After completing all the production tasks, participants filled in a questionnaire on the strategies employed while working on the tasks.

The results of correlational and other data analyses between WM capacity and the gap observed in each task are presented and discussed with reference to the responses in the questionnaire.

Stefanie Morgret

(University of Kassel)

Music as a facilitating device for improving phonological skills in adult L2-education

Can music facilitate adults' phonological skills in L2-education? Several studies provide evidence that the phonological and musical ability are linked - not only for children's L1 but also for adults' L2 (Slevc & Miyake 2006). Evidence from cognitive neuroscience suggests that language and music processing and in particular perception and rhythm rely on at least partly overlapping cognitive and neural resources (Patel 2008). In addition, studies in recent years have reported the benefit of songs for improving L2-phonological skills. Songs can facilitate word segmentation in L2 especially in the first learning phase (Schön et al. 2008). More recently, evidence from experimental studies has provided support that singing can facilitate adults' verbatim memory for spoken foreign language (Ludke et al. 2013). However, there is a lack of classroom-based empirical studies about the benefit of music for adult L2-education.

I carried out two mixed-methods-studies to explore how music can be used as a facilitating device for improving phonological skills in adult L2-education. The first study investigated the experience of lecturers for German as a foreign language (n=82) regarding the use of music in the adult classroom (data collection instrument: questionnaire, March to April 2010). The second study (May to July 2011) was a classroom-based study with 10 Arabic students in Berlin (Germany). The participants were randomly assigned to a speaking training with music (experimental group) or without music (control group). During nine teaching sessions à 120 minutes (CEF: A2) extensive data was collected in both groups (instruments: questionnaires, tests, recordings, semi-structured interviews etc.). The emphasis of the study was on production, perception and memory skills including musical chunks. Existing teaching methods with music were explored and developed in the experimental group. The music was selected due to the students' preferences and contained mainly current authentic music (rap, pop etc.). In contrast, traditional methods were used in the control group to analyze the effects of methods with music in comparison to traditional methods.

My poster will summarize main results of both empirical studies and link them with theoretical principles as well as recent findings of cognitive neuroscience to present how music may be used as a facilitating device for improving phonological skills in adult L2-education.

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Yoko Nakano, Yuu Ikemoto and Brian Nuspliger

(Kwansei Gakuin University)

Contextual Influence on the Resolution of Relative Clause Attachment Ambiguities in L1 and L2 English

The interaction between syntactic processing and contextual information has been studied not only in L1 but also in L2 (Pan & Felsler, 2010). The present study investigated contextual influence on ambiguity resolution in sentences that had two potential antecedents (NP1 of NP2: the GEN condition (1a), NP1 with NP2: the PP condition (1b)) for a relative clause (that had a ...).

R1 R2 R3 R4 R5

- (1) a. The car of the driver /that had /a summer cottage/ was pretty/cool.
- b. The assistant with the parrot /that had /a vacuum cleaner/ started /talking.

Twenty-four native speakers (NSs) of English and 31 advanced Japanese learners of English participated in a sentence completion task. The NSs and the learners were divided into two groups, respectively. For one group, the target sentences were preceded by a short text that supported either of the two antecedents (the With-Context condition); and for the other group, the target sentences were presented without any preceding texts (the No-Context condition). The results indicated that NSs of English chose the second noun phrases (NP2) more frequently than the first noun phrases (NP1) both in the GEN and PP conditions in the No-Context condition. On the other hand, NPs that matched the context were chosen more frequently in the With-Context condition than in the No-context condition both in the native speakers' and learners' groups.

Twenty-four native speakers of English and 39 advanced Japanese learners of English also participated in the eye-tracking experiment. Target sentences were semantically manipulated so that a relative clause was forced to be attached either to NP1 (the high attachment (HA)-biased condition) or to NP2 (the low attachment (LA)-biased condition). The experimental sentences were presented with or without a supporting text on the monitor. First fixation duration, first-pass duration, regression path duration, and rereading time for the critical region (R3) and the spill-over region (R4) were analyzed. Both in the native speakers' and the learners' groups, no significant difference was found for the first fixation durations between the No-context and With-Context conditions, but the first-pass duration, the regression path duration, and the rereading time were shorter in the With-Context condition than in the No-Context condition. The results indicate the possibility that the supporting context facilitated processing decisions online both in the native speakers' and the learners' groups. Although the LA-biased condition was shorter than the HA-biased condition in the No-Context and the With-Context conditions in the native speakers' group, the tendency was found only in the With-Context condition in the learners' group.

To summarize contextual information influences native speakers' and learners' sentence processing.

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Poster Presentations

Dea Nielsen, Silke Fricke and Joy Stackhouse

(University of Sheffield)

A longitudinal study of early language and literacy development in young children learning English as an Additional Language

Within the UK, the number of children entering the school system who have English as an Additional Language (EAL) is growing every year, with recent estimates suggesting that about 16.8% of all primary school pupils are non-native English speakers (School Census Statistics, 2011). This situation is not unique to the UK, as school systems across Europe are faced with increasing numbers of children for whom the transition into school is complicated by the need to learn to speak the language of instruction. While considerable research with monolingual populations has evidenced the predictive significance of pre-school language and early literacy skills for later academic outcomes (Scarborough, 2009), little work has explored the early development of children with EAL. As literacy is not only a specific educational outcome, but also a fundamental requisite ability that allows children access to much of the curriculum, it is particularly important to examine the impact of limited oral language proficiency on these children's literacy development.

This study reports the findings of a longitudinal study following children from diverse linguistic backgrounds (N=50) from when they were first recruited at the beginning of nursery, to the middle of their first year of primary school. Children were assessed at four time points over the course of 2.5 years: twice in nursery at T1 (mean age 3;7 years) and T2 (mean age 4;02 years), in reception at T3 (mean age 5;02 years), and in Year 1 at T4 (mean age 6;0 years). A group of monolingual English-speaking children from the same classrooms were recruited to form a comparison group once children entered primary school, and these children were assessed at T3 and T4. The development of EAL children's language (vocabulary, grammar, listening comprehension) and early literacy skills (phonological awareness, RAN, letter-sound knowledge) were investigated at all four time points, with a particular focus on the trajectory of children's gains from pre- to post-school entry. Additionally, children's performance on broad measures of literacy attainment (reading accuracy and fluency, reading comprehension, spelling) was examined, and the EAL children's performance was compared to that of their monolingual peers. Finally, the predictive significance of the aforementioned language and cognitive skills for word reading, reading comprehension, and spelling was assessed, and patterns of prediction were compared across groups. The findings discussed have implications for theories of bilingual language and literacy development, as well as being of practical relevance for supporting young EAL children entering school.

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A Young Park

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A Comparison of the Impact of Extensive and Intensive Reading Approaches on the Reading Fluency and Reading Attitudes of Korean Secondary EFL Learners

The Extensive Reading (ER) approach encourages learners to read large amounts of long, easy-to-understand material based on each learner's interest and reading level. Although a number of empirical studies have reported a positive impact of ER on English as a Foreign Language (EFL) learners at tertiary educational institutions, few studies have focused on EFL learners at secondary schools. Exploring whether the ER approach can demonstrate a positive impact on secondary school EFL learners is particular practical interest, since these learners are generally considered to be 'slow readers' who have just begun to learn reading in English.

Situated in the Korean EFL secondary context, this quasi-experimental study compares the impact of Extensive Reading(ER) and the conventional Intensive Reading(IR) approach that is widely used in Korean secondary schools. IR primarily focuses on close translation or analysis of relatively short reading materials which are used to exemplify specific aspects of vocabulary and grammar. Treatment effects of ER and IR pedagogical interventions are examined in terms of secondary EFL learners' (a) reading fluency (reading rate and reading comprehension), and (b) their attitudes towards English reading.

A class of 36 Korean secondary students participated in a 12-week ER course while another class of 38 matched for English proficiency level participated in a 12-week IR course. Measures were taken of Nation's reading fluency test and an adapted version of Yamashita's questionnaires examining attitudes toward reading.

Independent and paired-sample t-tests were used to compare changes to students' mean scores in reading fluency tests and to students' responses to reading attitudes questionnaires before and after the intervention. Following this, a one-way ANCOVA was applied to reduce sampling error and control for initial differences in the pre-test mean scores for reading fluency and reading attitudes between two groups. Pre-test mean scores were used as covariates when comparing the mean scores of both group's post-tests.

The findings show a significant improvement in the ER group's reading fluency over that of the IR group. In the pre-test, ANCOVA estimated both group's reading rate to be 113.34 WPM. The adjusted mean score of reading rate post-test from ER group was significantly higher by 14.57 WPM than that of the IR group ($f=6.93$, $p < .05$). In addition, the ER group's comprehension score showed an increase twice that of the IR group's. Furthermore, the reading attitudes of the ER group were significantly more positive after the treatment ($f=17.49$, $p < .05$), while the IR group's showed almost no increase, which implies that learners exposed to ER had a more favorable attitude toward English reading. These results support the growing body of evidence that ER significantly enhances secondary school EFL learners' reading fluency and reading attitudes and offers an effective alternative to IR.

Anna Lia Proietti

(University of Haifa)

Vulnerability at syntax-discourse interface when structures overlap: the case of Turkish-Italian L1 bilinguals

Over the last years, the syntax-discourse interface has been the locus of fruitful research in the field of language acquisition, gathering evidences that it can be a vulnerable domain both for language learners as well as bilinguals (Hulk & Müller, 2000; Müller & Hulk; 2001; Sorace, 2011; Serratrice, Sorace & Paoli, 2004). Researchers' attention has been primarily attracted by those cases in which there is a partial overlap of syntactic across the bilingual's two languages, consequently proposing that cross linguistic interference occurs where languages' structures overlap (Döpke, 1998; Hulk & Muller, 2000; Muller & Hulk 2001) due to underspecification that give a rise to optionality. Recent studies (Sorace & Serratrice, 2009; Serratrice, Sorace, Filiaci & Baldo, 2012, among others) revealed that cross linguistic interference is found also in contexts where the languages' structure in analysis overlap completely, as in the case of Spanish and Italian, underlining the need for a more fine grained approach. This presentation reports data from ongoing research focusing on the simultaneous acquisition of two null subject languages, Italian and Turkish. The focus will be on the acceptance of postverbal subjects with unaccusative and unergative verbs. Subject inversion is accepted as one of the property for null subject languages (Rizzi 1982, Jaeggli & Safir 1989; among the others). Both Turkish and Italian allow post verbal subjects with unaccusative/ unergative verbs.

However, this position is regulated by different discourse requirements: in Italian the postverbal subject position with unaccusative and unergative verbs is favored in neutral contexts (a), (Pinto, 1997).

(a) É arrivato Mario Came-3rd Mario-subj Mario came

while in Turkish postverbal subjects (b) can only be used to give or repeat information (Ergüvanlı, 1984), that is in the position of tail (İşsever, 2002).

(b) Geldi mi Mario? Çok bekledik! Came-3rd sg. Mario -subj? so
long wait-2nd pl. Did Mario came? We wait so long

Data have collected from 10 fluent 2L1 Turkish-Italian bilinguals (aged 6-12) as well as age-matched control of Turkish monolingual and Italian monolingual children. An acceptability judgment task and a translation task were used to investigate the target-phenomenon in both the languages.

Results show an over acceptance of subjects in preverbal position in Italian, including those contexts in which post verbal subject would have been a more felicitous choice. Those data seem to be consistent with findings for Italian/Spanish bilingual (Sorace & Serratrice, 2009; Serratrice, Sorace, Filiaci & Baldo, 2012) reinvigorating the hypothesis that when syntactic structures overlap residual optionality is not enough to explain the vulnerability of this particular interface and that some other factors as quantity and quality of the input and processing limitation as to be taken in account.



Sophie Schlöffel, Clara Martin, Sedy Caffarra, Marie Lallier and Manuel Carreiras
(Basque Center on Cognition, Brain and Language)

Does learning to read in L2 affect native language reading?

Orthographic depth, or the relative consistency of spelling-to-sound mappings, has been proposed to result in differences in reading strategies across languages. This has important implications for bilingual children learning to read in more than one language: depending on how (in)consistent letter-sound conversions are in each of their languages, strategies used to read in L1 may not be as effective when decoding written words in L2. Thus, when their languages differ in orthographic depth, bilinguals may need to a) use separate strategies depending on the language they are reading in, or b) adapt existing (L1) strategies to allow them to successfully read in both languages.

To investigate these possibilities, an audio-visual matching task was employed to examine the interaction between orthographic and phonological information in L1 and L2, focusing on possible influences of L2 literacy on L1 processing. Basque-Spanish and Basque-French bilingual children were asked to decide whether an auditorily presented word was the same as the word visually presented on the screen. All stimulus material was in Basque, with words either having “regular” spelling-to-sound correspondences (unambiguous pronunciation in the three languages) or including letter combinations such as ‘ain’, ‘au’, or ‘oi’ that, if pronounced French-like, would differ from the task-relevant Basque pronunciation but would not change if pronounced Spanish-like (“irregular” words). In this manner, the influence of orthographic depth in one language (Spanish or French) on task performance in another (Basque) could be assessed. Critically, the two groups of bilinguals were tested in the same transparent language (Basque), but differed in the consistency of spelling-sound mappings in their L2. Thus, for one group of children we were able to examine the effects of literacy in an opaque L2 (French) on the reading system of a transparent L1 (Basque), while in the other group (Basque-Spanish bilinguals) both languages were transparent. Additionally, both groups performed the task using pseudowords rather than real Basque words in order to gain insight into how familiarity with the statistical regularities of L2 affects children’s general pre-lexical reading strategies irrespective of their specific lexical knowledge.

If bilinguals indeed develop one combined strategy to read in both their languages, it can be expected that knowledge of an alternative pronunciation for the same letter string in the “irregular” condition would cause Basque-French children to be slower than their Basque-Spanish peers when deciding if stimuli matched in the two modalities, whereas there will be no such difference for the “regular” words. On the other hand, if two independent reading systems are employed for L1 and L2 both groups should perform similarly irrespective of the regularity of the stimuli. Results and implications will be discussed.

Nicole Schumacher, Ingo Fehrmann and Torsten Andreas

(Humboldt University of Berlin)

The use of V2 structures by Japanese learners of German as a foreign language during classroom interaction

SLA studies on the German word order suggest that V2 in declarative sentences, here the verb is preceded by a non-subject, is particularly challenging for learners and therefore acquired late (e.g. Pienemann 1998, Diehl et al. 2000, Lee 2012). Explanations include processability constraints (Pienemann 1998), L1 transfer (Diehl et al. 2000) or L2-complexity (emergence of morphosyntactic conflicts, see Lee 2012). Counter evidence can be found in Bohnacker (2006) and Hoshii (2010): Even elementary learner varieties display targetlike XVS structures.

Our findings correspond to and supplement these latter studies. We present results of a pilot study that investigates oral data of 20 beginning learners of German. The data were collected in a German as a foreign language class in Germany (level A1) during a 4-week course for Japanese university students. Classroom German (70 contact hours intensive GFL with a communicative pedagogic orientation) constituted the primary source of L2 exposure. Methods of data elicitation included different focused tasks (Ellis 2003) that favoured the production of longer utterances anchored in place and time by explicit linguistic means, thus inducing the learners to produce non-subject-initial sentences. The oral production was recorded through audio and video, transcribed and analysed. In addition, subjective learner data were collected.

Our results show targetlike XVS structures in more than 90% of obligatory contexts. We thus confirm Bohnacker's (2006) findings concerning the oral production of learners with a different L1 (Swedish) and Hoshii's (2010) findings concerning the written production of learners with the same L1 (Japanese). We discuss the following possible explanations for these findings: (i) transfer from L1 Japanese, a topic-prominent language, (ii) access to explicit knowledge about grammar rules during classroom interaction, (iii) chunking as a learning strategy.

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Silke Schunack

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Resolution of subject-object ambiguities in L2 Norwegian: a self-paced reading study

Several studies have already investigated the resolution of subject-object ambiguities in a variety of L2 languages. These studies mainly used morphosyntactic cues (e.g. case, verb agreement) for disambiguation. These cues have been shown to be highly valuable cues in German, therefore I investigated how German native speakers deal with a language that provides them with neither of these cues, like Norwegian. In Norwegian sentences with an auxiliary only a subject can be placed between the auxiliary and the main verb, resulting in an OVS sentence. As previous work has highlighted the importance of animacy for L2 learners, this was introduced as a second factor resulting in a 2x2 design (SVO vs. OVS x animate vs. inanimate). All 24 experimental sentences were pretested for their plausibility and all NPs were matched for length and frequency. Example items:

(1a) Ambulansen som alltid er punktlig, vil passere legen bak sykehuset.
(SVO-inanimateS)

(1b) Legen som alltid er punktlig, vil ambulansen passere bak sykehuset.
(OVS-animateS)

‘The ambulance will pass the doctor that is always on time behind the hospital.’

(2a) Legen som alltid er punktlig, vil passere ambulansen bak sykehuset.
(SVO-animateS)

(2b) Ambulansen som alltid er punktlig, vil legen passere bak sykehuset.
(OVS-animateS)

‘The doctor that is always on time will pass the ambulance behind the hospital.’

32 adult German L2 speakers of Norwegian were tested. Their mean age was 26 (range: 20-58) and mean AoA was 20 (range: 15-29). They had learned Norwegian on average for 4.5 years (range: 0.5-12). They rated themselves as at least B2 level in the CERF. The task was a word-by-word self-paced reading task. The main research questions were:

- Can L2 speakers pick up the word order cue by monitoring of the word following the auxiliary to assign syntactic roles?
- Does animacy help in the assignment of syntactic roles?

In the OVS condition, the L2 group showed the same pattern as the L1 group with faster reading times for animate subjects. Surprisingly, the L2 group showed the opposite pattern of the L1 group in the SVO condition, but this difference did not turn out significant.

An ANOVA was run on the reading times for the region of interest (main verb, second NP and following preposition). It revealed a main effect of word order ($F(1,31)=8.96$, $p<0.01$, $F(1,23)=34.87$, $p<0.001$) and an interaction of animacy and word order in the F1 ($F(1,31)=7.06$, $p<0.01$, $F(1,23)=3.4$, $p=0.078$). The L2 group was able to use the word order cue to start a reanalysis from a subject-first interpretation shown by slower reading times in the OVS condition. Reanalysis was sped up by the use of animacy in the OVS condition. This is in line with results from previous studies on other L2 languages.

Aldona Sopata

(Adam Mickiewicz University)

The syntax-discourse interface: Object omissions in child second language acquisition

The integration of syntactic information within an adequate discourse framework is a difficult task for children in the course of first and second language acquisition. The coordination of syntax and pragmatics often leads to the omission of obligatory morpho-syntactic elements (e.g. objects). Children acquiring their L1 seem to rely on discourse licensing for the interpretation of missing categories. Accounts relate object omissions to some computational complexity of structures with object clitics (Jakubowicz et al. 1997, Gruter 2006, Gavarró et al. 2010) or to the problems with the syntactic-pragmatic interface (Matthews et al. 2006, Hughes & Allen 2013). It is still an open question up to which age L1 strategies remain accessible to successive learners and in which grammatical areas the age of onset of acquisition influences the course of language development (Schwartz 2004, Unsworth 2005, Rothweiler 2006, Meisel 2008, 2011).

The specific grammatical phenomena investigated in the paper are null objects in the child acquisition of German as the L2. Children omit objects to a some extent in the L1 acquisition of German (Hamann et al. 1996, Jakubowicz et al. 1997). The first language of the children under investigation is Polish. Polish is a language which allows object-drop to some extent. Monolingual Polish children show a general preference for null objects in both specified and unspecified context at an early age. Only older children approach the adult-like level of omissions in specified context and cease to produce null objects in unspecified context.

If child L2 acquisition follows the same pattern as L1 acquisition, the developmental sequence of object omissions in child L2 German should mirror the L1 acquisition of German. If the L1 strategies are no more accessible to children, their L2 German development will differ from the L1 sequence of monolingual German children. Moreover, if the child L2 acquisition can be influenced by their L1 Polish, the impact of the higher rate of object omissions in L1 Polish should be seen in the L2 development.

The present study investigates the longitudinal data from five children, who were first exposed to German as their L2 at the ages of 2;6, 3;8, 4;0, 4;7 and 9;1. The variable of the age of onset is the main variable differentiating them. In other respects, they constitute quite a homogeneous group and their input situation is qualitatively and quantitatively very similar. Their language development was investigated through the period of ten months.

The data provide evidence for the claim that the innate ability to acquire a language from mere input starts fading out at the age of three. The results show also that children acquiring their L2 after the age of three use strategies which differ from those characteristic for the L1.



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Global foreign accent in heritage speakers of Turkish in Germany: Comparing simultaneous and successive acquisition

There has been a lot of research on global foreign accent (FA) in successive bilinguals, showing generally that the earlier a language is acquired, the more native-like it will be spoken later in life (e.g. Flege et al. 1995, Abrahamsson & Hytlenstam 2009). Only few studies have been concerned with the phonological abilities of heritage speakers (HS) so far (see Benmamoun et al. 2013, Montrul 2012 for overviews), although these appear to represent a counterexample to the “earlier is better” view. At least with regard to their heritage language simultaneous learners may be argued to have a disadvantage, since they have been in contact with the dominant language of the environment for a longer period of time (Montrul 2008).

The goal of the present study is to investigate whether (i) HS can acquire a native accent in both of their languages or whether having a native accent in one language implies having a FA in the other, and (ii) whether it is relevant when the language of the environment starts to be acquired: quasi simultaneously (both languages as L1s before 3 years) or later (one language as early L2 between 4-9 years)? FA will be examined in 21 HS of Turkish in Hamburg (Northern Germany). German-Turkish bilinguals in Germany typically grow up in monolingual Turkish homes and have their first intensive contact with German when starting kindergarten or school. Over the lifespan, German often turns into their dominant language (Rothweiler 2007). Participants in the present study (age range 20-42 years) were first exposed to German between birth and 9 years. All spoke standard varieties of German and Turkish. FA was assessed in two separate experiments for German and Turkish, with 15 monolingual raters in each experiment judging the bilinguals’ accents based on speech samples of 10 seconds.

At first sight, there was no systematic relation between age of onset (AoO) in German and perceived native-likeness, neither in German nor in Turkish. Some speakers were perceived as foreign in German, others in Turkish, irrespective of their AoO in German. Few speakers were perceived as either foreign or native in both languages, the majority had an accent in one language but not in the other. For a statistical analysis, speakers were divided into two groups: 2L1ers (AoO in German before age 3) vs. eL2ers (AoO in German after age 4). This analysis revealed that speakers in the latter group never acquired a native accent in both languages, i.e. for this group, sounding native in one language excluded the possibility of sounding native in the other. Overall, results suggest that “early is better” is not true generally, but the ability of sounding native-like in two languages decreases when acquisition starts after age 4.

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Accuracy in the Oral Proficiency of L1 Attriters: the Role of Age at Emigration vs. Amount of L1 Exposure

The gradual decline in (perceived) L1 proficiency is a frequent phenomenon in long-term emigrants. But why do some L1 attriters retain more of their L1 than others? Two competing factors moderating L1 attrition are frequently being discussed: age at emigration (AaE), and the amount of exposure to the L1 after emigration. While maturational accounts (e.g., Bylund 2009) argue that migrants who left their L1 community before puberty will be less proficient in their L1 than post-puberty migrants, L1-interference accounts suggest that it is not AaE, but the amount of L1 exposure after migration that moderates L1 attrition (Pallier et al. 2003).

To investigate these factors, we assessed the L1 proficiency of 60 German Jewish migrants who fled to English-speaking countries before WWII (see Schmid 2012) and show different levels of both AaE and continued L1 exposure. The data used are spontaneous, autobiographical interviews.

The level of L1 proficiency was assessed using two measures of accuracy. The measure that sets apart attriters from non-emigrant native speakers most clearly, the overall amount of errors in free speech (Schmid & Dusseldorp 2010), was augmented with a measure of the native-like selection of multi-word-constructions. While a native-like use of such constructions seems to be a good indicator of proficiency in L1 and L2 writing (Nation 1995; Verspoor, Schmid & Xu 2012), its investigation is rare for oral proficiency and seems to be absent from L1 attrition research. The native-like use of the constructions was rated by a group of monolingual German speakers.

Preliminary results suggest that the amount of L1 exposure is a better predictor for error rates than AaE, but that neither of the factors moderates the amount of native-likeness in the selection of multiword constructions. Instead, other factors such as level of education seem to play a more prominent role.

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Retention of idiomatic expressions through image schema – one-semester classroom activities in a Japanese university setting

Although idioms are frequently used in everyday English conversation and the necessity of teaching idioms is recognized for enhancing communication skills, idioms' irregular and idiosyncratic behavior tend to make teachers to avoid teaching them. In applied linguistics (Boers & Lindstromberg, 2008), there have been some attempts to solve this problem by making use of conceptual metaphors in cognitive linguistics. Most attempts are, however, on a one-time experimental basis and no effective teaching method seems to have been established yet.

In this presentation, we will propose image schema of idioms help the learners to retain the idiomatic expressions in a systematic way through classroom activities. Image schema is defined here as a skeletal image or a representation of structural pattern that underlies everyday experience.

In order to measure the effect of idioms' image schema, we firstly categorized idiomatic expressions under 14 conceptual metaphors such as <Life is a Journey> and <Argument is War>, by referring to previous studies and textbooks (Lakoff & Johnson, 1980; King, 1999; Boers 2000). We set up two groups of Japanese university students (Group A: images, Group B: translation). Both group A and B learnt idiomatic expressions through a semester (14 times, 90 minutes each) using the same activities except the first part. In the first activity, Group A guessed the meaning of idioms through image schema to stimulate mental visualization, while Group B was given translation activity where they used a dictionary to find most appropriate meaning of each idiomatic expression. The second activity was practicing dialogues which invited both Group A and B to understand the idioms in a proper context, followed by production activities to retain the idiom expression through production in a new context.

Two-way repeated measures ANOVA were conducted to determine the effect of teaching methods (image schema and translation) and measures (pre-test and post-test). The results indicate that there was a significant effect of image schema for remembering idioms ($(F(1, 39) = 6.604, p < 0.05)$). The results also showed that the post-test score was significantly higher than pre-test ($(F(1, 39) = 169.113, p < 0.05)$). This means that mental visualization may have enhanced learners' depth processing and prompts could prompt retention over time. The questionnaires' answers interestingly revealed that the strategy that most of Group A used for understanding and remembering the meaning of idioms was to visualize idioms, whereas the one Group B used was to understand the meaning through dialogues or contexts rather than translation. As a further study it should be examined which is more effective to retain idioms, image schema alone or a blend of image schema and contexts.

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L2 Acquisition of Japanese Number Marking by English-Speaking Learners

This study investigates the interpretation of Japanese bare nouns and the plural marker *-tachi* by English-speaking learners of Japanese. Japanese is a so-called classifier language, which lacks count-mass distinction and obligatory number marking (e.g. Greenberg, 1972); instead, bare nouns without number morphology can be either singular or plural. In addition, they can be interpreted as definite or indefinite. However, Japanese has an optional plural marker, *-tachi*, which can only be attached to animate nouns. Common nouns with *-tachi* attached (CN + *tachi*) are generally interpreted as definite (e.g., Ishii, 2000; Kurafuji, 2004). Since CN + *tachi* are definite, they are incompatible with generic referents, as shown in (1), or non-specific referents, as shown in (2).

English-speaking learners of Japanese must understand that in Japanese, bare nouns can either be singular or plural, but when the plural marker *-tachi* is used, nouns must have a definite reading. English number marking systems lack the characteristics described above, and the meaning of *-tachi* is not typically taught in classroom instruction. In addition, since the attachment of *-tachi* is not obligatory and bare nouns can also be plural and definite, input does not seem to give consistent and reliable evidence as to the interpretations of bare nouns and CN + *tachi* (as pointed out by Lardiere (2009) for the Chinese plural marker *-men*, which is similar to *-tachi*). The present study examines whether the target-like knowledge of bare nouns and CN + *tachi* can be attained by English-speaking learners under these acquisition contexts.

Fifteen English-speaking learners of Japanese and 15 native speakers of Japanese were tested using a forced preference choice task with two contrasts: generic vs. definite and non-specific vs. definite. The sentences, such as in (3), were preceded either by a definite, a generic, or a non-specific context. The participants were asked to decide which they preferred, a bare noun or CN + *tachi*, in a given context. Test results showed that overall, both the control and the L2 groups preferred to use CN + *tachi* in definite contexts, but rejected it in generic and non-specific contexts. For both groups, comparisons between generic vs. definite and non-specific vs. definite were statistically significant (for both contrasts, $p < .001$). The results of this study suggest that English-speaking learners are successful in learning the Japanese number marking system despite L1-L2 differences, lack of classroom instruction, and an absence of consistent and reliable positive evidence.

- (1) Gengogakusha-tachi-wa yooki-da linguist-PL-Top cheerful
 a. *'Linguists are cheerful.' (*generic reading)
 b. 'The linguists are cheerful.' (✓definite reading)
- (2) Lisa-wa gengogakusha-tachi-o sagasi-teiru. Lisa-Top linguist-PL-Top seach-Prog
 a. *'Lisa is looking for linguists.' (*non-specific reading)
 b. 'Lisa is looking for the linguists.' (✓definite reading)
- (3) Lisa-wa (gengogakusha-o/gengogakusha-tachi-o) sagasi-teiru. Lisa-Top (linguist-Acc/linguist-PL-Acc) search-Prog



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Accessing L3 meanings in writing and speech: a quantitative study of individual differences and lexical variables.

This study explored different factors influencing form-to-meaning mappings in L3 contrasting orthography and phonology. We were interested both in learner related individual differences and in lexical properties that would possibly modulate accessing meanings of L3 words in the two modalities.

We studied multilingual learners of L3 French who had Finnish as their L1 and were highly competent in L2 English. They were presented with L3 French words either in written or spoken form. They were asked to give a possible translation for the target word in L1 and rate how confident they were of the given meaning. As they were all literate when starting to learn the L3, we expected orthographic forms to be more familiar than phonological forms. This hypothesis was confirmed. The meanings of L3 words were accessed more easily and more accurately in the orthographic than in the phonological modality even if this asymmetry decreased with more proficient learners.

Third language (L3) lexical knowledge is known to be influenced by previously acquired languages. For example proficiency in the source and target languages (e.g., Lindqvist, 2009) and recency of use (e.g. Williams & Hammarberg, 1998) have been shown to modulate cross-linguistic influences from previously learned languages to L3. Furthermore, lexical variables like spelling consistency (e.g. Ziegler, Petrova & Ferrand, 1998) or cognate status (e.g., Dijkstra, 2005) are known to influence word recognition both in orthographic and phonological modalities.

We explored the joint influence of individual factors related to L3 learning (age of acquisition, length of residence, exposure, proficiency, number of language spoken) and of lexical factors (frequency, number of homographs and homophones, number of orthographic and phonetic neighbours, spelling consistency, resemblance to L1 pronunciation, resemblance to L2 word forms) with linear mixed-effects modelling, and found that only proficiency and age of acquisition significantly modulated the confidence ratings, whereas there were several lexical factors like word frequency, number of homographs and homophones, size of orthographic and phonological neighbourhood and similarity to L1 pronunciation and to L2 English word forms (cognates) that significantly influenced form-to-meaning mappings in L3.

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Constructs of EFL Learners' Language Learning Strategies and Cognitive Styles and their Relationships at Different Proficiency Levels

Several measurement instruments have been well-documented for language learning strategies (LLS; e.g., Oxford, 1990; Pintrich, Smith, Garcia, & McKeachie, 1991) and cognitive styles (CS; e.g., Oxford, 1993; Riding, 1991). However, there are still some problems with the construct definition. While many studies have used the Strategy Inventory for Language Learning (SILL; Oxford, 1990) for LLS, it was reported to have different factor structures extracted (e.g., Hsiao & Oxford, 2002; Nyikos & Oxford, 1993; Takeuchi, 2003). Moreover, although the CS measures have been employed in L2 learning research (e.g., Littlemore, 2001; Carson & Longhini, 2002), they do not necessarily focus specifically on L2 learning. In addition, the relationships between LLS and CS remain to be clarified (Shi, 2011), and further, few studies have discussed the relationships with respect to language proficiency levels. Therefore, this study aims at elucidating the construct definition of LLS and CS of learners of English as a foreign language (EFL), and investigating their relationships at different proficiency levels.

Japanese EFL learners (N=847) responded the SILL and the Learning Style Survey (Cohen, Oxford, & Chi, 2001), which includes a sufficient number of comprehensible L2-learning-specific items. An exploratory factor analysis with a generalized least squares technique and oblique rotation was conducted to understand the constructs, and Spearman's ρ was calculated to investigate the relationships for beginners, low-intermediates, and high-intermediates (each included 164 participants).

The analysis revealed three important findings. First, the SILL has been found to consist of four factors different from those of previous studies. While this may still indicate the SILL's construct problem, these factors can be integrated into some higher-order constructs suggested by some previous studies. The first can be information processing and social interaction models (Nyikos & Oxford, 1993), and the second L2 learning and L2 use strategies (Hsiao & Oxford, 2002). Future studies should reinterpret the SILL in terms of these higher-order constructs. Second, it was found that the Learning Style Survey has four factors. In other words, the traditional dichotomic construct of wholist vs. analytic (e.g., Riding & Rayner, 1998) may consist of the following two dichotomic subscales in terms of L2 learning: synthesizing information vs. focusing on linguistic rules, top-down vs. bottom-up processing. Besides, it also implies that other possible dichotomic subscales, such as leveler vs. sharpener, might be unstable in L2 learning. Finally, the Spearman's ρ in each proficiency level shows that the more advanced the learners are, the less correlated the CS are with the LLS. This implies CS should be more important in lower level classes when focusing on LLS.



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Binding, Control, and Minimality Revisited

This paper revisits two important issues on L2 acquisition of English binding: (A) Reflexive binding is more difficult in infinitive constructions than in tensed clauses (Finer & Broselow, 1986), and (B) pronominal binding is delayed relative to anaphor binding (XXX, to appear). Theoretically speaking, if we follow the assumption that locality is part of the language faculty (Rizzi, 2013), reflexive binding should not be difficult because a reflexive requires a clausemate antecedent in English. Furthermore, given that adult L2 learners already know Principle B in L1, why do they show a “delay” in pronominal binding in L2, like L1 children (Chien & Wexler, 1990)? This paper presents a syntactic analysis for these issues from the structural minimality viewpoint, not from parameter resetting, as in the previous studies.

We conducted an experiment with a multiple-choice questionnaire with tensed and infinitive clause sentences. The latter sentences included want and subject/object control sentences. The participants were 60 Japanese-speaking learners of English (JSE) (Low and High proficiency groups (n=30 each, TOEIC Ave. 335 vs. 699, Difference $t(58)=17.341$, $p<.001$) and 27 native speakers of English (NSE). The results revealed: (I) In the tensed complements, the two learner groups performed relatively well in both reflexive and pronominal binding (around 90% correct), (II) In the control structures, the two learner groups were divergent from the NSE in reflexive binding (31.7%, 75% vs. 100%) whereas the Low group alone did not perform like the NSE in pronominal binding (66.7% vs. 91.4%). (III) In the want sentences, the Low group showed a significantly poorer performance than the NSE in reflexive binding (84.4% vs. 100%) and in pronominal binding (71.1% vs. 95.1%).

These results were interpreted as the JSE knowing the locality constraint for reflexives and the non-locality constraint for pronouns in English. However, they also indicate that the JSE experienced a problem with infinitival constructions. Our closer look at their results reveals that the subject-control was more difficult than the object-control and the want constructions. Thus, we argue that the low proficiency learners did not have the syntactic knowledge of PRO in the subject of the to-infinitival structure, and consequently, they incorrectly interpreted the matrix object as an antecedent of the embedded reflexive and the matrix subject as an antecedent of the embedded pronoun. We maintain that intervention locality (Rizzi, 1990) is operative, and learning to bypass the intervener requires time in L2, as in L1 (Chomsky, 1969).

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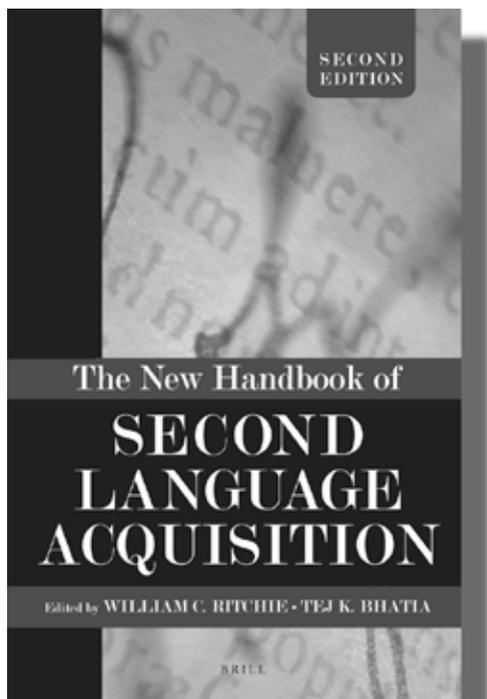
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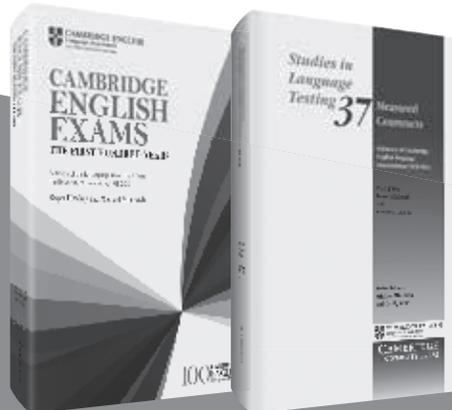
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