(LEVERAGE-Learn from Video Extensive Real ATM Gigabit Experiment—was a European three-year collaborative research project focusing on task-based multimedia learning of languages.) Using Web-based resources, students engage in a collaborative task over a network which offers high quality video-conferencing, application sharing and access to authentic multimedia resources. One of the main aims was to establish the practicalities of providing learners of languages with opportunities to engage in reciprocal peer tutoring. After outlining the pedagogical assumptions, and describing the set-up of the network-based learning environment, the trials are analysed, and the effectiveness of network-based language in supporting collaborative learning is discussed.

00–105 Wright, Margaret (The Queen's U.of Belfast, Northern Ireland). Influences on learner attitudes towards foreign language and culture. *Educational Research* (London, UK), **41**, 2 (1999), 197–208.

There is an assumption in UK National Curriculum documentation that foreign language learning has beneficial effects on pupils' attitudes towards foreign people. Numerous studies have questioned the validity of this assumption, but there has been relatively little research into the determinants of learner attitudes. This paper presents results of research which investigates not only attitudes of GCSE (General Certificate of Secondary Education) learners towards French language and culture, but also learners' perceptions of factors which contribute to the formation of those attitudes. The sample consisted of 898 pupils-all in their fifth year of studying French-from 12 post-primary schools, six grammar (selective) and six secondary (non-selective). The findings indicate salient attitude differences according to gender and school type and point to some clearly perceived sources of significant influence on attitudes. Inside-school influences were seen to be stronger determinants of attitude than outside-school factors. The study's findings are seen as having implications for teachers, for authors of modern language textbooks and for the educational system.

00–106 Wright, Margaret (The Queen's U. of Belfast, Northern Ireland). Grammar in the languages classroom: findings from research. Language Learning Journal (Rugby, UK), **19** (1999), 33–39.

This article starts from the premise that research on foreign language learning in the past decade has pointed to a decline in students' spoken and written accuracy. Yet syllabuses and marking criteria for examinations in modern foreign languages in the UK continue to imply the need for accuracy and the importance of grammatical knowledge. In the context of renewed grammatical emphasis, the paper reviews research into the various aspects of the grammar debate and suggests that the weight of evidence points to the need for a balanced approach which combines opportunities both for acquisition and for focus on linguistic form. **00–107 Zaid, Mohammed A.** (King Said U., Abha, Saudi Arabia). Cultural confrontation and cultural acquisition in the EFL classroom. *IRAL* (Heidelberg, Germany), **37**, 2 (1999), 111–26.

This paper argues that the principles about teaching culture in EFL (English as a Foreign Language) have promoted cultural confrontation in the guise of cultural acquisition. It discusses the impact of the culture-oriented classroom on three areas of language pedagogy: approach, design, and procedure. Concerning approach, it is argued that the theories of learning and language adopted by proponents of the culture-centred EFL classroom have resulted in target- and native-culture schematic confrontation, often undermining the students' perspective on their own language and culture. Concerning design, i.e., programme objectives and teacher and student roles, it is argued that the acceptance of cultural knowledge as a basic objective of an EFL programme has frequently led to an overt or covert promotion of the target language at the expense of the native culture, even though the EFL teacher is not a trained sociologist in cultural acquisition. A typical student reaction is to create a hybrid 'third culture', not relevant to the student's own culture nor to the target language community. Concerning procedure, it is argued that, while students expect classroom activities to concentrate on linguistic acquisition, what they get in the EFL culture-oriented classroom is a course in cultural acquisition. The author concludes that, while culture is an important component of language study, cultural confrontation should not take precedence over linguistic acquisition in the EFL classroom.

Language learning

00–108 Arditty, Jo and Prodeau, Mireille (Université de Paris VIII, France). Donner des instructions en langue maternelle et en langue étrangère. [Giving instructions in the native and foreign language.] *Langages* (Paris, France), **134** (1999), 68–84.

This article proposes an interactional re-analysis of an experiment whose purpose was to study instructions produced by fluent (native) and less fluent speakers of a language. The experimental procedure consisted in asking participants to give oral instructions for assembling a model, first to a partner performing the task, and then alone to a cassette-recorder. The article first outlines the global characteristics of the experimental setting, examining the way in which participants constructed the instruction-giving relationship, the role of the partner in the discourse situation and the role of the experimenter both as a useful resource and as a threatening onlooker. It goes on to analyse the discourse of two instructors in detail, one a native French speaker and the other a semi-beginner. Variations in the texts are analysed and related to the tensions in the situation, in terms of both the cognitive difficulties of the task and

the interactional relationship. Both speakers develop their strategies in the situation with the tape-recorder, having learnt from their experiences with a partner, and the non-native speaker uses new linguistic devices. It is suggested that this experimental situation was a learning site for all participants, and that such situations can offer a new perspective on language acquisition.

00–109 Bailey, Phillip (U. of Central Arkansas, USA), **Daley, Christine E. and Onwuegbuzie**, **Anthony J.**. Foreign language anxiety and learning style. *Foreign Language Annals* (New York, USA), **32**, 1 (1999), 63–76.

Research suggests that how students perceive themselves as language learners can affect both their level of anxiety in foreign language (FL) courses and their achievement. However, the authors of this article assert that to date the potential link between learning style and FL anxiety has not been empirically tested. This study of 146 university students thus attempts to identify a combination of learning modalities that might be correlated with FL anxiety. A setwise multiple regression analysis revealed that, of 20 learning modality variables, only responsibility and peer-orientation appeared to be related to FL anxiety. Specifically, students who are not responsible in attempting assignments and who preferred not to learn in co-operative groups tended to have higher levels of FL anxiety. These learning style variables explained only 6 per cent of the variance; however, it is claimed that in the context of FL anxiety research this minimal finding has important implications. The paper discusses these findings, suggests possible questions for future research, and makes recommendations for understanding FL anxiety and increasing FL learning.

00–110 Brown, Cheryl (Brigham Young U., UT, USA), Sagers, Sherri L. and LaPorte, Carrie. Incidental vocabulary acquisition from oral and written dialogue journals. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 259–83.

This paper is in answer to Ellis's (1994) call for more research about vocabulary acquisition from oral input in four areas. It is a hypothesis-generating study of nine advanced university English-as-a-foreign-language learners' incidental vocabulary acquisition from oral and written dialogue journals over a semester. All teacher and student entries in the two types of journals were transcribed and analysed using WordCruncher (1993). The analyses compare the characteristics of the input to the learners in the two modes as well as quantitative and qualitative evidence of vocabulary acquisition by the learners from the two modes. The findings suggest that acquiring from written or oral discourse is similar if the model and production occur in the same mode; and that acquiring spoken production from a written model appears to be more difficult than written from spoken. Of great importance for either mode appears to be the emotional investment in the topics being discussed. Findings of the study indicate several specific places (14 statements) where further research could be undertaken. These fit in three of the areas Ellis named for exploration: (a) 'the nature of the input', (b) 'the role of interaction', and (c) 'individual learner factors'. The findings suggest measures that can be used for quantitative and qualitative evidence of vocabulary acquisition from natural sources.

00–111 Camacho, José (Rutgers U. and Pontificia Universidad Catolica del Perú). From SOV to SVO: the grammar of interlanguage word order. *Second Language Research* (London, UK), **15**, 2 (1999), 115–32.

This paper analyses the grammatical outcome of the conflict faced by speakers of a head-final first language (L1)-Southern Quechua-when learning a head-initial target-Standard Spanish-in a naturalistic setting. It proposes that interlanguage sentential word orders reflect a transfer of two independent parameters from the LI: the possibility of having null objects with definite/specific antecedents and a feature triggering object movement for sentential focus. The second parameter can be successfully reset through contradictory evidence; the first one, however, cannot, since target evidence is compatible with the LI setting. It is claimed that these data can better be accounted for in Schwartz and Sprouse's fullaccess/full-transfer model (Schwartz and Sprouse. 1994; 1996) than in other alternatives such as Vainikka and Young-Scholten's (1994) minimal trees hypothesis and Eubank's (1994; 1996) valueless features hypothesis.

00–112 Caselli, Cristina (Inst. of Psychology, Nat. Council of Research, Rome, Italy), Casadio, Paola and Bates, Elizabeth. A comparison of the transition from first words to grammar in English and Italian. *Journal of Child Language* (Cambridge, UK), **26**, 1 (1999), 69–111.

Cross-linguistic studies have played a major role in the effort to uncover the universal mechanisms governing language development. The present paper contributes to that effort by comparing in English and Italian the transition from first words to grammar in children aged 1;6 to 2;6. Cross-linguistic similarities and differences in early lexical and grammatical development are reported for 1001 English-speaking children and 386 Italian-speaking children. Parents completed the English or Italian versions of the MacArthur Communicative Development Inventory: Words and Sentences, a parent report instrument which provides information about vocabulary size, vocabulary composition and grammatical complexity across this age range. The onset and subsequent growth of nouns, predicates, function words and social terms proved to be quite similar in both languages. No support was found for the prediction that verbs would emerge earlier in Italian, although Italians did produce a higher proportion of social terms, and there were small but intriguing differences in the shape of the growth curve for grammatical function words. A strikingly similar

nonlinear relationship between grammatical complexity and vocabulary size was observed in both languages, and examination of the order in which function words are acquired also yielded more similarities than differences. However, a comparison of the longest sentences reported for a subset of children demonstrates large cross-linguistic differences in the amount of morphology that has been acquired in children matched for vocabulary size. Discussion revolves around the interplay between language-specific variations in the input to young children, and universal cognitive and social constraints on language development.

00–113 Clennell, Charles (U. of South Australia, Adelaide). Metalinguistic features as message enhancers in learner discourse. *Prospect* (Macquarie U., Sydney, Australia), **14**, 1 (1999), 20–27.

This paper looks at the strategies used by adult nonnative speakers (NNS) when performing pedagogic tasks. Certain repair routines which make use of discourse markers such as 'what I mean is' or 'I don't know how to say that' are identified as being particularly effective in overcoming communication difficulty and getting the tasks completed. Such manoeuvres, referred to here as editing procedures, seem to be found in the language use of the more proficient learners, though linguistic proficiency does not appear to be a decisive factor in their use. The paper suggests that the ability to make use of such devices is evidence of both strategic and discourse competence, and that the explanation for their effectiveness may lie in their capacity to work both within the body of the message and outside it. There are potential pedagogic implications for this type of metalinguistic activity, since, unlike communication strategies, these features can be clearly defined and demonstrated.

00–114 Cooper, Thomas C. (U. of Georgia, USA). Processing of idioms by L2 learners of English. *TESOL Quarterly* (Alexandria, VA, USA), **33**, 2 (1999), 233–62.

The study reported here investigated the on-line processing strategies used by a sample of 18 adult nonnative speakers of English who were asked to give the meanings of selected common idioms presented in a written context. Data were collected by means of the think-aloud procedure: participants were asked to verbalise their thoughts as they arrived at the meanings of the idioms. Analysis revealed that most of the participants engaged in a heuristic approach to idiom comprehension, employing a variety of strategies through trial and error to find the meanings of the idioms. Models of first language idiom acquisition did not apply well to the comprehension of idioms by the second language (L2) users. Some pedagogical suggestions derived from the findings are included.

00–115 Demidow, Irene (Martin Luther U., Halle-Wittenberg, Germany). Fachlernen im zweitsprachlichen Unterricht: Alltagssprache

versus Fachsprache. [Learning technical subjects in second language teaching: everyday language versus technical language.] *Zielsprache Deutsch* (Munich, Germany), **2** (1999), 65–74.

Despite an increasing demand for bilingual education, to date few subject-specific investigations into bilingual and second-language (L2) learners have been performed. This paper describes a research project 'Learning physics in a second language' at Halle-Wittenberg University, which attempts to fill this gap. The project examines the learning processes of immigrant children with Russian as a first language (L1) learning physics in German. In contrast to bilingual children, these pupils had received only limited instruction in the L1. Assuming Vygotsky's (1977) concepts of 'everyday knowledge' and 'subject knowledge', pupils' development of technical concepts was investigated, particularly the extent to which L1 knowledge influences concept formation in L2. Research methods involved the use of concept networks, questionnaires in both languages and small group interviews. Detailed case studies of two pupils reveal how they often merely rote-learn German technical terms, and rely heavily on everyday knowledge gained in the L1 for their understanding of technical concepts. The author recommends appropriate types of teaching materials and methods incorporating the L1 more widely to overcome some of the difficulties experienced by L2 pupils.

00–116 Dittmann, Jürgen and Schmidt, Claudia (Albert-Ludwigs-Universität, Frieburg, Germany). Verbales Arbeitsgedächtnis, Lernen und Fremdsprachenerwerb. Ein Forschungsüberblick. [Verbal working memory, learning and foreign language acquisition. A research overview.] *Deutsche Sprache* (Berlin, Germany), **26**, 4 (1998), 304–36.

This article begins with a comprehensive discussion of the current state of research in verbal memory from the point of view of memory psychology and neuropsychology, with particular emphasis on the model of the phonological loop and working verbal memory. Then, using the concept of working verbal memory, the authors investigate its impact on verbal/vocabulary learning. Here they draw both on their own research and that of others. Using the suggested connections between native language (L1) vocabulary acquisition and phonological working memory, they investigate if this also holds for foreign language (L2) (vocabulary) acquisition. Two factors seem to be at play here, namely, the similarity of L2 with L1 vocabulary, and the amount of L2 vocabulary already acquired. The results of several studies are presented and discussed.

00–117 Djokic, Danka (U. of Belgrade, Yugoslavia). Lexical errors in L2 learning and communication. *Rassegna Italiana di Linguistica Applicata* (Rome, Italy), **1** (1999), 123–35.

This paper presents the results of an analysis of errors

collected over a period of 20 years, based on 630 written compositions (mostly letters) yielding 8,756 errors out of 82,394 words and 9,141 sentences. The participants were Yugoslav adult learners who had learnt English for between one and twelve years. The paper specifically focuses on lexical errors made at the intermediate level (from two to five years) of learning English. The errors were examined for form and meaning, for the strategies applied, and for communication. It was hypothesised that lexical errors would occur when there were differences in first (LI) and second language (L2) lexical correspondence, in idiomatic expressions and unmastered lexical items. Three categories of errors were established in respect of form and meaning: substitution, addition and omission. The strategies most frequently applied were code-switching, transfer, intercode switching, and word-coining. In respect of message transfer-where the reader's knowledge of the students' mother tongue, together with the linguistic context, played an important role-there were three types of communication error: momentary confusion, misunderstanding, and communication breakdown. The initial hypothesis was only partly confirmed as to the prediction of transfer errors and L2 lexical correspondence: it did not predict code-switching, intercode-switching and coinage errors. The theoretical and pedagogical implications of the findings are discussed.

00–118 Duffield, Nigel and White, Lydia (McGill U., Quebec, Canada). Assessing L2 knowledge of Spanish clitic placement: converging methodologies. *Second Language Research* (London, UK), **15**, 2 (1999), 133–60.

This paper reports on an experiment investigating adult second language (L2) acquisition of Spanish object clitic placement by native speakers of English (which lacks clitics) and French (where clitics contrast in certain respects with Spanish). Two different experimental methodologies are compared: an on-line sentence matching task and an off-line grammaticality judgement task. Participants were advanced and intermediate level English-speaking and French-speaking learners of Spanish, together with a native-speaker control group. A variety of constructions involving Spanish clitic placement were tested. The results from the two tasks complement each other: all groups show significant effects for grammaticality on the sentence matching task and considerable accuracy on the grammaticality judgement task, suggesting that L2 clitic placement can successfully be acquired even when the first language (LI) lacks clitics, However, both tasks reveal that L2 learners have difficulties in restructuring and causative contexts, which the authors attribute to problems with clitic climbing.

00–119 Ellis, Nick (U. of Wales, Bangor). Cognitive approaches to SLA. *Annual Review of Applied Linguistics* (Cambridge, UK), **19** (1999), 22–42.

Second language learning is an act of cognition par excellence. A cognitive approach to second language

acquisition (SLA) places it within the broader remit of cognitive science. This review defines cognitive approaches to SLA firstly in terms of the discipline's goals and theoretical orientations, examining cognitive approaches to the property theory (what is the domain of knowledge and how is it represented?) and to the transition theory (how do generic learning mechanisms result in complex and highly specific language representations?). Secondly, the methods, tools and resources used in cognitive approaches are detailed, namely, observation of language acquisition, experimentation (laboratory research and naturalistic field studies), and simulation. Finally, a brief section on applications looks at relations between cognitive approaches and instruction. The review includes an annotated bibliography.

00–120 Ellis, Rod (U. of Auckland, New Zealand) and He, Xien. The roles of modified input and output in the incidental acquisition of word meanings. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 285–301.

This article reports an experimental study of the differential effects of premodified input, interactionally modified input, and modified output on the comprehension of directions in a listen-and-do task and the acquisition of new words embedded in the directions. Participants were 50 students from six intermediate-level classes of an American university intensive English language programme. The modified output group achieved higher comprehension and vocabulary acquisition scores than either of the input groups. There was no difference between the premodified and interactionally modified input groups. The advantage of the modified output group is explained in terms of the qualitatively superior dialogic interaction that occurred in this condition rather than in terms of actual language production.

00–121 Foster-Cohen, Susan H. (London U., UK). SLA and first language acquisition. *Annual Review of Applied Linguistics* (Cambridge, UK), **19** (1999), 3–21.

A confluential trend has occurred in recent years in first and second language (L1/L2) and bilingual acquisition studies. The main focus of this review is the advances in thinking on the 'big questions' in the L1 and L2 fields. Firstly, is there a language instinct? i.e., is there a language-specific acquisition device or are other cognitive factors the main agents in learning? The influence of Universal Grammar (UG) in L1 and L2 studies is discussed. Secondly, what is the input like? What input could and does teach a child? The relationship between input and intake is discussed. Thirdly, rules and representations are examined: are there mental representations of linguistic knowledge (a UG account), or pathways in a connectionist network? Fourthly, what kinds of individual differences are there? In L1 research, current interest is mainly focused on pathological aspects (eg. deafness, autism, Downes syndrome, and especially Specific Language Impairment). Finally, consideration is given to methodology, since any empirical

conclusions on language development are only as good as the data on which the analyses are based. An annotated bibliography is included.

00–122 Fraser, Carol A. (York U., Toronto, Ontario, Canada). Lexical processing strategy use and vocabulary learning through reading. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 225–41.

This article reports on a strategy training study which investigated the lexical processing strategies (LPSs: ignore, consult, infer) used by second language learners when they encounter unfamiliar vocabulary while reading, and the impact of these strategies on vocabulary learning. A time-series with repeated-measures design was used. Introspective data were gathered from eight participants (Francophone university students, intermediate English second-language proficiency) on eight texts over five months to elicit LPS use on selfidentified unfamiliar words. Then, one week after each reading, participants completed a cued recall task to measure their learning of these words. An analysis of overall LPS use (changes in patterns and effectiveness of strategy use with LPS-focused instruction) and word retention rates demonstrates the potential for vocabulary learning through reading, and indicates that some LPSs lead to higher retention rates than others. The research is seen as increasing understanding of the role of LPS use in vocabulary learning and suggesting some re-evaluation of current pedagogic practice.

00–123 Freeman, Mike (U. of Brighton, UK). The language learning activities of students of EFL and French at two universities. *Language Learning Journal* (Rugby, UK), **19** (1999), 80–88.

This article presents the results of a survey of the time spent on language learning activities of EFL (English as a Foreign Language) and French at two British universities. It addresses four questions: (1) how students spend their time when language learning and (2) what they spend most time on; (3) to what extent these study habits vary with proficiency level and target language; and (4) what the study implications are of these study patterns for language teaching. A group of 118 university students of French and EFL completed a questionnaire relating to a two-month period. This questionnaire collected data on the periods of time students spent on language learning and on student proficiency levels using self-report instruments. The data were triangulated with similar data collected from 23 interviewees and six case study students. Students of French reported spending most time on classwork and homework, whereas the EFL students spent most time chatting to non-native speakers and listening to the radio. Given that the students reported spending a very high percentage of time on out-of-class language learning (85% for the complete sample), it is suggested that these activities should be more carefully monitored by language teachers.

00–124 Gass, Susan (Michigan State U., USA).

Incidental vocabulary learning. Studies in Second Language Acquisition (New York, USA), **21**, 2, 319–33.

This paper—one in a special collection of SSLA on the topic of incidental second language vocabulary acquisition-takes the other papers as a starting point and raises issues concerning key terms, with particular emphasis on incidental. It is argued that there is no clear way to show that a word has been learned incidentally, if one means that specific attention is not drawn to that word either by some external force or by the learner. It is further argued that, to understand vocabulary learning, linguists cannot limit the investigation to word meaning. Essential to a study of the lexicon is the study of syntax-in particular, the incorporation of syntactic subcategorisations. Taking all of these factors into account, the present author suggests that a more nuanced approach to the study of incidental vocabulary learning is needed. [See also abstracts 00-110, 00-120, 00-122, 00-125, 00-127, 00-144, 00-158.]

00–125 Henriksen, Birgit (U. of Copenhagen, Denmark). Three dimensions of vocabulary development. Studies in Second Language Acquisition (New York, USA), **21**, 2, 303–17.

This article starts from the premise that progress toward establishing a model of lexical development to guide vocabulary acquisition research requires more precise specification of the various dimensions of lexical competence, the interrelationships among them, and how they interface with processes of word learning and use. Three dimensions of lexical competence are proposed: (a) partial to precise knowledge, (b) depth of knowledge, and (c) receptive to productive use ability. The relationship between the two knowledge dimensions and the acquisition of word meaning is considered, with emphasis on the complexity of the semantisation process and on the need for redefining lexical development as both item-learning and system-changing. The adequacy of the three-dimensional description as a reflection of the process of vocabulary development is then discussed. Consideration of the nature of the developmental interrelationships among the dimensions raises two further questions: whether (a) depth of knowledge is a prerequisite for developing precise comprehension; and (b) precise knowledge and depth of knowledge are prerequisites for a word to become productive.

00–126 Howard, Martin (U. College, Dublin, Ireland). The advanced learner: poor relation of the second language acquisition family? *Cahiers AFLS* (Cambridge, UK), **5**, 1 (1999), 7–26.

Second language (L2) studies tend to focus on learners at early levels, and there is a dearth of studies of learners at advanced level. Two major characteristics of learner language have been identified, viz. variability and selective fossilisation, but information on how these apply specifically to the advanced learner is limited. The study

reported here was concerned with the identification of the notable defining features of advanced level language, with particular reference to the expression of temporal relations. All verb forms referring to past time were analysed in the oral production of six Hiberno-English speakers studying French at undergraduate level. It is suggested that the choice of verb forms, and preference for particular aspect with particular verbs, may be determined by type of discourse and verb semantics. Deficiencies in the learner's temporal system may benefit from more informal L2 input, eg. in the target language (TL) community, permitting better transformation of declarative into procedural knowledge; on the other hand, use of language to communicate in the TL community focuses on meaning rather than form.

00–127 Huckin, Thomas (U. of Utah, USA) and **Coady, James**. Incidental vocabulary acquisition in a second language. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 181–93.

It is widely agreed that much second language vocabulary learning occurs incidentally while the learner is engaged in extensive reading. After a decade of intensive research, however, the incidental learning of vocabulary is still not fully understood, and many questions remain unsettled. Key unresolved issues include the actual mechanism of incidental acquisition, the type and size of vocabulary needed for accurate guessing, the degree of exposure to a word needed for successful acquisition, the efficacy of different word-guessing strategies, the value of teaching explicit guessing strategies, the influence of different kinds of reading texts. the effects of input modification, and, more generally, the problems with incidental learning. This article briefly surveys the empirical research that has been done on these issues in recent years.

00–128 Kojic-Sabo, Izabelle and Lightbown, Patsy M. (Concordia U., Canada). Students' approaches to vocabulary learning and their relationship to success. *TESOL Quarterly* (Alexandria, VA, USA), **32**, 4 (1998), 176–92.

This article reports a study surveying students' approaches to vocabulary learning in two distinct learning environments: one where English was studied as a second language (ESL), and another where it was a foreign language (EFL). A questionnaire (after Sanoui, 1992) was administered to 47 ESL and 43 EFL students. Questions asked included the amount of time usually spent on vocabulary learning, the extent to which they engaged in independent language study, the type of vocabulary learning activities carried out on a regular basis, and the frequency and elaborateness of (a) note-taking and reviewing efforts and (b) dictionary use. Whereas students in the two settings exhibited significant differences in the use of some of the strategies, other parts of their strategic behaviour were strikingly similar. Cluster analysis, a technique used for finding relatively homogeneous subgroups in a population,

identified eight different profiles of student approaches to lexical learning. The majority of learners fell into 'saw-toothed' profile clusters, exhibiting clear preferences for certain types of strategic behaviour. Analyses were also conducted to determine a possible relationship between strategy use and achievement level. Students' performance on two tests, a Yes/No test assessing knowledge of academic vocabulary and a cloze test assessing overall English proficiency, were compared for the clusters. More frequent and elaborate strategy use was associated with higher levels of achievement, whereas lack of self-reported effort was linked to poor performance. Results also suggested that time and learner independence were the two measures most closely related to success in vocabulary learning and higher overall English proficiency.

00–129 Kormos, Judit (Eötvös U., Budapest, Hungary). Monitoring and self-repair in L2. Language Learning (Malden, MA, USA), **49**, 2 (1999), 303–42.

The aim of this article is to review the psycholinguistic research on second language (L2) self-repair to date with particular attention to the relevance of this field for L2 production and acquisition. The author first reviews the main psycholinguistic theories of monitoring with special regard to theories of noticing and consciousness. This is followed by the presentation of the findings of empirical research on self-repairs organised according to a number of key issues. Analysis of the results of L2 research on self-repair to date leads to a discussion of what they reveal about mechanisms of L2 speech processing and learning. The article points out that Levelt's (1989, 1992, 1993) and Levelt et al.'s (in press) perceptual loop theory of monitoring can be adopted for monitoring in L2 speech as well. It is also argued, however, that this theory needs to be complemented with recent research on consciousness, attention and noticing in order to account for mechanisms of error detection in L2.

00–130 Kormos, Judit (Eötvös U., Budapest, Hungary). The effect of speaker variables on the self-correction behaviour of L2 learners. *System* (Oxford, UK), **27**, 2 (1999), 207–21.

This paper aims to explore the effect of individual speaking style on the self-correction behaviour of second language (L2) speakers. The project reported here involved 30 Hungarian learners of English of varying levels of proficiency and made use of self-report data. The results obtained from the analysis of a wide range of variables did not support the assumptions of previous studies, as the difference between accuracy- and fluency-centred speakers did not manifest itself in the global frequency of self-repairs. The two types of learners were found to differ in how frequently they produced rephrasing-repairs, which involve uncertainty about the correctness of their utterance, in the proportion of the errors they corrected, and in the speed with which they uttered their message. The findings suggest that accura-

cy-centred participants tended to pay more attention to monitoring at the expense of the other speech production processes, while fluency-centred learners allocated more attention to speedy production and focused less on intercepting errors. It is also pointed out that L2 learners with differing speech habits may make conscious decisions not to correct an error with varying frequency.

00–131 Kost, Claudia R. (U. of Arizona, USA), Foss, Pamela and Lenzini, Jr., John J.. Textual and pictorial glosses: effectiveness on incidental vocabulary growth when reading in a foreign language. *Foreign Language Annals* (New York, USA), **32**, 1 (1999), 89–113.

Research into techniques which facilitate reading in a foreign language (FL) has recently focused in particular on the relationship between glossing and reading comprehension. The present study investigates the effects of pictorial and textual glosses and a combination thereof on incidental vocabulary growth of FL learners. Fiftysix participants from second-semester German classes read a narrative text passage under one of three marginal gloss conditions: textual gloss (English translation); pictorial gloss; and text and pictures in the gloss. Participants were tested on production as well as recognition of 14 target words both immediately following and two weeks after the reading. Support was found for the hypothesis that participants utilising a combination of text and pictures in the gloss would outperform participants under the other two gloss conditions on the recognition of target words on both short-term memory and retention.

00–132 Liceras, Juana M. (U. of Ottawa, Ontario, Canada) and Díaz, Lourdes. Topic-drop versus pro-drop: null subjects and pronominal subjects in the Spanish L2 of Chinese, English, French, German and Japanese speakers. Second Language Research (London, UK), **15**, 1 (1999), 1–40.

Recent developments within the so-called Principles and Parameters model of acquisition argue for a clearcut separation of Universal Grammar (UG) principles from parametric captions and locate all parameters within functional categories. This has led Tsimpli and Roussou (1991) to propose that adult L2 (second language) learners have access to UG principles but do not reset the parameters of the L2, which amounts to saying that null subjects in the adult Spanish L2 may or may not have the same status as native Spanish null subjects, depending on the speakers' LI (first language) and the UG principles at stake. In the case of LI acquisition, Rizzi (1994) and Hyams (1994) provide a competence account of null subjects in early child English which relate them to adult English Diary Drop and Germanstyle topic-drop rather than to Spanish-style prodrop. They specifically argue that these missing subjects are restricted to the first position of non-wh root clauses and that fixing the null subject parameter will consist of incorporating the ROOT=CP principle into this grammar. The present paper analyses the Spanish L2 oral spontaneous data produced by adult LI speakers of pro-drop and topic-drop languages in an attempt to provide a competence account of null subjects in adult non-native Spanish. The data show that, unlike early English grammars, all the Spanish non-native grammars contain null subjects both in matrix and subordinate clauses, and that this is the case at the early and advanced stages. It also shows that many non-native pronominal subjects do not have the same value as native Spanish subjects and that subject pronouns are used for identification purposes. It is suggested that these data provide evidence for a model of L2 acquisition where adult non-native grammar construction resorts to a default licensing procedure which allows null pronouns provided they can be identified.

00–133 Liceras, J. M. (U. of Ottawa, Ontario, Canada), Valenzuela, E. and Díaz, L.. L1/L2 Spanish grammars and the pragmatic deficit hypothesis. *Second Language Research* (London, UK), **15**, 2 (1999), 161–90.

In recent research on primary (LI) and non-primary (L2) language acquisition, special attention has been given to whether syntactic development is subject to a continuity condition. While it has been proposed that the continuity condition applies to both LI and L2 syntactic growth, the changes that take place in developing grammars have sometimes been attributed to other cognitive systems. Specifically, it has been proposed that child grammars are 'underspecified' because they lack a pragmatic principle which determines the range of indices available for establishing verbal and nominal co-reference. According to this proposal, a grammar which is underspecified for Number has null subjects and bare NPs only with noninflected verb forms. On the assumption that adults will not have a pragmatic deficit of the kind proposed for children, this paper analyses data from child LI Spanish and adult L2 Spanish. The results of the analysis show that: (1) in child LI Spanish, the feature Person may encode Number so that when Person is distinctively implemented, root infinitives and bare NP subjects will cease to occur. However, the pervasive morphology of Spanish verbs conspires against the possibility of providing clear-cut evidence for underspecification in the case of child Spanish; (2) the different nature of LI and L2 root infinitives may provide partial evidence for underspecification in the case of LI Spanish; and (3) in the case of L2 learners, the distribution of null and overt subjects seems to be partially determined by their LI rather than by underspecification.

00–134 Liu, Dilin (Oklahoma City University, USA) and Zhong, Shouman. Acquisition of culturally loaded words in EFL. *Foreign Language Annals* (New York, USA), **32**, 2 (1999), 177–88.

Although vocabulary learning has begun to gain due attention in second language (L2) acquisition research, studies have been scarce on L2 acquisition of culturally

loaded words-those that are similar in primary meaning but different in connotation between LI and L2. The study reported here attempts to determine empirically whether or not English as a Foreign Language (EFL) students' understanding of culturally loaded words approximates that of native speakers of English, and how much English proficiency level may account for the extent of this approximation. The study involved 125 EFL students (all English majors, 64 intermediatelevel and 61 advanced-level) from a university in China and 61 native-speaker students from an American university. The three groups were asked to rate the appropriateness of six culturally loaded words and four culturally neutral words in sentences that provided adequate contextual information. Statistical analysis of the three groups' ratings indicates that there is some limited but inadequate EFL approximation towards the target model in the understanding of culturally loaded words, and that even advanced EFL students' understanding of most of the words differs significantly from that of the native speakers. The findings suggest that English Foreign/Second Language (EFL/ESL) educators and researchers should pay more attention to this special type of vocabulary and that vocabulary should be taught in adequate and appropriate social and cultural context.

00–135 Maingard, Christine (Southern Cross U., Lismore, Australia). Evolutionary epistemology in language learning: possible implications for CALL. *ReCALL* (U. of Hull, UK), **11**, 1 (1999), 80–92.

Whereas improvements in CALL (Computer-Assisted Language Learning) design are dependent on theories of language learning and acquisition, limitations to the former have arisen from widespread disagreements over the latter. This paper attempts to point towards a way forward using an evolutionary epistemological understanding of language learning, and some implications of such an approach for CALL. It is claimed that an evolutionary approach, involving trial and error elimination, requires a multi-dimensional learner-centred model which takes into account advancements in psychology, education and linguistics, areas that have often been ignored by CALL researchers and practitioners.

00–136 Mandell, Paul B. (U. of Wyoming, USA). On the reliability of grammaticality judgement tests in second language acquisition research. *Second Language Research* (London, UK), **15**, 1 (1999), 73–99.

The use of grammaticality and metalinguistic judgement tests in second language acquisition research has been the subject of considerable scrutiny over the past decade. Grammaticality judgement test data in research design are used to make inferences about the syntactic structures and rules that constitute learners' linguistic competence, in the Chomskian sense of the word. One criticism levelled at the use of this type of test, however, is that they are not reliable measures of linguistic competence. The study reported here compared grammati-

cality judgement test data with dehydrated sentence test data, an assessment tool commonly used in the L2 (second language) classroom. Data were collected from three levels (second, fourth and sixth semester) of adult L2 learners of Spanish about verb movement (V-movement). The results from the comparison of the two tests are taken to indicate that grammaticality judgement data are reliable measures of linguistic knowledge.

00–137 Mizuno, Mitsuharu (Kanagawa U., Yokohama, Japan). Interlanguage analysis of the English article system: some cognitive constraints facing the Japanese adult learners. *IRAL* (Heidelberg, Germany), **37**, 2 (1999), 127–52.

This article posits that second language (L2) learners whose first languages (L1s) contain an article system are likely to differ greatly in English article acquisition from those whose L1s do not. The article reviews the approach of Mizuno's (1988) Interlanguage Analysis for uncovering the process in second language acquisition. Mizuno's (1986) findings in respect of article errors in English among Japanese adult learners in Japan are summarised. New data-from five follow-up experiments conducted consecutively with around 2000 Japanese students of English as a foreign language at seven universities in Japan-are then examined from the same perspective. It is claimed that both the original and the new data provide clear support for Mizuno's (1985) claims regarding the five types of errors in article use. The study also suggests that, specifically, in the acquisition of English articles, Japanese adult learners demonstrated the following constraints: (1) confusion over the concept of zero and nil; (2) ignorance of the concept of the zero article in English; (3) lack of awareness of the boundary between the discrete and continuous attributes of nouns; (4) limited opportunity for practice of and exposure to meaningful expressions in English and the authentic rhythms of everyday English; and (5) a complete lack of awareness of deictic factors constraining the article used. The article concludes with pedagogical implications for speakers of languages lacking an article system.

00–138 Montrul, Silvina (State U. of New York, Albany, USA). Causative errors with unaccusative verbs in L2 Spanish. *Second Language Research* (London, UK), **15**, 2 (1999), 191–219.

Unaccusative verbs do not form a homogeneous class with respect to the syntactic constructions in which they may appear. Change of state unaccusatives alternate in transitivity (romper break'), others have a suppletive causative counterpart for the transitive variant (morir-matar die-kill'), while still others do not alternate and do not have lexically unrelated counterparts (escapar escape'). It has been documented that first (LI) and second language (L2) learners of English use intransitive verbs in causative contexts (Don't giggle me, Come it closer), due to the existence of the alternating class. Using a Picture Judgement Task, the present study investigates whether intermediate Turkish-speaking and

English-speaking learners of Spanish know which unaccusative verbs alternate in transitivity and which ones do not, and whether they find causative errors natural with intransitive verbs. Results confirm similar findings to those reported in English interlanguage and LI acquisition and suggest that, at the level of argument structure, LI and L2 acquisition are guided by the same linguistic principles: LI influence plays a significant role with the reflexive morphology of intransitive forms. It is argued that transfer might not operate uniformly in all linguistic domains in interlanguage grammars (Schwartz and Sprouse, 1996).

00–139 Moyer, Alene (Georgetown U., Washington, USA). Ultimate attainment in L2 phonology. The critical factors of age, motivation, and instruction. *Studies in Second Language Acquisition* (New York, USA), **21**, 1, 81–108.

Within both first and second language (L2) acquisition research, a critical or sensitive period for complete attainment has largely been substantiated in phonological studies, although it is questionable whether age should be examined in isolation from socio-psychological influences and the extent of the exposure to the L2. The study reported here sets out to challenge the Critical Period Hypothesis by examining phonological performance among 24 highly motivated participants who use German daily as graduate student instructors and who have been immersed in the language through in-country residence, augmented by years of instruction in both language- and content-based courses. The methodology developed seeks to expand the realm of factors potentially conflated with age, such as instruction, motivation, suprasegmental training, and self-perception of productive accuracy, and other factors that have not been addressed in previous studies on ultimate attainment. Production tasks target sounds difficult for non-native speakers according to contrastive analysis, and task types range in complexity from isolated words to sentences, paragraphs, and free speech. A mean rating was computed for each speaker, including native speaker controls, according to native speaker judgements. When averaged across all tasks, non-native speaker performance did not overlap with native performance. However, several variables correlated significantly with outcome, including suprasegmental training, which indicated performance closer to native level.

00–140 Myles, Florence, Mitchell, Rosamond and Hooper, Janet (U. of Southampton, UK). Interrogative chunks in French L2: a basis for creative construction? *Studies in Second Language Acquisition* (New York, USA), **21**, 1, 49–80.

This paper explores the relationship between formulaic language and creative construction in second language acquisition by examining the production of interrogatives in an extensive naturalistic corpus of second language (L2) French produced by early classroom learners in secondary school. The paper first analyses the production and breakdown of such formulaic lan-

guage over time, before exploring the development of more creative structures. The interaction between the two processes 'rote learning of formulas' and 'creative construction' is then investigated. This interaction is shown to be a dynamic two-way process, with learners being driven forward in the development of their L2 system by their attempts to resolve the tension between structurally complex but communicatively rich formulas on the one hand, and structurally simple but communicatively inadequate creative structures on the other hand.

00–141 Negretti, Raffaella (Università di Verona, Italy). Web-based activities and SLA: a conversation analysis research approach. *Language Learning and Technology* (http://polyglot.cal.msu.edu/llt), **3**, 1 (1999), 75–87.

Different Internet technologies foster the acquisition of different language skills. In the case of synchronous interaction tools, such as Webchat, the concern is to evaluate whether and how this communication context affects the process of acquiring a second language. A collection of Webchat interaction data among English non-native speakers (NNS) and native speakers (NS) is the basis for the microanalytic investigation reported here, conducted from a Conversation Analysis (CA) perspective. The main purpose is to discover patterns and conversational strategies used by participants in this on-line context. A CA research approach was chosen since it investigates the machinery and the structure of social action in language, avoiding preformulated theoretic categories. This is important since computer-mediated communication (CMC) represents a new second language acquisition (SLA) context, forcing both NS and NNS to produce different structures and strategies. The study analyses, in particular, whether Webchat implies a reduction of the range in interactional practices, actions, performance, sense making, and meaning negotiation, thus affecting the SLA process. Finally, the researcher considers the reliability and validity of this type of qualitative research in this new technological area. Using some research methodologies taken from CA literature, an analysis of the data focuses first on the overall structure of interaction and sequence organisation in connection with the on-line communication setting features. It then passes to turn-taking organisation, with attention to recurrent structures and patterns as in openings and closings; turn design (or packaging of actions); expression of paralinguistic features in this on-line context; and some (interlanguage) pragmatic variables. The conclusion resolves the findings and underlines NNS versus NS behaviour, offering hypotheses about SLA through Webchat and synchronous CMC in general, encouraging further investigation.

00–142 Olsen, S. (Finnmark Coll., Alta, Norway). Errors and compensatory strategies: a study of grammar and vocabulary in texts written by Norwegian learners of English. *System* (Oxford, UK), **27**, 2 (1999), 191–205.

This article describes a study of the English written by Norwegian English foreign language learners attending district schools. Language problems on different linguistic levels are analysed, and the theory of compensatory strategies is used to explain the process underlying the text production. The results suggest that less proficient learners have a higher number of grammatical, orthographic and syntactical errors which can be attributed to cross-linguistic influence. It is argued that the learners have had too little exposure to the target language, especially in written form, and that results would improve if more reading and writing tasks were included in the classroom.

00–143 Ortega, Lourdes (U. of Hawai'i, USA). Planning and focus on form in L2 oral performance. *Studies in Second Language Acquisition* (New York, USA), **21**, 1, 109–48.

Previous research on the impact of pre-task planning on interlanguage development (e.g. Crookes, 1989; Ellis, 1987; Foster & Skehan, 1996) has focused solely on the linguistic quality of planned output, leaving the cognitive and attentional processes engaged during planning time unexplored. Drawing on recent research on focus on form (Doughty & Williams, 1998) and on retrospective methodologies used in strategy use research (e.g., O'Malley & Chamot, 1990), the study reported here investigated whether planning opportunity results in an increased focus on form at the level of strategic attention to form during planning time, as well as at the level of production outcomes during task performance. Participants were 64 university students from advanced-level Spanish classes and from non-language classes in a variety of disciplines. The results are taken to provide support for the claim that planning before doing a second language task can promote an increased focus on form by providing space for the learner to devote conscious attention during pre-task planning to formal and systemic aspects of the language needed to accomplish a particular task.

00–144 Paribakht, T. Sima and Wesche, Marjorie (U. of Ottawa, Ontario, Canada). Reading and 'incidental' L2 vocabulary acquisition: an introspective study of lexical inferencing. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 195–224.

The study reported here is a follow-up to a classroom experiment with university students of English as a Second Language (ESL) which demonstrated incidental acquisition of new lexical knowledge through the reading of thematically related texts. Introspective data from similar students using the same materials are analysed in this study to explore how vocabulary knowledge may be acquired as a by-product of reading for comprehension. Participants were 10 intermediate-level students in a university ESL class from a variety of first language backgrounds. The researchers sought to identify the strategies and the kinds of knowledge and information learners used when dealing with new sec-

ond language (L2) words they encountered while reading. Learners tended to ignore a large proportion of the words. For those words they attended to, inferencing was the main strategy employed. A taxonomy of the knowledge sources they used in inferring word meanings from various textual and other cues was developed, which provided a framework for describing learners' inferencing behaviour. Findings are interpreted in terms of existing research and theory on incidental vocabulary acquisition within an input-processing framework; and pedagogical implications are drawn.

00–145 Pérez-Leroux, Ana T. and Glass, William R. (Pennsylvania State U., USA). Null anaphora in Spanish second language acquisition: probabilistic versus generative approaches. *Second Language Research* (London, UK), **15**, 2 (1999), 220–49.

The acquisition of Spanish null pronouns is an optimal domain for comparing the predictions of generativist versus probabilistic approaches to language acquisition. This paper presents two studies on the acquisition of null subjects by English adult learners of Spanish as a second language. The first investigates a low frequency construction in which the antecedent of the pronoun is a quantifier, and the distribution is regulated by a principle of Universal Grammar. The second looks at a high frequency context, where the distribution of the null pronoun depends on whether it is interpreted as focus or as discourse topic. The data indicate early mastery, and no development in the case of the low frequency quantifier construction, and gradual acquisition for the distribution of pronouns in discourse. These findings are taken to lend support to grammatical as opposed to probabilistic approaches to language learning.

00–146 Rézeau, Joseph (Université de Haute Bretagne Rennes 2, France). Evolution des attitudes et des représentations dans l'apprentissage des langues dans un environnement multimédia. [Changing attitudes and representations in learning a language in a multimedia environment.] *ReCALL* (U. of Hull, UK), 11, 1 (1999), 93–110.

This article begins from the premise that learners' attitudes and representations play a crucial role in their learning. The research reported here reveals discernible differences in learner profile among language and nonlanguage university students. The data suggest that the representations of language learning and of ICT (Information and Communication Technology) held by these two groups are very much of a social nature, which suggests a striking correspondence in the two areas under study. The article also reports a longitudinal study of a sample of the students, which shows that their learning profiles and representations are susceptible to change. The question is raised of how far the change noted is influenced by the multimedia environment in which the language is learned.

00–147 Riney, Timothy J. (Internat. Christian U., Tokyo, Japan) and Takagi, Naoyuki. Global foreign accent and voice onset time among Japanese EFL speakers. *Language Learning* (Malden, MA, USA), **49**, 2 (1999), 275–302.

This study follows Major (1987) and Flege & Eefting (1987) in its investigation of the correlation between global foreign accent (GFA) and voice onset time (VOT). Two questions were investigated: (1) whether interlanguage VOT values approach the target language norms over time; and (2) whether there is a correlation between interlanguage VOT values and GFA scores. VOT values for /p/, /t/, and /k/ were measured at two times, separated by an interval of 42 months, produced by 11 Japanese speakers of English as a Foreign Language (EFL); five age-matched native speakers of English served as the control group. The GFA scores of the same 16 speakers are taken from Riney & Flege (1998). One finding, that VOT generally did not change over time, is attributed to phonological similarity between Japanese and English diaphones. A second finding, that of a GFA-VOT correlation, links global and discrete measures of accent and supports an earlier claim by Major (1987).

00–148 Roberts, Celia (Thames Valley U., London, UK). Acquisition des langues ou socialisation dans et par le discours? Pour une redéfinition du domaine de la recherche sur l'acquisition des langues étrangères. [Language acquisition or discourse socialisation? Re-thinking the boundaries of second language acquisition.] Langages (Paris, France), **134** (1999), 101–15.

This paper recasts the process of learning to use a second language as language socialisation—but also identifies some limitations of language socialisation. The social aspects of language learning and use include not only a study of second language interaction but also the wider social outcomes of intercultural encounters. Detailed analyses of encounters between minority workers and gatekeepers from the majority group are used to illuminate the socio-cultural knowledge necessary for language socialisation. They also shed light on the ways in which minority workers are ideologically positioned in interaction and so on the potentially hostile environment for language learning. The link between language socialisation and wider social processes is illustrated through Gumperz's work on intercultural communication.

00–149 Salaberry, M. Rafael (Penn State U., USA). The development of past tense verbal morphology in classroom L2 Spanish. *Applied Linguistics* (Oxford, UK), **20**, 2 (1999), 151–78.

Previous research has shown that the development of aspectual distinctions-inflectional morphology-among adult second language (L2) learners is associated with lexical aspect. The study reported here analysed the development of past tense verbal morphology in L2 Spanish among 20 college-level students whose first

language was English. Four native speakers acted as a control group. The study was based on the analysis of oral movie narratives collected at two different times two months apart. The purpose of the study was to investigate the potential role of lexical semantics in the selection of verbal morphology among instructed L2 learners of different levels of proficiency in the target language. The results show that the lexical aspectual semantics of the verb phrase have an increasing influence on the selection of verbal endings throughout development of the L2. In contrast, for the lowest-level learners represented in this study the effect of lexical aspect is minimal compared to the effect of tense contrasts.

00–150 Segalowitz, Norman and Lightbown, Patsy M. (Concordia U., Montreal, Canada). Psycholinguistic approaches to SLA. *Annual Review of Applied Linguistics* (Cambridge, UK), **19** (1999), 43–63.

Psychological theory and second language acquisition (SLA) theory are converging on solutions to common issues. This review considers some of the central issues for psycholinguists in SLA. The first section examines the place of an innate Universal Grammar (UG) in language acquisition, and the challenge to the premises underlying the innateness position made possible by new research techniques. Consideration is also given to the Competition Model, an approach which views both first and second language acquisition as a learning process based on universals of cognitive structure (rather than on principles of UG) and in which learning is input driven. The second section of the review deals with the basic cognitive mechanisms underlying SLA, particularly attention and memory, and their role in the achievement of fluency. Finally, some pedagogical implications of recent developments in the psychological literature are discussed: how can communicative language teaching (CLT) promote fluency, which requires automatic processing (achieved through repetition); and what place is there in CLT for focus on form? The review includes an annotated bibliography.

00–151 Sheorey, R. (Oklahoma State U., USA). An examination of language learning strategy use in the setting of an indigenised variety of English. *System* (Oxford, UK), **27**, 2 (1999), 173–90.

This paper reports on the language learning strategies of a group of learners not represented in previous such studies, namely, Indian college students (n=1261) studying English in the environment of an indigenised variety of English. Data were collected through the English Language Learning Strategies Inventory (ELLSI), a questionnaire specifically designed for the study. Results indicated that the students used learning strategies included in the ELLSI with high to moderate frequency, and that their cultural and educational backgrounds seemed to influence some of the strategies used. In general, the results were consistent with those previously reported in similar studies of students in

other environments: female students reported significantly more frequent use of strategies than male students, as did students with high proficiency in English. Results of factor analysis suggested that Indian students seem, on the one hand, to favour functional practice strategies which help them boost their communicative performance, and, on the other, to rely on examination-oriented memory strategies which help them suceed in the examination-driven educational system. The paper also includes background information and discussion of the English language situation in India and of the learning and teaching of English at college level.

00–152 Talamas, Adrienne, Kroll, Judith F. (Pennsylvania State U., USA) and Dufour, Robert. From form to meaning: stages in the acquisition of second-language vocabulary. *Bilingualism:* Language and Cognition (Cambridge, UK), **2**, 1 (1999), 45–58.

During early stages of second language acquisition adult learners make frequent errors of lexical form. This paper reports an experiment performed to examine this effect in the laboratory. More and less fluent bilinguals in English and Spanish performed a translation recognition task in which they decided whether the second of two words was the correct translation of the first. In the critical conditions of the experiment the words were not correct translation equivalents, but related by lexical form (e.g., man-hambre (hunger) instead of man-hombre (man)) or by meaning (e.g., man-nujer (woman) instead of man-hombre (man)). Less fluent participants suffered more interference for form-related than for semantically-related words relative to unrelated controls, but the reverse pattern held for more fluent participants. The results support a progression from reliance on word form to reliance on meaning with increasing proficiency in the second language. The performance of the more fluent bilinguals further suggests that the ability to retrieve semantic information directly for secondlanguage words can potentially override some of the costs associated with lexical competition in languages that access shared lexical features.

00–153 Taraban, Roman (Texas Tech. U., USA) and Kempe, Vera. Gender processing in native and nonnative Russian speakers. *Applied Psycholinguistics* (Cambridge, UK), **20**, 1 (1999), 119–48.

Traditional computational accounts of gender representation and learning (e.g., Carroll, 1989, 1995) differ radically from cue-based and connectionist accounts. The latter but not the former predict that access to noun gender will vary depending on the reliability of noun endings (and other sublexical elements and morphological constituents) in marking gender, and that agreement markers can be used strategically to constrain the genders of ambiguously marked nouns. This article reports a study in which adult native (LI) speakers of Russian (Experiment 1) and advanced non-native (L2)

speakers (Experiment 2) read Russian sentences on a computer and were asked to choose one of two inflected past tense verbs in a forced choice task. The verbs either matched or mismatched the gender of the subject NP (noun phrase). Half of the target trials used opaque (end-palatalised) subject nouns, which were ambiguously marked for gender, and the other half used transparent (regularly marked) subject nouns. Noun type was crossed with the presence or absence of a gender-marked adjective in the subject NP.When an adjective was present in the subject NP, both LI and L2 speakers were significantly faster at reading and selecting the correct verb form. L2 but not LI speakers showed longer reading and choice latencies and made more errors when the subject noun was opaque. The data showed that L2 speakers used adjective inflections to disambiguate the gender of opaque subject nouns and to select gender appropriate verb inflections. The accuracy data for LI and L2 speakers were tested against several connectionist models. The models' success in accounting for the data suggested that LI and L2 speakers may depend on a common learning mechanism and thus resemble one another at the computational level, contrary to traditional computational accounts.

00–154 Vasseur, Marie-Thérèse (Université René Descartes, Paris V, France). Dialogues, soliloques et projet d'apprenant chez une étudiante avancée. [An advanced learner's dialogues, soliloquies and learning project.] *Langages* (Paris, France), **134** (1999), 85–100.

This article reports on a case study of an advanced learner's practices in conversation and soliloguy, drawing on a theoretical understanding of language learning as requiring a combination of interaction and reflection. It begins with a detailed description of the speaker, a Taiwanese student living in France, and moves on to analyse features of her audiotaped conversation with others and recordings of her self-talk. Conversations with other students demonstrate very little focus on language. Conversation with an individual who takes on the role of 'teacher' shows evidence of much more correction and reformulation. The article then analyses extracts of the speaker's own soliloquies, in which she speaks to herself in the target language in dialogic form. This offers her a space in which she can practise the target language, reproduce things she has heard from other people, and correct herself and reformulate expressions in a way which would be very face-threatening in an interactive situation. The article concludes by suggesting that the interrelationship between conversation and soliloquy is one of the ways in which linguistic competence is built up for this student, with interaction and reflection combining in the process of knowledge construction.

00–155 Wang, Wendy (State U. of New York, Albany, USA). Age and second language acquisition in adulthood: the learning experiences and perceptions of women immigrants. *TESL Canada*

Journal/La Revue TESL du Canada (Burnaby, B.C.), **16**, 2 (1999), 1–19.

Although considerable evidence indicates that age of onset for second language (L2) acquisition is related to L2 proficiency outcomes among adult learners, few studies have actually looked at how adult learners of different ages experience and perceive L2 acquisition. The study reported here presents 30 women immigrant learners' accounts of their experiences and perceptions of learning L2 English in the Canadian context. Findings from the study reveal the complexity of adult L2 acquisition, which involves factors pertaining not only to the learners themselves, but also to the social context in which the L2 is learned. Implications of these findings are discussed in relation to the L2 curriculum development and classroom practice.

00–156 Williams, John N. (U. of Cambridge, UK). Memory, attention and inductive learning. *Studies in Second Language Acquisition* (New York, USA), **21**, 1, 1–48.

This paper reports three experiments investigating the relationship between memory for input and inductive learning of morphological rules relating to functional categories in a semi-artificial form of Italian. Participants were 54 adults divided into three groups, two experimental and one control. A verbatim memory task was used as both the vehicle for presenting sentences and as a continuous measure of memory performance. Experiments 2 and 3 introduced increasingly explicit manipulations of attention to form compared to Experiment 1. In all experiments there were strong relationships between individual differences in memory for input as measured early in the experiment and eventual learning outcomes, and in Experiments 2 and 3 learning form-form (but not form-function) rules was related to vocabulary learning efficiency (taken as a measure of phonological long-term memory ability). These relationships along with the lack of an effect of feedback in Experiment 3 suggest that participants tended to adopt a data-driven, as opposed to conceptually driven, mode of learning. However, the fact that the introduction of highlighting and vocabulary pre-training in Experiment 2 had a large impact on learning without improving early memory is taken to suggest that knowledge of distributional rules does not simply emerge out of memory encodings of the relevant forms but depends upon the appropriate allocation of attention over relationships between input elements at the time of encoding.

00–157 Williams, Marion and Burden, Robert (U. of Exeter, UK). Students' developing conceptions of themselves as language learners. *The Modern Language Journal* (Malden, MA, USA), **83**, 2 (1999), 193–201.

This article describes a small-scale study into learners' attributions for success and failure in learning French. The study investigated the way in which learners con-

ceptualise the notion of doing well, together with their perceived reasons for their successes and failures. Interviews were conducted with students aged between 10 and 15 learning French in the Southwest of England. The results indicated that most of these learners tended to judge their success by external factors such as teacher approval, marks or grades, and that the range of attributions increased with age. Many of the attributions mentioned, however, were superficial in nature. It appears that the teacher plays a significant role in the development of students' attributions. Implications are drawn with regard to language teaching and to the nature of the learning environment.

00–158 Wode, Henning (Kiel U., Germany). Incidental vocabulary acquisition in the foreign language classroom. *Studies in Second Language Acquisition* (New York, USA), **21**, 2, 243–58.

This paper is based on ongoing research on a recent low-dose, late partial English immersion programme in Germany. The evaluation compares English language outcomes of immersion groups, groups from nonimmersion schools, and non-immersion groups from the same school as the immersion groups, at various points of their development. This paper focuses on whether English vocabulary learning occurs incidentally while students are learning history or geography, or both, taught in English, and whether there is evidence to suggest that the learning abilities activated in the immersion classroom are the same as those found in traditional foreign language teaching and in naturalistic (untutored) second language (L2) acquisition. The data derive from a communicative group test. It is shown that some of the lexical items cannot have come from the textbook or from other kinds of teaching materials used during regular foreign language instruction in the programme-which leaves the teacher's oral use of English as the most likely source. Several implications for L2 acquisition theory and teaching practice are discussed.

00–159 Ying, H. G. (U. of Colorado at Denver, USA). Access to UG and language transfer: a study of L2 learners' interpretation of reconstruction in Chinese. *Second Language Research* (London, UK), **15**, 1 (1999), 41–72.

This paper reports a study which investigated second language (L2) learners' knowledge of reconstruction (NP and predicate fronted sentences with ziji 'self') in Chinese. Twenty-seven English-speaking learners of Chinese (the experimental groups) and 20 native speakers of Chinese (the control group) participated in the study. Results of a sentence interpretation task indicate that English-speaking learners of Chinese had knowledge of ambiguity of antecedence of ziji inside a moved predicate, and lack of ambiguity of antecedence of ziji inside a moved NP, although such information is not directly available in English. While the experiment produced evidence that they appeared to have access to Universal Grammar, English-speaking learners of Chinese bound ziji in non-movement sentences to an

embedded subject, indicating that they mapped the narrower setting of reflexives in English onto a wider parameter setting of ziji in Chinese.

00–160 Young, Richard (U. of Wisconsin-Madison, USA). Sociolinguistic approaches to SLA. *Annual Review of Applied Linguistics* (Cambridge, UK), **19** (1999), 105–32.

Two important areas of sociolinguistic research in second language acquisition (SLA) are examined: language variation and face-to-face communication. The former takes the notion of context as a given, and correlates contextual features with variation in a particular linguistic form. Variationist methods have been used in the study of interlanguage, with a number of studies suggesting that systematic variation is essential to the development of interlanguage. The latter considers context to be emergent and dynamic. Research into cross-cultural communication has made use of the hermeneutic and qualitative methodology dominant in this type of research, with the result that such communication is increasingly seen as a joint accomplishment and the social identities of those involved as dynamic rather than static. These methodologies are important tools in illuminating patterns of language use and the language attitudes of bilinguals. Three sociolinguistic theories are reviewed: discourse domains, co-construction and interactional competence. The weakness of the first lies in its focus on the individual; the others, in contrast, view sociolinguistic phenomena as co-constructed by all participants. In explaining how learners become participants in the social world, interactional competence is considered the most applicable to explaining cross-cultural communication. Finally, a short annotated bibliography is provided.

Reading

00–161 Barfield, Andy (U. of Tsukuba, Japan). In others' words: how learners construct reading difficulties. *Literacy Across Cultures (LAC)* (Fukui, Japan), **3**, 1 (1999), 3–10, 21.

This preliminary study uses data from self-reports in an attempt to answer fundamental questions about students' perceptions of their difficulties in reading. The areas addressed are difficulties in reading graded readers, making the transition from graded to authentic texts, and identifying areas of difficulty in academic and expository texts. Participants were enrolled on a university-level reading programme. Classes focused on a range of strategies depending on the text and aimed to move from graded readers to newspaper articles and teenage content texts and finally to academic texts. Students were encouraged to keep learning journals to reflect on their reading processes and to enable the teacher to advise and guide them-these form the basis of this study. According to students' journals, graded readers posed problems mainly with comprehension, encouraging fast reading and guessing meaning from context. Vocabulary caused

most difficulties when students moved on to newspaper articles and teenage publications. Similar problems were identified by students with academic text, though problems were divided between subject-specific and general academic language. The article concludes that students need to practise a range of reading skills and vocabulary acquisition strategies, while a methodology such as the one outlined here can encourage student reflection and independence.

00–162 Bimmel, Peter and Oostdam, Ron (U. of Amsterdam, The Netherlands). Strategietraining en leesvaardigheid. Theorie en praktijk in balans. [Strategy training and reading comprehension. Theory and practice in balance.] *Levende Talen* (Amsterdam, The Netherlands), **543** (1999), 556–64.

In earlier publications, a first experimental study was reported in which the effect of teaching reading strategies was measured in terms of effective strategy use, reading comprehension in the first language (L1) and reading comprehension in a foreign language, in this case English. None of the training programmes appeared to have had any effect. In the second study reported here, the experimental design was improved in a number of ways, including the fact that it concentrated on more complex strategies, and that the training sessions were spread over a much longer period of time. The results of this second study suggest improved strategy use and higher scores for reading comprehension in L1, i.e., Dutch. Spontaneous transfer of these effects to reading comprehension in the foreign language could not be observed, however; it remains unclear whether such transfer could be achieved by explicit instruction. The authors argue that this latter point deserves further research, in view of the fact that at present language teachers devote a large amount of time to teaching essentially the same strategies.

00–163 Gholamain, Mitra and Geva, Esther (U. of Toronto, Canada). Orthographic and cognitive factors in the concurrent development of basic reading skills in English and Persian. *Language Learning* (Malden, MA, USA), **49**, 2 (1999), 183–217.

According to the 'script-dependent' hypothesis, accurate word recognition skills develop more slowly in languages with an irregular orthography, such as English, than in regular orthographies, such as Persian. According to the 'central processing hypothesis', basic reading skills in all languages are influenced primarily by underlying cognitive factors. These hypotheses were examined by studying the linguistic, cognitive and basic reading skills of 70 children in Grades 1-5 learning to read concurrently in English (their first language) and Persian (a second language). The findings supported both hypotheses. A consideration of these frameworks as complementary is seen as contributing to a cross-linguistic theory of reading skills development in bilingual children.