

French second language acquisition research: setting the scene

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ABSTRACT

This introductory article introduces the field of second language acquisition (SLA) to specialists in French linguistics who are not familiar with it. Its purpose is to present a map of the field which will then enable the reader to better situate the following in depth articles which present focused theoretical and empirical investigations as they apply to French. The first part summarises recent, and sometimes apparently contradictory, research findings. The second part explores the theoretical approaches which have been most influential in recent investigations, outlining where each of these approaches originates, and which aspects of the SLA process it investigates.

I INTRODUCTION

Research into second language acquisition over the past few decades has repeatedly come up with two main findings. First, second language acquisition is highly systematic, as shown by the acquisition sequences learners from different first language (L1) backgrounds go through when acquiring a given second language (L2). Second, SLA is highly variable, as evidenced by the widely different levels of proficiency reached by second language learners.

Although these two statements might appear contradictory at first sight, they are not. They merely reflect the highly complex and multi-faceted nature of L2 acquisition, and they usually refer to different aspects of the acquisition process.

Systematicity primarily refers to what has been called the **route** of development (the nature and sequence of the stages all learners go through when acquiring a second language). This route remains largely independent of both the learner's mother tongue (L1) and the context of learning (e.g. whether instructed in a classroom or acquired naturally by exposure).

Variability, on the other hand, usually refers to either the **rate** of the learning process (the speed at which learners are learning the L2), or the **outcome** of the learning process (how proficient learners become), or both. We all know that both speed of learning and range of outcomes are highly variable from learner to learner.

This is of course somewhat of a simplification. The route of development is not completely free of variation, nor does it remain uninfluenced by the L1 of learners. Second language learners often use variable structures when native speakers would not, and the phenomenon of **transfer**, even if much less prevalent than was once thought, is nonetheless well-documented in the SLA literature. However, making the distinction between the acquisition process, as evidenced by the developmental stages learners go through, and the speed and final outcome of this process, as shown by widely differing proficiencies, is a helpful starting point when trying to make sense of what sometimes appear as contradictory findings.

The first part of this article summarises in very general terms the main findings of SLA research; the second part then outlines how various theoretical paradigms have attempted to explain/investigate these findings.

2 SLA FINDINGS

2.1 Systematicity

A defining moment for the field was in the 1970s, when it became evident that L2 learners follow a fairly rigid developmental route, similar in many ways to the route followed by children learning their L1. In the context of first language acquisition, Roger Brown and his colleagues (Brown, 1973) found that children acquired fourteen grammatical morphemes in English in the same order, albeit at variable rates.

This work gave the impetus for studies investigating the acquisition of the same morphemes in the context of second language acquisition (Dulay and Burt, 1973; Bailey *et al.*, 1974; Dulay and Burt, 1974; 1975). It was found that L2 learners acquire these morphemes in similar orders, irrespective of their L1 (Spanish, Cantonese, Greek, Persian, Italian, Turkish, Japanese, Chinese, Thai, Afghani, Hebrew, Arabic, Vietnamese).

Moreover, not only do children, and L2 learners, acquire grammatical morphemes in a fixed order, but they also follow fairly rigid stages during the acquisition of a range of syntactic structures. Developmental sequences for e.g. the acquisition of negative and interrogative structures in English are well documented, as is the acquisition of German word order. In the case of French, similar sequences have been found: for example, Myles *et al.* (1999) showed that English learners of French go through the following early stages in their acquisition of interrogatives:

1. A 'verb-less' stage, e.g.: **je grand maison?*
2. An 'infinitive verb' stage, at which verbs are introduced in creative constructions, but are typically untensed, e.g.: **euh . . . la . . . mère regarder la magasin?*
3. A 'finite verb' stage, where verbs are marked morphologically, e.g.: **la mère regarde euh lire euh la petite frère et soeur euh pêchent?*

By the end of the study (Year 9 in the UK context), learners still did not use inversion to mark questions in French, resorting exclusively to intonation in order to do so (unless using rote-learned chunks which remain unanalysed).

These stages match the first two stages found by Pienemann *et al.* (1988) in English as an L2, as defined below:

Stage 1: Single words or formulae

Stage 2: Declarative word-order

Stage 3: Fronting

Stage 4: Inversion in *wh*- and 'yes/no' questions (with copula and auxiliaries other than 'do')

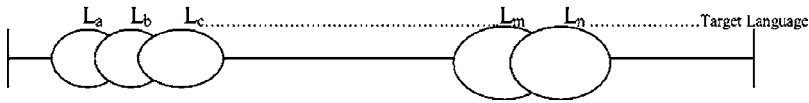
Stage 5: Inversion in *wh*-questions (with 'do' and other auxiliaries)

Stage 6: Complex questions (question tags, negative questions, embedded questions).

(Bartning and Schlyter, this volume) present recent findings about developmental stages in French L2 in more detail.

The developmental route learners follow can be crudely represented as a series of interlocking linguistic systems (or interlanguages: L_a , L_b , ... L_n ...), sometimes bearing little resemblance to either the L_1 of the learner, or the L_2 being learnt (e.g. the interrogative structures exemplified above do not correspond to either the English rule nor the French rule for interrogative formation).

Developmental route



Crucially, these interlanguages are linguistic systems in their own right, with their own set of rules. For example, Hernández-Chávez (1972) showed that although the plural is realised in almost exactly the same way in Spanish and in English, Spanish children learning English still went through a phase of omitting plural marking. It had been assumed prior to this that second language learners' productions were a mixture of both L_1 and L_2 , with the L_1 either helping or hindering the process depending on whether structures are similar or different in the two languages. This was clearly shown not to be the case, even if the L_1 of learners does, of course, play some role, especially in early stages and more persistently at the level of pronunciation.

Similar sequences of acquisition have been found for a wide range of structures in a range of languages (for reviews, see e.g. Ellis, 1994; Mitchell and Myles, 2004).

The finding that learners follow developmental routes which are largely independent of both L_1 and L_2 had important implications for the field as a whole. It led to the demise of Contrastive Analysis, which aimed to compare pairs of languages in order to predict difficulty (what was different would be difficult and would therefore need to be taught explicitly, and what was similar would be easy to learn) and to a reassessment of the role of errors in second language learning (Error Analysis). If errors do not primarily originate in the L_1 of learners, as learners from a range of different L_1 s follow the same developmental sequences and make similar

errors, then SLA researchers need to study them in order to understand where they come from.

From the 1980s onwards, the SLA research agenda focused primarily on (a) documenting the route followed by learners in a range of structures and languages – although English remains by far the most studied L2, and increasingly (b) explaining this route which, if it is for the most part independent of both the L1 and the context of learning, must be due to **learner-internal processes**. This still remains today a crucial part of the SLA research agenda.

2.2 Variability

The variability that occurs in L2 development, in terms of rate of acquisition and outcome, has received much less attention in the SLA literature until relatively recently. This was because of the very robust general findings showing that, in key respects, learners develop in similar ways no matter what their age is, whether they are learning the L2 in a classroom or in a country where the language is spoken, no matter what their L1 is, and no matter what they were actually taught. As more and more empirical research has been carried out, however, a number of important points have emerged which have meant qualifying these statements somewhat.

2.2.1 Variability in route

Despite the relative rigidity of the L2 learning route, it would be misleading to suggest that there is no inter or intra-learner variability in SLA. L2 productions are not as stable as native productions, and there is much evidence in the literature of learners alternating between competing forms. Additionally, though the findings documented above led to a re-evaluation of the role of the L1 in SLA, which went from being the main culprit for all errors to being one source of hypotheses among others, all foreign language teachers nonetheless know that transfer of L1 properties does play a role in L2 learning. And this role is not exclusively one of either speeding up the learning process in the case of closely related languages or similar linguistic structures (or slowing it down in the case of typologically distant languages). We also know that some errors can be traced to specific first languages and are indicative of specific L1 communities (especially at the level of pronunciation – foreign accents, but not exclusively; e.g. an English learner of French saying *je suis onze* when giving her age or Chinese learners' persistent problems with articles – they do not exist in Chinese).

The main role of the L1, however, seems to be as facilitator or inhibitor of the learning process; learners from different L1s will tend to follow the same developmental patterns, but move along the continuum more or less quickly depending on their L1. For example, Italian learners of French will acquire the idiosyncratic placement of object pronouns in French more quickly than, say, English learners, because it is similar in both languages, but they will still go through the same stages, when in fact transferring their L1 structure would lead to

acquisition of the correct system. Both sets of learners will go through the following stages in acquiring object pronouns:

1. Pronoun placed after the verb: *le chat mange la*
2. Omitting the pronoun: *le chat mange Ø*
3. Correct placement: *le chat la mange*

In fact, if Italian learners used either the L2 input they are exposed to, or their L1 system (*il gatto la mangia*), they would get it right straight away. But whereas English learners will take some time to acquire this structure in French L2, Italian learners will be quicker, leading to variability across sets of learners: some learners who seem to be developmentally at a similar stage will be more or less advanced on given structures.

Additionally, there is ample evidence in the literature not only of transfer not taking place when it would help, but also of transfer taking place one way and not the other. For example, as we have just seen, English learners of French go through a stage producing *la souris mange le* rather than *la souris le mange* (which could be attributed to transfer). French learners of English, however, never produce *the mouse it eats* in their interlanguage, which one would expect if transfer was taking place (Hawkins, 2001a).

However, there are also areas in which the L1 gives rise to structures not found in the language of other L2 learners (Odlin, 1989; Selinker, 1992; Odlin, 2003). The impact of the L1 on interlanguage development needs to be better understood, even if its potential influence on SLA remains limited, since we know that only a small subsection of structures from the L1 are likely candidates for transfer.

Another source of apparent variability in the productions of L2 learners, especially in early stages, is their reliance on unanalysed **chunks**. Before learners have generated the grammar necessary for producing target L2 structures, they tend to rely on a databank of set phrases and routines they have rote-learned, and which they have not analysed yet into their constituents. For example, they might learn classroom (or holiday) routines such as *Comment t'appelles-tu? Je m'appelle... Où habites-tu? J'habite... Où est la gare?* etc. These structures will typically be more complex than the language produced by learners generatively on the basis of their current grammar. This will give rise to apparently variable language, when learners might produce within the same task *comment t'appelles-tu?* (rote-learned chunk), and *le nom?* (pointing to a person on a photo in order to elicit their name from the researcher). With time, these chunks become analysed and feed into the construction of the grammar of learners (Wong-Fillmore, 1976; Weinert, 1995; Myles *et al.*, 1998; 1999; Wray, 2002; Myles, 2004).

2.2.2 Variability in rate and outcome

In contrast to the undeniable systematicity of the route of development (bar the relatively minor differences alluded to previously), the rate of acquisition and the outcome of the acquisition process are highly variable, unlike L1 acquisition in

which children seem to progress at roughly similar rates (give or take a few months), all becoming native speakers of the language they are exposed to.

It is difficult to predict in second language acquisition what makes some people learn faster and better than others. Some factors have been isolated as playing some part in this. For example, age is one such factor (Singleton and Lengyel, 1995). Although the commonly held view that children are better L2 learners is a gross oversimplification, if not a complete myth, differences have been found between children and adults, primarily in terms of eventual outcome. Although teenagers and adults have been found to be generally better and faster L2 learners than young children in the initial stages of the learning process (on a wide range of different measures), children usually carry on progressing until they become indistinguishable from native speakers, whereas adults do not. Whether this is due to the process of acquisition having changed fundamentally in adulthood, or for other reasons (e.g. the process remains the same but stops short of native competence), is an issue hotly debated today, and the source of much empirical investigation (Birdsong, 1999; Hawkins, this volume).

In order to explain variability in rate and outcome, SLA researchers have focused primarily on the role of external factors in the acquisition process. One line of research inquiry has addressed questions about the nature of the input and the role of interaction in the learning process. Other lines of inquiry have investigated the role of learner variables, such as intelligence, aptitude, phonological memory, motivation, attitude, as well as the social and sociolinguistic variables which impact on them (Skehan, 1989; Ellis, N. 1996; Berry, 1998; Skehan, 1998; Dörnyei, 2001b; Dörnyei, 2001a; Ellis, N. 2001a; Robinson, 2001; Sawyer and Ranta, 2001; Dörnyei, 2002; Dörnyei and Skehan, 2002; Robinson, 2002c; 2002a; 2002b; Skehan, 2002; Sternberg, 2002; Dörnyei and Skehan, 2003; Robinson, 2003). These variables have been found to play an important role in determining how successful learners are. For example, recent motivation research has witnessed something of a boom since the 1990s, with research questions becoming more sophisticated and addressing more directly language teaching issues. Motivation is now seen as situation-dependent as well as a relatively stable learner trait, and much work has been carried out investigating issues such as the role of tasks in motivating learners, the role of the teacher in motivating learners, or the role of learning strategies in enhancing motivation (Dörnyei, 2001a; 2002).

However, the reasons why even well-motivated, intelligent adults, with abundant exposure to the L2, still usually fall short of native competence (a phenomenon often referred to as fossilisation), remain poorly understood. In particular, why some structures seem very difficult to acquire in the L2, even when there is plenty of input, is unclear. In immersion programmes in Canada for example, in which English-speaking children are taught the normal curriculum through French and are therefore exposed to large amounts of input within a communicative focus, end results have been mixed. Although these children become very proficient and fluent in French, their accuracy in some areas (e.g. gender, adverb placement etc.) remains far from native-like, suggesting that some aspects of language resist

spontaneous acquisition (Harley, 1992; White, 1996a; Harley, 1998; Hawkins, 1998; White, 2003b; Lyster, this volume).

To conclude this brief overview of the main findings characteristic of SLA research, it is important to stress that the similarities and differences between first and second language acquisition have been an important source of theorising in SLA. If the processes are similar, the explanations which are put forward to explain L1 acquisition could well apply to L2 acquisition as well; if, on the other hand, they are different, researchers need to explain those differences. We can briefly summarise these similarities/differences as follows:

Similarities:

- learners go through well-defined stages when acquiring the L1/L2
- these stages are similar across learners

Differences:

- L2 learners are highly variable in speed of acquisition and ultimate attainment
- there is transfer of some L1 properties
- L2 learners do not usually become native-like, especially in some areas of grammar or language use (e.g. sociolinguistic competence; pronunciation; some morphological and syntactic properties)

3 THEORETICAL PARADIGMS

We can broadly classify theoretical approaches into two groups: approaches which aim to explain the nature of the L2 linguistic system (both in terms of what is similar across L1 and L2 learners and what is different; these are referred to as **property theories**), and approaches which focus on the development of the learner system and what has an impact upon it (**transition theories**). Within this broad dichotomy, researchers have focused on learner-internal mechanisms (linguistic or cognitive), or on learner-external factors (e.g. the role of the input, social factors etc.). To make sense of the field, it is therefore important to be aware of the specific aspects of L2 development the various approaches are aiming to elucidate. Similarly, it is important to be clear about which aspect of language specific approaches are investigating: is it the development of morphology, syntax, phonology, or of sociolinguistic competence or fluency? Each area of language development will bring with it its own descriptive apparatus and hypotheses. It is fair to say that until now, the focus has been primarily on morphosyntactic development, although this is starting to change, with an increasing number of studies focusing on lexical development, phonological development, or processing. These areas remain relatively little studied in the context of French as an L2, however, and are therefore under-represented in this volume.

The second part of this article turns to a brief presentation of the main theoretical paradigms used in the field.

3.1 *The nature of the L2 linguistic system*

The approach which has contributed the most to our understanding of the L2 linguistic system has undoubtedly been **Universal Grammar (UG)**. The UG approach applies the Chomskyan paradigm to the study of L2 development. In a nutshell, this linguistic theory claims that humans inherit a mental language faculty which highly constrains the shape that human languages can take and therefore severely limits the kind of hypotheses that children can entertain regarding the structure of the language they are exposed to. UG contains universal principles which specify the invariant features of human languages (e.g. all human languages are hierarchically structured in similar ways), and parameters which specify the limited amount of variation which is allowed from language to language (e.g. all human languages are built from phrases – principle, but the order of constituents within phrases varies, with the complement coming either before or after the head of the phrase – parameter). This is why children acquire their first language easily and speedily, in spite of its complexity and abstractness, at an age when they are not cognitively equipped to deal with abstract concepts generally. In this view, the core of language is separate from other aspects of cognition, although it operates in close interaction with them. If the L2 developmental route is similar in many respects to the L1 route as noted above, then it must also be because the innate UG constrains L2 development. The L2 situation, however, is complicated by the fact that learners have already set parameters in the context of their L1. One question which arises is whether learners can reset parameters to the L2 setting when it differs from their L1, or not. This approach has given rise to a wealth of studies (White, 1989; Cook and Newson, 1996; White, 1996b; Flynn *et al.*, 1998; Schwartz, 1998; Archibald, 2000; Herschensohn, 2000; White, 2000; Balcom, 2001; Hawkins, 2001a; 2001b; White, 2003b; 2003a; Mitchell and Myles, 2004). The evidence to date is inconclusive, with some researchers claiming that L2 learners can reset parameters and others not. For example, Flynn (1996) claims that Japanese (head-last) learners of English (head-first) are able to reset the head-parameter we have just mentioned from the earliest stages of acquisition. Other researchers investigating the acquisition of wh-movement in learners whose L1 does not have it (i.e. the phrase being questioned remains in situ) have argued that they failed to acquire properties linked with wh-movement (Schachter, 1996; Hawkins and Chan, 1997).

Researchers generally agree, however, that L2 learners do not produce ‘wild grammars’, i.e. grammars which violate UG. L2 acquisition seems to be UG-constrained, but access to parametric options may be unlike L1 acquisition.

Overall, the UG approach has been very influential, and has enabled great strides in our understanding of the L2 linguistic system, by providing a sophisticated analytical tool, as well as specific hypotheses about the nature of inter-languages.

Hawkins (this volume) presents a UG analysis of French L2 development.

3.2 The development of processing

Processing approaches, as their name indicates, investigate how second language learners process linguistic information, and how their ability to process the L2 develops over time. They are focused primarily on the computational dimension of language learning, and might or might not believe that language is a separate innate module.

Cognitive theorists fall into two main groups:

- (a) The theorists who believe that language knowledge might be 'special' in some way, but who are concerned to develop transition/processing theories to complement property theories such as UG (Towell and Hawkins, 1994), or LFG (Lexical Functional Grammar; Pienemann, 1998; 2003).
- (b) Theorists such as MacWhinney (1999), Ellis, N. (2003), Tomasello (2003), who do not think that the separation between property and transition theories is legitimate, as they believe that you can explain both the nature of language knowledge and the development of processing through general cognitive principles. In fact, they see the learner as operating a complex processing system which deals with linguistic information in similar ways to other kinds of information. They refute the need to posit an innate, language specific, acquisition device. Learning in this view is seen as the analysis of patterns in the language input, and language development is seen as resulting from the billions of associations which are made during language use, and which lead to regular patterns which might look rule-like, but in fact are merely associations. 'Constructivists believe that the complexity of language emerges from associative learning processes being exposed to a massive and complex environment' (Ellis, N. 2003: 84).

Generally speaking, cognitive and information processing models claim that language learning is no different from other types of learning, and is the result of the human brain building up networks of associations on the basis of input. They see learning as the shift from controlled processes (dealt with in the short term or working memory and under attentional control) to automatised processes stored in the long term memory (retrieved quickly and effortlessly), through repeated activation (McLaughlin, 1987; McLaughlin and Heredia, 1996). Recently, connectionist models have further assumed that all learning takes place through the building of patterns which become strengthened through practice (Elman *et al.*, 1996; Ellis, N. 2003). Computer models of such processes have had some success in replicating the L1 and L2 acquisition of some linguistic patterns (e.g. past tense, gender in French L2; Sokolik and Smith, 1992; Ellis, N. and Schmidt, 1997). The view of language encapsulated within connectionism is fundamentally different from linguistic models, where language is seen as a system of rules rather than as patterned behaviour.

Pienemann's Processability Theory (1998, 2003) aims to clarify how learners acquire the computational mechanisms which operate on the linguistic knowledge

they construct. Pienemann believes that language acquisition itself is the gradual acquisition of these computational mechanisms, i.e. the procedural skills necessary for the processing of language. It is limitations in the processing skills at the disposal of learners in the early stages of learning which prevent them from attending to some aspects of the L2. The processing challenge facing learners within this framework, is that they must learn to exchange grammatical information across elements of a sentence. Initially, learners are only able to exchange grammatical information locally, and gradually extend the domain they can operate in, from the level of the word to exchange across phrases and then sentences.

In both the UG and cognitive models, the focus is on explaining learner-internal mechanisms, and how they interact with the input in order to give rise to learning. Whereas linguistic models focus on the nature of the linguistic system, however, cognitive models are primarily concerned with the computational mechanisms involved in language development. The emphasis placed on the role played by the input also varies, with the UG approach assuming that, as long as input is present, learning will take place, and the other models placing a larger burden on how the input is decoded by learners, paying particular attention to concepts such as noticing or attention.

3.3 *Functional/pragmatic approaches*

Rather than making the formal linguistic system their starting point, researchers within this tradition are centrally concerned with the ways in which L2 learners set about making meaning and achieving their personal communicative goals; they argue that interlanguage forms produced by second language learners cannot be sensibly interpreted unless we pay attention also to the speech acts which learners are seeking to perform, and to the ways they exploit the immediate social, physical and discourse context to help them make meaning. Further, it is argued that these meaning-making efforts on the part of the learner are a driving force in ongoing second language development, which interact with the development of formal grammatical systems.

On the basis of a major European Science Foundation (ESF)-funded six-year longitudinal study of the acquisition of five different languages by adult immigrants in Europe, Klein and Perdue (1992) argue that through a functional analysis, three developmental levels in the basic organisation of learners' utterances could be identified across all the linguistic groups which were studied. These were:

- Nominal utterance organisation (NUO)

Utterances consist of unconnected nouns, adverbs and particles; verbs (when they appear), do not have the major sentence structuring power they normally have in native languages;

- Infinite utterance organisation (IUO)

Verbs take on their structuring role in sentences, but they remain untensed at this stage;

- Finite utterance organisation (FUO)

A distinction between finite and non-finite verbs is now made; not all learners in their study reached this stage.

At all levels of proficiency, the ESF team argue learner utterances were produced under a range of competing constraints, **pragmatic**, **semantic**, and **phrasal**. For example, in proposing pragmatic constraints on the form of learner utterances, Klein and Perdue revisit the issue of topic-comment structure, originally proposed by Givón (1979) as typical of the pragmatic communication mode. They re-label and re-define the concepts of topic and comment as **topic** and **focus**, as follows:

Very often, a statement is used to answer a specific question, this question raising an alternative, and the answer specifying one of the 'candidates' of that alternative. For example, the question 'Who won?' raises an alternative of 'candidate' persons – those who may have won on that occasion –, and the answer specifies one of them... Let us call 'focus' that part of a statement which specifies the appropriate candidate of an alternative raised by the question, and 'topic' the remainder of the answer. (1992: 51–52)

They suggest that a pragmatic constraint operates on learner utterances, which provides that the focus element in an utterance should normally come last (e.g. *Charlie* [topic] *get up first* [focus]).

The main semantic constraint they put forward has to do with the notion of **control**. For verbs which associate with more than one 'actant' (or argument),

a semantic asymmetry is observed in that one actant has a higher, and the other(s) a lower degree of control over the situation... This asymmetry is a continuum ranging from clear 'agent-patient' relations down to cases of real or intended possession. (1992: 340)

The proposed semantic constraint on utterance structure is that the actant with highest control (the 'controller') should be mentioned first, e.g. *she pushing policeman*.

These two constraints, **Focus last**, and **Controller first**, are said to interact with phrasal constraints which specify the range of syntactic resources available at a given developmental level, and their permitted sequences. Of course, these constraints are sometimes in competition (as when the 'controller' is 'in focus'), and Klein and Perdue see these conflicts as 'a major germ of development' (1992: 303).

The ESF project was influential in putting functional and pragmatic concerns, which had largely been ignored beforehand, firmly on the SLA map. It also provided rich cross-linguistic data of early development in naturalistic contexts. The model put forward provided useful explanations of the very early stages of development, when learners typically rely on functional-pragmatic ways of communicating, as grammatical tools have not yet developed sufficiently to perform the required functions. It is less clear, however, how useful this model is to explain later, 'more grammatical', stages of development, although it has met with some success in explaining the acquisition of e.g. tense and aspect in more advanced learners

(Bardovi-Harlig, 1995; 2000). The article by Véronique (this volume) adopts such an approach.

3.4 *The role of the input/output*

In contrast to the models mentioned above, the interactionist approach, as its name indicates, has paid particular attention to the nature of the interactions L2 learners typically engage in (Galloway and Richards, 1994; Gass and Varonis, 1994; Pica, 1994; Oliver, 1995; Long, 1996; Gass, 1997; 2003). It has focused on investigating, for example, the role of negotiation for meaning in the context of NS – NNS (Native Speaker – Non-Native Speaker) conversations, in order to see how interactions are modified by both NSs and NNSs to ensure that the input the latter receive is comprehensible. Swain (1995) further argues that comprehensible input is not sufficient for grammatical development to fully take place; learners also have to produce language in order to acquire grammatical rules, as much language can be processed semantically, without fully analysing its grammatical encoding, as witnessed by the immersion students in Canada we have mentioned before.

The role of feedback given to learners when they make mistakes has also been the object of attention (Aljaafreh and Lantolf, 1994; Oliver, 1995; Lyster and Ranta, 1997; Long *et al.*, 1998; Lyster, 1998; Oliver, 2000; Ayoun, 2001; Han, 2002; Panova and Lyster, 2002; Leeman, 2003; Mackey *et al.*, 2003). For example, Lyster and Ranta (1997) found that the most common feedback given to learners when they produce incorrect forms are recasts, i.e. a repetition of the learner's utterance minus the error; however, they also found that recasts were the kind of negative feedback learners were most likely to ignore.

Many researchers have used current understanding of the relationship between cognition and SLA in order to investigate what kind of instruction is most helpful (Doughty and Williams, 1998; Doughty, 2001; Ellis, 2001; Robinson, 2001). For example, the role of constructs such as attention, noticing and 'focus on form' have been used in order to better understand the role of instruction (Pica, 1994; Schmidt, 1994; Nicholas *et al.*, 2001; Philp, 2003). In an extensive review of the empirical literature on the effectiveness of instruction, Norris and Ortega (2000; 2001) conclude that explicit form-focused instruction is effective in promoting learning. The object of most of these studies is to test what kind of instruction is most effective, such as 'input enhancement' (i.e. ways of making the input more noticeable for learners, such as e.g. having all object pronouns in bold in a text if the focus of the class is object pronouns), or 'input flood' (in which learners are exposed to vast quantities of a given structure). Different ways of presenting structural input have also been explored, with explicit form-focused instruction being contrasted with implicit form-focused instruction (with learners having to work out the rule for themselves, or having the rule made explicit to them). Although the results of this increasingly rich and sophisticated new body of research are tentative at present, it has identified key themes/agendas for further research, such as the role of explicit vs. implicit instruction, the role of negative evidence

or the role of noticing. This research is crucial for gaining a better understanding of the relationship between learning and teaching (Mitchell, 2000). The article by Lyster (this volume) investigates the role of instruction in the French immersion classroom.

Recently, theoretical models of the way in which the input is processed by second language learners have been proposed. VanPatten (1996; 2002) has developed Input Processing Theory, which offers a set of principles underlying the way in which learners process the linguistic input. They are said to prefer semantic processing over morphological processing, so that content words are processed first, and their inflections are only processed if the context does not allow meaning to be retrieved without having to process them. For example, in the sentence '*L'année dernière, j'allais au cinéma tous les mardis*', there is no need to process the *-ais* inflection, as reference to the past is already indicated by *l'année dernière*. VanPatten has drawn pedagogical implications from this model (known as Processing Instruction). Carroll (2000) offers a much more complete and ambitious model of how learners process the input, known as Autonomous Induction Theory. She argues that inductive learning is triggered when learners fail to parse incoming stimuli adequately using existing mental representations and analysis procedures.

Interaction research to-date has undoubtedly enabled us to better understand the nature of the modifications characteristic of NS (Native Speaker) – NNS (Non-Native Speaker) interactions, and has shown that feedback relating to particular target structures can significantly advantage learners when later tested on those structures. However, apart from Carroll's model, attempts at modelling interaction within a theory of SLA have remained fragmentary.

3.5 *Sociocultural and sociolinguistic approaches*

Researchers adopting a socio-cultural framework, following in the footsteps of Vygotsky (1978; 1986), who believed that all learning was essentially social, have explored the way in which L2s are learned through a process of co-construction between 'experts' and 'novices'. Language learning is seen as the appropriation of a tool through the shift from inter-mental to intra-mental processes. Learners first need the help of experts in order to 'scaffold' them into the next developmental stages before they can appropriate the newly acquired knowledge. Language learning is seen as a quintessentially social process, in which interaction plays a central role, not as a source of input, but as a shaper of development (Lantolf and Appel, 1994; Lantolf, 2000). Sociocultural theory has given rise to many studies which have investigated in great detail a range of learner activity including private speech, interaction during problem solving, form focused tasks, scaffolding etc, which have enriched our understanding of learning processes in the classroom. The Vygotskian approach has been warmly received by educators generally, who view it as an exciting alternative for the renewal of classroom practice. Its contribution to our understanding of L2 learning remains local and individual, however, and it

lacks at present a clear view of the nature of the language system and of its role in learning.

Sociolinguists' work in SLA has mainly focused in two areas. The first strand has been primarily concerned with the quantitative study of variability in second language use. For example, how L2 learners acquire (or not) the varied sociolinguistic registers typical of native varieties has been the object of many studies. Dewaele (this volume) presents this research in the context of French. Additionally, sociolinguists have given accounts of internal learner variability, in terms of e.g. the linguistic context, linguistic markedness, or the role of the L1 (Ellis, R., 1994). External factors and their impact on learner variability have also been studied, e.g. task-based variation (Tarone, 1988), gender-based variation (Young, 1991). For a review, see Romaine (2003). Sociolinguistic factors have been shown to play an important role, especially as learners become more advanced, in giving rise to variable productions, although much variability can be attributed to psycholinguistic factors.

Other sociolinguistic strands deal with social aspects of L2 learning. For example, the importance of personal characteristics and ambitions of learners in shaping their social integration into the L2 'community of practice' have been studied (Pallotti, 2001; Watson-Gegeo and Nielsen, 2003), as have the pragmatic and discourse features of cross-cultural communication. The L2 ethnographers engaged in this work, like the sociocultural theorists mentioned earlier, believe that language learning is socially constructed through interaction. But whereas sociocultural theorists pay great attention to the linguistic detail of expert/novice interaction in order to pinpoint language learning taking place, L2 ethnographers adopt a more 'macro' approach to studying the learning context and learners' social engagement with it, and how these factors can speed up the learning process (rather than shape it). They have been concerned with analysing learners' changing identities as they engage with the L2 learning process, seeing constructs such as self-esteem, motivation etc. as changeable during the course of L2 interaction (Norton, 2000; Toohey, 2000; 2001; Toohey and Norton, 2001).

Sociolinguistic approaches have thus been influential in helping us understand learner variability and its many dimensions, and they have given rise to detailed studies of the learning context and environment which have enriched our understanding of the social issues involved in language learning.

4 CONCLUSION

These varied approaches are not the only ones that have been applied to the study of second language learning and teaching, but they have received most interest and generated most empirical work. These models might appear contradictory at times, but in fact they can often be reconciled in so far as they are concerned with different aspects of SLA, which is, after all, a very complex process.

Even if one accepts the view that language development is highly constrained, for example by UG (and the robust developmental routes that learners follow, as

illustrated earlier, seem to be a strong argument in favour of this view), it is not the whole picture. We also need to understand many aspects of the SLA process other than the acquisition of syntax and morphology, such as lexical acquisition or the development of pragmatic and sociolinguistic repertoires. Moreover, if developmental sequences show how learners construct the L2 linguistic system, they do not tell us anything about how learners develop their ability to access in real time the system they have constructed. In other words, if we believe UG constrains the mental grammars constructed by L2 learners, we still need to understand how learners acquire the computational mechanisms necessary to use them.

In order to understand SLA, we need to know not only what the system constructed by learners is like, but also the procedures which enable efficient use of this system, and how the two interact in real time, as well as develop over time. The fact that these two endeavours are independent is clearly evident when we think of learners who are good system builders, i.e. they are accurate in their productions, but not necessarily good at accessing this system in real time, i.e. they are very non-fluent. The reverse is also true, with some learners developing high levels of fluency quickly, but remaining very inaccurate in their productions.

Similarly, if we are to find out what can facilitate the learning process, we need to gain a much better understanding of the kinds of interactions and social settings which promote learner development. Gass (1997), for example, argues that task-based methodologies (in which learners have to negotiate with one another in order to perform a meaning-focused activity) force learners to notice 'gaps' in their L2, a prerequisite for filling such gaps. Swain (1995), in her 'pushed output hypothesis', argues that it is when learners' own productions fail to meet their communicative goals that they are forced to revise their linguistic system.

The picture thus emerging from research into second language development is, unsurprisingly, highly complex, and many factors have been identified as playing a role.

To conclude, SLA research is an extremely buoyant field of study which has attracted much theoretical and empirical work in the last two or three decades. Much progress has been made in gaining a better understanding of the processes involved in learning second languages, as well as the different external factors which affect this process. Although these complementary agendas remain less integrated than one might wish, bridges are being built which connect them (e.g. Towell and Hawkins, 1994; Carroll, 2000). Similarly, the implications of SLA research for teaching are now receiving more attention, as is the specificity of the classroom context for understanding learning, but much more work remains to be done in these areas. There is still a huge gap – not unsurprisingly, given the limits of our knowledge – between the complementary agendas of understanding the psycholinguistic processes involved in the construction of L2 linguistic systems, and understanding what makes for effective classroom teaching.

As will become evident to the reader throughout this volume, much work has been carried out on French SLA from a range of perspectives, and great strides

have been made since Hawkins and Towell wrote their review article in *JFLS* back in 1992.

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