

# Eliciting data in second language research: Challenge and innovation

A series of invited colloquia, hosted by the IRIS project

<http://www.iris-database.org>

Monday 2nd - Tuesday 3rd September, 2013

National Science Learning Centre, University of York, UK



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The IRIS team is pleased to announce a two-day series of invited talks and poster presentations, to bring together researchers working across diverse areas of second language studies.

Each presentation will be a conference-style paper, a hands-on workshop, or a demonstration.

Questions to be addressed include:

- What data collection tool or approach does this presentation focus on?
- What sorts of data emerge from using this tool/instrument?
- What are some of the methodological challenges that come up when using this particular elicitation technique or approach to collecting data?
- How do such challenges impact theory, findings, or research designs?
- Are there recent innovations, developments, or refinements of this tool or approach?
- Do any other kinds of measures / instruments / tests contribute to our understanding of the use of this elicitation tool?

Each colloquium will end with a discussion of 20 minutes.

# PROGRAMME

## Monday 2 September

### 8.45 – 9.00 Welcome and introduction

Emma Marsden (University of York) and Alison Mackey (Georgetown University / Lancaster University)

### 9.00 – 11.00 Eliciting data on identity in L2 language learning

Kimberly Noels (University of Alberta)

Alison Mackey<sup>1+2</sup>, Sam Kirkham<sup>2</sup>, Sheena Shah<sup>1</sup> and Kaitlyn Tagarelli<sup>1</sup> (<sup>1</sup> Georgetown University, <sup>2</sup> Lancaster University)

Sarah Mercer (University of Graz)

Florentina Taylor (University of York)

### 11.00 – 11.30 BREAK

### 11.30 – 1.30 On-line methods for investigating L2 processing

Casey Lew-Williams (Northwestern University)

Leah Roberts (University of York)

Guillaume Thierry (Bangor University)

Danijela Trenkic (University of York)

### 1.30 – 3.30 LUNCH

**Lunchtime presentation:** Monique E Beaudoin (Office of Naval Research Global). *Applying for ONR Global funding.*

### POSTER SESSION 1

### 3.30 – 4.00 BREAK

### 4.00 – 6.00 Eliciting different types of knowledge of L2 morphosyntax

Rosemary Erlam (University of Auckland)

Kara Morgan-Short (University of Illinois at Chicago)

Patrick Rebuschat (Lancaster University)

John Williams (University of Cambridge)

## 7.00 CONFERENCE DINNER, ST WILLIAM'S COLLEGE, YORK

## Tuesday 3 September

### **8.30 – 10.30 Measuring working memory capacity for L2 learning research**

Graham Hitch (University of York)  
Rita Kaushanskaya (University of Wisconsin-Madison)  
Steve Majerus (University of Liège)  
Elisabet Service (McMaster University)

### **10.30 – 11.00 BREAK**

### **11.00 – 1.00 Eliciting oral interaction data**

Bryan Smith (Arizona State University)  
María del Pilar García Mayo (University of the Basque Country) and Eva Alcón Soler  
(University Jaume I (Castello))  
Rhonda Oliver (Curtin University)  
Jenefer Philp (Lancaster University)

### **1.00 – 2.00 LUNCH**

### **POSTER SESSION 2**

### **2.00 – 4.00 Eliciting priming effects in L2 learning research**

Kim McDonough (Concordia University)  
Marije Michel (Lancaster University)  
Pavel Trofimovich (Concordia University)  
Anita Thomas (Lund University)

### **4.00 – 4.30 CLOSING DISCUSSION: Challenges ahead and a role for IRIS**

Emma Marsden (University of York) and Alison Mackey (Georgetown University / Lancaster University)

## **POSTER SESSIONS**

- *Insights from real-time measurement of L2 state motivation* (Maimoonah Al Khalil, King Saud University)
- *Perception and production of English vowels by FL learners: Towards a foreign language model* (Rana Alhussein Almbark, University of York)
- *Speech and communication in educational settings in Northern Ireland* (Catriona Arlow, Queens University, Belfast)
- *Measuring short term memory for serial order and incidental learning as aptitudes for L2 idiomaticity* (Cylcia Bolibaugh, St Mary's University College)
- *Acquiring new words from syntactically simple and complex text by L2 learners of German* (Denisa Bordag, Amit Kirschenbaum, Andreas Opitz, Maria Rogahn & Erwin Tschirner, University of Leipzig)
- *Acquiring the phonetics and/or phonology of English word stress* (Nadia Bouchhioua, Université de la Manouba, Tunisia, Rana Alhussein Almbark & Sam Hellmuth, University of York)
- *Investigating L2 grammar knowledge acquisition under implicit and explicit learning conditions* (Nadiia Denhovska, University of Manchester)
- *The evolution of elicited imitation: Syntactic priming comprehension and production task* (Amy Fang-Yen Hsieh & Man-Kit Lee, University of Cambridge)
- *Elicited imitation as proficiency assessment method* (Stéphanie Gaillard, University of Illinois at Urbana-Champaign)
- *How complete are think-alouds? A comparison of verbal reports and finger tracking during L2 reading* (Aline Godfroid & Le Anne Spino, Michigan State University)
- *Eliciting knowledge about morphosyntax from young foreign language learners* (Rowena Hanan & Emma Marsden, University of York)
- *Collecting and analysing longitudinal oral L2 data: Experiences from the SALA-COLE Project* (Maria Juan-Garau, University of the Balearic Islands, & Carmen Pérez-Vidal, Universitat Pompeu Fabra)
- *Using micro-genetic studies in L2 acquisition research* (Vera Kempe, University of Abertay Dundee, & Patricia J. Brooks, City University of New York)
- *A methodological nightmare and a goldmine of data: Measuring outcomes in an experimental evaluation of CLIL* (Liss Kerstin Sylven, University of Gothenburg)
- *On the quandary of L1 English language learner identity: Predicaments of learner group identity and consequences for data eliciting* (Ursula Lanvers, Open University)

- *Picture verification task: Toward an understanding of the relationship between L2 sentence processing and grammar acquisition* (Agnieszka Latos & Marzena Watorek, Université de Paris 8 & CNRS)
- *CorrectMe: A grammar checker that teaches and learns at the same time* (Jim Lawley, Universidad Nacional de Educación a Distancia)
- *Using picture stories to elicit oral data on the acquisition of the past simple tense* (Hanne Roothoof, University of Navarre)
- *Re-evaluating dictation: The effectiveness of transcription tasks for developing intensive listening skills* (Jon Rowberry, Sojo University)
- *The role of multimodality in early L2 vocabulary learning and memorisation* (Sarah Jane Rule & Rosamond Mitchell, University of Southampton)
- *Extensive reading and development of L2 learners' reading efficiency: An eye movement study* (Miho Sasaki, Keio University)
- *Sentence recall in natives and near natives* (Judith Schweppe<sup>1</sup>, Ralf Rummer<sup>1</sup>, Sandra Barth<sup>2</sup> & Almut Ketzer<sup>1</sup>; 1 University of Erfurt, 2 Kiel University)
- *Quantitative and qualitative differences between single and multiple word association tasks in L2* (Tessa Spätgens, University of Amsterdam)
- *Eye-tracking for Chinese online learning* (Ursula Stickler, The Open University, & Lijing Shi, London School of Economics)
- *Reconsidering the classification of primed language production in written synchronous computer mediated communication (SCMC) – beyond the 6-turn-paradigm* (Laura Stiefenhöfer, University of Duisburg-Essen, Germany)
- *Measuring acquisition at the syntax/semantics interface: An example from instructed L2 German* (Elizabeth Thoday, Heriot-Watt University)
- *Investigating WM effects in SLA* (Clare Wright, Newcastle University)

## **MONDAY 2 SEPTEMBER**

### **ELICITING DATA ON IDENTITY IN L2 LANGUAGE LEARNING**

**Kimberly Noels, University of Alberta**

#### **Eliciting data on identity in L2 learning: A psychological perspective**

This presentation draws from the work of social, developmental, and cultural psychologists to discuss the value of quantitative assessments of identity as a multifaceted, subjective experience of belonging with one or more social groups that is contextually and temporally dynamic. Subjective assessments, whether made directly or indirectly, can be construed in a variety of ways, including self-categorizations, evaluations of that group, the centrality of a group to personal identity, a sense of attachment, and behavioral involvement, among a number of other dimensions. Importantly, these aspects of identity are potentially differentially related to linguistic and communicative acts. As well, social identities are relational, such that at least two reference groups are important; in the case of ethnolinguistic identities, these might include the heritage ethnolinguistic group and any other relevant ethnolinguistic group(s). An implication of this claim is that speakers might have multiple and/or hybrid identities or reject identities altogether, much of which is accomplished through language use and communication strategies. Thirdly, identity is intertwined with aspects of context, including the relative socio-structural relations between ethnolinguistic groups and the interactional situation, defined in terms of where we are, with whom we are speaking, and what we are doing (among other aspects). Assessments across various situational domains, such as family, friends, university and community settings, show that, among immigrant language learners, heritage identity is much stronger than Canadian identity in more intimate domains but the converse tends to be true in less intimate settings. These findings emphasize that global measures of identity can hide the fact that people might alternate identities depending upon situation. They also suggest a process by which identity changes as a result of interethnic contact, progressing from less to more intimate domains.

**Alison Mackey<sup>1+2</sup>, Sam Kirkham<sup>2</sup>, Sheena Shah<sup>1</sup> and Kaitlyn Tagarelli<sup>1</sup> (<sup>1</sup> Georgetown University, <sup>2</sup> Lancaster University)**

#### **Eliciting data on shifting identities and dialects**

This presentation examines data elicitation in a study of the construction and evolution of identity, focusing on British women living in the United States and North American women living in the UK. The participants face a unique linguistic environment when compared to other foreign nationals because they are surrounded by speakers of English, their native language, while also being exposed to subtle (and not so subtle) differences between their native dialects and the new ones.

Understanding these women's perspectives on how their second dialect experiences and environments contribute to the shaping and reframing of their identities was the goal of the study. In this presentation, we analyze the role of the researcher, the data collection tools and the interactions between researchers and their participants. Semi-structured interviews were the prime elicitation method, and show the women frequently distancing themselves from the countries where they were living and their associated dialects, and identifying strongly with their country of origin. The interview data were triangulated with other production data and interestingly, they contextualized their use of a few linguistic features of the second dialect as intentional, for example to avoid drawing attention to themselves. We discuss the nuanced and reflexive relationship between the researcher, the elicitation tool and the participant, focusing on the co-production of data to explain how the co-constructed nature of the data affords unique insights into the complex relationships amongst social and linguistic phenomena.

**Sarah Mercer, University of Graz**

**A network-based view of the self: Help or hindrance?**

The self is a vast and highly complex construct and, as such, researchers have chosen to break it down into manageable 'researchable' constructs such as self-efficacy, self-concept, and identity. It is therefore important to understand that none of these perspectives can claim to offer *the* definitive view of the self, but rather they each represent differing theoretical stances on various aspects of the self. Thus, a first step for anyone wishing to research in the field of the self is decide on what theoretical stance to take and how to define their respective self construct.

In my own work, I began with an interest in self-concept but have recently been moving towards taking a complexity-informed perspective on the self, which enables a more holistic, less fragmented view of the self. In this presentation, I will explain my rationale for exploring this perspective and discuss what I perceive to be its phenomenological benefits. However, I will also discuss the serious empirical challenges complexity theory poses for researching the self and the related need to rethink our understandings of domain. In my first tentative steps to meet some of these challenges, I will show how multimedia data and interviews can be combined to elicit rich data and how these can be analysed from a network perspective to generate a model which conceptualises the self as a network of relationships. I will outline the additional challenges I have faced when seeking participant validation of such a model. Although I currently see positive potential in this line of thinking for both practitioners and researchers, especially in terms of researching the longitudinal development of the self, which traditionally has been contradictory and hard to track, I conclude by raising questions about the validity of adding yet another perspective to the quagmire of self constructs.

**Florentina Taylor, University of York**



## **At the crossroads: Researching identity in educational psychology and applied linguistics**

'Self' and 'identity' are buzzwords that now appear in many publications adopting a wealth of theoretical and methodological stances. The applied linguistics literature has also embraced these terms to such an extent that almost any investigation into the learners' perspective will now refer to their identity or self. Such approaches clearly owe much to (educational) psychology directly or indirectly, so it is perhaps surprising that theoretical frameworks related to identity in educational applied linguistics do not usually build directly on educational psychology constructs and approaches. This can be seen as a positive development, in that it emphasises this branch of applied linguistics as an independent discipline, with its own identity. But it can also add to the confusion caused by the multitude of definitions and approaches used to elicit data about identity and the self. This divergence is also reflected in preferences for different research designs and methods. While educational psychology has tended to prefer large cross-sectional quantitative studies, educational applied linguistics has shown a preference for more grounded, qualitative investigations. This paper describes key methodological approaches to eliciting data about the learner's identity in the two disciplines, before discussing examples of research that has reconciled and built on the strengths of both. I will focus on methodological challenges and possible solutions in each discipline, as well as challenges inherent in their combination, including the fact that researchers adopting such crossover approaches may attract criticism from both fields.

## **ON-LINE METHODS FOR INVESTIGATING L2 PROCESSING**

**Casey Lew-Williams, Northwestern University**

### **Eye movements as a window into L1-L2 processing: A side-by-side comparison of 8 groups of Spanish speakers**

Eye-tracking methods are widely used to study real-time language processing in monolingual children (Fernald et al., 1998), bilingual children (Marchman et al., 2010), L1 adults (Tanenhaus et al., 1995), and L2 adults (Dussias, 2004; Grüter et al., 2012; Lew-Williams et al., 2010). The method exploits the very basic human behaviors of looking and listening -- behaviors practiced even by infants. But across the developmental spectrum and across the range of language proficiency, there is surprising variability in how language guides eye movements. For some individuals, the linguistic and visual signals are closely time-locked; others process language more slowly or do not consistently engage in incremental language processing. Here, as a case study for understanding subtle differences in real-time language processing, I will focus on one particular linguistic construction: grammatical gender in Spanish. This work reveals how 8 distinct groups of L1 and L2 Spanish speakers process function and content words, and highlights how experiential and maturational factors interact with the nature of specific referential contexts to shape listeners' efficiency in language processing. Interpretations will examine how different contexts for learning

yield substantial and important differences in the nature and amount of language experience, giving learners different kinds of exposure to cues that are critical in laying the foundation for fluency in understanding. Throughout discussion of the experiments, attention will be drawn to various methodological and ecological challenges faced by eye-tracking researchers.

**Leah Roberts, University of York**

#### **Self-paced reading and L2 grammatical processing**

One of the most common methods for examining L2 sentence processing is self-paced reading. Many studies have investigated learners' processing of temporary ambiguities (or garden-path sentences) and grammatically complex constructions, to find out the extent to which learners process the input like native speakers. This task has also been used to examine how sensitive learners are to certain types of ungrammaticality. In this talk, I will provide an overview of the major findings of such studies. The research shows that L2 learners are more likely to process the input like native speakers under specific methodological circumstances—when they are asked to perform a secondary, metalinguistic task whilst reading sentences. When learners are required to read for meaning alone, they tend to process the input more 'shallowly' than native speakers.

**Guillaume Thierry, University of Bangor**

#### **How the mind controls languages and vice versa**

In this talk I will explain how electrical activity recorded from the human scalp sheds light onto the cognitive mechanisms underlying bilingual processing and conceptual variations introduced by different languages. I will provide examples in the domain of language nonselective lexical access (both in comprehension and production) and in the domain of executive control. Pulling these examples together, I will propose that event-related brain potentials are probably the best tool to decipher the mysterious mechanisms underlying bilingual functioning.

**Danijela Trenkic, University of York**

#### **Visual-world paradigm in second language research**

Situated language comprehension is often studied using the visual-world eye-tracking paradigm (VWP). In this paradigm participants typically look at pictures or displays of objects while simultaneously listening to sentences related to them. The speed with which their looks towards the objects are initiated are closely time-locked to the linguistic input. The paradigm allows studying real-time language processing of well-formed sentences, in a relatively naturalistic setting. In that respect it differs, and so complements research paradigms which derive their insights from processing of semantic and grammatical violations (e.g. fMRI, EEG, self-paced reading).

A firm conclusion emerging from VWP studies on native language processing is that sentence comprehension is a highly incremental, predictive and cumulative process, in which both linguistic

and non-linguistic information is utilised. With its ability to measure fine-grained time course of online comprehension, the paradigm has also been crucial in resolving some of important theoretical debates in second language (L2) research, notably on lexical access (Marian & Spivey, 2003). While it has the potential to do the same for debates in L2 grammatical processing, only a handful of studies have so far applied it in this domain.

This talk will present a recent VWP study which explored how L2ers utilise both grammatical and pragmatic information in online language comprehension. It will compare proposals which suggest that L2ers over-rely on lexical and pragmatic information and ignore grammatical elements in sentence processing (Clahsen & Felser, 2006), and those which assume that morphosyntactic cues can be processed efficiently by non-native speakers, as long as their L1 does not have a different realisation of the same grammatical feature (Tokowicz & MacWhinney, 2005). It will also touch on how different tasks employed in the VWP (object manipulation in a real vs. computer world, “look’n’listen” tasks) may affect results.

### **ELICITING DIFFERENT TYPES OF KNOWLEDGE OF L2 MORPHOSYNTAX**

**Rosemary Erlam, University of Auckland**

#### **Designing and using oral elicited imitation tests as measures of implicit language knowledge**

The elicited imitation test has a considerable history (Vinther, 2002), particularly as used in child language research. In SLA research it has gained more recent prominence as one of the ‘implicit’ measures in Ellis’s (2005) battery of tests of explicit and implicit language knowledge. Elicited imitation has an important advantage over tests of oral free production (considered valid measures of implicit language knowledge) in that it allows for the elicitation of specific language structures. Erlam (2006) describes how the elicited imitation test used in Ellis (2005) 1/ was designed to ensure that test takers were likely to focus on meaning rather than form, thus reducing the likelihood that learners could rely on memory or verbatim imitation and 2/ gave test takers the opportunity to spontaneously correct ungrammatical sentences, thus giving an indication of participants’ constraints on internal grammar (Munnich et. al, 1994).

In designing elicited imitation tests, resolving the challenges of determining the length of utterance, of ensuring that test takers are indeed focused on meaning and that there is an appropriate delay between presentation of stimuli and response can help substantiate claims that the test is a likely measure of implicit language knowledge. A challenge in scoring is determining to what extent failure to create obligatory occasions for target structures constitutes evidence that these have not been internalised.

Recent innovations in the design of elicited imitation tests have looked at other ways of ensuring that test takers are focused on meaning, including using pictures (Erlam & Loewen, 2010) or stories (Akakura, 2012). Other studies have also sought to look at evidence for further validating this data

elicitation method as a way of obtaining information about learners' implicit language knowledge (e.g. Bowles, 2011; Spada, Shiu, Tomita, forthcoming).

**Kara Morgan-Short, University of Illinois at Chicago**

**Potential contributions of event-related potentials to the elicitation of different types of knowledge of L2 morphosyntax**

Event-related potentials (ERPs) are scalp-recorded, electrical potentials that provide fine-grained temporal information about the neural process(es) that underlies a cognitive event, such as processing a word or an aspect of grammar. Different ERP components have been elicited in response to processing morphosyntactic stimuli in both first and second languages (L1 and L2). This talk considers whether these neural signatures may be informative in regard to our understanding of different types of knowledge or processing that underlie L2 morphosyntax. In order to accomplish this goal, I first provide a general introduction to ERPs, with a specific consideration of the types of inferences about processing that we can draw from such data. Second, I review ERP components typically elicited by L1 morphosyntactic processing, e.g., the N400, the LAN and the P600, and describe their identifying temporal, polar and scalp characteristics. I also consider what underlying mechanisms each component is understood to reflect, and whether these mechanisms can be interpreted in terms of explicit or implicit processing and knowledge. Finally, I provide a brief synthesis of the ERPs typically elicited in response to L2 morphosyntactic processing and draw conclusions regarding what implications these results may have for understanding what types of processing or knowledge underlie L2 morphosyntax. In general, I argue that ERP research can provide us with unique insights into L2 processing and knowledge, even though clear associations between ERP components and specific underlying mechanisms remain elusive.

**Patrick Rebuschat, Lancaster University**

**Measuring implicit and explicit knowledge in second language research**

Despite the strong interest in the topic of implicit and explicit language learning (see e.g. N. Ellis, 1994; Rebuschat & Williams, 2012; Rebuschat, 2013; Sanz & Leow, 2011), we know surprisingly little about the role that these two processes play in second language (L2) acquisition and teaching. This is, in part, due to methodological reasons. Although there are several theories about the role of implicit and explicit L2 learning, it is difficult to adjudicate between them because of the difficulty of determining whether exposure resulted primarily in implicit or in explicit knowledge. If we intend to characterize the contribution of implicit and explicit learning to L2 acquisition, we need to be able to measure whether the acquired knowledge is implicit or explicit.

This paper discusses two measures of awareness which have been widely used in cognitive psychology but have found relatively little application in the field of Second Language Acquisition (SLA) research: verbal reports and subjective measures. The objective is to make these techniques

available to a wider audience of researchers and to promote the study of implicit and explicit L2 learning. The presentation begins with a brief definition of what it means to have acquired implicit or explicit knowledge according to the two measures. This is followed by a description of how the techniques have been used in previous research. The presentation concludes with a discussion of limitations and with specific guidelines on how to apply these measures of awareness to the investigation of implicit and explicit L2 learning.

Ellis, N. C. (Ed.) (1994). *Implicit and explicit learning of languages*. London: Academic Press.

Rebuschat, P. & Williams, J. N. (2012). *Statistical learning and language acquisition*. Berlin: Mouton de Gruyter.

Rebuschat, P. (Ed.) (2013). *Implicit and explicit learning of languages*. Amsterdam: John Benjamins.

Sanz, C., & Leow, R. N. (Eds.) (2011). *Implicit and Explicit Language Learning: Conditions, Processes, and Knowledge in SLA and Bilingualism*. Washington, DC: Georgetown University Press.

### **John Williams, University of Cambridge**

#### **Indirect tests of unconscious morpho-syntactic knowledge**

Memory researchers make a distinction between direct and indirect tests. A direct test explicitly targets the knowledge at issue, whereas an indirect test involves making a response that is not directly dependent on the target knowledge, but could be affected by it. Grammaticality judgement is a direct test, and although subjective measures (e.g., confidence ratings) can be used to distinguish the contributions of conscious and unconscious knowledge the task invites the learner to apply whatever conscious knowledge they have. In this presentation I shall consider two kinds of indirect test that do not suffer from this problem – a semantic judgement task (Leung & Williams, 2012) and a false memory task (Paciorek & Williams, in prep). Both are shown to be sensitive to grammaticality, even though this knowledge is not necessary to perform the task at hand. A problem with these methods, though, is that they rely on post-experiment debriefing to assess awareness of the grammatical regularity at issue, a method that has been criticised for its insensitivity to conscious knowledge in the moment of responding (Leow & Hama, 2013). However, I will show how it is possible to identify from patterns of performance individuals who appear to be using knowledge of grammaticality strategically to perform the task, and others who, whilst reporting conscious knowledge, did not appear to use it strategically. Thus an advantage of indirect tests is that even if learners have conscious knowledge they will not necessarily use it to perform the task. Excluding from consideration all participants who have at least some degree of conscious knowledge is therefore highly conservative, and any effects of grammaticality on task performance in the remainder can be plausibly attributed to implicit knowledge.

**7PM: IRIS CONFERENCE DINNER, ST WILLIAM'S COLLEGE, YORK**

**TUESDAY 3 SEPTEMBER**

**MEASURING WORKING MEMORY CAPACITY FOR L2 LEARNING RESEARCH**

**Graham Hitch, Meesha Warmington & Swathi Kandru, University of York**

**Working memory and second language learning: The importance of taking components into account**

Working memory refers to our ability to hold and manipulate information in the focus of attention and is a key aspect of cognition. The multicomponent model of working memory proposed by Baddeley & Hitch in 1974 is reviewed briefly, noting especially subsequent fractionation of the original three components and the addition of a new one, the episodic buffer (Baddeley, 2000). Evidence of links between working and language learning provides the context for a recent study of second language learners that focused on executive processes and word learning in Hindi—English adults. Our main finding was that bilinguals outperformed monolinguals on tests of inhibitory control while performing equivalently on tests of selective attention. We interpret this as illustrating the value of distinguishing between different components of executive functioning in describing the abilities of second language learners. Analysis of individual differences showed that bilinguals' superior performance in word learning was related to their capacity for inhibitory control, but not that for selective attention. Our current research is exploring whether similar advantages in working memory and word learning can be found in bilingual schoolchildren against the apparent paradox of their poorer literacy skills.

Baddeley, A. (2000). The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, 4, 417-423.

**Margarita Kaushanskaya, University of Wisconsin-Madison**

**Measuring verbal working memory in bilingual children and adults**

The work in my lab examines the effects of bilingualism on working memory function primarily in the linguistic domain in order to delineate the dynamics between linguistic and attention factors in constraining working memory capacity. In the experiments I will describe in this talk, we take a developmental-comparative approach where bilingual children and adults are compared on verbal short-term and working memory measures to monolingual children and adults. In the first series of studies, I will demonstrate that bilingual adults can outperform monolingual adults on verbal memory tasks, that these bilingual advantages tend to expand with the increase in task-difficulty level, and that they are likely based within domain-general attention mechanisms that are facilitated by lifelong bilingual experience. In the second series of studies, I will demonstrate that the effects of

bilingualism on verbal memory performance in childhood fluctuate with the type of bilingualism, and that just as in adulthood, the role of language proficiency in constraining verbal memory performance in childhood decreases as task-difficulty increases. I will conclude with data suggesting that classroom exposure to a second language appears to facilitate verbal memory performance but not non-linguistic task-shifting abilities in emergent bilingual children. Thus, the mechanisms that underlie the effects of bilingualism on verbal working memory may be dissociable from the mechanisms that underlie the effects of bilingualism on other executive functions. Throughout the talk, I will emphasize how the tasks chosen to index working memory in bilinguals, with fluctuations across domains (linguistic vs. non-linguistic), the processes (item vs. sequence-based; short-term vs. working-memory) and the structures under study (nonwords vs. words, for example) can influence the performance patterns, and thus the conclusions reached with regards to the structure and the function of the bilingual working memory system.

**Steve Majerus, University of Liège**

### **The importance of short-term memory for serial order in L2 learning**

Many studies have shown a close association between verbal short-term memory (STM) capacity and L2 learning. This association either reflects the dependency of L2 learning on temporary short-term storage capacity, or, alternatively, reflects the dependency of verbal STM on language knowledge and abilities. We propose here that the distinction between item information and serial order information in STM tasks is a critical factor when trying to disentangle these two hypotheses. In a series of experiments, we will show that maintenance of verbal item information is determined by language knowledge while the maintenance of serial order information predicts both L1 and L2 lexical learning abilities. We will conclude by discussing the nature of the mechanisms through which serial order coding in WM supports L2 lexical learning.

**Elisabet Service, McMaster University**

### **Measuring phonological memory**

Individual differences in phonological working memory capacity have been suggested to underlie variation in acquisition efficiency of both first and second language. Attempts to measure such differences have mostly used three tasks to tap into the underlying construct of phonological loop capacity: repetition of single pseudowords or pseudoword pairs, digit or word span and pseudoword span. Positive correlations between language tests and these measures have been reported in many studies. However, difficulties in separating influences of language experience from "true" capacity in any of these tasks has led to doubt about the psychological reality of the capacity construct. In particular, the size and content of existing vocabulary have been suggested to affect phonological memory measures. Assessment of individuals' phonological memory capacity becomes increasingly difficult as their age and experience of one or more languages increases. An additional difficulty

arises from the fact that scoring of pseudoword repetition performance cannot be automatized but requires the assessor's capacity to exceed that of the assessed. A study of phonological memory in incidental and controlled vocabulary learning in 8-year-old children and young adults will be described. Two phonological memory measures: Finnish children's pseudoword span and Korean repetition accuracy were found to be moderately correlated. Explicit learning of novel pseudowords was predicted by both. Adult correlations were affected by the rated wordlikeness of the pseudowords presented in the span measure. The familiarity of the pseudowords to be learned may also have affected the correlations. Adults' pseudoword span was highly correlated with their Korean word repetition accuracy. However, although Korean word repetition predicted explicit pseudoword learning, pseudoword span was only weakly correlated with it. . Real foreign words may be needed both as predictors and predicted in laboratory tasks targeting the role of phonological memory in foreign word learning.

### **ELICITING ORAL INTERACTION DATA**

**Bryan Smith, Arizona State University**

#### **Eye tracking in learner interaction: A CALL perspective**

This presentation will describe the rich potential of employing eye tracking technology in the data collection and analysis of synchronous computer-mediated communication in an instructed L2 setting. Framed within a cognitive interactionist approach to SLA, I will show how eye tracking technology can work as a stand-alone data elicitation tool or serve as an adjunct to other, more established, data elicitation approaches in providing researchers a more robust record of learner L2 interaction in a CALL environment. This presentation is quite timely as CALL scholars are moving away from a reliance on impoverished records of learner interaction and are employing more sophisticated 'tracking' methods in explorations of learner-learner, learner-NS, and learner-instructor computer-mediated interaction. I will show the types of data that this approach yields, including the count and duration of eye fixations on one's own and interlocutor's chat text, heat maps, and the sequential route of learner fixations. I will also show how these data points may be correlated to outcome measures such as posttest scores on linguistic targets and also learner self reports of, say, what they noticed during the interaction. Published and unpublished data will be used throughout the presentation to illustrate many of the points above. I will wrap up by discussing some of the eye tracking options available to researchers and will touch on the many challenges researchers face in using this technology and, more importantly, coding and interpreting the data that this technology yields. Finally, I will show the formats that such tracking data are typically saved in, which allow for easy storage and shared access via a digital repository.



**María del Pilar García Mayo & Eva Alcón Soler, University of the Basque Country and University Jaume I (Castello)**

### **Eliciting oral interaction data in EFL settings**

Most data on interaction research have been collected in English as a Second Language (ESL) settings. Over the past fifteen years we have been collecting oral interaction data in English as a Foreign Language (EFL) settings in two Spanish autonomous communities (the Basque Country and Valencia), where students are exposed to English for about 3-4 hours per week since the time they first begin contact with the foreign language (age 3-4) and where little emphasis is placed on their speaking skills. Within this backdrop, this presentation will focus on two data collection tools that we have used with adult learners: dictogloss and discourse completion tasks. We will highlight the type of data that emerge from these tasks (dictogloss: language-related episodes, L1 use and functions, the oral-written connection; discourse completion tasks: pragmatic knowledge of speech acts and the impact of collaborative dialogue on pragmatic learning), the challenges each presents and what lies ahead in our research setting regarding research innovation and refinement of the tools.

**Rhonda Oliver, Curtin University**

### **Eliciting child and adolescent data in second language research: Adapting for age and cultural differences**

In this paper I will describe the various methods I have used in my research of child and adolescent language learners (e.g., Oliver, 1995, 2000; Oliver, Grote, Rochecouste, & Exell, 2012) including those from migrant, refugee and Indigenous backgrounds learning English as a second language or dialect. This will include a description of methodology used in a number of interactional studies, particularly those underpinned by Task Based Language Learning (TBLT) approaches, including pedagogical tasks, and also Needs Analysis research. It will also include an account of methods used for studies of language attitudes and second language learning strategies.

I will review a number of different instruments and tasks I have used to collect second language learning data, outlining how modifications were needed to suit the interests, and the social and cognitive developmental levels of the participants. I will also examine those adaptations required to cater for learners from different cultural backgrounds. In doing so, I will reflect on the challenges, required innovation and novelty of working with age groups such as these. Finally, I will discuss areas of potential development for research material for these and other age groups.

Oliver, R. (1995). Negative feedback in child NS/NNS conversation. *Studies in Second Language Acquisition*, 18(4), 459-481.

Oliver, R. (2000). Age differences in negotiation and feedback in classroom and pair work. *Language Learning*, 50(1), 119-150.

Oliver, R., Grote, E., RocheCouste, J., & Exell, M. (2012). Addressing the language and literacy needs of Aboriginal high school VET students who speak SAE as an additional language. *Australian Journal of Indigenous Education*, 41(2), 1-11. doi 10.1017/jie.2012.23

**Jenefer Philp, Lancaster University**

### **Eliciting oral production of target forms in peer interaction: Issues and options**

This paper reflects on options and issues in eliciting oral production data between second language learners that seeks to elicit specific target forms for interaction-based research. As a starting point, I present two data sets from quasi experimental studies among children and adults. The first data set (Philp, Oliver & Mackey, 2006; Oliver, Philp & Mackey, 2008) involves pairs of primary school L2 learners of English (ages 5-7 and 9-11) undertaking 5 communication gap tasks, carried out under different conditions of guidance and planning. The second data set (Philp & Iwashita, 2013) involves pairs of university foreign language learners working on six interactive tasks over three treatment sessions, and six pre and post-test tasks, all tasks elicited use of the target structures.

Through each data set I explore different aspects of three central issues in eliciting oral language production, relating to age and purpose of the learners, as well as the goals of the researcher. The first issue concerns elicitation of the target form and the threefold challenge of : (a) ensuring the task provides an authentic context for communicative use of the form (and, in classroom contexts, are ecologically valid) (Mackey & Gass, 2005); (b) encouraging variation in production of the form (c) preventing the potential cycle of formulaic language use (Mackey, 1999). The second issue concerns task engagement, and the need to provide tasks that are age appropriate, appealing and cognitively challenging. That is, the tasks are sufficiently interesting to the participants that they are motivated to talk. The third issue relates to pre and post-test tasks, and the need for consistency and equivalence between oral production tasks when used for testing purposes. This discussion of issues in eliciting production of target forms in peer interaction is relevant to both teaching and testing contexts.

### **ELICITING PRIMING EFFECTS IN L2 LEARNING RESEARCH**

**Kim McDonough, Concordia University**

### **Using collaborative structural priming activities to elicit grammatical structures**

Previous studies have demonstrated that second language (L2) speakers benefit from carrying out collaborative tasks because they provide each other with interactional feedback, produce modified output, and attend to language form (e.g., Fujii & Mackey, 2009; Pica, Kang & Sauro, 2006).

Researchers also have suggested that collaborative tasks are useful because they create opportunities for priming (McDonough & Trofimovich, 2008). However, few studies have

investigated the design and implementation of collaborative priming activities in L2 classrooms (McDonough & Chaikitmongkol, 2010; Trofimovich, McDonough, & Neumann, 2013).

This study reports the findings of a study that compared the effectiveness of two collaborative priming activities at eliciting passives and relative clauses. Students (n = 39) in an English for Academic Purposes (EAP) course completed eight collaborative tasks over a 13-week semester. Four tasks involved note-taking and summarization, and four tasks were oral interviews. Half of the tasks targeted relative clauses while the other half elicited passives. Each task provided primes in the form of complete sentences, and prompts which were sentence fragments to be completed using information in the task materials. The priming group (n = 23) had prime sentences containing passives and relative clauses, but the comparison group (n = 16) received prime sentences without the target structures.

The number of passives and relative clauses produced in the primes and prompt-generated sentences were calculated and compared across tasks and groups. Although the priming group produced more relative clauses than the comparison group, there was no difference in their production of passives. The interview tasks elicited more passives and relative clauses than the summary tasks. Implications for the design of collaborative priming tasks and challenges in their use are highlighted.

### **Marije Michel, Lancaster University**

#### **Primed production during synchronous computer mediated communication among peers**

In this paper I will report on three studies that looked into primed production during synchronous computer mediated communication (SCMC) among second language (L2) learning peers. Priming refers to the unintentional and pragmatically unmotivated tendency of speakers to repeat a lexical form or syntactic structure encountered in recent discourse (Bock 1995). Earlier work on spoken interaction has shown that priming may work as a powerful way to prime advanced structures in L2 learners (e.g., McDonough 2006). In this presentation I will present data that implemented priming during SCMC among L2 learning peers.

In a first study, Stiefenhöfer & Michel (2013) manipulated computer chat task material such that one interactant of an L2 learning dyad received model sentences in Spanish subjunctive mood. The results of the classroom-based study showed an increased use of subjunctives for experimental dyads in comparison with a control condition. In a second study, Michel & Stiefenhöfer (in preparation) used a similar manipulation but implemented the chat tasks as homework.

Furthermore, a pre-post-delayed-post test design was adopted to reveal acquisition. Findings for the use of subjunctives corroborate the first study but no clear picture with regard to learning gains was revealed. The third investigation (Michel, in preparation), implemented priming chat tasks in a UK secondary school classroom for L2 learners of German. This time, pre- and post-test scores revealed

a learning effect, which could be related to the primed use of the complex German subordinate clause structures under investigation.

The discussion highlights the practical implications of the three studies by focusing on the value of primed production to trigger effective peer interaction in the L2 classroom and the effectiveness of SCMC material for L2 learning.

**Pavel Trofimovich, Concordia University**

**Eliciting auditory word priming: From the psycholinguistic lab to the language classroom**

In recent years, researchers have suggested that collaborative tasks might be useful for second language (L2) learning because peer interaction creates opportunities for priming. Priming is a cognitive phenomenon in which prior language exposure influences subsequent language processing. Although researchers have investigated the occurrence of structural (syntactic) priming during peer interaction, no research has yet explored whether collaborative tasks can elicit auditory priming in L2 classrooms. Auditory priming, which is the tendency for speakers to process spoken language more quickly or accurately if they have been exposed to it in prior discourse, occurs with little awareness or conscious effort. Auditory priming may also be an implicit mechanism for pronunciation practice.

This presentation will focus on a study designed to elicit auditory priming in learners' pronunciation of Academic Word List (AWL) word stress patterns as part of classroom-based collaborative tasks. Students (N = 41) enrolled in a university-level English for Academic Purposes (EAP) class completed four collaborative tasks over a 13-week semester. The collaborative tasks were information-exchange activities seeded with multisyllabic words containing 3-2 (consistent) and 4-2 (intelligent) stress patterns. Transcripts were analyzed for priming, or the tendency to produce a target stress pattern more frequently following an interlocutor's production of a word with the same stress pattern. The results indicated that priming occurred in all four collaborative tasks. Implications for the use of auditory priming in pronunciation tasks, as well as methodological and practical issues of conducting priming research in a language classroom will be discussed.

**Anita Thomas, Lund University**

**Eliciting structural priming in L2 learning: Lessons from a corpus-based study**

The study of structural priming effects contributes to a better understanding of the influence of input on L2 learning. Structural priming might "play a specific role in assisting the acquisition of new knowledge" (Pickering & Ferreira 2008). Structural priming effects are traditionally investigated in experimental settings. As a consequence, their operationalization stems from experimental designs and has to be adapted to less controlled contexts (Collentine & Collentine 2013; Gries 2005). However, corpus based studies are required to "inform the design of experimental materials" (McDonough & Trofimovich 2009).

In this paper I will present an exploratory corpus-based study with data from nine children learning French as L2 (age of onset between 3 and 7 years). The children have been recorded by an adult native speaker of French every third month between two or three years.

The construction under investigation is a specific French past tense structure <auxiliary + past participle> (roughly corresponding to the English present or past perfect) where the auxiliary is être 'be', e.g. il est parti 'he is gone'. The use of être as an auxiliary is restricted to a limited number of verbs such as go (in, out...), fall, come... The correct use of this construction is late in French L2 (at advanced level). Learners first use the past participle in isolation and later the auxiliary have. Both auxiliaries will alternate before the construction is correctly used with be only.

A qualitative analysis of prime-target pairs suggests that structural priming sometimes contributes to the correct production of the construction under investigation. However, in some cases, the prime seems to activate the incorrect auxiliary. The results will be discussed in terms of factors that have to be controlled for as well as in terms of input quality.

## POSTER PRESENTATIONS

1. *Insights from real-time measurement of L2 state motivation.* (Maimoonah Al Khalil, King Saud University)

Although second language (L2) motivation is cited in the literature as a powerful driver of L2 achievement (e.g., Dörnyei, 2005; Dörnyei & Skehan, 2003; Masgoret & Gardner, 2003), measurement related difficulties associated with the complex and fluctuating construct of motivation precluded its direct investigation in early SLA research (Gardner & Lambert, 1959). It was only after Gardner's (1985) carefully-constructed and well-piloted measurement scales of the Attitude/Motivation Test Battery (AMTB) that L2 motivation data could be systematically elicited and more recent perspectives on L2 motivation could be explored (e.g., Dörnyei's L2 motivational self-system, 2005, 2009; Dörnyei & Ushioda, 2009). Questionnaires, however, often measure L2 motivation non-concurrently and at a general trait-like level rather than a situational state-like level (Julkunen, 1989), when situation motivation has been empirically found to mediate the relationship between trait motivation and L2 achievement (Gardner & Tremblay, 1998; Tremblay, Goldberg, and Gardner, 1995). This research reports the findings of a study which elicited state motivation in real time using a motivation thermometer (Tennant & Gardner, 2004). Forty-four university level intermediate learners of Arabic at an American university were asked to rate the relevance of several language learning tasks (e.g., ordering food, seeing a doctor). Six tasks were then designed on the basis of participant responses: three high-motivation tasks in line with learner expressed language needs and three low-motivation tasks which learners explicitly stated to be irrelevant. Participants completed the tasks in Arabic with a native speaker interlocutor, marking the level of their state motivation on a motivation thermometer after each task and explaining the reason/s for measurements provided. Tracking state motivation across tasks in single participants revealed that factors other than task relevance related to state motivation, particularly the opportunity to practice Arabic orally with a native speaker.

2. *Perception and production of English vowels by FL learners: Towards a foreign language model.* (Rana Alhussein Almbark, University of York)

The Perceptual Assimilation Model (Best 1995) and Speech Learning Model (Flege 1995) are widely used to analyse L2 speech. While PAM accounts for naive L2 listeners or early L2 learners, SLM accounts for naturalistic L2 learners. However, neither model, to the author's knowledge, accounts readily for the speech of the millions of Foreign Language (FL) learners, who learn an L2 in their L1

country for many years. How can current L2 models account for the perception and production of FL learners who lack native L2 input and have L2 knowledge gained primarily in the classroom?

The insights of current L2 models are employed here to examine the perception and production of English vowels by 20 Syrian Arabic FL learners. A perceptual assimilation task and an identification task were used to examine FL speech perception. As for production, the target English vowels were extracted using a neutral /hVd/ context (had, hid, hard, head, heard, hoid, hayed, hoed, hear, hoer, howdy, hair). Similarly, L1 Arabic vowels were extracted using the same context. Another real word with the same vowel was given to stimulate the production of target vowels, especially if a nonsense /hVd/ word was used.

The results showed that neither model accounts entirely for the properties of FL speech. Thus, a Foreign Language Model (FLM), which takes into consideration the peculiarities of FL learners compared to naive and/or naturalistic L2 learners, is needed. The FLM should consider that FL learners lack native L2 input but they have classroom input. However, the classroom input may not be native-like. Additionally, the ultimate goal of FL learners is to be intelligible. So, the perceptual skills of FL learners are reflected in the distinctiveness of their productions rather than being native-like.

3. *Speech and communication in educational settings in Northern Ireland.* (Catriona Arlow, Queens University, Belfast)

My data-driven project explores the effect of variable phonological input in classroom environments on first and second language acquisition and language development among children with different language backgrounds, and on communication among interlocutors in different linguistic and social contexts in educational settings in Northern Ireland. The changing demography of Northern Ireland over recent times has resulted in an increasingly linguistically diverse population exposed to many languages and accent systems, yet little linguistic research has been done directly on the effect of so-called “native” and “non-native” phonological input on the phonological systems of schoolchildren in this geographical area.

My poster presents the methodology and preliminary results of a pilot study designed to examine the dynamic between speech production and speech perception using structurally and experimentally elicited data. A corpus of regional- and foreign-accented English was collected, which provided the stimulus material for a series of perceptual experiments that aimed to explore how speech features are perceived and processed by schoolchildren according, primarily, to language background. The experimental results are analysed impressionistically, instrumentally, and statistically, in relation to phonetic and phonological patterns in the speech stimuli and among speech data elicited from the schoolchildren through a “group conversation” task. By comparing the speech production and speech perception data, and by observing spoken interactions among peers

and educators, I offer insights into how to develop integrative methods for developing and evaluating communicative competence that impact upon individuals' linguistic knowledge.

4. *Measuring short term memory for serial order and incidental learning as aptitudes for L2 idiomaticity.* (Cylcia Bolibaugh, St Mary's University College)

Recent investigations of the mechanism underlying the relationship between new word learning and phonological short term memory (pSTM) suggest that word learning depends not only on the short term maintenance of phonological material, but also on the incidental or implicit abstraction of phonological structure (Service et al 2007). Other research has proposed that the creation of new chunks in long term memory is particularly reliant on the maintenance of serial order in STM, even in individuals with a highly developed phonological knowledge base (Majerus et al 2008).

This poster reports on methodological issues arising from the use of two versions of a short term memory task which simultaneously measures serial recall of order information and incidental learning of statistical structure, a partial replication of Karpicke and Pisoni 2004. This instrument was used as an individual difference measure in two studies (n=80 and n=33) investigating ultimate attainment in knowledge of L2 conventional word combinations in bilingual adults with advanced proficiency and long experience in their L2 (between 12 and 70 years).

The use of a task as an aptitude measure for ultimate attainment (where past learning processes are inferred on the basis of present relationships) raises issues of the stability of the measured ability and reliability of the measure. This poster will report on whether task performance is related to participant characteristics such as age at testing, language of testing and length of exposure to the L2. It will also explore whether serial recall performance is related to the magnitude of incidental learning when stimuli and response modes differ and whether either is related to performance on operation span and non-word repetition tasks.

Karpicke, J.D., & Pisoni, D.B. (2004). Using immediate memory span to measure implicit learning. *Memory & Cognition*, 32, 956-964.

Majerus, S., Poncelet, M., Van der Linden, M., & Weekes, B. S. (2008). Lexical learning in bilingual adults: The relative importance of short-term memory for serial order and phonological knowledge. *Cognition* 107 (2), 395-419.

Service, E., Maury, S., Luotoniemi, E. (2007). Individual differences in phonological learning and verbal STM span. *Memory & Cognition*, 35, 1122–1135.

5. *Acquiring new words from syntactically simple and complex text by L2 learners of German.* (Denisa Bordag, Amit Kirschenbaum, Andreas Opitz, Maria Rogahn & Erwin Tschirner, University of Leipzig)



Initial stages of incidental acquisition of lexical knowledge during reading in L2 are explored using a novel combination of several on-line and off-line methods. Advanced learners of German first read short texts, each with three occurrences of a novel word (pseudoword) replacing a low frequency noun. The syntactic complexity of the texts was manipulated yielding two different versions of otherwise identical texts: one syntactically simple and one complex (the latter containing more subordinate clauses, passive voice, participle constructions etc.). After each text, several additional sentences were read in a self-paced manner. One of these sentences contained the novel word preceded by a semantically plausible or implausible adjective. The observed effects indicated that participants were successful in deriving the meaning of the novel words and that the meaning representation was stronger for pseudowords that occurred in syntactically complex texts than for ones in syntactically simple texts.

Data from a lexical decision experiment and an adapted Vocabulary Knowledge Scale (VKS) revealed that participants correctly remembered about 60% of the 20 phonological/orthographic forms of the novel words. Slow responses to these novel forms when compared with unknown pseudowords and actual words suggest that the access to them was still very demanding.

A semantic priming experiment revealed a semantic facilitation effect for semantically related known words in a control condition as well as semantic inhibition effects for the novel words (presented as primes) indicating that fast mapped word representations were integrated into the semantic network and established associations with semantically related word meanings (Borovsky, Elman, & Kutas, 2012). The effect was larger for novel words that had appeared in syntactically complex texts. However, the novel representations were still very weak (most meanings were not recalled as shown by the VKS data) and their retrieval was conditioned by inhibiting the activation of competing related semantic concepts (cf. Dagenbach, Carr, & Barnhardt, 1990).

6. *Acquiring the phonetics and/or phonology of English word stress.* (Nadia Bouchhioua, Université de la Manouba, Tunisia, Rana Alhussein Almbark & Sam Hellmuth, University of York)

There has been much investigation of second language acquisition of word stress phonology (Archibald 1994 et seq) but little on acquisition of phonetic implementation of word stress. This paper uses adapted versions of two types of elicitation instrument, yielding complementary quantitative and qualitative data regarding the realisation of stress.

L1 Arabic and L2 English production data were collected with four intermediate level learners of English, two from Cairo and two from Amman, and NE English control data from two native speakers of English. We index acquisition of the phonology of English word stress by measuring % accuracy in word stress placement in a read speech passage ('Cindarella') adapted from that used in the IViE

corpus ([www.phon.ox.ac.uk/IViE](http://www.phon.ox.ac.uk/IViE)). We assess acquisition of the phonetics of English word stress through acoustic analysis of f0, duration, intensity, F1/F2 and spectral balance in stress near-minimal pairs elicited so as to attract (1a) or resist (1b) phrasal stress, adapted from that used in Bouchhioua (2008), with comparison to parallel measures in L1 Arabic and NE English.

(1a) /ʔuktub xamsa kama:n marra ʔuktub 'sitta/sit'taat kama:n marra/

'Write five another time, write SIX/SIXES another time'

(1b) /sitta kalima sahla ʔuktub sitta kama:n marra ʕi:d 'sitta/sit'taat kama:n marra/

'Six is an easy word. Write six another time, REPEAT six/sixes another time.'

Preliminary analysis indicates that phonological accuracy is higher than phonetic accuracy, and that L1 transfer accounts for phonetic inaccuracy: learners realise stress in English with essentially the same phonetic correlates as those observed in their native dialect.

Archibald, John. 1994. A formal model of learning L2 prosodic phonology. *Second Language Research*. 10 215-240.

Bouchhioua, Nadia. 2008. The acoustic correlates of stress and accent in Tunisian Arabic: A comparative study with English. University of Carthage.

7. *Investigating L2 grammar knowledge acquisition under implicit and explicit learning conditions.* (Nadiia Denhovska, University of Manchester)

Previous research on implicit learning focusing mainly on receptive knowledge acquisition of a natural language already familiar to learners and of artificial grammars demonstrated that some learning is possible under implicit learning conditions (Lee, 2002; Leung & Williams, 2011a, 2011b; Rebuschat & Williams, 2011). However, it still remains unclear to what extent adults can acquire receptive and productive grammar knowledge of a natural language via implicit learning and what factors contribute to successful L2 grammar acquisition. We exposed 100 adult native English speakers without knowledge of a Slavic language or advanced knowledge of a language with grammatical gender agreement to noun-adjective agreement rules in Russian under explicit learning and four implicit learning conditions (high type high token, low type low token, high type low token, low type high token frequency). Participants in implicit learning conditions read for meaning Russian sentences containing agreement in masculine and feminine genders and four cases and viewed semantically corresponding pictures presented on the computer, whereas in the explicit they were explained the rule. We used response times and accuracy and comprehension and production post-tests to investigate the level of receptive and productive knowledge retention. We also measured participants' working memory capacity using Operation and Reading Span tasks. The analysis of

results demonstrated that there was no significant difference between conditions on comprehension. However performance on production in implicit learning conditions was higher in the low type frequency conditions, in addition to awareness being a significant factor for production. The results will be discussed in the light of measuring implicit and explicit knowledge that result from different learning conditions and how correlation with working memory may provide insight into the activation of either explicit or implicit knowledge when performing a task.

8. *The evolution of elicited imitation: Syntactic priming comprehension and production task.*

(Amy Fang-Yen Hsieh, Man-Kit Lee, University of Cambridge)

This study proposes an ‘evolved’ version of Elicited Imitation task (EI). EI is based on the assumption that it is easier to repeat sentences of which the linguistic components exist in one’s grammar. However, there have been lots of criticisms on EI, including: (1) it seems to involve rote repetition only but not comprehension; (2) it is difficult to decide whether a sentence is long enough to exceed one’s working memory span to ensure reliability; (3) it is uncertain whether EI measures comprehension or production skills; and (4) it is difficult to process ‘odd’ sentences without contextual support.

The above-mentioned problems can be solved by using the syntactic priming comprehension and production task (SPCP). In SPCP, participants are presented with three different pictures. Participants then hear a stimulus and select the picture which they think corresponds to the meaning of the stimulus. Here is a sample item.

Stimulus: The dog which chased the sheep found a tiger.

Pictures shown to the participants:

(A)



(B)



(C) (correct answer)



There are three stimuli in one round. After hearing three sentences and choosing the corresponding pictures, participants refer to the pictures chosen and repeat all the three sentences. They can listen to a stimulus as many times as they need before choosing a picture, and can use their own words to describe the pictures if they cannot remember the stimuli.

In SPCP, comprehension and production are measured separately. Working memory span is controlled for because the production task starts after three stimuli. Sentence probability is not a

confounding factor as pictures/contexts are provided. Also, extra data can be elicited, such as the listening times needed for comprehension, the way a sentence is interpreted incorrectly, and the strategies employed to depict a picture.

9. *How complete are think-alouds? A comparison of verbal reports and finger tracking during L2 reading.* (Aline Godfroid and Le Anne Spino, Michigan State University)

Think-aloud protocols have become an increasingly popular methodology to investigate second language (L2) learners' cognitive processes. For example, a verbal report about a language item or rule is often taken as evidence of awareness (e.g., Hama & Leow, 2010), while the absence of such a report is often considered evidence for unconscious or implicit processing (e.g., Leung & Williams, 2012). The validity of the latter argument depends on the extent to which verbal reports afford a complete record of the individual's conscious thought processes. The present study investigates this question empirically by triangulating data from think-alouds and finger tracking during L2 reading. Advanced EFL learners read 20 English paragraphs embedded with 12 novel pseudowords, which served as targets for incidental word learning. Participants were asked to speak their thoughts out loud but read silently. They simultaneously tracked the words they were reading with their finger, so the researcher could link their verbalizations to the text. After reading, participants took surprise vocabulary recognition and text comprehension post-tests, without thinking aloud.

Preliminary analyses of video recordings suggest that while participants' index finger often stopped at the novel words, they commented on them less frequently. Next, we will correlate the oral and finger data with vocabulary post-test scores. We expect that both finger pausing and verbal reports will predict vocabulary learning, but that the association will be stronger for the verbal reports because they may signal a higher level of awareness. The results may highlight the need for triangulating different awareness measures.

Hama, M., & Leow, R. (2010). Learning without awareness revisited. *Studies in Second Language Acquisition*, 32, 465-491.

Leung, J., & Williams, J. (2012). Constraints on implicit learning of grammatical form-meaning connections. *Language Learning*, 62, 634-662.

10. *Elicited imitation as proficiency assessment method.* (Stéphanie Gaillard, University of Illinois at Urbana-Champaign)

The overarching theoretical goal of this research is to determine whether the Elicited Imitation Task (EIT) can provide evidence of validity, reliability, and practicality for assessing second/foreign language (L2) proficiency, one that meets language-testing standards, for both L2 research and

classroom placement. Focusing on French, the practical goals of this research are: (1) to create a test for assessing oral/aural proficiency in L2-French research; (2) to supplement an existing university French placement (written) test; and (3) to create a validity report that justifies the interpretation and use of EIT scores.

93 French learners from various classroom levels and 6 native French speakers completed a 15-minute EIT. The test takers' audio-recorded sentences (50/person) were rated by 3 French instructors on 7-point scales assessing the meaning, syntax, morphology, phonology, vocabulary, and fluency of the productions. The test takers also completed a 20-minute cloze test [1].

The results show that the test takers' overall ratings (across scales) are slightly skewed to the right but otherwise normally distributed and reasonably spread (mean=3.5/6; standard deviation=1.21; skew=0.51; kurtosis= -0.93). The inter-rater reliability coefficients for these overall ratings are high for both test-taker and test-item means (>.99), indicating that the different raters similarly judged the test takers and the test items. The ratings on the different types of scales (meaning, syntax, etc.) correlate strongly for both test-taker and test-item means (>.99), indicating that the test takers and test items with high accuracy on one scale also have high accuracy on another scale. The learner means correlate strongly with both the cloze test scores ( $r=.86$ ) and the classroom levels ( $r=.79$ ). These EIT results provide evidence of validity, reliability, and practicality, suggesting that the EIT is a promising proficiency-assessment tool for L2 research and classroom placement.

[1] Tremblay, A. (2011). *SSLA*, 33, 339-372.

11. *Eliciting knowledge about morphosyntax from young foreign language learners.* (Rowena Hanan & Emma Marsden, University of York)

This classroom experiment 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.

120 participants were randomly assigned to one of two intervention groups: 'Processing Instruction', or 'Explicit Information + Enriched Input'. The PI 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.

A battery of 6 outcome measures was developed for pre, post and delayed post-tests to measure the learners' explicit knowledge (written gap fill, sentence matching, and metalinguistic knowledge tasks) and implicit knowledge (act-out comprehension, elicited imitation and oral production tasks) of the target feature (nominative-accusative case marking on masculine nouns in German). In addition the participants' performance on the grammatical sensitivity section of the MLAT-E was correlated with their performance on outcome measures.

Preliminary findings suggest that both interventions were beneficial on all tests.

This poster focuses on methodological issues, including i) designing age-appropriate measures for eliciting explicit versus implicit knowledge (Doughty, 2004; Ellis, 2005), ii) balancing internal versus ecological validity of the teaching and tests, iii) the extent of correlation between the tests, iv) how well the MLAT-E predicted performance on each test, and v) the practical challenges of carrying out research in schools.

Doughty, C.J. (2004). Commentary: When PI is focus on form it is very very good, but when it is focus on forms... In B. VanPatten (Ed.), *Processing instruction: Theory, research, and commentary* (pp. 257-270). New Jersey: Lawrence Erlbaum Associates.

Ellis, R. (2005). Measuring implicit and explicit knowledge of a second language: A psychometric study. *Studies in Second Language Acquisition* 27(2), 141-172.

Marsden, E., & Chen, HY. (2011). The roles of structured input activities in processing instruction and the kinds of knowledge they promote. *Language Learning* 61(4), 1058-1098.

VanPatten, B. (2002). *Processing instruction: An update*. *Language Learning* 52(4), 755-803.

12. *Collecting and analysing longitudinal oral L2 data: Experiences from the SALA-COLE Project.*

(Maria Juan-Garau, University of the Balearic Islands, & Carmen Pérez-Vidal, Universitat Pompeu Fabra)

Researchers have used various tasks to measure different aspects of oral L2 performance including its relative fluency, accuracy complexity (FAC) as well as the frequency of discourse and grammatical features (Foster et al. 2000). As part of the SALA-COLE project, carried out in two north-eastern Spanish universities, a battery of tests was developed to measure oral linguistic progress in English as a foreign language by both higher- and secondary-education participants in three different learning contexts, namely study abroad, content and language integrated learning and conventional formal instruction. The overarching aim of the present paper is to reflect on the effects of task structure on data elicitation when analysing longitudinal oral development within the project. The following data collection instruments were used with higher-education learners (N=70): (a) a reading aloud to measure comprehensibility and foreign accent; (b) a categorial AX auditory discrimination test to assess the perception of English phonemic contrasts; (c) a dyadic problem-solving role-play that spurred dynamic interaction to gauge the progress of FAC measures, among others; and (d) a guided interview on university life conducted in pairs to obtain natural individual spoken data. Adolescent learners (N=50) were asked to answer versions of tasks (a) and (c) adapted to their level. They were additionally required to tell a picture-prompted story to delve into their narrative skills. The fact that the same tasks were used to gather longitudinal oral data over a two-and-a-half year period and four different data collection times no doubt posed a methodological challenge as well as some difficulties including respondent mortality (see Rees & Klapper 2008). The

data obtained for the different subskills which were tapped by each instrument showed differential degrees of progress, revealing the multifaceted nature of oral proficiency.

Foster, P., Tonkyn, A. & Wigglesworth, G. 2000. Measuring spoken language: a unit for all reasons. *Applied Linguistics* 21(3): 354-375.

Rees, J. & Klapper, J. 2008. Issues in the quantitative longitudinal measurement of second language progress in the study abroad context. In L. Ortega and H. Byrnes (Eds.), *The Longitudinal Study of Advanced L2 Capacities*. Routledge: New York.

13. *Using micro-genetic studies in L2 acquisition research*. (Vera Kempe, University of Abertay Dundee, & Patricia J. Brooks, City University of New York)

Systematic research into L2 learning is hampered by the diversity of L1-L2 combinations and learning situations (immersion vs. formal study), as well as by differences in input structure and quantity, in learner variables related to individual differences in language learning aptitude, and in elicitation methods, which all limit generalizability of findings obtained in the classroom or in situations of immersion. One solution is the use of micro-genetic studies, in which participants learn elements of an unfamiliar L2 in an implicit manner over a period of several laboratory sessions. This methodology allows researchers to control for specific L1-L2 combinations, for input features, and the elicitation method, in order to study the interaction between learner and input variables. It differs from the artificial language learning paradigm in the use of natural L2s, which lends it greater ecological variability, as well as in its emphasis on simultaneous learning of syntax and semantics. Crucially, micro-genetic studies allow researchers to trace learning trajectories over a period of time.

For the past 15 years we have used this methodology to study adult learning of L2 morphology and vocabulary. This poster will describe our micro-genetic studies in more detail and summarise the main findings with respect to input characteristics and the cognitive abilities that facilitate learning of L2 morphology and vocabulary: (a) Learners benefit from more salient structure as found in child-directed speech, such as frequent diminutives, which regularize word endings. (b) Greater cognitive capacity as measured by non-verbal intelligence and verbal working memory tests predicts greater success in the early stages of learning, both for morphology and vocabulary. (c) Effects of cognitive abilities that aid learners in extracting structure from rich input are mediated by meta-linguistic awareness. In the future, we hope to apply this methodology to optimise language input to L2-learners in various learning situations.

14. *A methodological nightmare and a goldmine of data: Measuring outcomes in an experimental evaluation of CLIL*. (Liss Kerstin Sylven, University of Gothenburg)

This poster describes an ongoing large-scale, longitudinal study into content and language integration in Swedish schools, the CLISS-project. The overall aim of the project is to shed light on the effect of using another language than students' first language (L1) as the medium of instruction, in this case English, by comparing students in content and language integrated learning, CLIL, programs (N = 125) with students in non-CLIL programs (N = 85), where Swedish (most students' L1) is the medium of instruction and English is taught as a separate subject. The primary focus of the project is on students' proficiency and progress in written, academic English and Swedish. The project further aims at looking at classroom interaction, interviewing students, teachers and administrators, as well as making international comparisons.

Large amounts of data of different kinds are being collected within this project. Students' receptive lexical proficiency in both languages is measured by frequency based vocabulary tests, synonym and collocation tests; their productive vocabulary is measured by argumentative and exploratory writing assignments. Reading comprehension tests are carried out in both languages. Video recordings are made in the classrooms throughout the three-year period of data collection. Interviews are tape recorded. Teaching material is investigated, and assessment forms are scrutinized. Questionnaires tapping into students' background and motivational profiles are administered.

In this poster, the data collection process is illustrated, together with real and potential methodological difficulties encountered. Results on background factors and motivational profiles are described. Furthermore, students' receptive and productive lexical proficiency as well as their results on the reading comprehension tests in both English and Swedish are reported from several perspectives, primarily CLIL vs. non-CLIL, gender and L1. Given the fact that this is an ongoing study, the poster presents baseline results.

15. *On the quandary of L1 English language learner identity: Predicaments of learner group identity and consequences for data eliciting.* (Ursula Lanvers, Open University)

Since the 'social turn on second language acquisition' in SLA research (Block 2003), identity in language learning has become a mainstream SLA research focus, as Norton & Toohey's (2011:413) remark in their seminal contribution on the subject. Given the numbers of learners of English, it may be unsurprising that much empirical data focuses on this learner group (e.g. Adawu, A, & Martin-Beltran, M. 2012); the few studies looking at English=L1 learner identity tend to focus on very specific special contexts or learner groups, such as Heritage learners (Berardi-Wiltshire, A. (2012). Therefore, this paper presents new interview data from Distance HE language students, with English=L1, revealing conflictual learner relationships, in particular to their L1 community, as these quotes may illustrate:

I feel that in England there is a widespread attitude that it is unnecessary to learn a second language.



I have come across many fellow Brits who find learning another language unnecessary. Even those who have moved to another country like Spain.

The difficulties surrounding eliciting data from students finding themselves in this dual but conflictual L1 and L2 language identity are discussed.

Adawu, A, & Martin-Beltran, M. (2012) 'Points of Transition: Understanding the Constructed Identities of L2 Learners/Users across Time and Space', *Critical Inquiry in Language Studies*, 9.4, 376-400.

Berardi-Wiltshire, A. (2012). "Reframing The Foreign Language Classroom To Accommodate The Heritage Language Learner: A Study Of Heritage Identity And Language Learning Motivation." *New Zealand Studies in Applied Linguistics* 18.2, 21-34.

Block, D. (2003). *The social turn in second language acquisition*. Edinburgh, UK: Edinburgh University Press.

Norton, B. and Toohey, K. (2011). Identity, language learning, and social change. *Language Teaching*, 44, 412-446.

16. *Picture verification task: Toward an understanding of the relationship between L2 sentence processing and grammar acquisition.* (Agnieszka Latos & Marzena Watorek, Université de Paris 8 & CNRS)

A great deal of L2 research focuses on how learners utilize grammatical information and integrate different information sources when interpreting L2 sentences. One of the elicitation techniques frequently employed to learn which cues learners use in the L2 sentence comprehension is the Sentence Interpretation Task (cf. Gass & Mackey 2007). This type of test, called Picture Verification Task, was used during the experimental sessions of the Villa project (Dimroth et al., to appear) to examine how initial L2 learners assign case (Nominative vs. Accusative) and interpret argument roles (agent vs. patient) in the TL sentences with different word orders (SVO, OVS, OSV).

To elicit the data, the participants heard the pre-recorded TL transitive sentences while viewing two pictures representing the action. Only one picture showed the event with the same agent and patient roles expressed by the sentence. The participants were asked to match the correct picture with the sentence.

The test was designed to examine what type of grammar rules were developed by the learners. Our aim is to discuss its possible limitations, by looking at phonological and cognitive constraints that may interact in the overall sentence processing with semantic and syntactic constraints.

To do so, we will analyze the data from the participants with four different L1s (Dutch, French, German, Italian) and confront the best and worst task performers (case studies) with their results

obtained in tests assessing the implicit knowledge of Nom.-Acc. distinction and in psychometric tests (working memory & phonological sensitivity).

Gass, S. & Mackey, A. (2007) *Data Elicitation for Second and Foreign Language Research*. Mahwah, NJ: Lawrence Erlbaum Associates.

Dimroth, C., Rast, R., Starren, M. & Watorek M. (to appear) *Methods for studying the learning of a new language under controlled input conditions: The VILLA project*.

17. *CorrectMe: A grammar checker that teaches and learns at the same time*. (Jim Lawley, Universidad Nacional de Educación a Distancia)

CorrectMe is a grammar checker designed at Spain's Universidad Nacional de Educación a Distancia (UNED) for students of Spanish as a foreign language. It makes use of a hundred-million word corpus of Spanish known to be correct as a normative corpus for error correction purposes: the system hypothesises that combinations of words present in a student's writing but not found in the normative corpus are probably errors. Detailed but generic instructions are provided to enable students to correct and learn from their mistakes.

CorrectMe forms a central part of a Massive Online Open Course (MOOC) for English-speaking students who want to learn how to write correct Spanish. CorrectMe is free but a condition of use is that the writing uploaded by students to CorrectMe will form part of a rapidly growing learner corpus. This corpus of learner Spanish is then analysed to discover which are the most frequent errors and specific detailed feedback is then written about these high-frequency errors.

18. *Using picture stories to elicit oral data on the acquisition of the past simple tense*. (Hanne Roothoof, University of Navarre)

I propose analysing a number of methodological issues regarding the use of picture stories that I have come across in my research about the effects of oral feedback on the acquisition of the English past simple tense. The use of stories has been common in many studies focusing on this topic, such as Takashima & Ellis (1999) and Yang & Lyster (2010). These authors did not report any problems with the use of stories to elicit the past tense. However, I intend to discuss several complications that have arisen in my research and propose solutions to deal with these. One suggestion concerns the use of keywords together with the pictures. Unlike the authors quoted above, I suggest not providing the infinitives of verbs, as these cause the task to resemble a grammar exercise, rather than eliciting "spontaneous" oral data. Another problem is that several students in my studies tried to tell the story in the present tense, even though an obligatory context for the past tense was provided, as suggested by Takashima and Ellis (1999). Furthermore, in quantitative studies with a

pre-test/post-test design, determining the difficulty and comparability of picture stories is vital. Finally, the analysis of the oral data is not straightforward, as decisions whether or not to include certain ambiguous or unclear forms can influence the results.

Takashima, H. & Ellis, R. (1999). Output enhancement and acquisition of the past tense. In R. Ellis, *Learning a second language through interaction* (pp. 173-188), Amsterdam/Philadelphia: John Benjamins Publishing Company.

Yang, Y. & Lyster, R. (2010). Effects of form-focused practice and feedback on Chinese EFL learners' acquisition of regular and irregular past tense forms. *Studies in Second Language Acquisition*, 32, 235-263.

19. *Re-evaluating dictation: The effectiveness of transcription tasks for developing intensive listening skills.* (Jon Rowberry, Sojo University)

Despite enduring popularity with generations of language teachers, dictation has been largely overlooked in recent SLA research and has become marginalised in many second language curricula. Undoubtedly, traditional teacher-fronted 'dictée' tasks are of limited value in many contexts but intensive listening skills are a vital component of listening proficiency and it may be dangerous to assume that such skills will develop without conscious attention and focused practice. Moreover, digital technologies have made it relatively simple to create high quality dictation tasks, targeting a range of skills and levels, and have enabled the learning to be moved out of the classroom and into online learning environments thus facilitating self-paced, individualised learning programmes with built-in feedback. This research project aims to evaluate the efficacy of such a program, focusing primarily on the students' ability to decode spoken English. Subjects were divided into two groups and tests were administered to each group both before and after exposure to a 12-week dictation programme delivered online as homework. Mean scores were calculated for each performance and compared using a correlated samples T-test. If evidence of learning gain is established, a secondary aim of the project is to identify which decoding processes (for example, lexical segmentation, recognition of syllable structure, awareness of formulaic chunks, etc.) have been most implicated in the change by coding and analysing both sets of responses. The poster will introduce the rationale for the project and explain the methodology that was employed as well as presenting the initial results. It is hoped that the poster will generate feedback and discussion about the benefits and limitations of the research design as well as about possible approaches to coding the responses and any inferences which may be drawn from the data.

20. *The role of multimodality in early L2 vocabulary learning and memorisation.* (Sarah Jane Rule & Rosamond Mitchell, University of Southampton)

This poster outlines the methodology used in order to investigate the influence of gesture and other forms of multimodality on classroom L2 vocabulary learning and memorisation. 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, other forms of multimodality, and analysis of word frequency in teacher input. All lessons were transcribed using CHILDES software programmes and gestures or other forms of multimodality were tagged accordingly. A series of tasks were given to the children at mid-test, post-test and delayed test intervals including a receptive vocabulary task based on the children's classroom input.

We analysed the mid-test, post-test and delayed post test scores for the vocabulary test, tallied the frequencies of the 40 vocabulary items in the teacher input, tallied the multimodal support including gesture for the 40 vocabulary items and related word frequencies to word learning and multimodal support to word learning.

In L1 acquisition, gesture facilitates language development, and vocabulary acquisition in particular (McGregor 2008). Gestures leave richer traces in working memory (Cohen and Otterbein 1992), and younger children tend to rely on visual rather than verbal recoding of memory items (use of visuo-spatial sketchpad: Gathercole and Baddeley 1996). Studies of instructed adult L2 learning suggest that teacher gesture enhances classroom input (Lazaraton 2004). However, little is known about the significance of gesture for child L2 classroom learners (but see Tellier 2008, Porter 2010).

In this study, both teacher and children used gesture frequently when introducing new words and also as an ongoing accompaniment to French interaction.

21. *Extensive reading and development of L2 learners' reading efficiency: An eye movement study.* (Miho Sasaki, Keio University)

This study explores the development of L2 learners reading skills observing the eye movement data before and after their extensive reading experience. Studies on extensive reading have mostly examined the readers vocabulary development (e.g. Coady, 1997) arguing that L2 learners can learn words by encountering unknown words repeatedly in different contexts, forms and meanings, i.e. incidental vocabulary learning. Moreover, it has been said that reading fluency is acquired through reading fairly easy books not only by beginners but also by higher level of L2 learners. Japanese readers of English usually lack this reading fluency partly because of the difference in the writing systems between the L1 and L2: Non-alphabetical orthography in Japanese and the Roman alphabet for English. 18 Japanese learners of English (age 18-21, intermediate level) engaged themselves in an extensive reading programme over 4 months and participated in the pre- and post- reading experiments that included 900-word reading speed measurement, a Reading Span test in English,

and reading tasks while recording their eye movement. The participants read 34 books, 231,000 words on average. L2 learners who had experienced extensive reading reported that their reading skills have improved remarkably but it has been a challenge to observe the developmental data of such skills. The current study show that all the participants reading speed increased, although the reading span scores did not change. The eye movement data show longer distance between eye fixations in a sentence and less re-reading or reading backwards, i.e. their increased efficiency to process grammatical and morphological elements in English.

Coady, J. (1997), L2 vocabulary acquisition through extensive reading. In J. Coady & T.N. Huckin (Eds), *Second language vocabulary acquisition: A rationale for pedagogy*, pp. 225-237, Cambridge University Press.

22. *Sentence recall in natives and near natives*. (Judith Schweppe<sup>1</sup>, Ralf Rummer<sup>1</sup>, Sandra Barth<sup>2</sup>, & Almut Ketzer<sup>1</sup>; 1 University of Erfurt, 2 Kiel University)

Verbatim sentence recall is a task widely used to test the language competence of L1 and L2 speakers. It is seemingly well suited for the purpose since it involves comprehension and production, including phonological, syntactic, and semantic processing. However, we assume that, to maintain surface information, sentence recall additionally relies on attentional resources, due to which L1 and L2 speakers are engaged in different processes when coding a sentence for recall. Since even in near natives language processing is less automatized than in native speakers (e.g. Stowe & Sabourin, 2005), the combination of processing an L2 sentence and retaining its surface may result in cognitive overload. To test this assumption, we contrasted near natives' sentence recall performance with that of native speakers of German, who were matched according to their performance on a cloze test. Near natives recalled the sentences significantly poorer (77% correct) than the natives (91% correct). It is however possible that sentence recall is a more sensitive measure of language competence than the cloze test. Therefore, we tested another group of natives that matched the near natives in their sentence recall performance. The near natives significantly outperformed this group of natives on the cloze test (93% vs. 88%, respectively). These findings indicate that, in particular in near natives, sentence recall is not simply a measure of language competence. Whether the performance differences are indeed due to the different involvement of attentional resources in natives' and near natives' sentence recall needs further investigation. To this end, we are currently conducting a self-paced reading study and a visual world study.

Stowe, L.A. & Sabourin, L. (2005). Imaging the processing of a second language: Effects of maturation and proficiency on the neural processes involved. *International Review of Applied Linguistics in Language Teaching*, 43, 329-353.

23. Quantitative and qualitative differences between single and multiple word association tasks in L2. (Tessa Spätgens, University of Amsterdam)

Word association (WA) studies are widely used in L2 research. An important methodological choice which is still a matter of debate, is the number of associations to be required from participants. Schmitt (1998) has argued for L2 learners specifically that allowing for multiple responses provides a better chance of capturing all strong associations L2 learners may have.

The present study will contribute to this debate by investigating quantitative and qualitative differences between first, second and third associations to 80 cue words by Dutch L2 children aged 10-11. This will be done by separating the three associations and analyzing differences in response set size (the number of non-idiosyncratic responses) and the distribution of association types (taxonomic, situational, feature-oriented and linguistic) across the three responses, based on the methodologies used in a large WA study involving L1 adults (De Deyne & Storms, 2008a; 2008b). De Deyne and Storms found that response set size increased with multiple responses and that the distribution of association types varied across responses. This calls into question the validity of seeing single associations as indicative of the most important links in the lexical network structure. The present study will investigate whether the child L2 data exhibit similar differences when single and multiple responses are compared. The results will improve our understanding of the effect of the two WA methodologies on our perception of L2 WA behavior and L2 lexical networks.

De Deyne, S., & Storms, G. (2008a). Word associations: Network and semantic properties. *Behavior Research Methods*, 40(1), 213-231.

De Deyne, S., & Storms, G. (2008b). Word associations: Norms for 1,424 Dutch words in a continuous task. *Behavior Research Methods*, 40(1), 198-205.

Schmitt, N. (1998). Quantifying word association responses: What is native-like? *System*, 26(3), 389-401.

24. Eye-tracking for Chinese online learning. (Ursula Stickler, The Open University, & Lijing Shi, London School of Economics)

Our project used eye-tracking technology to investigate learners' eye movements during online learning of Chinese. Participants undertook two tasks, one individual reading task, and an interactive reading and speaking task in an online group. The tasks were followed up with individual stimulated recall sessions, using the visualisation data from eye-tracking.

The data shows that attention to Pinyin transcription, characters, images and social presence indicators varied according to individual ICT skills and the nature of the task, i.e. social or individual

focus. In the individual reading task, students of all language levels employ conscious strategies for the use of Pinyin and characters, and for answering comprehension questions. During the interactive tasks, participants' eye focus moves towards social presence indicators frequently, regardless of task. Our findings contribute to the knowledge of online language learning, particularly for languages with non-Western scripts. They also inform online teacher training by demonstrating the effect of task type, graphic interface, social presence indicators, and feedback.

The study was partly funded by a British Academy small research grant.

25. Reconsidering the classification of primed language production in written synchronous computer mediated communication (SCMC) – beyond the 6-turn-paradigm. (Laura Stiefenhöfer, University of Duisburg-Essen, Germany)

Priming is 'the tendency for a speaker to produce a structure that was encountered in the recent discourse' (McDonough & Kim 2009: 386). Research by e.g., McDonough and Mackey (2008) has shown that priming may be one of the reasons why peer interaction facilitates second language production. In their analysis of oral learner data McDonough and Mackey (2006) classify primed production as any occurrence of the target form within the limit of six interactional turns.

More recent work (Stiefenhöfer & Michel, in preparation) investigated the priming of advanced L2 structures in written synchronous computer mediated communication (SCMC). Given the specific non-ephemeral characteristic of SCMS, i.e., the written output of the interactional partner remains visible in a chat log, the authors mention that the proposed 6-turn-limit may not be appropriate. Instead, the chat window provides the interlocutors with the opportunity to scroll back and re-read previous turns. This means that primed production in SCMC may include a wider scope of turns and that one prime can be attended to several times by the primed participant – which calls for a reconsideration of the categories employed when coding written priming data.

This study examines and compares the feasibility of various alternatives to the 6-turn-paradigm, e.g., size of the chat window or number of words per chat turn. Given the probability of repeated priming and frequent turn overlaps, it also explores the value of analysis by means of related discourse topics and specific "question & answer" structures.

Results indicate that the consideration of these aspects considerably enhances the accuracy when classifying written priming data. The refined analysis points out the need for implementing additional experimental techniques in future research, such as eye-tracking and screen capture. These online methods might lead to a better understanding of how the specific characteristics of SCMC influence priming effects.

26. Measuring acquisition at the syntax/semantics interface: An example from instructed L2 German. (Elizabeth Thoday, Heriot-Watt University)

A methodology has been devised to examine a learner corpus of written data collected over 4 years from a cohort of university-level learners of German with English L1.

Tools designed specifically for analysing German are few, and focus largely on part-of-speech annotation (e.g. Reznicek et al 2012). Tagging of the corpus in its entirety was not undertaken since this study examines only the choice of auxiliary in passive syntax, which varies according to the semantics of either a stative (auxiliary sein) or a dynamic (auxiliary werden) passive.

Syntactic forms of the auxiliaries were identified with a concordancer (Scott 2008) and counted cross-sectionally. Learners' performances were then compared longitudinally with a view to identifying possible stages in development.

The resulting raw word count was relatively unproblematic to achieve; a more robust treatment is required in order to evaluate the correctness of choice of auxiliary. The passive may sometimes be avoided in German by introducing an active construction. Thus acquisition cannot be measured by applying the criterion of use in an obligatory context. A formula derived from Ellis & Barkhuizen (2005) is proposed in order to calculate the percentage of correct choices made by the learners in their own chosen context. These results can then be used as indicators of acquisition.

Supplementing the data with responses to a questionnaire and an Acceptability Judgement Task provides an insight into the reasons for learners' choices.

Ellis, R. & Barkhuizen, G., 2005. *Analysing Learner Language*. Oxford: Oxford University Press.

Reznicek, M., Lüdeling, A., Krummes, C., Schwantuschke, F., Walter, M., Schmidt, K., Hirschmann, H., and Andreas, T., 2012. *Das Falko-Handbuch. Korpusaufbau und Annotationen, Version 2.01*.

Available from: [http://www.linguistik.hu-](http://www.linguistik.hu-berlin.de/institut/professuren/korpuslinguistik/forschung/falko)

[berlin.de/institut/professuren/korpuslinguistik/forschung/falko](http://www.linguistik.hu-berlin.de/institut/professuren/korpuslinguistik/forschung/falko). [29.4.2013]

Scott, M., 2008, *WordSmith Tools version 5*, Liverpool: Lexical Analysis Software

## 27. Investigating WM effects in SLA. (Clare Wright, Newcastle University)

This study investigated Working Memory capacity effects on L2 development, focusing on WM associations with asymmetries in processing L2 English wh-questions shown by adult Chinese learners of English, measured in a timed grammaticality judgement task. The study's key focus was a methodological comparison of WM performance on measures of executive span, between tasks and between languages. Findings from a range of L1 and L2 measures for verbal and non-verbal WM span, suggest that WM is task-specific (Yoshimura 2001), but language-independent (Osaka & Osaka 1992). We propose an innovative but simple story recall task as an effective way of incorporating the episodic buffer, proposed in the latest model of WM (Baddeley 2000). This study further tested the assumption that WM facilitates instructed L2 learning (N. Ellis, 2005) by investigating whether



greater WM capacity would facilitate processing for explicit taught knowledge (grammatical wh-questions), compared to implicit untaught knowledge (subjacency violations). Results showed that WM capacity, as measured by an L1 story recall task, was significantly associated only with higher performance on subjacency violations ( $r=.402$ ,  $p<.05$ ), implicating WM in implicit language learning. These findings illuminate the debate about how best to use WM tasks in L2 learning research, and we call for further testing of WM measures across a range of languages and range of tasks to clarify the construct of WM and its complex role in L2 development.

Baddeley, A. (2000). The episodic buffer: A new component of working memory? *Trends in Cognitive Sciences*, 4 (11), 417-423.

Ellis, N. (2005). At the interface: Dynamic interactions of explicit and implicit language knowledge. *Studies in Second Language Acquisition*, 27, 305-352.

Osaka, M. & Osaka, N. (1992). Language-independent working memory as measured by Japanese and English reading span tests. *Bulletin of the Psychonomic Society*, 30 (4), 287-289.

Yoshimura, Y. (2001). The role of working memory in language aptitude. In X. Bonch-Bruевич, W. Crawford, J. Hellerman, C. Higgins & H. Nguyen (Eds.), *The past, present and future of second language research: Proceedings of the Second Language Research Forum*. Somerville, MA, Cascadia Press: 144-163.

**There will be a book prize worth £75 to be awarded to each of the presenters of the two best posters, courtesy of Cambridge University Press.**