## Second Language Acquisition

Since this is a new section in the YWES chapter on Language, I will begin with some introductory words. Applied Linguistics has been traditionally understood as embracing both Second Language Acquisition (SLA) research and Second Language Teaching (SLT) research. SLA is a discipline that dates back to the seventies, when research showed that learners construct their own mental grammatical representations (interlanguage grammars) worth investigating in their own right, irrespective of pedagogical concerns. This review therefore focuses on L2 (inter)language as a system and it covers child and adult L2 acquisition, with a focus on L2 English empirical studies. The general term L2 acquisition will be used to refer both to the acquisition of English as a second language (L2) in naturalistic settings and as a foreign language (EFL) in instructed settings. I will exclude other acquisition contexts, e.g., heritage speakers of English, third language (L3) learners or English, simultaneous child bilingualism, English first language (L1) acquisition and L1 English attrition/loss. In short, the range of studies reviewed here respond to this question: How is knowledge of the L2 interlanguage acquired (L2 acquisition) and put to use (L2 processing)?

I will first pay attention to L2 English acquisition (and processing) of the different interlanguage grammar competence (broadly understood as phonology, lexicon, semantics, morphosyntax and the interface between these modules) and interactional competence. Next, some studies on individual learner differences will be reviewed, followed by a series of studies coming from the field of learner corpus research, a relatively new discipline. The review finishes with L2 English studies conducted within alternative approaches to SLA.

To start off with phonology, in 'The Development of Coda Perception in Second Language Phonology: A Variationist Perspective' (SLR 27[2011]433-65), Walcir Cardoso explores L2 phonological perception in L1 Brazilian Portuguese (BP)-L2 English learners, divided according to their proficiency: those without any formal exposure to L2 English, and those with L2 English instruction in a formal setting (beginner, intermediate and advanced). BP speakers typically perceive English consonantal codas as being followed by an illusory epenthetic [i] vowel as codas are illicit in BP. In a phone identification task, the learners listened to English pseudo-words and then decided on whether each word ended in a consonant or a vowel. The pseudo-words met several criteria: (i) they were either monosyllabic [fip] or disyllabic [mə.'lep]; (ii) the place of articulation of the word-final coda could be labial [p b], coronal [t d] or dorsal [k b]; (iii) the quantity of the preceding vowel was tense/long [i u a] as in [zit] 'zeet' or lax/short [I  $\cup \varepsilon$ ] as in [vit] 'vit'; (iv) the stress always fell on the coda-bearing, right-most syllable [mə.'lep]. As previously reported for coda production, coda perception and proficiency are associated (codas are more likely to be perceived in advanced levels), but, unlike production, perception develops faster and then reaches a plateau around intermediate-advanced levels of proficiency, as in child L1 English acquisition. Additionally, codas are perceived better with coronals [t d] and labials [p b] and also when preceded by a lax/short vowel than by a tense/long vowel. No word-size (mono-/bi-syllabic) effect was found. Cardoso concludes that 'speech perception precedes production in the development of second language codas' (p. 453).

L2 perception has been traditionally associated with vocabulary size: L2 phonological perception occurs in the early stages when the L2 vocabulary is still

small. This is akin to L1 acquisition since children's L1 perception is established before the lexical spurt. Rikke L. Bundgaard-Nielsen, Catherine T. Best and Michael D. Tyler, however, show that this may not be the case in L2 English: 'Vocabulary Size is Associated with Second-language Vowel Perception Performance in Adult Learners' (SSLA 33[2011] 433-61]. AusE vowel perception was explored in L1 Japanese-L2 English. Learners rated contrasts and completed an L2 vocabulary size test after less than twelve weeks of exposure to L2 English in Australia in a study-abroad programme. Results showed a positive association between vocabulary size and vowel discrimination: learners with higher vocabularies showed more accurate discriminations than those with smaller vocabularies. In a second experiment, vowels perception was compared after four to eight weeks of exposure vs. six to eight months. A positive association was found again for L2 vocabulary size and vowel perception, independent of length of residence (LoR). It is concluded that vocabulary size is a better predictor for L2 phonological perception than LoR. On the other hand, LoR has been shown to be positively correlated with L2 vowel production in the paper 'The Acquisition of Phonetic Details: Evidence from the Production of English Reduced Vowels by Korean Learners' (SLR 27[2011] 535-57) by Jeong-Im Han, Jong-Bai Hwang and Tae-Hwan Choi. They tested two groups of L1 Korean-L2 English learners based on LoR: A noresidence abroad (NRA) group vs. a residence abroad (RA) group who, on average, lived in an English-speaking country for thirty-five months. They were compared against an English native control group. The test stimuli contained bi-syllabic words where a reduced vowel (schwa [ə] or barred-i [i]) can occur either wordinitially (assist), word-internally (roses) or word-finally (sofa). Learners were presented with similar words and were required to produce them. The NRA group

showed fewer reduction rates than the RA group as they tended to produce each variant of the reduced vowel as a full vowel, probably as a result of either (i) L1 transfer since Korean contains only full (but not reduced) vowels (so learners tend to match the English reduced vowel to the closest Korean full vowel) or (ii) English orthography since learners might have been misled by the English orthographic conventions or by the transliteration system of Korean. E.g., word-initial [ə] in <u>assist</u> was pronounced as a mid back [ʌ], and word-final schwa in *sof<u>a</u>* was pronounced as a low-central [ɑ]. By contrast, the RA group behaved in a native-like fashion by showing more temporal reduction of the target vowels than the NRA group. This study shows that 'it is possible for second language (L2) learners to learn the [phonological] statistical properties in L2' (p. 535).

A welcome collection in the field of phonology is a volume edited by Jausz Arabski and Adam Wojtaszek, *The Acquisition of L2 Phonology*, in the well-known *Second Language Acquisition* series published by Multilingual Matters. This volume contains theoretical, empirical and pedagogical papers. Of interest are the studies in section 1, which deal with L2 English phonological interlanguage. In 'On Phonetic Negative Transfer from Chinese to English' (pp. 16-26), Luo Xiaorong and Gao Jian report that different dialectal varieties of L1 Chinese have differential transfer effects in L2 English, e.g., native Chinese speakers from Tonghua (Jilin province), who articulate the Chinese fricative palatal [ʃ] as [s] in their dialect, are likely to pronounce English [ $\theta$ ] as [s]. L1 dialectal differences can thus have systematic effects on L2 phonological attainment. Linda Shokey ('Understanding L2 and the Perspicacious Pole', pp. 26-36) tested four groups: English natives, L1 Greek-L2 English learners studying in England, L1 Polish-L2 English learners studying in England, and L1 Polish-L2 English studying in Poland. Results from a casual-speech comprehension test (elicited via a gating technique) show that Poles (whether they are studying English in England or in Poland) outperform the Greek natives because 'they are looking for overall shapes as well as small details' (p. 28) due to the fact that Poles 'have a mental model of what is easy and what is difficult for the vocal tract to achieve' (p. 34). While suggestive, these claims need future empirical support. In 'Perception of the English Voice Onset Time Continuum by Polish Learners' (pp. 37-58), Arkadiusz Rojczyk presents evidence from a widely investigated phenomenon in language acquisition studies: the Voice Onset Time (VOT). Two groups of advanced and beginner L1 Polish-L2 English learners were compared against English-speaking natives on VOT perception. Rojczyk manipulated the VOT of the word keef [ki:f] so that the velar stop [k] was released at 10 millisecond (ms) intervals, ranging from +70 ms to 0 ms. In a forced-choice identification task, subjects were required to decide whether they heard either a voiced or unvoiced velar sound. As expected, English natives showed a categorical perception since the +50 ms VOT marks the cut-off point between voiceless to voiced plosive. Advanced learners had a rather late categorization point (between +20 and +10 ms). By contrast, beginners did not show a categorical perception peak but rather a decreased perception in voiceless judgements as VOT decreased. This study importantly suggests that native-like categorical VOT in L2 English must develop at near-native proficiency levels. Finally, Marta Nowacka investigates L1 Polish-L2 English learners in 'The Productive and Receptive Acquisition of Consonants and Connected Speech by Polish Students of English' (pp. 59-73). Productive test results reveal that formal phonetic training enhances the learners' pronunciation of some phonemes, but not others (particularly dental fricatives,

linking *r* and yod-coalescence, which are particularly problematic), whereas receptive test results show successful perception in all phonemes. This attests to a well-known phenomenon in SLA: attainment in perception precedes attainment in production.

As for interlanguage vocabulary, in 'Guessing and Risk Attitude in L2 Vocabulary Tests' (*EUROSLA yearbook* 11[2011] 53-74), Dieter Thoma investigates lexical categories to ascertain whether more proficient learners guess less and guess more successfully. Results from advanced L1 German – L2 English learners show that vocabulary guesses could not be attributed to general lexical proficiency and risk-taking factors (as previous research had claimed), but to inadequate or lack of semantic word knowledge.

In *Lexical Errors and Accuracy in Foreign Language Writing*, María Pilar Agustín Llach investigates the relationship between vocabulary acquisition and writing quality in young L1 Spanish-L2 English learners in a primary-school EFL context (4<sup>th</sup> to 6<sup>th</sup> grade). Lexical error frequency decreases as proficiency increases, as also attested in previous research. The most common error type is misspelling. She concludes that there is a correlation between lexical error and essay score, which indicates that lexical errors are a good indicator to predict writing quality.

Though lexical diversity has been extensively researched in SLA, researchers have been recently concerned with lexical quality rather than quantity. In this line, Tom Salsbury, Scott A. Crossley and Danielle S. McNamara's 'Psycholinguistic Word Information in Wecond Language Oral Discourse' (*SLR* 27[2011] 343-60) explores depth of word knowledge as measured by psycholinguistic factors such as concreteness, imagability (easiness to construct a mental image of the word), meaningfulness (degree of association of a word to other words) and familiarity. A longitudinal study was conducted: six learners of L2 English (with different L1s: Spanish, Japanese, Korean and Arabic) were interviewed every two weeks over a one-year period. The researchers analysed the incidence of shared words between the learners' spoken data and the psycholinguistic MRC database. Results reveal that learners' productive vocabularies become more abstract, less dependent on physical, visual, and semantic contexts, and more tightly associated over time (though no significant results were found for familiarity). The authors conclude that 'psycholinguistic properties of words impact the learnability of those words' (p. 357) since more concrete/imagable/meaningful words emerge earlier in L2 development.

The issue of lexical quality and quantity has been also explored with age of onset (AoO) to L2 English as an additional factor. In 'Vocabulary Size and Depth of Word Knowledge in Adult-onset Second Language Acquisition' (*IJAL* 21[2011]162-81) Andrea B. Hellman investigated vocabulary size and depth of word knowledge as measured via the Peabody Picture Vocabulary Test and a word association test respectively. She compared two groups of learners based on AoO (a highly successful adult-onset L2 English group and a balanced bilingual childhood-onset L2 English group) against a control group of English natives. Results showed that native-like L2 vocabulary size and depth are attainable in those learners who started acquiring their L2 after puberty (i.e., the adult-onset group), which indicates that Critical Period effects for lexicon are not observable in an L2, unlike what has been found for phonology and morphosyntax, suggesting that 'the L2 lexicon, its size and depth, are independent from both L2 phonological and grammatical competence' (p. 177). The role of L1 influence on the L2 lexicon has been a recurring topic in SLA. In *New Trends in Crosslinguistic Influence and Multilingualism Research*, edited by Gessica De Angelis and Jean-Marc Dewaele, a series of papers explore the influence of languages other than the L1 on other-known languages (L2 and L3) (see papers by Cheung *et al.* and Gibson and Hufeisen, below). In this volume, Agnieszka Otwinowska-Kasztelanic explores whether multilinguals (L3 learners) have an advantage over bilinguals (L2 learners) in cognate vocabulary learning in 'Awareness and Affordances: Multilinguals versus Bilinguals and their Perceptions of Cognates' (pp. 1-18). Results from L1 Polish-L2 English learners (some of which had an additional European language as their L3) show that (i) there is a positive correlation between proficiency level and knowledge of cognates between Polish and English, and that (ii) multilinguals are advantaged over bilinguals in noticing the role of lexical similarities (cognates).

We will now turn to morphosyntax. A recurring topic in L2 inflectional morphology is the acquisition of Subject-Verb (S-V) agreement as realised by the 3<sup>rd</sup> person singular –*s* morpheme. In 'The Nature of Bariable Sensitivity to Agreement Violations in L2 English' (*EUROSLA Yearbook* 11[2011] 113-37), Masanori Bannai shows that L1 Japanese–L2 English learners are insensitive to agreement violation with omission of –*s* (\**The doctor drink a lot of coffee*) but sensitive to overuse violations (\**Those two sisters makes a lot of money*). In the latter case, sensitivity decreases with an intervening ADV between the S and the V (\**The doctor often drink.../\*The two sisters often make...*), which is taken as evidence that S-V agreement is independent from the *Agree* operation in intermediate learners. Nominal plural morphology is also a recurring topic. Helen Charters, Loan Dao and Louise Jansen tested its acquisition under a Processability Theory framework in 'Reassessing the Applicability of Processability Theory (PT): The Case of Nominal Plural' (*SLR* 27[2011] 509-33]. PT stipulates that in L2 English plural marking emerges first in lexical contexts (bare nouns) and later in phrasal contexts (numeric expressions), but the authors found the reverse pattern in a cross-sectional study of L1 Vietnamese-L2 English learners. Overall, the learners' stages for plural marking are: (1) absence of overt marking: *\*book-Ø*, *\*five book-Ø*; (2) overt marking in numeric expressions: *five book-s*; (3) overt marking in bare nouns: *book-s*. The authors conclude that 'numeric contexts are not appropriate for testing PT's principle that feature unification forced by the syntax incurs a higher processing cost than lexical selection' (p. 529) as a result of L1 influence, which implies that some tenets of PT cannot be extended to any (X) language in L1 X-L2 English pairs.

The effects of an intervening element is also explored by Soo-Ok Kewon and Robert Bley-Vroman's 'Acquisition of the Constraints on *wanna* Contraction by Advanced Second Language Learners: Universal Grammar and Imperfect Knowledge' (*SLR* 27[2011] 207-28). Contraction of *want to* to *wanna* has been traditionally claimed to be constrained by UG since young L1 English children disallow the contraction when the trace (*t*) of an extracted *wh*- word intervenes between *want* and *to*, as in subject extraction (SE) (*Who<sub>i</sub> do you* {*want* t<sub>i</sub> *to/\*wanna*} *kiss?*), but not in object extraction (OE) (*Who<sub>i</sub> do you* {*want to/wanna*} *kiss* t<sub>i</sub>?). Results from three tasks (elicited production, oral repair and grammaticality judgment) showed that adult English native speakers' obey the contraction constraint, as predicted. L1 Korean-L2 English advanced learners were also sensitive to the SE/OE constraint, but many tolerated ungrammatical contractions (*\*Who do you wanna kiss?*). The authors conclude that 'learners are indeed sensitive to the syntactic difference, but their knowledge is "imperfect" (p. 221). These findings do not fully settle the issue of whether UG constrains the knowledge of poverty-of-the-stimulus syntactic structures in SLA.

In 'Syntactic Creativity in Second Language English: *wh*-scope Marking in Japanese-English Interlanguage' (SLR 27[2011] 313-41) Barbara Schulz presents evidence for the well-known fact that L2 learners' interlanguage grammars sometimes exhibit properties that cannot be accounted for by either transfer from their L1 or from their L2 input. Typologically, there are three ways to form complex *wh*-questions: (i) the *wh*- phrase remains in its base position (*Tim thinks* [Anne should invite who?]), as in Japanese and also English echo questions; (ii) the *wh*- phrase is overtly displaced to sentence-initial position, as in StE (*Who*<sub>i</sub> does *Tim think* [t<sub>i</sub> *Anne should invite* t<sub>i</sub>]?); (iii) *Wh*-scope marking (a.k.a. partial *wh*movement), as in the German counterpart for this ungrammatical English sentence (\*What does Tim think [who<sub>i</sub> Anne should invite t<sub>i</sub>]?), where the wh-word moves partially to embedded-clause initial position. Results from three tests (elicited production, online and offline acceptability) reveal that the interlanguage grammars of L1 Japanese-L2 English learners tolerate *wh*-scope marking, which cannot be accounted for by L1 transfer (as Japanese does not have overt whmovement or *wh*-scope marking) or by the L2 input, but rather by the learners adopting a simplification strategy to ease the processing burden due to their limited L2 processing resources.

The idea that learners' processing is somehow limited when compared to that of natives is a controversially classic topic in SLA. This debate gained momentum several years ago after a seminal psycholinguistic paper by Harald Clahsen and Claudia Felser (*AppPsycholing* 27[2006] 3-42), who postulated the

Shallow Structure Hypothesis (SSH). Basically, during online L2 comprehension, the learners' parser constructs shallow representations containing basic argument-predicate relations but lacking detailed syntactic information. Unlike natives, learners heavily rely on lexical and semantic information in L2 processing. Akirai Omaki and Barbara Schultz challenge the SSH in 'Filler-gap Dependencies and Island Constraints in Second-language Sentence Processing' (SSLA 33[2011] 563-88). They tested relative clause island constraints. In native English processing, the parser shows a strong bias for active gap creation (e.g., The  $\{city/book\}_i$  that the author wrote regularly about  $t_i$  was named for an explorer): as soon as the verb is encountered (*wrote*), the parser immediately creates a gap and analyses the filler (i.e., the extracted constituent *the city/the book*) as the object of the verb *wrote* (probably as a strategy to reduce the cost of retaining the filler in memory), instead of waiting until it encounters the missing argument after the preposition (i.e., trace t left at the extraction site) to identify the correct gap position. English natives show a plausibility mismatch effect here: processing time increases when the filler is an implausible object (*city*) of the verb (*wrote*) compared to when it is plausible (book). In native English, however, there are domains (called 'islands') that are opaque to filler-gap dependency formation: relative clauses are islands and thus the mismatch effect (*city/book*) disappears when the critical verb (*wrote*) is embedded in the relative clause (*The {city/book*}<sub>i</sub> *that the author [who wrote regularly] saw* t<sub>i</sub> *was named for an explorer*). Omaki and Schultz show data from advanced L1 Spanish-L2 English learners in four conditions: Non-island implausible (N-I) (The city that the author wrote regularly about was named for an explorer), Non-island plausible (N-P) (The book that the author wrote regularly about was named for an explorer), Island implausible (I-I)

(*The city that the author who wrote regularly saw was named for an explorer*), and Island plausible (I-P) (*The book that the author who wrote regularly saw was named for an explorer*). Results from an acceptability judgement task and a self-paced reading task clearly show that advanced learners behaved like natives: the plausibility effect occurred only in the non-island conditions since an active-gap creation effect appears (reading time for both groups: N-I>N-P; I-I≈I-P). Learners thus obey island constraints and are sensitive to plausibility mismatch effects as natives do. These findings are important for SLA theory as they suggest that 'L1 and L2 linguistic systems are not qualitatively different' (p. 585) and 'cast doubt on the view that L2 learners are unable to build abstract structural representations in real-time processing' (p. 585).

The accumulated bulk of research on L2 morphosyntax over the past decades has led some researchers such as Patti Spinner to propose measures or indices of grammatical L2 development/proficiency. In 'Second Language Assessment and Morphosyntactic Development' (*SSLA* 33[2011] 529-61), she proposes such an index based on previous theoretical research on processability theory and the emergence of phrase structure grammar. Adult L2 English learners (with different L1 backgrounds) were administered a rapid profile scale. Results indicate that an implicational scale (which contains linguistic properties known to be problematic for L2 learners) can account for learners' grammatical development.

Regarding the grammar-pragmatics interface, Krassimira D. Charkova and Laura J. Halliday investigated 'Second- and Foreign-language Variation in Tense Backshifting in Indirect Reported Speech' (*SSLA* 33[2011] 1-32). They tested the effects of two learning environments (Second Language [SL] vs. Foreign Language

[FL]) on L2 English tense backshifting because it is not entirely clear yet whether there exists 'a clear-cut distinction between the influence of FL and SL environments on the acquisition of grammar and pragmatics' (p. 2). Three groups of learners participated in the study: thirty-five ESL learners with different L1 backgrounds, thirty-seven Bulgarian EFL learners and thirty-eight Bosnian EFL learners, plus an English native control group. The ESL learners were graduate students in an American university while the EFL learners were final-year students in an English department in their respective countries. Learners were shown a context containing actual speech and were then asked to report it in indirect speech. There were contexts for simple present, simple past and future. Overall, similar to the English natives, the ESL learners' tense backshifting rates were low (also confirmed by the ESL learners' negative correlation between length of residence and backshift score), whereas the EFL learners show very high rates of backshifting, independently of their L1. The authors conclude that the learning environment (SL vs. FL) has an effect on grammar and pragmatics: while SL learners' behaviour is native-like, the EFL learners adhered to the standard backshift rules from textbooks, 'with little consideration for pragmatic and semantic factors that cancel its appropriateness.' (p. 24). The acquisition of tense has also been investigated by Anna S. C. Cheung, Stephen Matthews and Wai Lan Tsang in 'Transfer from L3 German to L2 English in the Domain of Tense/Aspect' (in De Angelis and Dewaele, eds., pp. 53-73). They explored reverse or backward transfer (i.e., transfer from the L3 to the L2), which is an underexplored area in SLA. L2 English learners with L1 Chinese (Cantonese) and L3 German were hypothesized to have a negative influence in the acquisition of the present perfect/past simple contrast in L2 English due to L3 German influence. Results

confirmed that L2 English learners who had previously studied German as an L3 tend to produce and accept the use of the present perfect to refer to the past (e.g., \**Yesterday, I have celebrated my friend's birthday with his parents*) more often than those who had not previously studied German. This paper sheds new light on the role of the L3 on the L2. In the same volume, Martha Gibson and Britta Hufeisen explore the acquisition of prepositions in L2 English in 'Perception of Preposition Errors in Semantically Correct versus Erroneous Contexts by Multilingual Advanced English as a Foreign Language Learners: Measuring Metalinguistic Awareness' (pp. 74-85). They tested a group of L1 German-L2 English multilinguals (i.e., those who had learnt (an) additional language(s) after their L2 English). An association was found between the number of languages learnt and the learners' accuracy in judging prepositional errors involving *in, at, on,* and *of* in L2 English. The authors conclude that 'more FL [foreign language] experience translates into more efficient linguistic abilities at the grammatical level' (p. 83).

Learning an L2 implies learning how to combine a finite set of grammatical elements to generate (unlimited) new expressions. Recently, however, SLA researchers have been interested in the rote-learnt aspects of L2. One such study is Stuart Webb and Eve Kagimoto's 'Learning Collocations: Do the Number of Collocates, Position of the Node Word, and Synonymy Affect Learning?' (*AppLing* 32[2011] 259-76). They explored the acquisition of collocations in L1 Japanese-L2 English with a minimum of six years of EFL experience. Learners were given sixty frequent collocations (e.g., *deep respect, good laugh, thick hair,* etc) taken from the Bank of English, together with their corresponding Japanese gloss. This was followed by an illustrative sentence used as an example, drawn from the BNC and the Bank of English. Only those learners who showed no knowledge of the

collocations were given three minutes to learn each collocation. Results showed that productive knowledge of collocations increased as the number of collocates per node word increased, i.e., learners significantly acquired more collocates when the node word was repeated six times (deep {respect/feelings/end/sleep/voice/ *divisions*}) than three times (*good* {*laugh/reason/behaviour*}) or than once (*simple truth*). The position of the node word did not affect L2 collocation learning. The implication is that it is more effective to acquire a (relatively) large number of collocates for a small number of node words than a small number of collocates for a large number of node words. Obviously, an intervening factor here could be whether the L2 English collocation is equivalent/related/unrelated to the learners' L1. This was tested in Brent Wolter and Henrik Gyllstad's 'Collocational Links in the L2 Mental Lexicon and the Influence of L1 Intralexical Knowledge' (AppLing 32[2011] 430-49), whose results reveal that L1 Swedish-L2 English learners process faster and recognise collocations more easily with translation equivalents in Swedish and English (get ett svar/give an answer), than collocations that were acceptable in English but not in Swedish (\*betala ett besök/pay a visit). L1 influence is therefore a key factor in the successful acquisition of L2 collocations.

The role of the interfaces in L2 acquisition is one of the most active research areas in SLA. Basically, several versions of the Interface Hypothesis postulate that L2 learners tend to show persistent deficits and difficulties where the syntax interfaces with language-external cognitive modules such as semantics (syntaxsemantic interface) and discourse/information structure (syntax discourseinterface), but not with language-internal modules (lexicon-syntax interface) – see 'Pinning Down the Concept of "Interface" in Bilingualism' by Antonella Sorace (*LAB* 1[2011] 1-33) and papers in that volume. This hypothesis is controversial, though, since ample empirical evidence has demonstrated that interfaced properties are not necessarily problematic – see overviews in Lydia White's 'Second Language Acquisition at the Interfaces' (*Lingua* 121[2011] 577–90) and Silvina Montrul's 'Multiple Interfaces and Incomplete Acquisition' (Lingua 121[2011] 591-604). This year, there are two notable studies showing that learners can acquire properties at the interfaces in L2 English. In the first study, 'No time like the present: Examining Transfer at the Interfaces in Second Language Acquisition' (Lingua 121[2011] 670-87) Alison Gabriele and Alonso Canales tested L1 Spanish/Japanese-L2 English learners on the extended range of meanings associated with simple present and present progressive. Overall, learners could successfully integrate contextual information in the interpretation of aspectual forms, which indicates that learners are indeed sensitive to constraints at the syntax-pragmatics interface. The second paper, 'Straight on through to Universal Grammar: Spatial Modifiers in Second Language Acquisition' (*SLR* 27[2011] 289-311) by David Stringer, Beatrix Burghardt, Hyun-Kyoung Seo and Yi-Ting Wang shows that 121 learners of L2 English (with differing L1 backgrounds) can attain native-like competence at the syntax-semantics interface with multiple spatial modifiers (e.g., *He flies* {right up out of the cave/on through to the outside/etc}). This applies independently of (i) their proficiency level (lower intermediate to advanced), (ii) the presence/absence of the relevant functional categories in their L1, and (iii) the task type (preference and grammaticality judgement tests), (iv) the lack of formal instruction, and (v) the paucity of combinations of multiple modifiers in the L2 English input, which represents a clear case of the poverty of the stimulus. It is argued that such knowledge derives from a functional hierarchy of adpositional modifiers which is constrained by Universal Grammar.

Another recent area of interest in SLA is bilingual education in European CLIL (Content and Language Integrated Learning) classroom settings, as reflected by the publication of many collective volumes on L2 English, such as, for instance, *Content and Foreign Language Integrated Learning: Contributions to* 

Multilingualism in European Contexts, edited by Yolanda Ruíz de Zarobe, Juan Manuel Sierra and Francisco Gallardo del Puerto. Of particular interest here are studies investigating the beneficial effects of CLIL instruction (as opposed to mainstream EFL instruction) on L2 interlanguage competence. In 'Which Language Competencies Benefit from CLIL? An Insight into Applied Linguistics Research' (pp. 129-154), Yolanda Ruíz de Zarobe reviews empirical studies (most of them on L2 English) conducted in European CLIL settings and shows that, while CLIL has a beneficial effects on some L2 linguistic areas (receptive vocabulary, fluency and some morphological phenomena), other areas are impervious to the alleged benefits of CLIL (syntax, productive vocabulary, writing accuracy and pronunciation). Teresa Navés's 'How Promising are the Results of Integrating Content and Language for EFL Writing and Overall EFL Proficiency?' (pp. 155-186), presents empirical evidence showing that CLIL learners typically outperform mainstream EFL learners (who were two or three grades ahead) on overall L2 English proficiency (except listening comprehension), which largely supports previous published research. However, there are important methodological limitations in most of these studies, so that 'more refined empirical research is needed to explore the real benefits of CLIL provision' (p. 182).

Though most studies reviewed here deal with grammatical competence in a broad sense, interactional competence (IC) is also addressed. *L2 Interactional Competence and Development*, edited by Joan Kelly Hall, John Hellermann and

Simona Pekarek Doehler draws on a variety of L1s and L2, two of which are relevant for this review. Arja Piirainen-Marsh investigates (in 'Enacting Interactional Competence in Gaming activities: Coproducing Talk with Virtual Others', pp. 19-44) how adolescent L1 Finnish-L2 English console-operated videogame players attend to the talk produced by the game characters in English. Learners sustain joint attention to the game and are able to build alignments and manage shifts in attention focus. The author concludes that such co-productions are effective for the development of IC. In 'Members' Methods, Members' Competencies: Looking for Evidence of Language Learning in Longitudinal Investigations of Other-initiated Repair' (pp. 147-72), John Hellermann explores interactions between two adult learners of L2 English in a longitudinal study taken over five terms. While lexical/pronunciation/grammatical repairs remain consistent over time, their other-initiated repairs develop over time and only their action-related repairs emerge later. In short, their repair repertoire increases with proficiency.

We next consider learner-corpus (LC) research, i.e., the use of corpora in the study of L2 acquisition, which is a relatively new approach in SLA. The number of publications in the field has risen steadily over the past ten years. An example of this increase is Anna Frenkenberg-Garcia, Lynne Flowerdew and Guy Aston's edited volume: *New Trends in Corpora and Language Learning*. The first section is dedicated to corpora and language teaching, and the second deals with corpora as a tool. Only some chapters in the third section are of interest here as they deal with corpora and learner language, i.e., the investigation of interlanguage through corpora. John Osborne's 'Oral Learner Corpora and the Assessment of Fluency in the Common European Framework' (pp. 181-97) uses the parallel PAROLE corpus

(L1 French/Italian – L2 English) to measure overall L2 oral fluency, which is made up of factors such as speech rate, pauses and length of utterance. Corpus results were then correlated against results from independent raters' perception of the learners' proficiency based on the CEFR scales. While an overall measure of fluency is not an accurate index of learners' proficiency, such a measure correlates with CEFR proficiency scales, which indicates that oral fluency factors in learner corpora can be used as a measure to determine proficiency, though '[t]he measures described above are time-consuming to carry out. ... [and] are therefore not a practical option for day-to-day oral production' (p. 193). Sylvie de Cock's 'Preferred Patterns of Use of Positive and Negative Evaluative Adjectives in Native and Learner Speech: An ELT Perspective' (pp. 198-212) investigates the syntactic and collocational pattern of evaluative adjectives (e.g., good, great, nice). Results from three LINDSEI subcorpora (L1 French/German/Chinese–L2 English) and the comparable English native LOCNEC corpus indicate that natives prefer the predicative position for 'good' (*it was really good*) whereas learners favour the attributive position (very good experience). A well-known problem with the written ICLE corpus (and its equivalent spoken LINDSEI corpus) is that there is not an independent and standardized measure of proficiency. Hence, '[i]t does not seem unreasonable to expect similar differences across and within the various LINDSEI components' (p. 210), which could explain why the German speakers (assumed to be in the C1/C2 level) behaved closer to natives than the Chinese speakers (assumed to have a B2 level). Anna-Maria Hatzitheodorou and Marina Mattheoudakis's 'The Impact of Culture on the Use of Stance Exponents as Persuasive Devices: The Case of GRICLE and English Native Speaker Corpora' (pp. 229-46) compares two written corpora of university-student essays: GRICLE (L1

Greek–L2 English) and an equivalent American English native corpus. Results reveal that learners prefer boosters (*of course, undoubtedly*) and attitude markers (*unfortunately*) to hedges (*perhaps*) as a result of (both linguistic and cultural) L1 transfer.

While both of the above studies analyse learner corpora with a pedagogical aim in mind, the SLA literature on interlanguage is full of empirical evidence that instruction does not necessarily lead to acquisition, a fact not always taken into account by corpus researchers. This is indeed shown in a volume edited by Fanny Meunier, Sylvie De Cock, Gaëtanelle Gilquin and Magali Paquot's A Taste for *Corpora: In Honour of Sylviane Granger*, which is primarily concerned with the rise of learner corpora but it also contains many contributions on pedagogical issues in learner corpora and the role played by other types of corpora. Of particular interest here are chapters that have implications for L2 English interlanguage. In 'Frequency, Corpora and Language Learning (pp. 33-62), Geoffrey N. Leech argues that the most frequent structures in a corpus are those that should be given priority in learning and teaching (i.e., the 'more frequent = more important to learn' argument). This argument, however, ignores two well-known SLA facts: (i) that frequency of input does not necessarily equate acquisition, which has been known since the 70s; (ii) that teaching does not necessarily lead to acquisition, which has been known since the Teachability Hypothesis. Hilde Hasselgård and Stig Johansson's 'Learner Corpora and Contrastive Interlanguage Analysis' (pp. 33-62), discusses the historical development of Contrastive Interlanguage Analysis (CIA) and the Integrated Contrastive Model (ICM) as explored via learner corpora and, in particular, the International Corpus of Learner English (ICLE). This is illustrated by two case studies of the L2 English learners' interlanguage of quite

and *I would say*. In 'Automatic Error Tagging of Spelling Mistakes in Learner Corpora' (pp. 109-126), Paul Rayson and Alistair Baron address a key issue in learner corpus research: error tagging. They argue that, since manual error tagging is time-consuming, a hybrid system (i.e., a combination of manual and automatic tagging as implemented in the Variant Detector (VARD) software) is ideal for learner corpus error tagging. They illustrate this with a 50,000 word corpus sample (L1 Spanish/German/French-L2 English) of spelling mistakes. In 'Learner Knowledge of Phrasal Verbs: A Corpus-informed Study' (pp. 173-208), Norbert Schmitt and Stephen Redwood show that there is a correlation between learners' (productive and receptive) knowledge of phrasal verbs (PVs) and the frequency of those PVs. This correlation between L2 knowledge and L2 input frequency led the researchers to postulate that learners' knowledge of PVs will benefit from ample exposure to English via the mass media. Once again, it is necessary to remember the caveat stated above, i.e., that high input frequency does not necessarily lead to L2 acquisition.

A third edited volume reflecting the rise of learner corpora is Joybrato Mukherjee and Marianne Hundt's *Exploring Second-Language Varieties of English and Learner Englishes*. As the title indicates, the volume encompasses corpus-based studies on institutionalized L2 English and on L2 English varieties in former colonial territories (aka 'New Englishes'), both reflecting non-native varieties of English. Of particular interest here are a few chapters dealing with L2 English interlanguage. Carolin Biewer 's 'Modal Auxiliaries in Second Language Varieties of English: A Learner's Perspective' (pp. 7-34), discusses how SLA theory can be applied to 'New English' studies. She illustrates this with a corpus study of modals of obligation and necessity in learner Englishes in Africa, Asia and the South

Pacific. A truly seminal paper is Gaëtanelle Gilquin and Sylviane Granger's 'From EFL to ESL: Evidence from the International Corpus of Learner English' (pp. 55-78), addressing a long-standing controversial dichotomy in SLA: the differences/ similarities between L2 English when acquired in different settings i.e., in an instructed foreign-language setting (EFL) or in a naturalistic setting (ESL). Taking the preposition into as a case in point, the authors analyse four different subcorpora from the ICLE corpus based on the type of quantitative-qualitative exposure received (L1 Spanish/French/Dutch/Tswana-L2 English) arguing that that the traditional EFL/ESL dichotomy should be seen as a continuum instead of a opposed dichotomic division. In 'Formulaic Sequences in Spoken ENL, ESL and EFL: Focus on the British English, Indian English and Learner English of Advanced German Learners' (pp. 79-100), Sandra Götz and Marco Schilk analyse formulaic sequences (3-grams) in three different corpora: comprising ENL, ESL (drawn from spoken Indian English) and EFL (drawn from L1 German-L2 English learners). Results show that 3-grams are less frequent in EFL than in ESL and that both nonnative speakers (EFL and ESL) overuse them compared to native speakers (ENL). Finally, Michaella Hilbert's 'Interrogative Inversion as a Learner Phenomenon in English Contact Varieties: A Case of Angloversals?' (pp. 125-144), discusses a wellstudied phenomenon in the L2 literature: subject-verb inversion in interrogative main and embedded clauses in three varieties of English: IndE, SingE and IrE. Hilbert argues, against previous quantitative studies, that it is the frequency of certain lexical chunks in interrogative structures that provides the syntactic factor governing the inversion/non-inversion structures in these three varieties.

Apart from the language-internal factors that shape L2 acquisition and processing, researchers have also been interested in language-external factors to

determine why learners vary in their L2 attainment patterns. This area of research is known as 'individual differences' and includes factors such as age, learning strategies, affective factors and intelligence. A recurring topic here is language learning strategies (LLS), covering more than thirty years of theoretical and empirical research. While most published research on L2 English has used Rebecca Oxford's well-known SILL questionnaire to measure LLS, her new book (Teaching and Researching Language Learning Strategies) is not yet another book on LLS based on her previous model, but is rather an attempt to provide a new theoretical framework for LLS – the Strategic Self-Regulation Model of Language Learning (S<sup>2</sup>R). It integrates theoretical constructs from three major traditions of learning theory and research: cognitive, affective and sociocultural-interactive. The main advantage of this model is that it is based on tried-and-tested theoretical models from several disciplines (educational and cognitive psychology, self-regulation theory, neuro-biology, social-cognitive theory, sociocultural theory, etc.). The author also includes a useful thirty-four-pages-long appendix with a summary of strategy type illustrating them with real examples as reported by learners. Of particular interest is chapter 8 'What we know from L2 learning strategy research' (pp. 241-62), which presents an overview of empirical research on the effects of LLS on the four skills (reading, writing, listening, speaking) and on language (vocabulary, grammar). Crucially, LLS have been shown to be beneficial for L2 vocabulary acquisition, but 'grammar strategies have had very little attention. ... [and] they have garnered the least interest and concern of any area of L2 learning strategies' (p. 256). This is unfortunate as it means that, after over thirty years of research, we still do not know whether LLS are beneficial in the acquisition of the core properties of interlanguage (i.e., grammar). Obviously, SLA researchers have

been interested in investigating some of those strategies in isolation (e.g., transfer) more than as a group of somewhat unrelated cognitive strategies (e.g., transfer, imagery, repetition, deduction) because it makes little sense to group them from a linguistic point of view given that each of them is accounted for by different and unrelated L2 processes and factors. Hence, the divorce from LLS research and L2 interlanguage research in the eighties is understandable. While this book is a welcome attempt in the field, Oxford acknowledges that the S<sup>2</sup>R model 'deserves further empirical testing ... although most of its component theories and aspects have been widely researched and accepted within educational psychology' (p. 42).

As noted earlier, SLA is a multifaceted discipline that draws on linguistics, cognition and sociology. While the mainstream SLA research has traditionally taken a linguistic/cognitive approach, the social turn is growing, gaining recognition in the study of L2 English as exemplified in the volume edited by Dwight Atkinson, Alternative Approaches to Second Language Acquisition, who states that 'it appears that no single theoretical perspective will allow us to understand SLA adequately' (p. xi). This book is therefore concerned not so much with presenting new empirical L2 evidence but rather with the theoretical and methodological underpinnings of six non-cognitivist, socially-oriented approaches. In 'The Sociocultural Approach to Second Language Acquisition' (pp. 24-47), James P. Lantolff, based on Vygotskyan tenets, explains the SCT-L2 model (sociocultural theory applied to L2 acquisition). Dianne Larsen-Freeman, a self-declared former cognitivist, questions in 'A Complexity Theory Approach to Second Language Development/Acquisition' (pp. 48-72), the traditional 'assumption that a single factor caused some effect' (p. 49), as it ignores the multivariate and complex processes in SLA. She presents the main tenets of her current thinking on

complexity theory arguing that (i) much of L2 variability is due to the learners' social context, (ii) SLA is a complex adaptive system, and (iii) interlanguages are not driven by general innate cognitive processes but rather emerge from frequency of use. In 'An Identity Approach to Second Language Acquisition' (pp. 73-94), Bonny Norton and Carolyn McKinney draw on identity theorizing to propose that learners' identity (at both an individual and social level) must be taken into account in SLA. Patricia A. Duff and Steven Talmy's 'Language Socialization Approaches to Second Language Acquisition' (pp. 95-116) discusses the contexts in which the L2 is acquired and used since linguistic, cultural and communicative competence develops through interaction with others who are more proficient. In 'A Conversation-analytic Approach to Second Language Acquisition' (pp. 117-42) Gabriele Kasper and Johannes Wagner's adopt a CA framework and focus on how interaction facilitates L2 acquisition, which has been a fruitful are of research over the past twenty years. Dwight Atkinson's contribution, 'A Sociocognitive Approach to Second Language Acquisition' (pp. 143-66), is an attempt to reconcile cognitive and social approaches to SLA, as interlanguage grammars undoubtedly develop as a result of a combination of both cognition and the environment (reminiscent of the old nature/nurture debate). In the final chapter 'SLA After the Social Turn' (pp. 167-80) Lourdes Ortega reflects on the previous six contributions to determine whether the so-called 'two extremes of the cognitive – alternative polarity' (p. 167) have advanced our knowledge of SLA. She argues that SLA is stronger after the social turn since new insights have been gained (which could not have otherwise been thought of under a purely cognitive approach).

Another edited volume on alternative approaches to SLA is Marjolijn Verspoor, Kees de Bot and Wander Lowie's *A Dynamic approach to Second*  *Language Acquisition Development: Methods and Techniques.* Dynamic System Theory (DST) is a general theory of change and development in complex systems that has been applied in several scientific domains, ranging from bio-mechanics (e.g., weather forecasting), to cognitive science and human behaviour (e.g., L2 acquisition) (cf. Dianne Larsen-Freeman, above). It includes chapters dealing with specific SLA issues (usage, variability, interaction between variables, developmental modelling) and DST. It also includes a final how-to section, a useful tool for new SLA researchers in this approach.

The cognitivist strand is taken up in Martin Pütz and Laura Sicola's (eds.) *Cognitive Processing in Second Language Acquisition: Inside the Learner's Mind*, which includes a collection of eighteen chapters on approaches linking cognition and SLA. The volume is divided into three sections: theoretical foundations, mental processes and cognitive language pedagogy. The first two sections deal with topics that are relevant to L2 interlanguage processing: construction learning, past tense processing, input and intake, the mental lexicon, formulaic language, and the Noticing Hypothesis.

Kimberly Mulder and Jan H. Hulstijn's 'Linguistic Skills of Adult Native Speakers, as a Function of Age and Level of Education' (*AppLing* 32[2011] 475-94) is not an empirical study on L2 interlanguage, but it has important consequences for empirical studies in L2 acquisition that use native speakers as a benchmark. Data from native speakers show that a biological factor (increasing chronological age) affects lexical knowledge positively but lexical fluency negatively; the same holds for a sociocultural factor (high educational and professional level). Such native-speaker variability should be taken into consideration when testing whether L2 learners can attain native-like competence. As for this year's SLA textbooks, Susan M. Gass and Alison Mackey's *The Routledge Handbook of Second Language Acquisition* presents state-of-the-art chapters on a wide range of perspectives on SLA (sociolinguistics, linguistics, psycholinguistics and neurolinguistics). Gass and Mackey's handbook includes sections devoted to topics not typically covered in existing similar textbooks, e.g., sections on skill learning, the setting of learning and the assessment of L2 knowledge.

The series *Palgrave Key Concepts* has offered several useful dictionary-entry type introductions to SLA for undergraduates. This year's *Key Concepts in Second Language Acquisition* by Shawn Lowewn and Hayo Reinders presents an updated and practical introduction to over four hundred terms and definitions in the discipline, ranging from theoretical concepts to methodological issues, each followed by suggestions for further exploration.

In Routledge's *Second Language Acquisition Research Series*, we find Nan Jiang's *Conducting Reaction Time Research in Second Language Studies* to be a valuable tool for those interested in applying psycholinguistic reaction time (RT) methods in SLA. This is a welcome addition to the field since this issue has been typically dealt with only in brief sections of existing chapters in the literature; it is here presented in a systematic and thorough format, ranging from theoretical issues to how to design and conduct hands-on RT experiments.

Another monograph on methodological issues in SLA is *Applying Priming Methods to L2 Learning, Teaching and Research,* edited by Pavel Trofimovich and Kim McDonough. The volume presents a collection of studies that apply priming techniques in L2 comprehension, acquisition and production of phonology, syntax and lexicon; it is most useful for those postgraduate students and researchers that are not familiar with this psycholinguistic technique.

In the *Cambridge Textbook in Linguistics* series, Jürgen M. Meisel's *First and Second Language Acquisition: Parallels and Differences* addresses one of the puzzling findings in SLA that dates back to the early seventies: that L1 and L2 acquisition are relatively similar regarding the developmental sequences/stages of acquisition of grammar, but, at the same time, are different in that L1 learners are invariably successful and attain native-like competence whereas L2 learners typically fail to do so. This is the first textbook that systematically compares L1 and L2 acquisition by drawing on data from a variety of languages (including English). Meisel concludes by presenting a tentative theory of language acquisition in several contexts (monolingual L1, bilingual L1 and adult L2 acquisition).

## **BOOKS REVIEWED**

Agustín Llach, María Pilar. *Lexical Errors and Accuracy in Foreign Language Writing*. Multilingual Matters. [2011] pp. xiii+247. pb £23.69 ISBN 9 7818 4769 4164.

Arabski, Janusz, and Adam Wojtaszek, eds. *The Acquisition of L2 Phonology*. Multilingual Matters. [2011] pp. x+182. £55.96 ISBN 9 7818 4769 3754.

Atkinson, Dwight, ed. *Alternative Approaches to Second Language Acquisition*. Routledge. [2011] pp. xii+190. hb \$140 ISBN 9 7804 1554 9240, pb \$39.95 ISBN 9 7804 1554 9257. Benati, Alessandro G., ed. *Issues in Second Language Proficiency*. Continuum. [2011] pp. xii+255. pb £23.99 ISBN 9 7814 4118 2326.

De Angelis, Gessica, and Jean-Marc Dewaele, eds. *New Trends in Crosslinguistic Influence and Multilingualism Research*. Multilingual Matters. [2011] pp. xv+128. pb £17.56 ISBN 9 7818 4769 4416.

Frankenberg-Garcia, Ana, Lynne Flowerdew, and Guy Aston, eds. *New Trends in Corpora and Language Learning*. Continuum. [2011] pp. xxxiv+268. hb £56.25 ISBN 9 7814 4115 9960, pb £20.99 ISBN 9 7814 4118 2111.

Gass, Susan M., and Alison Mackey, eds. *The Routledge Handbook of Second Language Acquisition.* Routledge. [2011] xviii+609. £140 ISBN 9 7804 1547 9936.

Hall, Joan Kelly, John Hellermann, and Simona Pekarek Doehler, eds. *L2 Interactional Competence and Development.* Multilingual Matters. [2011] pp. xii+274. pb £27.96 ISBN 9 7818 4769 4058.

Jiang, Nan. *Conducting Reaction Time Research in Second Language Studies.* Routledge. [2011] pp. xiii+282. hb £100 ISBN 9 7804 1587 9330, pb £29.99 ISBN 9 7804 1587 9347.

Meisel, Jürgen M. *First and Second Language Acquisition: Parallels and Differences*. CUP. [2011]. pp. xvi+302. pb £23.99 ISBN 9 7805 2155 7641. Meunier, Fanny, Sylvie De Cock, Gaëtanelle Gilquin, and Magali Paquot, eds. *A Taste for Corpora: In Honour of Sylviane Granger*. Benjamins [2011]. pp. xv+295. €95 ISBN 9 7890 2720 3502.

Mukherjee, Joybrato, and Marianne Hundt, eds. *Exploring Second-Language Varieties of English and Learner Englishes.* Benjamins [2011]. pp vi+2011. €90 ISBN 9 7890 2722 3203.

Oxford, Rebecca L., *Teaching and Researching Language Learning Strategies*. Longman. [2011] pp. xiv+342. pb \$46.67 ISBN 9 7805 8238 1292.

Pütz, Martin, and Laura Sicola. *Cognitive Processing in Second Language Acquisition: Inside the Learner's Mind.* Benjamins [2011]. pp. vii+373. €95 ISBN 9 7890 2723
9020.

Ruíz de Zarobe, Yolanda, Juan Manuel Sierra, and Francisco Gallardo del Puerto, eds. *Content and Foreign Language Integrated Learning: Contributions to Multilingualism in European Contexts*. Peter Lang. [2011] pp. 343. pb £66 ISBN 9 7830 3430 0742.

Verspoor, Marjolijn, Kees de Bot, and Wander Lowie, eds. *A Dynamic Approach to Second Language Development: Methods and Techniques*. Benjamins [2011]. ix+211. pb €33 ISBN 9 7890 2721 9992, hb €95 ISBN 9 7890 2728 7359. Trofimovich, Pavel, and Kim McDonough, eds. *Applying Priming Methods to L2 Learning, Teaching and Research*. Benjamins [2011] pp. ix+254. pb €36 ISB 9 7890 2721 3020, hb €105 ISBN 9 7890 2721 3013.

New JOURNALS for YWES

AppPsycholing = Applied Psycholinguistics

EUROSLAYb = EUROSLA Yearbook

LAB = Linguistic Approaches to Bilingualism

SLR = Second Language Research