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Research Timeline

Universal Grammar, crosslinguistic variation and second language acquisition

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According to generative linguistic theory, certain principles underlying language structure are innately given, accounting for how children are able to acquire their mother tongues (L1s) despite a mismatch between the linguistic input and the complex unconscious mental representation of language that children achieve. This innate structure is referred to as Universal Grammar (UG); it includes universal principles, as well as parameters which allow for constrained variation across languages.

As far as second language (L2) acquisition is concerned, the question arises as to whether there is a similar mismatch between input and unconscious knowledge. If L2 learners attain knowledge that goes beyond the input, this suggests that UG must play a role, providing constraints on interlanguages. At the same time, L2 learners can draw on properties of their L1 grammar. Hence, the nature and extent of crosslinguistic influence (or transfer) comes into play, raising the issue of how UG and the L1 grammar interact in determining properties of the interlanguage grammar.

Over the years, perspectives on the relationship between UG and the L1 grammar have changed and developed. This timeline will examine 25 years of research in this framework, focusing mostly on syntax and morphology. In the first decade (beginning in the 1980s), the main thrust of investigation was whether principles of UG remain accessible (fully, partially or not at all) to L2 learners during the course of acquisition and whether UG parameters can be reset. The idea that UG continues to operate in the L2 context was based on learnability arguments, which pointed to 'gaps' between what is exemplified in the L2 input and what learners actually come to know, unconsciously. The focus was predominantly, though not exclusively, on L2 English. Claims for the operation or non-operation of UG principles were tested experimentally. Researchers identified situations where the characteristics of the L1 and L2 were such that a principle known to operate in the L2 happened, for independent reasons, not to function in the L1. One such principle is that of Subjacency, which places constraints on wh-movement, so is relevant for wh-movement languages like English but not for so-called wh-in-situ languages like Chinese or Japanese. As for parameters, experimental research concentrated on cases where the L1 and L2 exemplified different settings of some parameter, looking for evidence of initial transfer of the L1 setting, followed by resetting. Investigation included parameters associated with Binding Principles governing the distribution of pronouns and reflexives, as well as the Pro-drop (or Null Subject) Parameter and the Verb Movement Parameter. Much of this research

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tried to determine whether all the consequences of a particular setting would hold together (or 'cluster') in the interlanguage grammar, the results being very mixed. While evidence that L2 learners demonstrate unconscious knowledge of principles of UG proved to be quite robust, evidence for parameter resetting was less compelling.

In the 1990s, emphasis shifted towards a consideration of the initial state in L2 acquisition, as well as the course of subsequent development and the nature of ultimate attainment. A broader range of L2s was investigated. Following similar trends in linguistic theory at the time, theories were couched in terms of functional categories (such as INFL and COMP) and their associated grammatical features (such as Tense and Agreement). Debate centred on whether the UG inventory of grammatical categories and features remains fully or partially accessible, whether L2 learners start off with the set of categories and features exemplified in the L1, and whether they are able to acquire categories and features that are not represented in the L1 grammar but are required in the L2. More generally, the issue of near-native competence was explored, with consideration given to which domains of grammar might never be mastered in a fully native-like manner, and the extent to which the grammars of near-native L2 speakers approximate those of native speakers. Another consideration in the domain of ultimate attainment was the issue of attrition of the L1 grammar under the influence of the L2.

In the past decade or so, there has been another shift, towards the so-called 'interfaces' between different modules of the grammar and how the grammar relates to other cognitive domains. The grammar includes internal components (phonology, syntax, semantics, morphology and lexicon), which must interface with each other. External domains, including discourse and pragmatics, also affect the grammar. Another external interface is that between the language processing (or parsing) system and the grammar; there is a fairly long-standing tradition which attributes L2 learners' difficulties to parsing the L2, including problems attributable to L1 parsing principles. In general, there is active consideration of the extent to which L2 learners' difficulties can be attributed to problems integrating material at the interfaces, especially where the L1 and L2 differ in how interface phenomena play out.

In conclusion, this timeline summarises three major themes which have recurred over time – not always with the same emphasis – in research addressing the relationship between UG and the L1 grammar. These themes are:

A Principles and parameters of UG

- **A1** Motivation for UG and access to UG Principles
- **A2** Parameters and parameter resetting

B From initial to final state

- **B1** The initial state and development
- **B2** Features and morphological variability
- **B3** Ultimate attainment and near-nativeness

C Interfaces

- **C1** Internal interfaces
- **C2** External interfaces

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YEAR	REFERENCES	ANNOTATIONS	THEMES
1985	Felix, S. (1985). More evidence on competing cognitive systems. *Second Language Research* 1, 1–47.	A very early paper which considers the relationship between UG and other cognitive domains in L2 acquisition. In contrast to those arguing for little or no involvement of UG in adult L2 (e.g. CLAHSEN & MUYSKEN[i] 1986; BLEY-VROMAN 1989), **Felix** argues that, whereas child language acquisition involves only UG, competing systems are implicated in adult L2, namely UG and problem-solving systems. In consequence, adult ultimate attainment in L2 necessarily differs from that of native speakers.	**A1, B3, C2**
1985	White, L. (1985). The pro-drop parameter in adult second language acquisition. *Language Learning* 35, 47–62.	Probably the first study to look for evidence of transfer of L1 parameter settings in L2. **White** reports on an experiment comparing French- and Spanish-speaking learners of English with respect to properties relating to the pro-drop parameter by means of a grammaticality judgment task. Spanish speakers, in contrast to French speakers, show evidence of transferring the L1 setting permitting null subjects in English. With increasing L2 proficiency, there is some evidence for parameter resetting. However, there was an absence of clustering effects.	**A2**
1986	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.	One of the first papers to argue against access to UG in adult L2 acquisition. On the basis of production data from learners of German, **Clahsen & Muysken** contrast L1 and L2 acquisition, arguing that stages in L2 word order acquisition are determined on the basis of general learning strategies, with neither L1 nor L2 parameter settings being adopted.	**A1, A2**
1986	Finer, D. & E. Broselow (1986). Second language acquisition of reflexive-binding. In S. Berman, J.-W. Choe & J. McDonough (eds.), *Proceedings of NELS 16*. University of Massachusetts at Amherst Graduate Linguistics Students Association, 154–168.	A small study which was the first to suggest that L2 learners might adopt parameter settings that are exemplified in languages other than the L1 or L2. A parameter related to Binding Theory is investigated, examining choice of antecedents for reflexives in L2 English. Results from a truth-value judgment task suggest that Korean speakers adopt a parameter value which is neither that of the L1 (long distance antecedents) nor the L2 (local antecedents) but which is a possible value in Russian (where tense is crucial in determining antecedent choice). See also HIRAKAWA 1990.	**A2**

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1987	duPlessis, J., D. Solin, L. Travis & L. White (1987). UG or not UG, that is the question: A reply to Clahsen and Muysken. *Second Language Research* 3, 56–75.	This paper reanalyses the L2 German word order data from CLAHSEN & MUYSKEN 1986 and provides additional data from learners of Afrikaans. **DuPlessis et al.** argue that word order acquisition is constrained by UG and that a number of word order parameters are implicated, which are reset in stages from the L1 value to the L2.	**A2**
1987	Coppieters, R. (1987). Competence differences between native and near-native speakers. *Language* 63, 544–573.	The first paper to look at the ultimate attainment of near-native L2 speakers. On the basis of metalinguistic tasks examining a variety of phenomena, including several UG principles, **Coppieters** argues for qualitative differences between the grammars of native and near-native speakers of French. For a critique of his methodology, see BIRDSONG 1992.	**B3**
1987	Flynn, S. (1987). Contrast and construction in a parameter-setting model of L2 acquisition. *Language Learning* 37, 19–62.	**Flynn** argues that L2 acquisition, just like L1 acquisition, involves parameter setting rather than resetting (contra WHITE 1985 and SCHWARTZ & SPROUSE 1996). In other words, transfer of L1 settings does not take place. Nevertheless, where L1 and L2 differ, acquisition of the L2 setting may be delayed. Results from an elicited imitation task, manipulating English word order and pronoun interpretation, show that Spanish speakers are significantly more accurate than Japanese speakers, suggesting facilitation versus delay attributable to the L1. EPSTEIN, FLYNN & MARTOHARDJONO (1996) provide a more recent statement of this position. See commentaries on that paper for counter-arguments.	**A2**
1989	Bley-Vroman, R. (1989). What is the logical problem of foreign language learning? In S. Gass & J. Schachter (eds.), *Linguistic perspectives on second language acquisition*. Cambridge: Cambridge University Press, 41–68.	This paper advances the influential *Fundamental Difference Hypothesis*, according to which L2 acquisition differs from L1 acquisition in major respects. Based on various rather general differences between adult L2 learners and child L1 acquirers, **Bley-Vroman** proposed that adults no longer have access to UG, although they are able to draw on the L1 to exhibit certain UG-like effects.	**A1**

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1990	Hirakawa, M. (1990). A study of the L2 acquisition of English reflexives. *Second Language Research* 6, 60–85.	**Hirakawa** extends the work of FINER & BROSELOW (1986), looking at whether the Subset Principle or language transfer determines the setting of two parameters associated with reflexives in the L2 English of Japanese speakers. Using a multiple choice comprehension task, Hirakawa shows, contrary to FINER & BROSELOW (1986), that Japanese speakers initially adopt the L1 settings of the parameters in question and that some learners are able to reset to the L2 value.	**A2**
1990	Schachter, J. (1990). On the issue of completeness in second language acquisition. *Second Language Research* 6, 93–124.	Related to the proposals of BLEY-VROMAN (1989) and CLAHSEN & MUYSKEN (1986), **Schachter** argues that adult L2 learners have partial access to UG via the L1 grammar. Results from a grammaticality judgment task testing knowledge of Subjacency in L2 English suggest that learners whose L1s lack wh-movement (Korean and Chinese) are significantly less accurate than native speakers in rejecting violations of Subjacency. Learners whose L1 (Dutch) is a wh-movement language have no such difficulty.	**A1**
1991	Johnson, J. & E. Newport (1991). Critical period effects on universal properties of language: The status of subjacency in the acquisition of a second language. *Cognition* 39, 215–258.	Like SCHACHTER (1990), **Johnson & Newport** investigate Subjacency by means of grammaticality judgments, showing that Chinese speakers perform significantly below native speakers in rejecting Subjacency violations. A comparison of the performance of individuals who had learned English at different ages shows a continuous decline in accuracy with age. Only the group that acquired the L2 as young children performed like native speakers, suggesting age effects on access to UG. See WHITE & GENESEE (1996) and WHITE & JUFFS (1998) for contrary findings.	**A1**

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1991	White, L. (1991). Adverb placement in second language acquisition: Some effects of positive and negative evidence in the classroom. *Second Language Research* 7, 133–161.	The first study to investigate whether resetting of UG parameters can be enabled by means of classroom instruction including negative evidence (explicit grammar instruction, correction, etc.). **White** investigates the Verb Movement parameter, which accounts for certain word order differences between French and English on the basis of differences in strength of grammatical features. A group of French-speaking child L2 learners were instructed on properties relating to adverb placement. On pretesting on a variety of tasks (grammaticality judgments, preference judgments, sentence manipulation), participants showed strong effects of French on the L2 English, effects which disappeared after instruction but re-emerged in the longer term. See TRAHEY & WHITE (1993) for a follow-up study focusing on positive evidence and SCHWARTZ 1993 for arguments that true parameter resetting did not take place in this case.	**A2**
1992	Birdsong, D. (1992). Ultimate attainment in second language acquisition. *Language* 68, 706–755.	**Birdsong** provides a critique and replication of COPPIETERS (1987), improving on his methodology and showing that some near-native speakers of French fall within the range of native speakers in their performance on a variety of sentence types in L2 French.	**B3**
1993	Schwartz, B. D. (1993). On explicit and negative data effecting and affecting competence and 'linguistic behavior'. *Studies in Second Language Acquisition* 15, 147–163.	This paper argues, contra WHITE 1991, that parameter resetting (and access to UG in general) cannot be effected by means of explicit input to language learners, including negative evidence.	**A2**

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1993	Sorace, A. (1993). Incomplete vs. divergent representations of unaccusativity in non-native grammars of Italian. *Second Language Research* 9, 22–47.	Like COPPIETERS 1987, **Sorace** reports on competence differences between near-native and native speakers, as well as differences depending on the L1. Italian unaccusative verbs are examined, unaccusatives being intransitive verbs manifesting morphological and syntactic properties which differ crosslinguistically. Using a magnitude estimation task, Sorace shows that French and English speakers differ in their ability to master properties of these verbs in L2 Italian, particularly with respect to choice of auxiliary verbs and positioning of clitics.	**B3**
1993	Trahey, M. & L. White (1993). Positive evidence and preemption in the second language classroom. *Studies in Second Language Acquisition* 15, 181–204.	Following on from WHITE (1991), **Trahey & White** investigate whether the Verb Movement parameter can be reset in the classroom context by supplying students with ample positive evidence of adverb placement possibilities in English. As a result of this 'input flood', French-speaking children learning English acquired the English word order. At the same time, they did not lose the French word order that is ungrammatical in English, suggesting that parameter resetting had not been effected, since one parameter setting did not preempt the other.	**A2**
1994	Schwartz, B. D. & R. Sprouse (1994). Word order and nominative case in nonnative language acquisition: A longitudinal study of (L1 Turkish) German interlanguage. In T. Hoekstra & B. D. Schwartz (eds.), *Language acquisition studies in generative grammar*. Amsterdam: John Benjamins, 317–368.	In this paper, **Schwartz & Sprouse** advance a precursor to the *Full Transfer Full Access Hypothesis* (SCHWARTZ & SPROUSE 1996). They propose that all developmental stages in the interlanguage grammar are UG-constrained. Longitudinal production data from a Turkish-speaking learner of German are analysed with respect to word order. A developmental path is traced which involves changes in how nominative case is assigned, with various consequences for L2 word order over time.	**B1**

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1995	Juffs, A. & M. Harrington (1995). Parsing effects in second language sentence processing: Subject and object asymmetries in wh-extraction. *Studies in Second Language Acquisition* 17, 483–516.	An early paper attributing difficulties in L2 performance to processing factors rather than a failure of UG to constrain underlying competence. Like SCHACHTER (1990), JOHNSON & NEWPORT (1991) and WHITE & JUFFS (1998), **Juffs & Harrington** examine performance on Subjacency in the L2 English of Chinese speakers. Using the moving window technique, these authors show that, while L2 learners are very accurate in judging Subjacency violations, they are slower judging grammatical subject gaps compared to object gaps, suggesting a processing effect. For more recent work making different assumptions about the role of processing in L2, see CLAHSEN & FELSER (2006).	**A1, C2**
1996	Epstein, S., S. Flynn & G. Martohardjono (1996). Second language acquisition: Theoretical and experimental issues in contemporary research. *Brain and Behavioral Sciences* 19, 677–758.	**Epstein et al**. argue for full access to UG principles and parameter settings. Contrary to SCHWARTZ & SPOUSE (1996) or WHITE (1985), they do not entertain the possibility of an initial stage involving transfer of L1 settings. They argue against the staged development involving growth of functional projections proposed by VAINIKKA & YOUNG-SCHOLTEN (1996).	**B1**
1996	Eubank, L. (1996). Negation in early German-English interlanguage: More valueless features in the L2 initial state. *Second Language Research* 12, 73–106.	**Eubank** advances the *Valueless Features Hypothesis*, arguing, contra SCHWARTZ & SPROUSE (1996) and WHITE (1991), for partial transfer rather than full transfer of L1 features. Based on a re-examination of data from WHITE (1991) (amongst others), Eubank argues that features in the interlanguage grammar are neither strong nor weak, resulting in optionality and variability in word order.	**B1**
1996	Grondin, N. & L. White (1996). Functional categories in child L2 acquisition of French. *Language Acquisition* 5, 1–34.	**Grondin & White** argue against the *Minimal Trees Hypothesis* (VAINIKKA & YOUNG-SCHOLTEN 1996), on the basis of longitudinal production data from child learners of French (L1 English). Evidence from suppliance of determiners, verbal morphology, clitics, negative placement, and question formation, is adduced to show that the functional categories DP, IP and CP are present from the beginning, rather than emerging in stages. There is also little evidence for full transfer in the domains examined, contra SCHWARTZ & SPROUSE (1996).	**B1**

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1996	Kanno, K. (1996). The status of a nonparameterized principle in the L2 initial state. *Language Acquisition* 5, 317–332.	Unlike other studies, which have been unable to probe the unconscious knowledge of beginner level L2 learners (e.g. WHITE & JUFFS 1998), **Kanno** successfully investigates a UG principle in the early stages of L2 acquisition. In judging the naturalness of sentences, beginner learners of Japanese (L1 English) demonstrate knowledge of permissible/non-permissible omission of case particles, with performance not differing from native speakers. Kanno argues that this knowledge comes from the Empty Category Principle.	**A1**
1996	Schwartz, B. D. & R. Sprouse (1996). L2 cognitive states and the full transfer/full access model. *Second Language Research* 12, 40–72.	This paper is one of a series advancing the *Full Transfer Full Access Hypothesis* (FTFA), according to which the initial state in L2 acquisition consists of the L1 grammar, including functional categories (contrasting with VAINIKKA & YOUNG-SCHOLTEN 1996). In the course of development, restructuring of the grammar occurs, in response to L2 input. Convergence on the L2 grammar is not guaranteed, with persistence of certain L1 properties. Data from a Turkish-speaking learner of German are discussed in the light of the hypothesis (see also SCHWARTZ & SPROUSE 1994), as well as data drawn from WHITE (1991).	**B1**
1996	Vainikka, A. & M. Young-Scholten (1996). Gradual development of L2 phrase structure. *Second Language Research* 12, 7–39.	**Vainikka & Young-Scholten** propose the *Minimal Trees Hypothesis*, which contrasts with the FTFA (SCHWARTZ & SPROUSE 1996). Based on longitudinal and cross-sectional production data from learners of German (L1s Turkish, Korean, Spanish and Italian), the authors claim that the L2 initial state consists of a grammar without functional categories (INFL, COMP, etc.), thus accounting for the absence of inflectional morphology and function words in early grammars. Functional categories subsequently emerge in universal stages, independently of the L1, and are added to the representation from the bottom up. The proposed order of acquisition is VP>IP>CP.	**B1**

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1996	White, L. & F. Genesee (1996). How native is near-native? The issue of ultimate attainment in adult second language acquisition. *Second Language Research* 12, 238–265.	Like COPPIETERS (1987) and SORACE (1993), **White & Genesee** investigate the nature of near-native competence, although with rather different results. L2 speakers of English were assessed, by independent measures, as being of near-native proficiency. Grammaticality judgments show native-like performance on Subjacency violations and no evidence of age effects, unlike the results presented by JOHNSTON & NEWPORT (1991). However, given that the majority had French as the L1, transfer cannot be excluded as an explanation of their success.	**B3**
1997	Dekydtspotter, L., R. Sprouse & B. Anderson (1997). The interpretive interface in L2 acquisition: The process–result distinction in English–French interlanguage grammars. *Language Acquisition* 6, 297–332.	With this paper, **Dekydtspotter et al.** initiated exploration of the syntax/semantics interface in L2 (see also DEKYDTSPOTTER & SPROUSE 2001). The focus is on situations where L2 French exhibits word order alternations not found in L1 English, resulting in subtle interpretative effects. The authors develop a truth-value judgment methodology where contexts are provided in the L1 and test sentences are in the L2. This study looks at process versus result interpretations of nominals and shows that advanced learners of L2 French perform similarly to native speakers. Beginners and intermediate learners show some sensitivity to the properties in question and their performance does not appear to be based on the L1.	**C1**

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1997	Hawkins, R. & C. Y.-H. Chan (1997). The partial availability of Universal Grammar in second language acquisition: The 'failed functional features hypothesis'. *Second Language Research* 13, 187–226.	**Hawkins & Chan** argue for the *Failed Functional Features Hypothesis* (FFFH), whereby grammars of post-puberty L2 speakers are restricted to certain formal features realised in the L1. In other words, access to the UG feature inventory is only partial. These authors claim that the ±wh feature required for English relative clauses cannot be acquired by Chinese speakers because Chinese lacks this feature. A number of structures implicating this feature are examined. Hawkins & Chan show that, across a range of phenomena, Chinese speakers perform significantly worse than French speakers, French being like English in the relevant respects. However, Chinese speakers improve with proficiency, which the authors interpret in terms of an ability to construct alternative, L1-based grammars which are UG-constrained but not native-like.	**B2**
1997	Haznedar, B. (1997). L2 acquisition by a Turkish-speaking child: Evidence for L1 influence. In E. Hughes, M. Hughes & A. Greenhill (eds.), *Proceedings of the 21st Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 245–256.	**Haznedar** provides convincing evidence for parameter resetting of word order in child L2. Spontaneous production data are examined from a Turkish-speaking child learning English. He starts off with head-final word order (as in Turkish) and switches to head initial (appropriate for English), all relevant word order changes taking place together. In other words, unlike other studies of parameter resetting (e.g. WHITE 1985), all properties relating to the parameter are reset at the same time.	**A2**
1997	Haznedar, B. & B. D. Schwartz (1997). Are there optional infinitives in child L2 acquisition? In E. Hughes, M. Hughes & A. Greenhill (eds.), *Proceedings of the 21st Annual Boston University Conference on Language Development*. Somerville, MA: Cascadilla Press, 257–268.	**Haznedar & Schwartz** compare a child's spontaneous L2 production data involving verbal morphology and use of subjects with data from L1 acquirers. (For other aspects of this child's L2 English, see HAZNEDAR 1997.) While the child uses uninflected forms, these do not show the correlation with null subjects or non-nominative subjects that is found in L1 acquisition of English. The authors argue that the child has a problem with realisation of morphology, rather than any kind of syntactic deficit. (See LARDIERE 1998 and PRÉVOST & WHITE 2000 for other versions of this proposal, for adult L2 learners.)	**B2**

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1997	Kanno, K. (1997). The acquisition of null and overt pronominals in Japanese by English speakers. *Second Language Research* 13, 265–287.	**Kanno** investigates whether English-speaking learners of Japanese observe the Overt Pronoun Constraint, a principle – applying only in null subject languages – which prohibits overt pronouns from having certain kinds of antecedents. Using a coreference judgment task, Kanno shows that L2 learners, like native speakers, differentiate in their treatment of Japanese overt pronouns depending on the type of antecedent involved (quantified or referential), suggesting UG access, since the L1 does not make this distinction.	**A1**
1997	Meisel, J. (1997). The acquisition of the syntax of negation in French and German: Contrasting first and second language acquisition. *Second Language Research* 13, 227–263.	Like BLEY-VROMAN (1989) and CLAHSEN & MUYSKEN (1986), **Meisel** argues that UG is no longer implicated in adult L2 acquisition. Comparing acquisition of French and German by child L1 and adult L2 learners, Meisel argues, on the basis of differences in their negative utterances, that adult L2 syntax is organised in terms of linear sequencing strategies. See PRÉVOST & WHITE (2000) for alternative analyses of some of the same data.	**A1**
1998	Lardiere, D. (1998). Case and tense in the 'fossilized' steady state. *Second Language Research* 14, 1–26.	In a series of studies of which this is one of the first, **Lardiere** examines longitudinal spontaneous production data from a fossilised L2 speaker (L1 Chinese) who has reached the end state, showing little change over time. This L2 speaker shows relatively low suppliance of tense morphology in L2 English but considerable accuracy in associated syntactic properties, suggesting that a tense feature is represented in her grammar. Lardiere attributes the dissociation between morphology and syntax to a problem in mapping between these two domains. She argues against the claim of VAINIKKA & YOUNG-SCHOLTEN (1996) that missing morphology necessarily implies missing syntactic categories and features.	**B2, B3**

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1998	White, L. & A. Juffs (1998). Constraints on wh-movement in two different contexts of non-native language acquisition: Competence and processing. In S. Flynn, G. Martohardjono & W. O'Neil (eds.), *The generative study of second language acquisition*. Mahwah, NJ: Lawrence Erlbaum, 111–129.	**White & Juffs** used a timed grammaticality judgment task to test knowledge of Subjacency in Chinese speakers who learned English as adults in China. Contrary to results reported by SCHACHTER (1990) and JOHNSON & NEWPORT (1991), participants did not differ significantly from native speakers in accuracy in rejecting Subjacency violations. However, they were slower, particularly with subject extractions, consistent with results of Juffs & Harrington (1995).	**A1, C2**
2000	Prévost, P. & L. White (2000). Missing surface inflection or impairment in second language acquisition? Evidence from tense and agreement. *Second Language Research* 16, 103–133.	This paper advances the *Missing Surface Inflection Hypothesis* (MSIH), proposing (contra MEISEL 1997, HAWKINS & CHAN 1997 and HAWKINS & LISZKA 2003) that L2 learners do not suffer from representational deficits in the domain of features (see also HAZNEDAR & SCHWARTZ 1997 and LARDIERE 1998). **Prévost & White** examine a variety of morphological properties, together with associated syntax, such as tense, agreement and verb placement, in L2 French and German. They argue that learners have a low-level morphological deficit such that they cannot consistently realise L2 morphology, resorting to default forms when in doubt.	**B2**
2001	Dekydtspotter, L. & R. Sprouse (2001). Mental design and (second) language epistemology: Adjectival restrictions of wh-quantifiers and tense in English-French interlanguage. *Second Language Research* 17, 1–35.	Like DEKYDTSPOTTER, SPROUSE & ANDERSON (1997), **Dekydtspotter & Sprouse** investigate the L2 acquisition of French, looking at interpretive differences associated with wh-expressions involving adjectival restrictors. Using a truth-value judgment task, these authors show that intermediate and advanced learners of L2 French are sensitive to different interpretations reflected in different word orders, proposing that this sensitivity must have come from UG.	**C1**

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YEAR	REFERENCES	ANNOTATIONS	THEMES
2001	Oshita, H. (2001). The unaccusative trap in second language acquisition. *Studies in Second Language Acquisition* 23, 279–304.	This paper provides an example of research on argument structure alternations and the interface between syntax and the lexicon. **Oshita** looks at unaccusative verbs in L2 English, Japanese and Chinese (see SORACE 1993 for L2 Italian) and provides a useful summary of previous research on this topic; his account brings together a number of seemingly disparate phenomena and he proposes developmental stages which are explained in terms of the interaction of universal principles governing argument structure, the L1 and properties of the L2 input.	**C1**
2003	Dussias, P. (2003). Syntactic ambiguity resolution in L2 learners: Some effects of bilinguality on L1 and L2 processing strategies. *Studies in Second Language Acquisition* 25, 529–557.	**Dussias** examines the potential effects of L1 processing strategies on parsing of ambiguous sentences in L2. She investigates two languages which differ in relative clause attachment preferences, looking at proficient learners of L2 English (L1 Spanish) and Spanish (L1 English). Results from online and offline reading tasks suggest that L2 learners do not resort to L1 parsing strategies. Rather, they show a preference for local attachment of the clause, even when the L1 does not. Like JUFFS & HARRINGTON (1995), Dussias suggests that processing difficulties, rather than lack of access to UG, may explain differences between L2 learners and native speakers.	**C2**
2003	Goad, H., L. White & J. Steele (2003). Missing inflection in L2 acquisition: Defective syntax or L1-constrained prosodic representations? *Canadian Journal of Linguistics* 48, 243–263.	In contrast to other explanations of morphological variability, such as mapping problems (LARDIERE 1998) or defective features (HAWKINS & LISZKA 2003), **Goad, White & Steele** advance the *Prosodic Transfer Hypothesis* (PTH), proposing that L2 learners' problems with production of inflection result from difficulties associated with constructing prosodic representations required for the L2 but disallowed in the L1. Such is the case for English tense and agreement when the L1 is Chinese. Production data from a group of Chinese-speaking L2 learners of English show that agreement is omitted only when English inflection cannot be analysed in terms of Mandarin prosodic structure. For extension of the PTH to other L2 inflections, see GOAD & WHITE (2004).	**B2, C1**

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2003	Hawkins, R. & S. Liszka (2003). Locating the source of defective past tense marking in advanced L2 English speakers. In R. van Hoet, A. Hulk, F. Kuiken & R. Towell (eds.), *The lexicon–syntax interface in second language acquisition*. Amsterdam: John Benjamins, 21–44.	In accordance with the FFFH (HAWKINS & CHAN 1997), **Hawkins & Liszka** argue that the morphosyntactic representation of L2 tense is defective when the L1 lacks overt tense morphology. They report on spontaneous production data from three small groups of learners of L2 English: Chinese speakers, Japanese speakers and German speakers. The Chinese speakers had greater difficulty realising English *t/d* in regular past tense contexts than the Japanese or German speakers. The authors attribute these difficulties to the absence of tense-marking in Chinese. For alternative analyses of problems with tense, see LARDIERE 1998, PRÉVOST & WHITE 2000 and GOAD, WHITE & STEELE 2004.	**B2**
2003	Montrul, S. & R. Slabakova (2003). Competence similarities between native and near-native speakers: An investigation of the preterite/imperfect contrast in Spanish. *Studies in Second Language Acquisition* 25, 351–398.	**Montrul & Slabakova** investigate whether near-native L2 speakers show knowledge of the Spanish preterite/imperfect distinction, a distinction which they attribute to an aspectual feature absent from the L1, English. Results from sentence completion and truth-value judgment tasks show that near-natives do not have problems with this distinction, contra COPPIETERS (1987), even with subtle properties that are not taught. Their results also argue against HAWKINS & CHAN (1997), since these L2 speakers had acquired a feature not present in the L1.	**B2, B3**
2003	White, L. (2003). Fossilization in steady state L2 grammars: Persistent problems with inflectional morphology. *Bilingualism: Language and Cognition* 6, 129–141.	Like LARDIERE (1998), **White** looks at the nature of ultimate attainment, in this case involving a fluent speaker of L2 English with L1 Turkish. While this speaker is far more accurate on English verbal morphology than Lardiere's informant, she has some difficulties with articles, suggesting a possible L1 effect from Turkish. See GOAD & WHITE (2004) for a possible explanation in terms of prosodic transfer.	**B3**

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2004	Goad, H. & L. White (2004). Ultimate attainment of L2 inflection: Effects of L1 prosodic structure. In S. Foster-Cohen, M. Sharwood Smith, A. Sorace and M. Ota (eds.), *Eurosla Yearbook* 4. Amsterdam: John Benjamins, 119–145.	This paper extends the PTH (GOAD, WHITE & STEELE 2003), looking at how Turkish prosodic structure affects production of English verbal and nominal morphology by the same Turkish speaker investigated by WHITE (2003). Omission of inflection is not the only consequence of transfer of L1 prosodic structure, stress and position of adjectives also playing a role.	**B3, C1**
2004	Gürel, A. (2004). Selectivity in L2-induced L1 attrition: A psycholinguistic account. *Journal of Neurolinguistics* 17, 53–78.	A recent theme has been the investigation of attrition, particularly effects of the L2 on the L1 grammar, in this case effects of English on Turkish. **Gürel** examines whether choice of potential antecedents for Turkish pronouns is influenced by long-term exposure to L2 English. Using a variety of tasks, she finds evidence for selective attrition but only so far as Turkish overt pronouns are concerned. (See KANNO 1997 for related work on L2 acquisition of similar Japanese pronouns by English speakers.)	**B3**
2004	Ionin, T., H. Ko & K. Wexler (2004). Article semantics in L2 acquisition: The role of specificity. *Language Acquisition* 12, 3–69.	**Ionin, Ko & Wexler** argue that L2 learners whose L1s lack articles (Korean and Russian) fluctuate between two settings of the Article Choice Parameter, being uncertain whether [±definite] or [±specific] is the relevant feature that determines English article choice. Using elicitation and production tasks, these authors show that errors in article use are systematic and attributable to the association of article choice with specificity. See IONIN, ZUBIZARRETA & MALDONADO (2007) for results from learners whose L1 has articles.	**B2**
2004	White, L., E. Valenzuela, M. Kozlowska-Macgregor & Y.-K. I. Leung (2004). Gender agreement in nonnative Spanish: Evidence against failed features. *Applied Psycholinguistics* 25, 105–133.	**White et al.** argue against the FFFH (HAWKINS & CHAN 1997), investigating the acquisition of Spanish gender by French and English speakers. Results from production data and from an interpretation task show that gender is acquired; there are proficiency effects but no L1 effects, contra FFFH and also FTFA (SCHWARTZ & SPROUSE 1996). L2 learners resort to masculine as a default in both production and comprehension, the latter finding going against earlier predictions of the MSIH (PRÉVOST & WHITE 2000).	**B2**

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2006	Clahsen, H. & C. Felser (2006). Grammatical processing in language learners. *Applied Psycholinguistics* 27, 3–42.	**Clahsen & Felser** advance the *Shallow Structure Hypothesis*, which holds that L2 learners differ in major ways from child and adult native speakers in their processing abilities, reminiscent of earlier claims for fundamental differences between native speakers and L2 learners as far as access to UG is concerned (CLAHSEN & MUYSKEN 1986; BLEY-VROMAN 1989). In particular, Clahsen & Felser argue that adults are unable to make full use of structural information in processing (either from UG or the L1), instead over-relying on lexical and semantic cues rather than syntax, in order to parse L2 sentences.	**C2**
2006	Hopp, H. (2006). Syntactic features and reanalysis in near-native processing. *Second Language Research* 22, 369–397.	Like JUFFS & HARRINGTON 1996 and DUSSIAS 2003, **Hopp** investigates ambiguity resolution in L2 parsing, comparing advanced and near-native speakers of L2 German (L1s Dutch and English). He examines L2 learners' ability to use case and agreement marking to disambiguate different word orders. Results from online reading tasks show that near-natives are not distinguishable from native speakers, with no evidence for shallow structure processing, contra CLAHSEN & FELSER (2006). Advanced speakers perform differently, proficiency level rather than L1 being the determining factor.	**B3, C2**
2006	Tsimpli, I.-M. & A. Sorace (2006). Differentiating interfaces: L2 performance in syntax-semantics and syntax-discourse phenomena. In D. Bamman et al. (eds.), *Proceedings of the 30th Annual Boston University Conference on Language Development.* Somerville, MA: Cascadilla Press, 653–664.	**Tsimpli & Sorace** argue that not all interfaces are equally problematic, the syntax/discourse interface being the source of persistent problems, in contrast to the syntax/semantics interface (as shown by DEKYDTSPOTTER, SPROUSE & ANDERSON 1997 and DEKYDTSPOTTER & SPROUSE 2001). Oral interview data from Russian-speaking learners of Greek are analysed; it is reported that structures involving syntax/discourse (namely, conditions on use of overt pronouns) are more problematic than structures involving syntax/semantics (namely, structures related to focus), at all proficiency levels. For investigation of the syntax/discourse interface in L2 Italian, see BELLETTI, BENNATI & SORACE (2007).	**C2**

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2007	Belletti, A., E. Bennati & A. Sorace (2007). Theoretical and developmental issues in the syntax of subjects: Evidence from near-native Italian. *Natural Language and Linguistic Theory* 25, 657–689.	Along the lines of TSIMPLI & SORACE (2006), this paper compares syntactic and discourse properties associated with the null subject parameter (see WHITE 1985 for earlier work on this parameter). **Belletti et al.** compare performance on syntactic and discourse properties related to null and overt subject pronouns, as well as postposed subjects. Using several elicitation tasks as well as an interpretation task, the authors show that near-native Italian L2 speakers have few problems with the syntax of null subjects. However, they sometimes overuse overt subjects in discourse contexts where null subjects would be more appropriate, and sometimes underuse postposed subjects in discourse contexts where these would be expected. Although the errors are not extensive, their performance differs significantly from native speakers. These problems are attributed, in part, to lasting effects of discourse properties of the L1, English.	**C2**
2007	Tsimpli, I. M. & M. Dimitrakopoulou (2007). The interpretability hypothesis: Evidence from *wh*-interrogatives in second language acquisition. *Second Language Research* 23, 215–242.	This paper argues, against GOAD & WHITE (2004), LARDIERE (1998), PRÉVOST & WHITE (2000) and along the same lines as HAWKINS & CHAN (1997), that there are permanent problems with the representation of uninterpretable features in situations where the L1 and L2 differ, with persistent transfer of L1 features. Acceptability judgment data from Greek-speaking learners of English show that L2 learners accept resumptive pronouns (grammatical in Greek, ungrammatical in English), suggesting transfer of the agreement features associated with them.	**B2**

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2008	Ionin, T., M.-L. Zubizarreta & S. B. Maldonado (2008). Linguistic knowledge in the second language acquisition of English articles. *Lingua* 118, 554–576.	Extending IONIN, KO & WEXLER 2004, **Ionin et al.** show that fluctuation between features determining article choice does not occur when the L1 (Spanish) has the Article Choice Parameter set to the same value, [±definite], as the L2 (English). Spanish speakers contrast with Russian speakers in performance on an elicitation task, showing no evidence of fluctuation at any level of proficiency.	**B2**
2009	Lardiere, D. (2009). Some thoughts on the contrastive analysis of features in second language acquisition. *Second Language Research* 25, 173–227.	This paper is the culmination of Lardiere's work on morphological competence (e.g. LARDIERE 1998). **Lardiere** argues that the task of the L2 learner is to assemble or map features into new formal configurations (termed 'feature reassembly') and that this is considerably more complicated than resetting parameters (cf. WHITE 1985) or failing to select certain features (cf. HAWKINS & CHAN 1997, HAWKINS & LISZKA 2003). Lardiere addresses properties of wh- and indefinite expressions in Korean and English, as well as differences in plural marking between Chinese, Korean and English.	**B2**
2011	White, L. (2011). Second language acquisition at the interfaces. *Lingua* 121, 577–590.	This paper provides an overview of recent perspectives on interfaces in L2. Like TSIMPLI & SORACE (2006), **White** points out that not all interfaces are equally problematic. Furthermore, within any particular interface, not all phenomena will be problematic, suggesting that studies of the syntax/discourse interface should move beyond the much-investigated conditions on use of overt pronouns (see TSIMPLI & SORACE 2006 and BELLETTI ET AL. 2007). White suggests that there may be multiple explanations of L2 learners' problems at the interfaces, including representational and processing accounts.	**C1, C2**

[i]Authors' names are shown in small capitals when the study referred to appears in this timeline.