ABSTRACTS

PLENAR: Manfred Pienemann & Anja Plesser

Two key issues in the design of PT: is L2 development real and how do learners move on?

From the outset, the design of PT (Pienemann 1998) has been modular, addressing first the developmental problem and later aspects of the logical problem (e.g. Pienemann 2005). Naturally, there is an expectation that the theory addresses challenges to its basic assumptions and that it continues to construct modules which address key explananda in SLA.

A recent challenge concerns one of the core notions of PT, "staged development" and more specifically universal stages of development. Whereas staged development is considered a generally agreed observational fact in VanPatten and Williams' (2008) "Theories in Second Language Acquisition", Eskildsen wonders if "… there [is] any justification for continuing to claim that there are universal 'orders' … in L2 acquisition". The validity of this notion is questioned, for instance, with reference to Lantolf's sociocultural approach and Dynamic Systems Theory.

In this paper we will examine the theoretical basis of these competing approaches as well as the way they relate to empirical evidence. We will show that each of the approaches is based on its own specific assumptions in the philosophy of science. Therefore empirical data analyzed in one framework may first need to be translated into another framework or they may be irrelevant.

We will demonstrate that available L2 data support the notion of universal stages and that the predictive power of PT is not challenged by the competing approaches.

One of the core issues in language acquisition has so far been left untouched by PT: how do learners move on from one stage to the next? How do they know their current version of the L2 needs to be extended? Plesser (2012) proposes that the Monitor (Levelt et al 1999) is the centerpiece of this adaptation process. A developmentally constrained monitor permits the learner to notice the gap between input and output. In other words, the developmental constraints imposed on the Monitor form the core of this explanatory approach. The presence of developmental constraints on the Monitor was demonstrated empirically in an analysis of self-repairs carried out on a database of L2 learners of English and Spanish. By relating self-repairs of the learners to their current state of development it could be shown that self-repairs occur within developmental constrains.

PLENAR: Eva-Kristina Salameh

Clinical aspects on Processability Theory

This lecture focuses on the assessment of language impairment (LI) and/or dyslexia in Swedish-Arabic bilingual children at the Speech Language Clinic at Skåne University Hospital. When diagnosing language impairment in bilingual children both languages must be assessed. If a child has problems in only one language, language impairment can be ruled out. Since PT is not language-specific, it can be used as a basis to assess grammatical development in both Swedish and Arabic in a comparable way. Tests based on PT have been used in the clinic for several years for both Swedish and Arabic.

A number of Swedish-Arabic bilingual school children are also referred to the clinic due to dyslexia and/or LI. Their grammatical development is also assessed with tests based on PT. When doing so the emergence criterion is used in combination with quantitative measures (using baseline data from research in a Swedish-Arabic bilingual school).

SESSIONS (in alphabetical order)

Malin Ågren & Jonas Granfeldt

Stages of Processability and Levels of Proficiency in the Common European Framework of Reference for Languages: The case of L2 French

Within the field of SLA, second language proficiency and second language development have often been considered as two different theoretical constructs (Hulstijn, 2011, 2012). Ellis (2008) claims that this might in fact be a comparison of "apples and oranges". However, as underlined by Ellis, the question of a possible relationship between L2 proficiency (i.e. in what way and how well a learner can use the L2) and L2 development (i.e. the learner's stage of morphosyntactic development) needs further examination. The aim of the present study was therefore to empirically investigate a possible developmental relationship between L2 proficiency, as measured by the Common European Framework of Reference for languages (cf. CEFR, Council of Europe, 2001), and L2 development, as defined by Processability Theory (cf. PT, Pienemann, 1998), in a corpus of written L2 French.

78 texts written in L2 French by 38 Swedish secondary students were scored according to their level of proficiency by two experienced CEFR raters. In addition, the same texts were analyzed according to their level of morphosyntactic development following the PT framework. Results show that the CEFR ratings cover four levels and range from A1 to B2. The analysis with respect to PT also covers four levels and ranges from stage 1 to stage 4. A strong linear correlation between the CEFR levels and the PT stages of development was found in the data (Spearman Rank Order Correlation .86, p<.001). Our results show that PT stages 1 and 2 are strongly associated with CEFR levels A1 and A2. Furthermore, we observe that the existence of uneven profiles in the data, i.e. learners with stronger communicative proficiency than morphosyntactic development or vice versa, becomes more frequent at more advanced stages. Up to CEFR level B1 and PT stage 3, learners' communicative proficiency and morphosyntactic development seem to develop more or less at the same rate. When discussing the results from this small-scale study, we underline that the observed correlation cannot be taken as evidence that the underlying constructs are related. However, we claim that future research will have to investigate this association in more detail.

References

Council of Europe. 2001. *Common European Framework of Reference for Languages: language, teaching, assessment*. Cambridge: Cambridge University Press.

Ellis, R. 2008. Investigating grammatical difficulty in second language learning: Implications for second language acquisition research and language testing. *International Journal of Applied Linguistics* 18(1). 4–22.

Hulstijn, J. 2011. Language proficiency in native and nonnative speakers: An agenda for research and suggestions for second language assessment. *Language Assessment Quarterly* (8). 229–249.

Hulstijn, J. 2012. The construct of language proficiency in the study of bilingualism from a cognitive perspective. *Bilingualism: Language and Cognition*, 15(2). 422–433.

Pienemann, M. 1998. *Language processing and second language development: Processability Theory*. Amsterdam/Philadelphia: Benjamins.

Ragnar Arntzen & Arnstein Hjelde

PT, language development, vocabulary and reading skills

For three years we have followed a group of 21 multilingual children and studied their second language development, from last year in kindergarten to 2nd grade in primary school. With one exception, all the children are born in Norway, their mother tongues are Arabic, Somali, Kurdish or Albanian, and they started to learn Norwegian after the age of three. In this work we have collected information on their multilingual development and use trough language mapping, talks with teachers and parents, interviews of the children and tests of vocabulary and reading skills. Twice a year the children have been recorded while performing language-demanding activities, and this has made it possible for us to study how each child has developed second language skills over time. PT has been one of several tools used in this analyzes.

In this paper we want to present and discuss some findings related to PT levels and these children's multilingual development and reading skills. We will especially discuss to what extent our material indicates any relation between levels in PT and:

a) *General oral skills in L2*

Is PT suited to give any indication on where a L2 learner is in the process of acquiring second language skills in a broader sense, including the ability to use the language for communicative purposes?

b) *Vocabulary in L2*

Is the development of PT levels in L2 also linked to the development of L2 vocabulary, or are these two independent of each other?

c) *Reading skills in L2*

We are also interested to see if the development of L2, as measured by PT levels, influences on the ability to acquire reading skills in L2.

Our findings might indicate that there are some correlation between PT levels and other aspects of L2 development. Thus we think our study raises some interesting research questions that could be investigated more thoroughly in the future.

Kristof Baten & Gisela Håkansson

The 'complexity' of subordinate clauses in L2 German and L2 Swedish

In our paper we aim to contribute to the debate on complexity as a measure of second language development. We will explore how linguistic complexity, as defined by a subordination ratio (see Housen & Kuiken, 2009), and complexity, in terms of feature unification (see Processability Theory, Pienemann 1998) describe the language development of L2 learners of German and Swedish, and more particularly their development of subordinate clauses. We examine how subordination as such is acquired, and how the specific subordinate clause word order is acquired. The acquisition of the subordinate clause is a challenge for learners of L2 Swedish/German, because the word order of subordinate clauses is different from the word order in main clauses. The German subordinate clause differs from the main clause by having the finite verb in final position instead. The Swedish subordinate clause differs from the main clause by placement of the sentence adverbial (e.g., negation).

We collected spontaneous production data of L2 learners of German and L2 learners of Swedish over a period of 1 year (in case of the Swedish learners) and 2 years (in case of the German learners). We used the subordination ratio as well as the emergence criterion as the methods of analysis (which is in line with the constructs linguistic complexity and processability, respectively).

The learners' language shows that the linguistic complexity fluctuates extensively. From the beginning of data collection, all learners use subordinate clauses. However, their use does not increase linearly over time. Instead, the individual subordination ratios follow a pattern of increases and decreases. When focusing on feature unification, on the other hand, a clear development from no feature unification to unification between clauses can be observed. In addition, our learner data reveals a different behaviour when it comes to auxiliary and lexical verbs. The correct internal structure of the L2 German and L2 Swedish subordinate clause first emerges with single main verbs only, and afterwards also with complex verb phrases including auxiliaries and/or modals. Based on the latter, we argue that within PT verb type variation should be taken into consideration when it comes to determining the emergence of syntactic structures.

References

Housen, A. & F. Kuiken 2009. Complexity, accuracy, and fluency in second language acquisition. *Applied Linguistics* 30. 461–473.

Pienemann, M. 1998. *Language Processing and Second Language Development: Processability Theory*. Amsterdam: John Benjamins.

Pascal Buttkewitz

Dissertation Project: Multiple Language Acquisition from a Processability Perspective

Since the 1990s some scholars claim that there is a fundamental difference between SLA and Third Language Acquisition (TLA):

> [T]here is not merely a quantitative difference between SLA and TLA, but also a *qualitative* one. This difference is so *fundamental* that it needs to be covered by a new and different theoretical framework, or a substantially extended SLA model (my highlighting; Marx and Hufeisen 2004:142).

In my final paper, I reviewed a number of studies on TLA in order to evaluate this claim (I termed it *Fundamental Difference Hypothesis concerning TLA*, short: FDH/TLA). The basic finding was that from a psycholinguistic perspective the claim by Marx and Hufeisen (see above) is not justified. Although admittedly TLA is more complex than (pure) SLA, the acquisition of the procedural skills needed to process the target language are the core to any language acquisition independently of previous linguistic knowledge.

However, theoretically there could still be advantages when it comes to acquiring a given target language as the first vs. second (third, fourth, etc.) foreign language. There is plenty anecdotal evidence that language acquisition "becomes easier the more languages you already know". From a PT-perspective, these could particularly be expected in a higher developed abstract-implicit knowledge of grammatical categories and expertise in the establishing and consolidation of processing procedures, besides benefits from multibasal transfer predicted by the already established DMTH.

In order to test learners' awareness of linguistic advantages, I developed a two-sheet questionnaire on multiple language acquisition which will be administered to a small group of learners of Turkish, many of which acquire it as (at least) a L3. Results will be compared to actual (target) language performance, with a particular focus on morphosyntax that has already been theoretically described by PT/ LFG. Turkish has been chosen because it is typologically distinct from most other European languages so that the role of (direct) transfer can be kept to a minimum and because I also have some knowledge of it (acquired with the same teacher whose group of learners I would like to test).

References

Marx, N. and B. Hufeisen 2004. A Critical Overview of Research on Third Language Acquisition and Multilingualism Published in the German Language. *The International Journal of Multilingualism*, 1/2. 141–154.

Aafke Buyl & Alex Housen

Towards a more comprehensive account of developmental stages in L2 grammar acquisition: findings from receptive learner data

This paper presents an analysis of receptive learner data against the theoretical framework of Processability Theory, with to aim of gaining more insight into (a) the nature and origin of developmental stages and (b) the intricate relationship between comprehension, production, the mental grammar and the L2 grammar acquisition process.

The study presented looks at the order in which L2 learners of English learn to receptively process five morphosyntactic phenomena: (1) genitive −'s, (2) modifier-noun agreement (e.g. *two dogs*), (3) a form of *have* + past participle, (4) subject-verb agreement and (5) word order in indirect questions. The target structures are predicted by PT to emerge in the learners' interlanguage at, respectively, (1) stage 2: Category Procedure, (2) stage 3: Phrasal Procedure, (3) stage 4: VP-procedure, (4) stage 5: S-procedure and (5) stage 6: S'- Procedure. A self-paced reading task with word-by-word presentation of 120 sentences tested learners' sensitivity (as evidenced by slower reaction times) to ungrammatical constructions – thus indicating whether the participants were able to receptively process the target grammatical phenomena (Roberts, 2012). To ensure that the task involved implicit, online processing of grammar, participants were asked to focus on the content and to answer comprehension questions.

Seventy adult learners of English – with proficiency levels ranging from beginner to advanced (A1 to C1 on the CEFR) and with diverse L1 backgrounds (e.g. Spanish, Turkish, Polish, Korean, Lingala) – completed the test battery. The data were analysed both by means of implicational scaling and group analyses. A grammatical phenomenon was considered acquired by a learner when his/her reaction

times for the ungrammatical stimuli were (significantly) slower than those for the grammatically correct stimuli. The results will be discussed in terms of their consistency with PT's predictions, and the implications of the results for (a) research on developmental stages and (b) for second language acquisition research more generally will be highlighted. The discussion will also reflect on the emergence versus acquisition distinction and the operationalization of these concepts for the receptive side of grammar acquisition.

Maria Eklund Heinonen
Processability in an oral language test

Language tests today are often based on a communicative view of language, which means less focus on formal aspects such as grammar. It is therefore interesting to investigate the significance of levels of grammatical development for test-takers' overall communicative competence. The so-called Tisus-test (Test in Swedish for University Studies) is a national language test for foreign students who intend to study at Swedish universities. The underlying construct of the test is the model of Communicative Language Ability as Bachman & Palmer (1996) describe it. When scoring, the raters use several rating criteria, such as communicative functions, pronunciation, vocabulary and grammar, of which the communicative functions (i.e. the ability to narrate, describe, analyze, argue and speculate) are regarded as the most important criteria, in accordance with the communicative approach.

This paper presents an investigation of the oral part of the Tisus-test from a processability perspective. The aim is to apply Processability theory (Pienemann 1998) on the test takers' oral production, to examine whether there is a difference in terms of grammatical development between test-takers who passed and those who failed the test. The data consist of 66 test recordings (33 who passed and 33 who failed). The results show a clear difference between the two groups, which indicates a correlation between the test takers' grammatical development and their general Communicative Language Ability. However, there are a few exceptions: test takers with a fairly low grammatical level who passed the test and those who despite a high grammatical level failed. Two of these exceptions will be discussed regarding what other factors may have affected their test results.

References
Bachman, L.F. & A.S. Palmer 1996. *Language Testing in Practice*. Oxford: Oxford University Press.
Pienemann, M. 1998. *Language Processing and Second Language Development: Processability Theory*. Philadelphia: Benjamins.

Katharina Hagenfeldt
Can Linguistic Profiling Complement the CEFR? – A Study on Rapid Profile, Auto Profiling and the CEFR

This study investigates if and to what extent Linguistic Profiling (LP) (Crystal, Fletcher & Garman (1976) can complement shortcomings of proficiency rating scales. With the Common European Framework of Reference (CEFR), a very renowned and influential framework is used. In order to shed light on possible interfaces between the theory underlying RP (Pienemann; Johnston & Brindley 1987, Pienemann 1992, Keßler 2006) i.e. Processability Theory (PT) (Pienemann 1998, 2005), nine samples of learner English were rated using the CEFR. The same samples were analyzed using Rapid profile and Auto profiling. Rank order correlations between CEFR levels and PT stages were calculated.

The analysis revealed significant correlations between PT levels and grammatical accuracy in the CEFR. This finding supports the validity of the CEFR for the area of grammatical accuracy and fills the gap in the assessment quality criteria of the CEFR (Harsch 2005).

Due to a lack of predictive power the CEFR was shown to be a rather intuitive framework (Harsch 2005). Following (Pallotti 2007), I use the emergence criterion as the point of departure for my case in favor of integrating LP into the CEFR.

The very recent addition to the formula is the development of Auto Profiling (Lin 2012, Pienemann; Lin & Chung 2009). This system is able to conduct interlanguage profiles fully automatically. Based on a pilot study by Lenzing & Plesser (2010), Rapid Profile and Auto Profiling are compared in terms of reliability and feasibility. The results show that RP and AP rank about the

same in terms of reliability and feasibility.

References

Crystal, D., Fletcher, P. & M. Garman 1976. *Grammatical analysis of language disability*. London: Edward Arnold.

Harsch, C. 2005. *Der gemeinsame Europäische Referenzrahmen für Sprachen: Leistungen und Grenzen. Bedeutung des Referenzrahmen im Kontext der Beurteilung von Sprachvermögen am Beispieldes semikreativen Schreibens im DESI Projekt*. Augsburg: Unpublished PhD thesis.

Keßler, J.-U. 2006. *Englischerwerb im Anfangsunterricht diagnostizieren: Linguistische Profilanalysen am Übergang von der Primarstufe in die Sekundarstufe*. I. Tübingen: Narr.

Lenzing A. & A. Plesser 2010. *Challenging the scope-precision dilemma in language testing: The common European framework and linguistic profiling*. Paper presented at the 10th International Symposium of Processability Approaches to Language Acquisition (PALA). University of Western Sydney, Australia, 19. 21.09.10.

Lin, B.J. 2012. *Is Automatic Linguistic Profiling Feasible in a ESL Context*? University of Newcastle: Unpublished PhD thesis.

Pallotti, G. 2007. An Operational Definition of the Emergence Criterion. *Applied Linguistics* 28(3). 361–382.

Pienemann, M., Johnston, M. & G. Brindley 1988. Constructing an Acquisition-based Procedure for Second Language Assessment. *Studies in Second Language Acquisition* 10. 217–243.

Pienemann, M. 1992. *Assessing Second Language Acquisition through Rapid Profile*. Ms. University of Sydney.

Pienemann, M. 1998. *Language processing and second language development. Processability Theory*. Benjamins: Amsterdam.

Pienemann, M. 2005. (ed.). *Cross-Linguistic Aspects of Processability Theory*. Amsterdam/New York: John Benjamins.

Pienemann, M., Lin, B-J. & L.-Y. Chung 2009. The Feasibility of Auto-Profiling Online. In Damiani, E. et. al. (eds.). *New Dimensions in Intelligent Interactive Multimedia Systems*. Berlin, Heidelberg: Springer Verlag. 189–198.

Yuki Itani-Adams & Bruno Di Biase

Processability and the acquisition of Wh-questions in bilingual first language acquisition: the case of Japanese-English

The acquisition of questions is an area requiring further discussion within processability theory. Questions in L2 were included in the original developmental schedules for English but they were not an explicit part of the original universal schedule proposed by Pienemann (1998), hence it is not clear how they might be treated in other languages. The subsequent extension proposed by Pienemann, Di Biase and Kawaguchi (2005) began to incorporate grammaticised discourse functions as proposed in LFG (Bresnan 2001; Dalrymple 2001; Falk 2001). However questions again were not an explicit part of the discussion or the formulation of the Topic Hypothesis as proposed then. So it may be useful to attempt start looking at questions in two typologically distant languages, such as English and Japanese, as they develop in a child growing up simultaneously in English and Japanese in the context of one-parent-one-language (Döpke, 1992). We may start by focusing on content, aka Wh-, questions, where Japanese and English behave quite differently from each other: while English uses a (simple-)fronting mechanism, Japanese keeps the questioned element in-situ (Mycock 2007, p.193). It is intriguing to trace the development of two such diverse systems in child who necessarily uses one and the same brain to learn and operate both systems consistently and successfully to communicate in either or both languages (Meisel 2005; Li Wei 2007). It is also interesting to capture whether the two systems get mixed or develop in parallel but separately in the bilingual child. The corpus of questions for this study contains approximately 390 tokens of English wh-questions and 814 tokens of Japanese content questions, derived from an extensive bilingual corpus in Itani-Adams (2007), consisting of naturally spoken production of 8495 turns in English and 8284 turns in Japanese collected from age 1;11 to 4;10. The development of these questions will then be mapped within a PT general developmental

canvas, so not abstracting the study from the more general development of the child in each of the two languages.

Satomi Kawaguchi & Yumiko Yamaguchi
Developing relative clause constructions in English as a second language

This presentation explores the developmental path towards relative clause (RC) constructions traversed by learners of English L2, within Processability Theory (PT, Pienemann, 1998). In this framework subordinate clauses are placed at the stage of S'- (interclausal) procedure since matrix and embedded clauses are processed separately. RC constructions involve information processing across clauses as one of the arguments in the RC needs to link to a referent within the main clause. In LFG (Bresnan & Mchombo 1987; Dalrymple 2001), a fronted relative pronoun in a RC bears syntacticised TOP function. Further, RCs involve long-distance dependencies where the TOPIC must be linked to a grammatical function (a gap) within it. Different types of RC constructions create different complexity of processing.

To investigate this issue we examine two-year longitudinal data of a Japanese L1 school-aged child learning English L2 in a naturalistic environment. The developmental path towards the RC constructions was traced and compared with findings of studies testing whether the acquisitional order follows Keenan & Comrie (1977) Noun Phrase Accessibility Hierarchy (NPAH): SUBJ > OBJ > ID OBJ > OBL > Possessor (GEN) > OCOMP. Our results indicate that:

(i)   Infinitive and participial complementizers are precursors to RC constructions (e.g., 'I have dog eating the doughnut').
(ii) RC constructions appear first with presentational or copula sentences where the complement is relativised e.g., 'there was a daddy who lives in the house…'(single proposition). Later it extends to sentences with lexical verbs, e.g., 'I saw big bunch of the bees who was chasing the dog' (two propositions).
(iii) RCs linking to OBJ in the matrix clause is predominant in the data.
(iv) The order of acquisition of RCs is SUBJ followed by OBLloc OBJ and ADJ. This partly supports NPAH.

These results align with the Lexical Mapping Hypothesis (Pienemann, et. al. 2005) and the Discourse Function Hypothesis (Bettoni & Di Biase, in preparation) and the hierarchy of grammatical functions, the prominence patterns of TOP and FOC, the distance between REL PRO and the gap also plays a role all of which indicate theoretical implications for PT.

References
Bettoni, C. & B. Di Biase (Eds.), (in preparation). *Processability Theory: Exploring the Boundaries.*
Bresnan, J. & S. Mchombo 1987. Topic, pronoun, and agreement in Chichea. *Language,* 63(4). 741–782.
Dalrymple, M. 2001. *Syntax and semantics: Lexical Functional Grammar*. San Diego; London: Academic Press.
Keenan, E. & B. Comrie 1977. Noun phrase accessibility and universal grammar. *Linguistic Inquiry,* 8(1). 63–99.
Pienemann, M. 1998. *Language processing and second language development: Processability Theory*. Amsterdam: John Benjamins.
Pienemann, M., Di Biase, B., Kawaguchi, S. & G. Håkansson 2005. Processing constraints on L1 transfer. In J. F. Kroll & A. M. B. de Groot (Eds.), *Handbook of Bilingualism: Psycholinguistic Approaches*. 128–153. New York: Oxford University Press.

Jörg-U. Keßler & Götz Schwab
Processability Theory meets Conversation Analysis: A multi-perspective analysis of instructed language development of low-achievers in CLIL settings

In this paper we will combine two distinct perspectives on foreign language learning. On the one hand we make use of the socio-interactional perspective of Conversation Analysis (CA) (Schwab 2011), and

on the other hand we apply the psycholinguistic approach of the Processability Theory (PT) (Pienemann 1998).

While in PT researchers focus on mental processes (Pienemann & Keßler 2011), CA scholars consider interaction between the learner and his/her environment as pivotal (Lantolf 2000). From what could be considered as insurmountable contradiction we believe that the combination of both approaches bear the chance for a more comprehensive insight into the issue.

Obviously, each approach is based on different ways of data collection. PT requires data that is usually obtained from interviews held outside the language classroom, whilst in CA video- or audio-recordings are taken in the classroom. However, both PT as well as CA analyse naturalistic L2 data.

Our sample data stem from a CLIL setting of a German *Hauptschule* with low-achieving learners aged 10–12. The following questions are discussed:

- (To what extend can those two approaches be combined in order to support a deeper understanding of processes underlying SLA without neglecting their original stance?
- Is a combined approach (PT and CA) a promising way of gaining more insight into instructed SLA?
- What do our findings imply for teaching languages at lower levels?

Selected Literature:

Keßler, J.-U. (ed.) 2008. *Processability Approaches to Second Language Development and Second Language Learning*. Newcastle upon Tyne.

Keßler, J.-U. & A. Plesser 2011. *Teaching Grammar*. Paderborn.

Lantolf, J. P. (ed.) 2000. *Sociocultural theory and second language learning*. Oxford.

Pienemann, M. & J.-U. Keßler (eds.) 2011. *Studying Processability Theory*. Amsterdam.

Schwab, G. 2011. From dialogue to multilogue: a different view on participation in the English foreign language classroom. *Classroom Discourse* 2(1). 3–19.

Anke Lenzing

The interface between comprehension and production in SLA

This paper focuses on the interface between comprehension and production in second language acquisition. Whereas traditionally, the mechanisms of language comprehension and production have been studied separately, based on the assumption that these processes are operative in two different modules with two different types of information (e.g. Clark & Malt 1984), this view has recently been challenged by proponents of a more integrated view of syntactic processing in both comprehension and production (Kempen 2000; Kempen *et al.* 2011, Segaert *et al.* 2012), who assume the existence of a "shared grammatical workspace" underlying both language comprehension and production.

In this paper, I view both L2 production and comprehension within the framework of *Processability Theory* (Pienemann 1998; Pienemann *et al.* 2005). In order to provide a potential explanation for the interface between these two processes, I adopt the notion of a "shared grammatical workspace" in comprehension and production to L2 processing. In particular, I propose the following hypotheses:

- There is one single syntactic processor underlying both comprehension and production processes in L2 acquisition. This processor develops stepwise and adheres to the predictions of *Processability Theory*.
- L2 learners draw on the same mental grammatical system in both comprehension and production. This system is initially highly constrained at the different levels of linguistic representation postulated in *Lexical-Functional Grammar* (Bresnan 2001) (cf. Lenzing forthc.).
- The restrictions of the underdeveloped L2 syntactic processor lead to a) the generation of flat c-structures and b) direct mapping processes between the levels of linguistic representation in both comprehension and production.

In order to test these hypotheses, I conduct a study focusing on the acquisition of the passive voice in both comprehension and production by German L2 learners of English at different stages of L2 acquisition. In this paper, I outline methodological considerations concerning the elicitation of the

passive in comprehension and production and present preliminary results of my study.

Bibliography

Bresnan, J. 2001. *Lexical-Functional Syntax*. Malden, MA: Blackwell.

Clark, H.H. & Malt, B.C. 1984. Psychological constraints on language: A commentary on Bresnan and Kaplan and on Givon. In Kintsch, W., Miller, J.R. & P.G. Polson (eds.) *Methods and Tactics in Cognitive Science*. Hilldsdale (NJ) Erlbaum. 191–214.

Kempen, G. 2000. Could grammatical encoding and grammatical decoding be subserved by the same processing module? In *Behavioral and Brain Sciences* 23. 38–39.

Kempen, G., Olsthoorn, N. & S. Sprenger 2011. Grammatical workspace sharing during language production and language comprehension: Evidence from grammatical multitasking. *Language and Cognitive Processes*. 1–36.

Lenzing, A. (forthc.) *The development of the grammatical system in second language acquisition*. PhD Thesis, University of Paderborn.

Pienemann, M. 1998. *Language Processing and Second Language Development: Processability Theory*. Amsterdam: Benjamins.

Pienemann, M., Di Biase B. & S. Kawaguchi 2005. Extending Processability Theory. In Pienemann, M. (ed.) 2005. *Cross-linguistic Aspects of Processability Theory*. Amsterdam: Benjamins 199–251.

Segaert, K., Menenti, L., Weber, K., Petersson, K. & P. Hagoort 2012. Shared Syntax in Language Production and Language Comprehension – An fMRI Study. In *Cerebral Cortex* 22. 1662–1670.

Bi-jar Lin
AutoProfile

In my paper I will outline the computational architecture of Auto Profiling (AP), a fully automatic approach to linguistic profiling as well as an update of the new user interface which is designed to be user-friendly – imitating the normal time constraints imposed on language production. Specifically, I will have different interfaces based on the same algorithms to interact with different users. For example, in the Profiling interface, hundreds of users, normally learners, can do the tasks provided in AP and then they will get their language profiling in real time. As this is done through the algorithms of AP, other related data are collected in AP such as the time using the profiling system. Another example is Teacher interface. It is a place where teachers can create their own tasks with the help of AP.

In addition, I will demonstrate how Auto Profiling can be used for a wide array of analyses by ESL researchers who are free to design their own analyses. In fact, with Researcher interface, researchers and/or teachers may use AP as a platform to illicit higher developmental levels of English.

Finally, I will also summarize an empirical study of the reliability of Auto Profiling. The study is based on a set of 9 ESL samples which were analysed manually and by our software. I will demonstrate that Auto Profiling reaches an accuracy of 96% through hundreds of subjects logging onto the system within a couple of hours.

Jana Roos
A Processability Approach to Task-based Language Teaching

The practical question of what to teach in the foreign language classroom, and when to teach it becomes much easier to answer if we can combine the advantages of a task-based and form-focused approach with what we know about the teachability and the learnability of grammatical features. Processability Theory provides a theoretical framework for a psycholinguistically motivated selection of communicative tasks with a developmentally moderated focus on form. Approaches using such tasks to promote the acquisition of target language structures in the EFL-classroom have only recently begun to be discussed and explored. When working with these tasks, learners have the opportunity to interact and negotiate for meaning, while being provided with natural contexts for the spontaneous and productive use of targeted features. Therefore my hypothesis is that incorporating tasks with a developmentally moderated focus on form into English lessons can have a positive effect on the acquisition process.

In this paper, I shall be presenting a classroom study with a pretest-post-test design involving 12 learners of English as a second language at secondary school level in Germany. For a limited period of time, a specific part of the lessons in the classroom was devoted to communicative tasks focusing on a morphological feature that is acquired at a relatively late stage in the acquisition process, namely '3rd person singular-s', which the learners had been shown to be developmentally ready for in the pretest. In a post test administered after the instruction period, as well as in a delayed post test the learners performed oral communication tasks that provided contexts for the productive use of this grammatical feature. Initial results from the study indicate clearly that this approach has a positive effect on the acquisition of the targeted structure and can thus support second language development in an institutional context.

Lilia Ruiz Debbe

Is the grammatical consciousness raising a tool for language instruction? A case of the tense-aspect development.

The present study investigates the role of the grammatical consciousness raising (CR) in tutored learners. One of the main points of discussion is: Is the learner's acquisition a result of pedagogical instruction based on didactic sequences under a specific curriculum? And, how is it related with symbolic procedures (such as textual organizers) or memory procedures (such as conjugational ending). The research in this area leads to the formulation of consciousness raising in the acquisition of grammatical structure (Pienemann, 1988m 1989, Rutherford and Sharwood Smith, 1988; Sharwood Smith, 1993, 1999), which predicts that the pedagogical strategies will draw the learner's attention to the formal properties of the target language.

The questions for this research are: (i) what is the role of the grammatical CR in tutored contexts? (ii) how do learners of Spanish as L2 in tutored contexts have a full control of the grammar rule? (iii) Can developmental sequences be affected by instructional learning? (iv) what factors guide the learners acquisition of a new structure in the L2 when it doesn't exist in the first grammar?.

In this presentation, I will report the results obtained from three different groups who participated in a cross-sectional study of oral and written film retell tasks narratives from learners of Spanish as a Second Language. A total of eighty-six oral productions and one hundred-seventeen written productions were analyzed for this study. The methodology was different in each group.

The first findings of this research show on one hand, that the formal instruction based on the grammatical CR give a high accuracy in the development of tense-aspect without modify the natural order of acquisition and, on the other hand, this results leads to insights in the design of curriculum for classroom procedures.

Susan Sayehli
Transfer and L3 Acquisition

This paper examines hypotheses about the source language of transfer in L3 acquisition of morpho-syntax: (1) Developmentally Moderated Transfer Hypothesis (DMTH) (*e.g.* Pienemann et al. 2005), where transfer is constraint by the learner's developmental stage; (2) L1 transfer theories (TL1) (*e.g.* Leung, 2005), where L1 syntax constitutes the initial L3 state; and (3) L2 transfer theories (TL2) (*e.g.* Bardel & Falk 2007), where L2 blocks L1 transfer.

The hypotheses were tested on L3 German learners with Swedish L1 and English L2 (N=61). An elicited imitation tested the participants' ability to imitate sentences characteristic for German syntactic developmental stages; SVO, *XSV and XVS (Meisel et al. 1981, Pienemann 1998). DMTH predicts that the developmental order is reflected in the learners' ability to imitate sentences; TL1 predicts, beginners to imitate XVS better than *XSV structures, because only XVS exists in Swedish. TL2 predicts beginners to be equally good at imitating *XSV and SVO structures, because both are frequent in the learners' L2, English, and will therefore transfer to their L3. Results showed that beginners imitated SVO better than *XSV sentences and *XSV better than XVS sentences, which supported the DMTH hypothesis.

A communicative task elicited German adjectives in attributive and predicative position and subject-verb agreement. German adjectives only agree with the noun when in attributive position and

verbs agree with the subject. Swedish has noun-adjective agreement in both attributive and predicative position but no subject-verb agreement, whereas English displays subject-verb agreement but no agreement between noun and adjectives. DMTH predicts German learners to first produce attributive adjectives in agreement, requiring phrasal information exchange, and at a later stage subject-verb and noun-predicative adjective agreement, both requiring inter-phrasal information exchange. TL1 predicts predicative and attributive agreement to appear simultaneously and initially no occurrences of subject-verb agreement whereas TL2 predicts early subject-verb agreement and initially no adjective-noun agreement. The results supported the DMTH hypothesis. The learners that produced noun-adjective agreement in predicative position produced agreeing adjectives in attributive position before. Interestingly, L1 transfer seemed to have boosted the production of agreeing predicative adjectives before subject-verb agreement. Taken together, the data from both tests strengthen DMTH but not TL1 or TL2 approaches.

Anna-Linda Steinker
A comparative analysis of English L1 and L2 development- a processability approach

This paper presents the application of *Processability Theory* on English L1 and L2 acquisition. My hypothesis is that if the underlying processes in the two types of acquisition are the same, the stages of development are also the same. Previous contrastive studies of German L1 and L2 development have shown that the two developmental paths differ while the underlying processes are the same (Pienemann 1998; 2005).

The aim of my study is twofold. First, I analyse and compare the stages of development in English L1 and L2 acquisition, using implicational scaling. Second, I conduct a distributional analysis in order to identify possible differences in the use of variational features to developmental problems in the two acquisition contexts. I use data from a corpus of a monolingual child acquiring English as his L1 and corpus data of four Indonesian learners of ESL.

While the results attest no differences in the stages of development, and the sequence of processing procedures and the related development of morphosyntactic structures could be confirmed for both English L1 and L2 acquisition, I observed distinct differences in the use of variational features in the learner languages. The morphologically correct insertion of auxiliaries in English L1 contrasts most significantly with the corresponding results I found for ESL which display non-target language like usage of auxiliaries. My results thus demonstrate an interleaving in the acquisition of morphology and syntax in English and suggest why the development and therefore ultimate attainment in English L1 is superior to that of ESL.

References
Pienemann, M. 2005. An introduction to Processability Theory. In M. Pienemann (ed.), *Cross-linguistic aspects of processability theory.* 1–60. Amsterdam: John Benjamins.
Pienemann, M. 1998. *Language processing and second language development. Processability Theory.* Amsterdam: John Benjamins.

XiaoJing Wang
Grammatical Development in L2 Mandarin Chinese: a Processability Account

Processability Theory (PT) suggests that learners acquire their second language follows a universal trajectory. However, can this trajectory be applied in typologically different languages worldwide? Can teaching approaches and instruction contents alter or influence such trajectory? If yes, to what extent? This current study aims to answer these questions. The purpose of this study is to identify the possibility of applying the PT-driven universal hierarchy to L2 Mandarin Chinese learners and further extend the current morphosyntactic hierarchy in Chinese. More importantly, the effectiveness of instruction in SLA are investigated to test the independency of the universal hierarchy.

This research consists of eight undergraduate L2 Mandarin learners in the UK. Their Chinese speeches elicited through natural conversation and semi-structured interviews are recorded over one academic year. Different from similar studies done in Chinese (Zhang, 2001; Gao, 2005), my research participants with diverse language backgrounds are taught by different language teachers using

different teaching syllabus. Participants in Zhang's (2001) and Gao's (2005) studies have been taught in accordance with the processability hierarchy; therefore, it can hardly conclude that whether the L2 learners follow the universal hierarchy proposed by PT or the teachers' instruction in class in the process of language development.

Results have shown that whatever the L2 learners' L1 are and whatever instruction they have received in acquiring their L2s, the L2 Chinese learners still follow the lock of steps PT has indicated. However, some exceptional cases different from Zhang's (2001) study has been identified in my research which requires further investigation and discussion. In addition, the influential factors of L2 learners' language development have been revealed in this research from the questionnaires and interviews.

Karoline Wirbatz
How 'fundamental' is the Fundamental Difference between L1 and L2 acquisition?

This paper aims to present key findings of my PhD thesis, which investigated the differences between first language (L1) and second language acquisition (L2) within the theoretical framework of Processability Theory (PT) (Pienemann 1998a&b, Pienemann, Di Biase & Kawaguchi 2005). Issues and proposals about the 'fundamental difference' were raised more than twenty years ago (e.g. Clahsen & Muysken 1986; Bley-Vroman 1988 & 1990), but the topic still leads to debates amongst linguists today (see, for instance, Slabakova 2009; Meisel 2011). Clahsen and Muysken (1986) attributed the fundamental difference to German children's initial hypothesis of syntax (variable word order) as against German L2 learners' initial hypothesis (SVO). In order to tease out the difference between German L1 and L2 acquisition the study compared the syntactic and morphological development of German L1 children between the age of 2;1 to 2;4 years (the time where syntactic development takes off once children reach the 2 word stage) and adult German L2 learners. The investigation considered three separate data pools consisting of eight German L1 and three German L2 data sets in total.

The study provides new insights into L1 and L2 learning, as it shows that the developmental paths of those two learner types are more similar than previously assumed. Moreover, the overall results from the study are consistent with the position that, at least in terms of the development of word order, the difference between L1 and L2 acquisition cannot be characterised as 'fundamental'.

References
Bley-Vroman, R. W. 1990. The logical problem of foreign language learning. *Linguistic Analysis,* 20(1–2). 3–49.
Clahsen, H. & P. Muysken 1986. The availability of Universal Grammar to adult and child learners – a study of the acquisition of German word order. *Second Language Research* 2. 93–119.
Meisel, J. M. 2011. *First and Second Language Acquisition.* Cambridge: University Press.
Pienemann, M. 1998a. *Language Processing and Second Language Development: Processability Theory.* Amsterdam & Philadelphia: John Benjamins.
Pienemann, M. 1998b. Developmental dynamics in L1 and L2 acquisition: Processability Theory and generative entrenchment. *Bilingualism: Language and Cognition* 1. 1–20.
Pienemann, M., Di Biase, B., & S. Kawaguchi 2005. Extending Processability Theory. In M. Pienemann (ed.). *Cross-linguistic aspects of Processability Theory.* Amsterdam & Philadelphia: John Benjamins. 199–252.
Slabakova, R. (ed.) 2009. The Fundamental Difference Hypothesis twenty years later. *Special issue of Studies in Second Language Acquisition, 31* (2).

Yanyin Zhang & Ima Widyastuti
A year later – Acquisition of L2 English morphology by a child learner

The present study is a follow-up of our 2010 study that investigated the acquisition status of morphology in the L2 English of an Indonesian family that had been living in Australia for 14 months. In this paper, we will focus on the 5-year-old daughter whose L2 English morphology was assessed, in 2010, to be at the early stage according to the processing hierarchy of Processability Theory

(Pienemann 1998). At that time, her English speech data contained mostly stand-alone *V-ing* (20), very limited number of lexical plural *–s* (e.g., *animals* 4/25), phrasal plural *–s* (e.g., *six bananas* 2/23), and 3rd person *–s* (e.g., *He works* 1/40). This was a surprising result given the length of her stay in Australia, her age, and the second language learning environment (ESL).

In this paper, we will present a fresh set of data collected from the girl after a further 8 months of immersion in Australia. We are interested in the extent of her L2 morphology acquisition, and the role of immersion in the language development of a child L2 learner. Our preliminary analysis shows that there is indeed progress: there are more lexical plural *–s* in her L2 English speech, and the phrasal plural *–s* has (just) emerged. However, the progress is incomprehensive: the 3rd person *–s* has not been acquired yet. We will discuss the result in the context of immersion and child language acquisition, with particular attention to the issue of the acquisition rate by young learners in the target language setting.

POSTERS

Berit Aronsson

A cross-linguistic study of L2 learners' realization of boundary tones: transfer of pragmatic strategies from Swedish L1 into Spanish L2

The paper aims to analyse the pragmatic functions of the final intonational contour produced at tone unit boundaries in L2 Spanish spoken by Swedish learners, as compared to L1 Swedish and L1 Spanish. The data consist of recordings of phone-calls where the subjects – 10 learners of Spanish and 13 native controls – make a booking at a restaurant. The Swedish subjects produced two versions of the task, one L1 and one L2 version. Using authentic phone calls implies that the informants have no opportunity to use visual cues such as head nods, eye-gaze etc. to facilitate the conversation.

Boundary rises are believed to have partly different interactional meanings in Swedish and Spanish, therefore special attention is given to rising tones. The study investigates phonetic transfer and a possible transfer of Swedish politeness patterns. Also the turnregulating functions and the pragmatic significance of these functions are analysed.

The results show that the L1 Spanish speakers systematically use rise level to distinguish between turn-keeping and information seeking values while no such pattern is shown in the L1 Swedish and L2 data. Results also indicate that the rising contours produced in Swedish L1 are used mainly for interpersonal purposes, and that this type is transferred into the Spanish L2 version. Preliminary perception tests with native speakers of Spanish show that the transferred L1 rise patterns may affect native speakers' acceptability judgments.

Katrijn Gijswijt

Similarities and differences in first and second language acquisition. A study within the framework of Processability Theory

This study focuses on the differences and similarities between first and second language acquisition, and more specifically deals with the acquisition of Swedish. The theory applied here is the Processability Theory, which provides proof for certain developmental processes in second language learning. Two structures are looked into in greater detail in this study. First, the acquisition of word order, and secondly, acquisition of adjective agreement. The aim of this study is to see whether the implicational hierarchy for the acquisition of Swedish proposed by PT accounts for both first language learners and second language learners with a mother tongue which has a similar syntax.

Data were collected from 5 children with Swedish as their mother tongue and 6 students with Dutch as their mother tongue. The children were 4 and 5 years old and solely used Swedish as their home language. They went to a Scandinavian school where the language of instruction was predominantly Swedish. The students were all in their first year of Swedish at university.

The results of this study show some similarities and differences between first and second language acquisition. Although the study isn't flawless when it comes to the data on first language acquisition, since the children had already reached a certain stage in their language development, the data from the second language learners provide clear proof for Processability Theory and the developmentally moderated transfer hypothesis. Dutch has a very similar sentence structure to Swedish, so one would expect there to be little problems when it comes to acquiring Swedish syntax. However, the results show that Dutch learners of Swedish start out with canonical word order, after which they start using an ungrammatical (both in L1 and L2) intermediate structure (adv NP subj V X), before using inversion. These results support the implicational hierarchy proposed by PT, and contradicts full transfer from L1 to L2.

In sum, this study shows that the PT-hierarchy for Swedish also applies for second language learners with a mother tongue with a similar syntax.

Iwona Kowal
The dynamics of crosslinguistic influence in Third Language Acquisition. A developmental perspective

In the last fifteen years the Dynamic Systems/Complexity Theory begun to play a more and more important role in the field of Second Language Acquisition or Second Language Development. According to this approach the development of a second (or additional) language is a complex system that is influenced by a variety of factors as i.e. sensitive dependence on initial conditions, nonlinearity in development, constant change, iteration etc. Crosslinguistic influence in Third Language Acquisition can also be analysed as a part of this systems. First, because the acquisition of a third language involves more complex relationships than the acquisition of the first or the second language, second, because the factors that interact in third language acquisition (level of proficiency, status of L2, recency, psychotypology) are not only complex but also changeable over time and the change of one of them can cause an unpredictable change in the development of the target language.

In present paper the cross-linguistic influence will be described as a dynamic process during the development of Third Language. The data consists of 90 texts written by fifteen polish learners of L3-Swedish, with German as their Second Language. In the analysis the tool ScriptLog was used. The aim of the tree years study has been to follow the development of the Third Language with the focus on crosslinguistic influence. According to previous studies, the likelihood of transfer is high when the level of proficiency is low, when another language is actively used or when the L2 has a higher "supplier language" status. The research hypothesis is that the transfer from L1 will occur more often in the first experimental sessions when students proficiency in Swedish is lower and that the L2-German will serve the function as the "supplier language" and will be activated during the whole process of Third Language Acquisition.

The results show that crosslinguistic influence changes in a dynamic, nonlinear way and that the change of one factor can lead to significant changes in the scope of crosslinguistic influence.

Marjo Savijärvi
Can linguistic processing be detected in interactional data?

In this presentation, I will first present results of a conversation analytic doctoral thesis examining how Finnish-speaking children learn Swedish in an immersion kindergarten where the method of Canadian immersion is used. Then I will raise the question of whether and how linguistic processing can be detected in interactional data. The discussion is based on conversational examples.

The database consists of 40 hours of videotaped data collected in naturally occurring situations in a group of 15 four-year-old children during the first two years of their immersion. Due to the immersion method, all children share the same L1, in this case Finnish, and the educators understand Finnish. However, they speak Swedish to the children in all situations. Swedish is thus learned in interaction without formal teaching.

Within the framework of conversation analysis, the study explores how second language learning is situated in interaction and evidenced in the participants´ verbal and non-verbal behavior, and how learning is achieved collaboratively. The emerging second language competence is explored by investigating how the children show understanding of the educators´ non-verbal and verbal actions. The children´s use of Swedish is analyzed by investigating how they recycle lexical items and later even syntactic structures from the educators´ Swedish turns (cf. Anward 2005; Linell 2005). Understanding of the educators´ verbal turns, including their syntactic structure, is manifested in the ways the children tie their turns to the educators´ turns. Recycling, on the other hand, proves to be the way by which the children start to speak the second language.

In this presentation, the aim is to further develop the analysis of the children´s linguistic processing, and to discuss the possibilities and constraints of analyzing interactional data with the help of PT.

References
Anward, J. 2005: Lexeme recycled. How categories emerge from interaction. *Logos and language* 2.
Linell, P. 2005: En dialogisk grammatik? In Anward, J. & B. Nordberg (eds.) *Samtal och grammatik. Studier i svenskt samtalsspråk*. 231–328. Lund: Studentlitteratur.