Thursday, May 17 – Abstracts

9.15-10.00

Parvaneh Tavakoli

Task-modality effects. Issues in past and current theory and research

Research in the effects of task design and task type has been prolific over the past three decades offering the fields of SLA and L2 teaching a number of significant findings with important implication for research and practice in these areas. This body of research (Ellis, 1987; Foster & Skehan, 1996, 1998, 2001; Gilabert, 2007, Gilabert et al., 2016; Revesz et al., 2016; Robinson, 2001) has provided solid evidence that some task design features consistently influence task performance and L2 development. While many of these studies have focused on task effects in either writing or speaking, investigating the effects of task modality and its interaction with task effect is a relatively new and under-researched area. This more recent and developing area (Kormos, 2014; Kuiken & Vedder, 2011; Manchón, 2014; Vasylet et al., 2017; Zalbidea, 2017), however, has clearly indicated that there are differential effects when task design interacts with task modality highlighting the varying opportunities modality offers for L2 performance and development.

Focusing on the impact of task modality on L2 performance, the current paper's primary aim is to present an overview of the underpinning theoretical principles informing this body of research. The paper would also aim to highlight the issue of task modality in the global discussion of factors contributing to the development of writing and the potential contribution modality can offer second language learners. Summarising the existing research evidence on the opportunities task design and task modality offer L2 teachers and learners, the paper will serve as a framework in which practical implications suggested by this body of research will be scrutinised.

10.00-10.30

Roger Gilabert, Olena Vasylets & Rosa M. Manchón

Task complexity across modalities

Task complexity is the central construct in the psycholinguistically-oriented strand of task-based language learning and teaching (TBLT) research. The Cognition Hypothesis (Robinson, 2001, 2011) and the Trade-off Hypothesis (Skehan, 1998, 2009), which represent the major theoretical accounts in cognitive TBLT, define task complexity in slightly different ways and also make somewhat different predictions about the way in which task complexity may interact with L2 learners` cognitive response and performance. The common feature of these models, however, is that both frameworks were proposed to account primarily for oral production, and it is still an open question whether the predictions of these speech-customized theories can be applied to writing (see also Byrnes & Manchón, 2014; Kormos,

2014; Tavakoli, 2014). In order to advance in the understanding of task complexity effects across modalities, we have conducted several studies in which we have compared the effects of task complexity, operationalized as reasoning demands (Robinson, 2011), on L2 oral versus written production in terms of CAF measures. Additionally, we are currently looking into the way in which mode and task complexity influence the links between the quality of L2 performance and the communicative adequacy of production, which we have operationalized as the degree to which learners` performance is successful in achieving the goal of the task (Pallotti, 2009). In these studies, N=78 L1 Catalan/Spanish EFL learners performed orally and in writing the simple and complex versions of an argumentative task. The analysis of the performance revealed marked differences in the way task complexity affected oral and written production. Thus, while task complexity affected the area of linguistic complexity in similar ways in the two modes, its effects across modalities were manifestly different in the realms of propositional complexity, accuracy and time on task. Another major finding was that written production showed more variation between the complex and simple versions of the task. Importantly, changes in the written production also showed a better fit to the theoretical predictions advanced in the Cognition Hypothesis. In sum, evidence was obtained that task complexity does not operate in isolation, but interacts with the mode (oral or written) in which a task is performed. These findings will be discussed from the perspective of the language learning potential of writing. We shall also offer suggestions for the reconsideration of the cognitive TBLT models in light of the idiosyncratic nature of oral and written modes of production.

10.30-11.00

Alberto Sánchez, Rosa M. Manchón & Roger Gilabert

Task repetition across modalities

Task Repetition (TR) has attracted considerable attention in TBLT theoretical and empirical research agendas (Bygate, 2001; Gass et al., 1999; Lynch & Maclean, 2000). However, TR in writing has received minimal scholarly attention (see Nitta & Baba, 2014, for a notable exception) and it is an empirical question whether or not potential TR effects are mediated by modality. Importantly, in the environment of writing, the role written corrective feedback (WCF) may play in TR has also been ignored in TBLT preoccupations (Manchón, 2014). Moreover, the beneficial effects of TR have been claimed to be mediated by learners´ proficiency (Mojavezi, 2013). Attempting to advance research in these domains, our study looked into (i) the effects of repeating the same task orally and in writing in terms of CAF measures, (ii) the effects of TR in writing with and without the availability of WCF (and (iii) the mediating effect of learners´ proficiency in (i) and (ii). Participants at 2 proficiency levels were allocated as follows: oral TR (n=14), writing TR (n=15), writing TR with direct WCF (n=13), writing TR with indirect WCF (n=13) and writing TR with self-correction (n=11). The first two groups performed the task twice within a seven-day lapse. The remaining writing TR groups, performed the task, received and processed feedback/self-corrected their errors in a latter session and were asked to repeat the task within the same seven-day-lapse. Results confirm previous findings regarding the beneficial effects of TR on language production, mostly in

terms of fluency measures (Ahmadian & Tavakoli, 2011; Bygate, 1996, 2001; Nitta & Baba, 2014) and the beneficial effects of WCF (Bitchener, 2012; Sachs & Polio, 2007). Results will be discussed from the perspective of the language learning potential of TR across modalities.

11.30-12.15

Alister Cumming

Writing and L2 Learning: Resources, self-regulation, and interactions

Conceptualizations about the potential benefits of writing for learning a second language have centered on three perspectives in three dimensions. One perspective looks back to the knowledge that learners have and use from their first language, a second perspective elucidates what learners attend to while they compose, and the third perspective looks forward to developments that learners make progressively over time. Each perspective focuses at a micro-level, on cognitive and linguistic resources; at a processing level, on affordances, attention, and self-regulation; and at a macro-level, on interactions with other people and identities within discourse communities.

12.15-12.45

Sonia López-Serrano, Julio Roca de Larios & Rosa M. Manchón

Reprocessing output during L2 individual writing tasks: An exploration of depth of processing and the effects of proficiency

Traditionally viewed as playing a minor role in promoting second language acquisition, L2 writing is increasingly regarded as a vehicle that may facilitate a number of processes potentially conducive to the internalization, modification or consolidation of L2 knowledge (Manchón, 2011; Manchón & Roca de Larios, 2007; Ortega, 2009, 2012; Williams, 2012). However, while most of the empirical studies conducted to date have explored how these processes occur during the completion of controlled tasks in collaborative writing, the linguistic processing L2 learners engage in during the individual completion of L2 writing tasks, and particularly composition writing tasks, has remained largely unexplored (but see Cumming, 1990; Swain & Lapkin, 1995). Following (i) recent claims in models of instructed SLA (Leow, 2015) in which the effects of output on L2 development is purported to be largely dependent on the depth of processing (DoP) achieved in the course of the production process, and (ii) previous tenets and empirical findings on the mediating role of learner-related factors (e.g., proficiency) on L2 writers' linguistic reflection (e.g. Kormos, 2012; Ortega, 2012), the present study aimed to shed light on the different levels of processing involved in the language-related problem spaces produced by 21 EFL writers divided into three proficiency groups during the individual completion of an argumentative L2 essay under think-aloud conditions. Results showed that engaging in L2 writing fostered deep levels of language

processing, and that the frequency of such engagement seemed to be proficiency dependent, as advanced students were found to produce more episodes of deep language processing than their less proficient counterparts. These results will be discussed in relation to the language learning potential of individual L2 writing tasks.

12.45-13.15

Andrea Revesz & Marije Michel

Investigating the pausing behaviours of L2 writers across independent and integrated tasks: A mixed methods study

The end products of writing tasks have been the object of much research in second language (L2) acquisition and assessment. Less empirical research, however, has examined the cognitive processes and behaviours in which L2 writers engage. It also remains unexplored how task type may influence the writing process. To help address these gaps, this study examined the pausing behaviours of L2 writers and the cognitive processes underlying them, adopting Kellogg's model as a theoretical basis. Our methodological innovation lay in combining keystroke logging, eye-tracking, and stimulated recall to examine pausing at different writing stages.

The participants were 60 L2 users with B1-C1 CEFR levels. They performed two independent and two integrated TOEFL iBT writing tasks, counterbalanced across participants. Writing behaviors were recorded via the keystroke-logging software Inputlog, and participants' eye-movements were captured with an Eyelink1000 eye-tracker. Stimulated recall comments were prompted by the playback of participants' keystrokes during the last writing task they performed. For both task types, the data analyses involved triangulating results from the keystroke logs, eye-gaze recordings, and stimulated recall comments. We considered the thought processes and eye-gaze behaviours of participants when they paused at various textual locations, and investigated how these patterns differed across writing stages (beginning, middle, end).

We will discuss the implications of the results for L2 writing and assessment research. We will additionally consider the value of triangulating data sources (eye-tracking, key-stroke logging, stimulated recall) to examine L2 pausing during writing, placing special emphasis on the benefits and challenges of using eye-gaze measurement.

15.30 -16.15

Heidi Byrnes

L2 writing and linguistic development: Reflections, refractions, reconsiderations

In this presentation I focus on linguistic development through L2 writing rather than on-shot performance and explore research orientations that, though benefiting from past efforts, may well constitute new directions. Also, while an increasing array of assessment or measurement

approaches and tools necessarily play a prominent role, that role is best fulfilled when they are able to capture the considerable variation that is characteristic for development even within a discernible overall trajectory, thus enabling us to interpret its meaning and significance. In my presentation I will further explore these matters in four areas:

First, since L2 writing and L2 development are phenomena that are of particular interest in and tend to occur in educational settings, an overarching consideration for any useable and useful writing research is to acknowledge and begin to specify the crucial role that an educational or, more precisely a particular programmatic context plays in fostering, observing/describing, and measuring writing as process and product over an extended period of time. In other words, while task, modality, and written corrective feedback have provided useful theoretical and empirical frames of reference, their contributions to development is likely to be interpretable only in a programmatic context, a kind of framing that interweaves emic perspectives, which have dominated much of research, with etic perspectives of a particular programs' approach to writing development. Such a programmatic framing could begin to give the pervasive call for longitudinal studies the kind of educational—and at the same time—theoretical and intellectual heft that it all too often lacks.

Second, because L2 writing and L2 linguistic development are always and inherently about meaning, future research into L2 development in writing might find it useful to ground its engagement with writing development in a functional, that is, a meaning-oriented theory of language rather than one that, at heart, is purely form oriented.

Third, taken together, these two approaches should enable writing researchers to arrive at well-motivated different grain sizes for their investigations at different points of the fundamentally long-term quality of writing development. An ability to adjust one's investigatory lens in a theoretically motivated fashion—zooming in and zooming out to capture key aspects of L2 linguistic development at all levels of the semiotic system language and with different modalities and genres—will be both key challenge and exciting opportunity for the writing field.

Finally, as L2 writers are increasingly seen as multilingually competent, what constitutes quality non-native writing at different stages of their L2 writing and their L2 linguistic development, will require the very evidence that educationally informed inquiry into writing development would seem to be particularly well equipped to provide.

16.15-17.00

David Galbraith

A dual-process model of L1 writing processes: Implications for L2 writing research agendas on processing and language development

Classical cognitive models of the writing process in L1 typically assume that writing is a matter of translating preconceived ideas into text. Although these models recognize that the writer develops their understanding during writing, this is assumed to be a consequence of adapting pre-existing ideas to the specific rhetorical context for writing. Hence, these models draw a

fundamental distinction between a knowledge-telling approach to writing, typically used by novice writers, which involves directly translating ideas into text according to their structure in long-term memory, with a knowledge-transforming approach to writing, typically used by more expert writers, in which content is retrieved and modified to satisfy the writer's rhetorical goals. In such models, text production is treated primarily as a potential impediment to the operation of the higher-level thinking processes involved in knowledge transforming, and strategies such as outlining, which separate idea generation from the process of text production, are recommended for improving the quality of text. In this talk, I will argue that these models have neglected the implicit nature of knowledge-representation, and hence the role that text production plays in enabling the writer to constitute their implicit knowledge in the text. I will describe an alternative, dual-process model of writing, in which writing is the joint product of two conflicting processes: an explicit problem-solving process, similar to the knowledge transforming process involved in classical models of writing, and an implicitly-controlled knowledge constituting process, taking place during the formulation of thought in language, and responsible for developing the writer's understanding of a topic. I will then present the findings from recent empirical research which provide evidence for these two conflicting components of the writing process. I will conclude by discussing the implications for writing in L2, suggesting the need for research into the effects of L2 language proficiency on the writer's ability to develop their understanding through writing, and discussing potential strategies for facilitating the process in L2 writing.

17.30-18.15

Andrea Revesz & Marije Mitchell

Using mixed methods to explore cognitive writing processes, behaviors, and text quality.

The end products of writing tasks have been the object of a considerable amount of research in the areas of second language (L2) acquisition and assessment. However, relatively less empirical research exists that examines the cognitive processes and behaviors in which L2 writers engage and how these may relate to text quality. In this talk, drawing on our and others' work, we will discuss how writing processes and their links to the products if writing may vary according to task factors such as task complexity, level of second language proficiency, and individual differences in working memory capacity. We will also highlight how triangulating various data sources -eye-movement recordings, online keystroke logs, comments from retrospective stimulated recall, and measures of cognitive abilities - may help explore cognitive writing processes and behaviors and their relationships to text quality. We will argue that the combination of behavioural and verbal protocol data enables researchers to arrive at more valid conclusions about the nature of the L2 writing process and more sound implications for teaching and assessing L2 writing. We will end the presentation by outlining future methodological directions which may help obtain a more nuanced view of the writing processes.

Friday, May 18 – Abstracts

8.45-9.30

Natsuko Shintani

Effects of different types of feedback: Issues in past and current theory and research

Written corrective feedback (CF) has been considered as a key teaching technique for "writing-to-learn". Bitchener and Ferris (2011) undertook a narrative review of a range of studies. This provided clear evidence of the effectiveness of written CF when this is examined in terms of accuracy in new pieces of writing. Three basic strategies for providing written corrective feedback have been distinguished by researchers, corresponding quite closely to those discussed in the teacher guides – direct CF, indirect CF and metalinguistic CF. There are also other possibilities for correcting written errors. Reformulation involves a native-speaker rewriting the student's text in such a way as 'to preserve as many of the writer's ideas as possible, while expressing them in his/her own words so as to make the piece sound native-like' (Cohen, 1989: 4). This differs from the three main strategies as it involves reconstructing the whole of the student's text rather than focusing only on the erroneous parts. It lays the burden on the learner to identify and accept or reject the specific changes that have been made. Another possibility providing learners with a detailed metalinguistic explanation of a specific type of error (e.g. errors in the use of articles) without correcting the actual errors that occur in the learners' text. This differs from other forms of CF because the feedback is not individualized (i.e. all the students can receive the same metalinguistic explanation) and thus is less time-consuming and also because it requires the learners to locate the actual errors in their text. Researchers have been interested in which type of CF is more effective in assisting L2 learning than others and whether revision contributes L2 learning.

In this talk I will examine second language acquisition theories that explain the effectiveness of written CF. I will then explore possible strategies for providing feedback on writing and discuss advantages and disadvantages of each. I will also examine results of research that has investigated the effects of each feedback strategy. I will conclude with the summary of research findings and gaps in the research field.

9.30-10.00

Mohammad Ahmadian

The effects of written corrective feedback and cognitive abilities on the development of linguistic knowledge

Written corrective feedback (WCF) is one of the core elements of any second/foreign language writing course as it is thought to help learners notice the gaps in their interlanguage systems and to consequently address them. This study looked into the development of learners'

knowledge of simple and complex grammatical structures whilst taking into account learners' individual differences in working memory capacity and language aptitude. 87 Iranian EFL learners participated in this research. All participants took a battery of tests prior to the investigation: (a) three tests of working memory capacity, i.e. reading span test, operation span test, and count span task; (b) LLAMA Test of Language Aptitude; and (c) a series of tests for measuring learners' implicit and explicit knowledge of one simple and one complex grammatical feature – these included oral imitation test and timed grammaticality judgement test for implicit knowledge and untimed grammaticality judgement test and metalinguistic knowledge test for explicit knowledge. Participants were then assigned to three groups. In the direct WCF group, participants received the correct form of their errors and in the indirect WCF group participants were only provided with an indication of where the errors were, and were required to correct them. Both groups were asked to revise their texts accordingly. Participants in the control group did not receive any feedback. The results of preliminary analysis revealed that overall both experimental groups outperformed the control group in terms of explicit knowledge of simple and complex grammatical structures and across both post- and delayed post-tests. Also, the results showed that participants' working memory capacity and language aptitude significantly correlated with the extent to which they benefited from indirect feedback. However, both groups benefited fairly equally from direct WCF.

10.00-10.30

Flori Nicolás-Conesa, Victoria Amelohina & Rosa M. Manchón

Long-term effects of WCF in an out-of-school context

This SLA-oriented L2 writing study intends to add to previous empirical work on the language learning potential (LLP) resulting from written corrective feedback provision and processing. The contribution of this study derives from its longitudinal nature the curricular framework in which it was situated, and the context investigated (an out-of-school setting). We analyzed the effects of task repetition aided with 2 types of WCF over 6 months on 4 tasks (with writing-WR1- and rewriting- WR2). Two feedback sequences of direct and indirect WCF (DWCF/IWCF) were implemented. Sequence 1: DWCF+IWCF+DWCF+IWCF. Sequence 2: IWCF+DWCF+IWCF+DWCF. We examined the existence of significant differences between the two sequences in terms of accuracy (global percentage of errors and error types), fluency, and syntactic and lexical complexity across four tasks, and across writings (WR1-WR2). The participants were 19 EFL students enrolled in four intermediate-level classes in an out-of-school context with the purpose of taking an accredited B2-level examination. They were given one hour to write each task. The statistical analyses conducted show that, regarding accuracy, there was a significant decrease in the global percentage of errors and grammar errors across tasks for both WCF sequences. Writing fluency, lexical density and mean length of clauses across tasks increased significantly in both sequences, but there was a decrease in the lexical sophistication of the texts written. The first provision of IWCF had an immediate detrimental effect for both sequences on accuracy and syntactic complexity, but these effects disappeared across time. The implications of these findings for the manner in which repeating writing tasks with the help of WCF can contribute to language learning will be discussed.

10.30-11.00

Lourdes Cerezo & Belén Moreno

Comparing accuracy improvements in intermediate EFL learners writing and processing unfocused, direct error corrections individually and collaboratively

Framed in the writing-to-learn-language dimension of L2 writing, this study investigates the language learning potential of written corrective feedback (WCF) in individual and collaborative writing conditions. Two questions guided the research: "Do intermediate EFL learners retain direct EC more effectively in individual than in collaborative conditions, as measured by improved L2 accuracy in a text revision in comparison to a non-feedback group?" and "What types of errors are more effectively addressed by direct EC in individual and in collaborative conditions, as measured by improvements in the accuracy of specific error categories in a text revision?"

Data sources included (i) individually (n= 54) and jointly (n= 32 pairs) produced texts in response to a problem-solving writing task (pre-test) and (ii) the text revisions produced by our participants following feedback processing (post-test). In both conditions, participants belonged to either the experimental group -receiving unfocused direct WCF- or a control group –receiving no feedback. Results revealed that (i) direct WCF was more effective than no feedback in individual and collaborative writing conditions, and (ii) direct WCF was equally effective in both conditions. Findings will be discussed in relation to current accounts of the language learning potential of WCF in individual and collaborative conditions.

11.30-12.15

Julio Roca & Yvette Coyle

WCF processing and L2 development: Key issues of debate in past and current theory and research

The results of research on written corrective feedback (WCF) in the last 15-20 years have been consistent for the accurate production of a limited number of grammatical forms but less reliable when it comes, for example, to the scope of errors to be corrected or the relative impact of different feedback types (Bitchener & Storch, 2016). A common characteristic of this research strand has been a focus on measuring how the accuracy of the final product (both in revised and new pieces of writing) is an effect of the feedback provided rather than on exploring the processes learners engage in while analyzing and trying to interpret it. However, due to its importance in understanding why some learners succeed while other learners fail to benefit from WCF (Bitchener, 2017), attention to feedback processing is becoming an increasingly relevant area of theory and research. In individual writing, Schmidt's (1990) dichotomous distinction between awareness at the levels of noticing and understanding has been the theoretical framework most commonly adopted by researchers when accounting for learners' engagement with reformulation (Qi & Lapkin, 2001), direct error correction (Suzuki,

2012; 2017), reformulation and direct error correction (Sachs & Polio, 2007), direct error correction and metalinguistic explanation (Shintani & Ellis, 2013), direct and indirect error correction (Simard, Guenétte & Bergeron, 2015) or reformulation and model texts (Hanaoka & Izumi, 2012). Theoretical frames involving multiple processing levels include (i) Leow's (2015) conceptualization of depth of processing, which has prompted the analysis of learners' engagement with direct, indirect and metalinguistic feedback (Caras, 2017) and with direct and indirect error correction (Cerezo, Manchón & Nicolás-Conesa, in press); (ii) Bitchener's (2016) adaptation of Gass's (1997) multistage model of input processing, which, together with Dynamic System Theory (de Bot et al, 2013), has been used to account for the potential links between metalinguistic feedback processing and language development (Li, 2017); and (iii) Han & Hyland's (2015) multidimensional model of feedback processing, employed in accounting for learners' reactions to the feedback received in naturalistic settings. In collaborative writing, feedback processing is seen as a joint problem-solving activity mediated by learners through languaging (Storch, 2013). In consonance with this premise, while some studies have relied on the noticing/understanding distinction to make sense of learners' interpretation of reformulations (Roca de Larios & Coyle, 2016), other studies (Storch & Wigglesworth, 2010; Wigglesworth & Storch, 2012) have looked at learners' engagement with text-editing and reformulation through the length and quality of their interactive discussions. In this presentation, we critically examine the ways in which feedback processing has been operationalized and analyzed, the findings reported to date on the relationship between learners' engagement with the feedback types analyzed and their modified output, and, when possible, the moderating role played by individual and contextual factors in learners' processing of WCF.

12.15-12.45

Yvette Coyle, Julio Roca, Josefa Cánovas & Lola Vidal

Exploring instruction in feedback processing on children's problem-solving and noticing from model texts in two multi-stage writing tasks

It is widely held that written corrective feedback (WCF) has the potential to help learners use the L2 with greater accuracy and enhance their L2 knowledge (Manchón, 2011). Less is known empirically about how individual and contextual factors influence feedback processing and why, or at which point during the writing, feedback and revision cycle, some learners succeed while others fail to do so (Bitchener & Storch, 2016). This study attempted to address these issues by analyzing the effects of model texts as a WCF technique on the noticing and uptake processes of EFL children, a population which is underrepresented in the field. Specifically, the aims were to i) identify the sequential routes or trajectories that the children followed across the different stages of two multi-stage writing tasks held five weeks apart; ii) examine the language learning potential of the trajectories used by the children, and iii) explore whether (or not) they were influenced by instruction and proficiency. Eight Spanish EFL pairs aged between 10 and 11 years at two levels of proficiency formed a teaching group and a control group. Between each task, the teaching group participated in a six-week instructional intervention in which they were trained to use models, while the control group continued their

regular English lessons. Multiple data collection sources were used including transcriptions of the children's collaborative dialogues, written notes and original and final written texts. In this presentation, trajectories with more and less language learning potential will be illustrated through across-stage analyses, which examine the children's problem solving behaviors while composing, the noticing strategies implemented during feedback processing and the impact of the latter on their revised written output. The role of instruction in promoting feedback processing will be discussed and conclusions drawn for the contribution it can make to children's second language development.

12.45-13.15

Rosa M. Manchón, Lourdes Cerezo & Flori Nicolás-Conesa

Depth of processing via written languaging. Implications for language learning.

The study reported in this presentation set out to investigate the language learning affordances of written corrective feedback (WCF) processing along two inter-related dimensions: We investigated the participants' depth of processing (DoP) of WCF as manifested in their written languaging behavior, as well as the relationship between DoP and accuracy of the self-produced texts written after receiving and processing two forms of comprehensive WCF. The study was carried out with 46 first-year English Studies undergraduates enrolled in a compulsory semester-long composition course. The study followed a pre-test- intervention- post-test design with 2 intervention groups and 1 control group. The participants completed a three-stage, time-compressed (50 minutes) writing task: Stages 1 and 3 corresponded to the pre-test (writing) and post-test (revision) stages respectively, whereas Stage 2 corresponded to the intervention (presence/absence of different forms of feedback processing). Data were gathered from two main sources: (i) the texts written before (Writing) and after (Revision) WCF processing in the case of the treatment groups, or before and after self-reflection in the case of the control group, and (ii) the languaging forms provided when returning the participants' original texts during the revision stage and completed concurrently while processing the feedback received (treatment groups) or while self-reflecting (control group) on their initial writing. On the basis of Leow's (2015) operationalization of DoP, a coding scheme with 5 levels of DoP was set up. The results indicate that L2 users do not appear to notice all the errors in their self-produced texts, although such noticing is more likely to take place when the engagement with one's own output is assisted with the availability of written WCF. In addition, our findings contradict the purported superiority of indirect forms of WCF for promoting deeper levels of processing: we found a clear advantage of direct WCF for prompting deeper levels of processing in terms of the various dimensions contemplated in our operationalization of DoP. Finally, results also showed that diverse levels of processing and awareness were equally facilitative of the overall correction of the final text although we were able to ascertain the differential effect of higher/lower levels of processing on different levels of accuracy as we looked into the amount of errors corrected successfully or unsuccessfully, uncorrected, or deleted. The relevance of these findings for the language learning potential of WCF processing will be assessed.

15.30 -16.15

Diane Schmitt

Can writing and WCF facilitate the development of a richer vocabulary? Advancing research agendas

The concerted effort that has been made to try to bridge the gap between second language writing and SLA research (cf. Ferris, 2010; Manchón 2011; Bitchener and Storch, 2016) does not adequately address the vocabulary learning potential of writing, partly because a look through influential SLA monographs (Mitchell and Myles, 1998; Ellis, 2008; Ortega, 2009) shows that mainstream SLA research has given little attention to second language vocabulary acquisition. Second language vocabulary research, in turn, has tended to focus on the development of receptive knowledge. While it provides useful insights into receptive vocabulary size requirements, what vocabulary learners should study and the number of exposures needed for receptive acquisition; none of these issues has been adequately addressed with regard to production. Corpus researchers' characterizations of second language writers' texts as displaying a lack of register awareness, underuse and overuse of single and multiword lexical items, semantic misuse, incorrect collocations, and a range of lexico-grammatical errors (Hinkel, 2002; Paquot, 2010) highlight the componential nature of word knowledge. While some progress has been made in developing a better understanding of the order in which learners acquire these components (Webb, 2005; Chen and Truscott, 2010; González-Fernández, 2016), such studies tend to operationalise productive vocabulary at the sentence level and thus provide limited insight into how EFL writing instruction and written correct feedback might support learners development of vocabulary through writing. This paper will identify a research agenda that brings together corpus research, vocabulary acquisition studies and cognitive approaches to SLA to consider how writing might facilitate noticing gaps in the size and depth of learners' vocabulary repertoires and whether common instructional approaches to writing instruction and written correct feedback can provide sufficient, quality practice to enable implicit, automatized use across the range of word knowledge components.

16.15-17.00

Mohammad Ahmadian

Individual differences in feedback processing. Advancing research agendas

Language teachers spend a large part of their working lives marking student work by providing written corrective feedback (WCF). Unfortunately, the impact of WCF is unclear with researchers such as Truscott (1996, 2007) arguing that the time teachers spend on correction is wasted because of the lack of evidence that correction improves students' grammatical abilities. This is largely because providing WCF is deceptively complex. At a basic level, we do not know how students understand and perceive WCF, something made harder by the variety

in forms of feedback. Some teachers provide a code indicating the category of the mistake, and others provide the rule which explains why a particular language usage is wrong. We also lack information about the possible relationship between the learners' cognitive engagement and usefulness of feedback. Furthermore, due to the complex nature of WCF and the "incomparability" of WCF studies conducted so far (Ferris, 2004; Guénette, 2007), there is still a need for further studies which examining both short-term and long-term benefits of distinct types and combination of various types of WCF within different contexts (Ellis, et al., 2008).

In this paper, I would argue for the need to conduct further rigorous written corrective feedback studies whilst taking into account the role of such cognitive individual differences as working memory capacity and language aptitude. A large and growing body of research has shown robust WMC effects across various L2 learning mechanisms, production and comprehension skills and abilities (vocabulary learning, speaking, L2 reading and writing, etc.) (Juffs & Harrington, 2011; Linck, et al. 2014; Wen, et al., 2015) and there are theoretical grounds to hypothesize that learners with greater WMC are more likely to benefit from indirect WCF. This hypothesis is motivated by two interrelated premises: (a) under implicit instruction conditions, learners are predominantly left to their own devices to infer or extract regularities and patters (or the underlying rules) in the input; and, (b) learners with higher WMC are more prone to notice, identify and register linguistic rules and then to sustain those features "in an active and readily accessible state" (Conway, et al. 2005, p. 3) so as to establish the form-meaning-context connections which are required for the acquisition of (pragma-) linguistic features. This latter assumption aligns with Doughty's (2001) argument that the efficacy of form-focused instruction depends on, inter alia, the extent to which learners' attention is focused on all three dimensions of form, meaning, and function which is itself regulated by WM system (Sawyer & Ranta, 2001).

Another ID factor which has been shown to be related to a myriad of learning processes and mechanisms (e.g. noticing, perceptual speed, etc.) in both naturalistic and instructed settings is Language Aptitude (Sawyer & Ranta, 2001; Kormos, 2013; Granena, 2016). Robinson characterizes LA as "cognitive abilities information processing draws on during L2 learning and performance in various contexts and at different stages" (2005, p. 46). For some SLA researchers and cognitive psychologists, WM is only one of the subcomponents of the broader construct of Language Aptitude. For example, Miyake and Friedman (1998, p. 339) claimed that "working memory […] may be one (if not the) central component of […] language aptitude". Also, Robinson (2005) considers Phonological Working Memory Capacity (PWMC) and Phonological Working Memory Speed (PWMS) as two basic cognitive abilities which, in conjunction with eight more basic abilities, contribute to the higher order aptitude complexes. In one of the most recent models of LA, the Hi-LAB (High Level Language Aptitude Battery) (Doughty, et al., 2010; Doughty, 2013), working memory and its subcomponents (i.e. executive functioning and phonological short term memory) are amongst the key subconstructs of LA and a separate measure has been put forth for each of their distinct functions. Skehan, too, argues for the linkage between WM, as an aptitude component, and noticing, as one of the SLA processing stages and concludes that WM is a "fundamental component of […] foreign language aptitude" (2012, p. 386). Therefore, future research on the relationship between the efficacy of different WCF types and cognitive abilities needs to take into account these recent developments.

17.30-18.15

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Tapping into processes and processing while making use of feedback: Methodological considerations for future research agendas

Feedback can be defined as knowledge about one's performance given by an external source (Ammons, 1956). Although there is ample empirical evidence in favour of the beneficial effects of feedback interventions (e.g., Kluger & DeNisi, 1996), we still do not have a putative cognitive theory which would be able to account for those effects. Such a theory has to adopt a domain-specific form to be useful for practical (educational) purposes and to be empirically testable. In the specific domain of SLA-writing, feedback effects are reported as reliable, beneficial and durable (e.g. Bitchener & Storch, 2016; Ferris, 2011), although there are some studies which obtained very small effects (Bitchener & Knoch, 2009) or even negative ones (Truscott, 1996). A theory of feedback should face to explain these variations and inconsistencies (Bitchener, 2017).

Eye-tracking methodology offers an excellent tool to build an empirically-grounded cognitive model about feedback processing (e.g., Leow, Grey, Marijuan, & Moorman, 2014). The eye-mind principle allows to link the inferred attentional states to the eye-movements (Just & Carpenter, 1980) and to associate them with the properties of the processed stimuli. But eye-movements alone and by themselves are not enough to tap into the qualitative nature of processing. In order to know what participants think at that moment we need to ask them. The point is that by combining information from eye-tracking with think-aloud and/or stimulated-recall protocols we can create complex measures in which each record serves as a control for the other, and both can be combined to offer a valuable register of the cognitive operations during feedback processing.

In order to test these ideas, we designed an eye-tracking experiment, in which college ESL learners were asked to read and process sentences which contained (or not) a number of typical errors produced by L1 Spanish ESL learners. The participants received computerized feedback about the accuracy of their responses. The recorded pattern of the eye movements was transformed into a video record to serve as a prompt for stimulated recall. Participants had to say what they were thinking about when they were attending to the text in the video. The data analysis allowed to uncover which type of strategies or information learners were drawing on when they were giving correct or incorrect responses in different types of sentences. It also allowed tracking attentional patterns subsequent to the administration of negative feedback as well as the pattern of processing of the error-free sentences.