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Grammar and meaning in early adult foreign language instruction

Paweł Scheffler Adam Mickiewicz University, Poland

There are at present two general views on implementing second/foreign language instruction. First, we can start from meaning and communication, assuming that grammar will 'take care of itself' with only a little help from the teacher. Second, we can start from grammar, assuming that communicative ability will follow from subsequent practice. The present article examines the key arguments for the meaning-first approach and two specific proposals for its implementation. It is then argued that such an approach is not appropriate for adult foreign language instruction, in which grammar should be taught and practised systematically from the initial stages of the process.

Keywords: adult language learning, context of L2 instruction, grammar-based L2 instruction, skill learning, task-based L2 instruction

Istnieją obecnie dwa poglądy na realizację nauczania języka obcego/drugiego. Po pierwsze, możemy rozpocząć proces nauczania od komunikacji i nacisku na znaczenie form językowych, przyjmując, że kompetencja gramatyczna wykształci się sama z niewielką pomocą nauczyciela. Po drugie, możemy rozpocząć od nauczania gramatyki, zakładając, że umiejętność komunikacji będzie konsekwencją ćwiczeń komunikacyjnych. Niniejszy artykuł omawia główne argumenty za pierwszym z wymienionych podejść i dwa modele jego realizacji. Następnie autor przedstawia argumenty, według których podejście to nie jest odpowiednie dla dorosłych uczących się języka obcego. W takim przypadku, gramatyka powinna być nauczana systematycznie od poczatkowego etapu nauki.

Słowa kluczowe: nauczanie dorosłych, kontekst nauki, nauczanie poprzez gramatykę, podejście zadaniowe, nabywanie umiejętności

Introduction

The need to adapt second language (L2) syllabus design to the context of learning has not been generally recognized by second language acquisition (SLA) specialists. Research publications and handbooks for teachers are produced in which authors propose specific syllabus designs as if they were applicable to all teaching contexts and universally accepted by the academic community. For example, R. Ellis (2003: 235) describes his meaning-first

modular syllabus as 'broadly applicable to all teaching situations'. Willis and Willis (2007), who adopt a similar model, do not restrict it in any way either. As a result, many teachers-in-training may be led to believe that this one-size-fits-all approach is indeed all they need. The aim of this article is to redress the balance and bring to the fore some recent theoretical and empirical arguments for prioritizing systematic grammar teaching and output practice in the initial stages of adult L2 instruction. In the section that follows immediately below, three central arguments for starting from meaning are discussed. This is followed by a presentation of how this approach can be implemented according to two very specific proposals for task-based syllabus design: R. Ellis (2002; 2003) and Willis and Willis (2007). Finally, it is shown that the design is of limited pedagogic value, and that in early L2 adult instruction in a foreign language context a grammar-first approach is more suitable.

In the discussion, the term 'foreign language learning' will be used to refer to a situation in which a language is learnt in a country where it is not the language of the society. If a non-native language is learnt by someone living in the society that uses it, the term 'second language learning' will be employed. The label 'L2 learning' will designate contexts in which this distinction is irrelevant.

Three arguments for starting from meaning

Argument 1

... learning is a developmental process which is not subject to the learner's conscious control. (Willis and Willis 2007: 18)

The grammatical competence behind L1 or L2 fluent linguistic performance is normally considered to be implicit (e.g. Hulstijn 2002). The process of acquiring such competence, regardless of whether it is conceived of as the acquisition of abstract rules or as 'piecemeal learning of many thousands of constructions and the frequency-based abstraction of regularities within them' (N. Ellis 2003: 67), is also said to proceed implicitly. This means that rules or constructions, namely, 'recurrent patterns of linguistic elements that serve some well-defined linguistic function' (N. Ellis 2003: 66), are not accumulated in the learner's mind as a result of a conscious effort. Instead, linguistic development involves long periods in which links are established between form and function. There is no 'categorical acquisition of new forms or rules', and learners often exhibit 'temporary deterioration in performance'. There are also 'fixed developmental sequences' in the acquisition of domains of grammar like word order and negation (Long and Robinson 1998: 16–17).

All this means that the process of acquisition has nothing to do with the way in which L2 features are presented and taught in traditional grammar-

based classes, where learners are fed with selected 'structures of the day' and expected to be able to acquire them one by one through conscious practice. For L2 instruction to facilitate acquisition, one should provide learners with opportunities for interaction in order to trigger natural acquisitional processes leading to the development of implicit knowledge. Any explicit L2 knowledge that learners receive can only support language acquisition indirectly by (for example) helping learners to notice and process certain features of input or by helping them to make comparisons between input and their own L2 production. Such a view of the relationship between explicit and implicit knowledge in language acquisition is usually referred to as the weak interface position (e.g. R. Ellis 2005; N. Ellis 2005).

It is not just the acquisition of grammar rules that is beyond learners' control. Using the same rules in spontaneous communication is also thought to be an implicit process, namely, one which learners have no awareness of. When time limits apply, as is normally the case in spontaneous spoken interaction, and when the focus is on meaning, learners simply do not have the time to resort to conscious grammar rules which they have been taught. Instead, they rely on implicitly acquired rules or constructions which they access through automatic processing (e.g. Hulstijn 2002; N. Ellis 2003; 2005; R. Ellis 2005; 2008).

The fact that the competence underlying learners' spontaneous speech does not match learners' explicit knowledge is something that most language teachers are probably familiar with. A study by Macrory and Stone (2000) provides an illustration of this phenomenon in relation to secondary school British learners of L2 French. In the study, the subjects were able to do well on tests of explicit rules concerning the French present perfect, but failed to apply the same rules in spontaneous L2 production.

Argument 2

... it is extremely difficult to concentrate on what we are going to say and at the same time on *how* we are going to say it, in the sense of what words or forms we are going to use. (Willis and Willis 2007: 17; emphasis in the original)

As for example Schmidt (2001) points out, a view often expressed in psychology is that humans have a limited attentional capacity. That is, if we need to perform an activity which requires attention, we find it difficult to carry out another attention-demanding task at the same time. In L1/L2 language comprehension and production, form and meaning are said to compete for attentional resources (e.g. Skehan 1998). This means that if a communicative activity is preceded by linguistic focus on the forms that learners are expected to use in it, it is very likely that while performing it

learners will not be able to attend equally to both form and meaning/content, and will prioritize the former over the latter. The danger is, then, that learners will treat it as a traditional grammar exercise (e.g. R. Ellis 2003). As a result, they may acquire some explicit L2 rules, but they will not acquire any implicit L2 knowledge: such knowledge arises out of communication, and – perhaps except for the need to notice formal L2 features – its acquisition does not require any conscious operations on the part of the learner (cf. Schmidt 1990).

So if we want to induce our learners to focus on content and communication, we should engage them in unfocused communicative tasks, namely, tasks 'designed to elicit general samples of learner language' (R. Ellis 2003: 141). While being engaged in task-induced communicative interaction, learners can temporarily shift their attention to linguistic form, as their communicative needs require them to, and as their developmental readiness allows them to. And it is in these instances of language focus triggered by communicative needs that the teacher can provide 'on-line' linguistic feedback which will be relevant to a particular learner's stage of development. In this way, interaction can contribute to language development by helping learners to process form-meaning relationships in a target language. Long and Robinson (1998: 23) refer to this kind of 'occasional shift of attention to linguistic code features' as 'focus on form' and contrast it with 'focus on forms', which covers form-focused teaching and syllabus design based on individual linguistic items.

Argument 3

When children begin to use their first language they communicate without using sentences. [...] Taking this observation as a starting point, one might argue that early communication is primarily lexical and that grammar plays a subsidiary function. (Willis and Willis 2007: 6)

As Dabrowska (2004) shows, there is at present vast empirical evidence for links between lexical knowledge and grammatical development in L1 acquisition. In many areas of L1 acquisition, like grammatical inflections and auxiliary verb placement, development is a slow and piecemeal process tied to certain lexical items and constructions: there is no sudden acquisition of abstract rules which apply 'across the board'.

As for early communication, research quoted by for example Skehan (1998), N. Ellis (2003), and Dąbrowska (2004) shows that children rely on chunks of language or formulas, which they access as wholes, and which are not processed by them in terms of the grammar rules that could be used to build them. Some of these formulaic utterances are invariant, whereas others are frames with slots which can be filled by a range of lexical items. As the

process of acquisition progresses, children gradually use more and more general formulas which ultimately lead to abstract templates or constructions.

For researchers like Dabrowska (2004: 200), this is the endpoint of syntactic development: that is, adult speakers do not possess an elaborate system of abstract syntactic constraints like those on *wh*-movement, but an extensive repertoire of abstract templates supplemented by grammatical knowledge necessary for filling in slots in the templates and for stringing them together.

For other researchers, such as Skehan (1998), the early formulas are not simply replaced by more abstract ones, but are analysed syntactically and can finally be produced with the help of a rule-based system developed by learners. When the rule-based system is in place, it also produces novel sequences, some of which may ultimately become lexical phrases.

According to Skehan (1998), as a result of the process of syntactic analysis, adult native speakers operate with a 'dual-mode system': they possess a fully-fledged implicit grammatical system, and a repertoire of hundreds of thousands of ready-made lexical chunks or clusters. It is widely believed that when under pressure of real-time communication, native speakers make extensive use of such prefabricated chunks, which greatly reduces the amount of linguistic processing that needs to be performed. The processing that is performed often seems to be rather shallow: some grammatical knowledge (for example, subject–verb agreement) is needed to combine the chunks into well-formed sequences, but no complete analysis of sentence structure is performed.

The 'dual-mode system' described by Skehan (1998) is supposed to reflect first language acquisition, but according to Skehan it should also be the goal of L2 learning. In an L2 context, however, it will not happen on its own, and should be supported: 'learners need to be led to engage in cycles of analysis and synthesis' (Skehan 1998: 91). N. Ellis (2003), who sees L1 development as a progression from formulas to constructions, also applies his model to L2 acquisition. He quotes a number of empirical studies which show that both in child and classroom-based SLA the same developmental patterns take place.

Implementing the meaning-first approach

The task-based approach is not a uniform instructional paradigm: proposals within it often exhibit significant differences (e.g. Willis 1996; Long and Robinson 1998; Skehan 1998; R. Ellis 2002; 2003; Nunan 2004; Willis and Willis 2007). What they share is an emphasis on meaning and communication, a syllabus consisting of (unfocused) tasks, and a licence to focus on grammar in one way or another. The most grammar-oriented version of task-based instruction is probably R. Ellis's (2002; 2003) modular approach.

For both R. Ellis (2002; 2003) and Willis and Willis (2007), starting from meaning involves both the level of the syllabus and that of individual lessons. In R. Ellis's (2002; 2003) modular approach, the syllabus consists of two

independent modules: a primary communicative module, which contains unfocused tasks, and a code-based module, which could be implemented through fairy traditional form focused activities. According to R. Ellis (2003: 236) '[t]he beginning stages of the course would be devoted entirely to the communicative module', and grammar-based instruction should 'be introduced from the intermediate stage onwards, gradually assuming more of the total teaching time.' In Willis and Willis (2007), there is no separate grammar component: form-focused activities are supposed to follow communicative tasks. However, Willis and Willis (2007: 191) make it clear that 'in the early stages of learning the process is very much lexically driven, with strong emphasis on acquiring relevant topic lexis'. Figure 1 outlines a possible implementation of R. Ellis's framework.

The existence of a separate code-based module in R. Ellis's system does not mean that all explicit grammar teaching is relegated to this secondary component. For both R. Ellis (2002; 2003) and Willis and Willis (2007), the general sequence in the communicative part of instruction can be as follows: the pre-task phase (preparation for the task), the during-task phase ('focus on form') and the post-task phase ('focus on forms').

In the pre-task phase, learners can perform various non-task preparation activities which are meant to reduce the cognitive or linguistic demands associated with the task. New language related to the task at hand is supposed to be introduced at this stage. R. Ellis warns, however, that the explicit preteaching of vocabulary or grammar can result in learners treating the task as a form-focused exercise, which of course defeats the purpose of task-based instruction.

In the during-task phase, learners are supposed to function as language users and language is supposed to treated as a tool for communication, not an object of study. This does not mean, though, that no attention can be devoted to form at this stage. Both R. Ellis (2003) and Willis and Willis (2007), in a vein similar to that of Long and Robinson (1998), allow for incidental form-focused episodes. The interactional devices that teachers can use can be both implicit and explicit, and can include options like recasts, explicit correction and brief metalinguistic comments.

The post-task phase is the stage in the instructional sequence in which an explicit focus on forms can be implemented. R. Ellis suggests that the obvious targets for pedagogic treatment are those grammatical features which learners did not use correctly while transacting a task, or those that they failed to use.

LEVEL	Beginner	Intermediate	Advanced
Comm	unicative module		
			Code-based module

Figure 1. The modular approach (adapted from R. Ellis 2003: 237)

As for the types of activity that can be employed, R. Ellis (2003: 260–62) lists the following: review of learner errors, consciousness-raising tasks, noticing activities, and production-practice activities. The last category includes various traditional exercise types, for example gapped sentences and transformation drills.

Three arguments for starting from grammar

Argument 1

... a view of language as skill is persuasive, insightful and useful for language teachers. (Johnson 1996: 38)

Native speakers can normally use their mother tongue fluently. As already stated, this ability is based on implicit knowledge, and the process of acquiring this knowledge in childhood is also implicit. Adults, however, differ from children in one fundamental characteristic - they possess an ability to acquire complex cognitive skills by means of domain-independent problem-solving operations (e.g. Anderson 2000). This ability, which is often thought to arise around puberty (e.g. Inhelder and Piaget 1958), can also be applied to language (e.g. Johnson 1996; DeKeyser 1998; 2007). In theory, then, adults can become skilled L2 users in two ways: through implicit acquisition and explicit skill learning. If they take the explicit path, the rules they learn are not likely to be subject to internal developmental constraints: as R. Ellis (1994: 635) says, research into developmental sequences has only been concerned with implicit knowledge, and '[t]here is no evidence that explicit knowledge of grammatical rules is acquired in some fixed order or sequence'. And even in the case of implicit knowledge, as Dabrowska (2004: 31) stresses, there is at present strong empirical evidence that grammatical development is far from uniform:

marked individual differences have [...] been found in almost every area of grammatical development where researchers have looked for them, including word order, negation, case marking, the order of emergence of grammatical morphemes, and [...] in the development of English auxiliaries.

Dąbrowska (2004) reviews research into first language acquisition, but if such significant individual differences characterize L1 development, one can expect them to be even more pronounced in the case of L2 learners (cf. Bley-Vroman 1989).

Further, as DeKeyser (2003) and Muñoz (2007) show, there is considerable empirical evidence that in the case of adults, language aptitude predicts the

outcomes of L2 learning. This applies to both formal instructional contexts (e.g. Skehan 1982, quoted in Skehan 1998) and naturalistic settings (DeKeyser 2000). An important finding of DeKeyser's (2000) study was that aptitude was a significant predictor of success for older rather than younger learners. Such a relationship can be explained if one assumes that whereas child L2 learning relies on implicit processes, adults primarily draw on an explicit mechanism. That this is the case seems to be confirmed by empirical research into implicit learning: DeKeyser (2003: 321), in a review of the relevant research, reaches the following conclusion: 'A thorough reading of the literature on implicit learning [...] must leave one very sceptical about the possibility of implicit learning of abstract structure, at least by adults.' If DeKeyser's interpretation of research is correct, then for adults, particularly those with limited access to input and few opportunities for interaction, the explicit route may be the only reliable way of acquiring L2 knowledge.

Advocates of the 'implicit-only position' claim that while adults may be capable of developing explicit or declarative knowledge of grammar rules, they will not be able to use this knowledge in spontaneous speech, as such knowledge cannot be accessed automatically: for example, R. Ellis (2008: 7) says that explicit knowledge 'is only accessible through controlled processing in planned language use'. This claim is, however, questioned by a number of prominent SLA researchers. For example, Sharwood Smith (2004: 276) says that 'metalinguistic knowledge is as open to automatization as any other domain of knowledge'. In his view, then, it makes sense to talk about 'metagrammatical fluency', namely, fluency arising out of an efficient application of explicit grammar rules in speech. For DeKeyser (2003: 329), automated explicit knowledge can be 'functionally equivalent to implicitly acquired knowledge'.

Some empirical evidence that the process of automatization in the domain of language learning is comparable to automatization in other domains comes from DeKeyser (1997). Using an artificial language, DeKeyser shows that learning curves for grammar rules developed through explicit instruction follow the power law that has been shown to apply to other domains.

DeKeyser's (1997) study may be interesting, but since it deals with an artificial language it is probably not very relevant to what actually goes on in L2 classrooms. Some evidence for learning advantages for explicit grammar teaching in the classroom can be found in Norris and Ortega's (2000) meta-analysis of the effectiveness of L2 instruction. However, since most of the studies examined by these authors tested learners' controlled rather than spontaneous language use, they do not demonstrate that the teaching of L2 grammar rules can lead to fluent performance.

Not very many studies examine the effectiveness of early explicit grammar instruction in relation to oral production tasks. There are, though, four studies which deal with early or not very advanced instruction, namely, with learners who possess zero or little knowledge of the relevant structures,

and which show clearly that such instruction is beneficial in this respect: White et al. (1991), Spada and Lightbown (1993), Housen, Pierrard, and Van Daele (2005) and Sheen (2005).

The first two studies mentioned above used similar designs: beginnerlevel learners of English as a second language were subjected to a two-week period of explicit instruction and corrective feedback concerning interrogative constructions. As a result, the learners exhibited gains in testing procedures (both immediate and delayed) which included paper-and-pencil tasks and oral production tasks. White et al. (1991) conclude that the type of explicit instruction that was administered 'can bring about genuine changes in learners' interlanguage systems'.

Sheen (2005) describes empirical evidence from an extended comparative study which shows that meaning-based teaching supplemented by explicit grammar instruction and practice in L2 English ('focus on forms') is more effective than meaning-based teaching supported by 'focus on form'. The experimental grammar group in his study outperformed the control communication group in the areas of question formation and adverb placement on all the post-test measures: aural comprehension, grammaticality judgements, and oral interview. At the time of the experiment the learners had studied English for two years, which means they were still in the early stages of their L2 instruction.

Housen et al. (2005) examined learners with four years' experience of French L2 instruction. They focused on the effectiveness of explicit presentation–practice–production types of grammar instruction in relation to simple versus complex structures in L2 French. The simple structure in the study was sentence negation whereas the complex structure was the passive. The results indicate that in both cases the effect of the instruction was positive. The learners exhibited gains on the all the measures used in the study: a grammaticality judgement task, a controlled written production task and an unplanned oral production task. The gains turned out to be the highest on the last of the three measures.

What is particularly interesting in the above results is that the subjects improved in unplanned language use. It seems, then, that at least in some areas explicit grammar teaching in a communicative context can lead to 'knowing that' becoming 'knowing how.' Further, the subjects in the four studies above were young: 10–12 years old in the first two, 11 and 12 in Sheen (2005), and 14+ in Housen et al. (2005). This means that most of them were at an age when formal or abstract thinking begins. If explicit grammar instruction yields positive results for pupils at such a young age, then it seems that older learners should be able to benefit from it to a much greater extent.

Argument 2

As a skill becomes more practiced, the skill undergoes dramatic changes, including great reductions in cognitive involvement. (Anderson 2000: 307)

To turn knowledge of declarative rules into procedures that can be used in fluent performance, the right kind of practice is necessary. If we view L2 learning as comparable to learning a complex skill, as for example Johnson (1996) and DeKeyser (1998) do, then the practice administered by teachers should follow the principles of skill acquisition theory (cf. Scheffler 2008).

In terms of Anderson's (2000) model, this means that learners should first develop explicit knowledge in the sense of understanding how a particular aspect of the L2 grammar works. Only after this has been achieved can learners be made to use this knowledge to perform the target behaviour, that is, to communicate new meanings in the target language. Learners, then, should not be required to perform communicative activities immediately after they have been exposed to a new grammatical point.

In the initial stages of communicative practice, no time pressure should be applied: learners should be given sufficient time to express new meanings while keeping in mind the newly learnt explicit rules. They need to perform two attention-demanding tasks at the same time, so operating without time constraints is vital. Such repeated application of explicit knowledge is supposed to lead to changes in the way in which this knowledge is stored: it becomes incorporated in specific procedures for actions (Johnson 1996). So, for example, the learner simply knows that the present perfect of the verb *take* in the 3rd person singular is *has taken*, and does not have to search for the relevant forms in long-term memory. Also, he or she directly recognizes the applicability of the present perfect rule to the communicative context at hand. Once explicit knowledge is proceduralized in this way, the deployment of grammar rules during L2 communication consumes far less attentional resources than was originally the case. Ultimately, as Johnson (1996: 137) says, learners develop 'the skill of automization', that is, 'the ability to get things right when no attention is available for getting them right.'

Argument 3

The role of instruction in a typical language classroom is not, surely, to attempt the impossible task of replicating the conditions of natural acquisition, but to compensate for their absence. (Swan 2005: 393)

In justifying their proposals for L2 syllabus design, SLA researchers often appeal to features of L1 acquisition or L1 language use (e.g. Skehan 1998). Learners, then, are supposed to perform an implicit analysis of input, and are supposed to rely extensively on prefabricated lexical chunks when they communicate. It seems, though, that such appeals are misguided, at least as far as adult foreign language instruction is concerned. The reason is that both the conditions and the characteristics of the learners are fundamentally different in each case. First, an L1 learner has unlimited access to input and

unlimited opportunities for spontaneous interaction: as N. Ellis (2003: 82) says, '[f]luent language users have had tens of thousands of hours on task. They have processed many millions of utterances involving tens of thousands of types presented as innumerable tokens.' If, in addition to this massive linguistic experience, L1 learners are also good implicit learners, then it is possible for them to extract regularities in input without any need for formal instruction, and to acquire hundreds of thousands of lexical phrases which are then employed by them in communication.

None of this can be said about an adult foreign language learner: as Swan (2005: 393) points out, secondary school pupils typically receive a total of around 600 hours of foreign language instruction, which makes for very severe constraints indeed. And even if formal instruction is supplemented by exposure to input outside school, this is still very unlikely to approximate the 'tens of thousands of hours' that an L1 user needs to become fluent.

The constraints are certainly less severe in the case of second language learners: for example, a child second language learner may be able to acquire most, if not all, target features implicitly. An adult second language learner, as a result of being exposed to much more input and to many more opportunities for interaction than his or her foreign language counterpart, may also achieve a considerable degree of success at implicit learning. For this reason, it is still inappropriate to make general claims for L2 syllabus design based on ways in which young or adult second language learners behave (cf. R. Ellis 2003: 237).

It seems that instead of trying to achieve the impossible, namely, replicate or approximate what happens in naturalistic settings, teachers in an adult foreign language context should capitalize on their learners' capacity for abstract logical thinking and provide their learners with systematic grammar instruction and communicative practice. Sheen's (2005) study shows that this is a more efficient instructional option than relying on incidental grammar acquisition based on communication and error correction.

There is no conflict between grammar and communication. Grammar, if taught appropriately, can be a resource which enables communicative and creative language use. In Swan's view (2005: 394–5), a structural syllabus is particularly useful at lower levels where 'basic structures are needed all the time as learners struggle to talk about themselves, their surroundings and their experiences'. These basic structures cannot be replaced by a battery of ready-made lexical chunks if creative language use is the goal of instruction: fluent L1 speakers may be able to rely on prefabricated units in spontaneous communication, but given the constraints referred to above, foreign language teaching should not be about equipping a learner with a lexical phrase for every possible communicative encounter he or she may experience. Even if it is indeed the case that initial L1 acquisition is lexically based, and that the end product is primarily a set of general templates rather than a system of abstract rules, it does not follow that pedagogical grammar rules and output practice based on them should be excluded from the early stages of adult foreign

language instruction. Such rules can be formulated regardless of the mechanism behind L1 acquisition, and as the studies cited earlier show, they can increase the accuracy of oral L2 output. As for higher levels of instruction, the role of systematic grammar teaching may diminish: as Swan (2005: 395) says, the grammar syllabus may become more 'remedial and reactive', and more emphasis may be given to tasks through which learners can increase their command of what they have already learnt.

More research into L2 classroom learners' performance is certainly needed: in particular, research testing the performance of learners subjected to instruction which implements the skill acquisition framework. Only in this way can we verify whether L2 language development is necessarily lexically driven: it does not seem appropriate to draw general conclusions about 'classroom-based SLA', as for example N. Ellis (2003: 73–4) does. The term 'classroom-based' is much too broad a concept for that, as it may include very different types of instruction. If the instruction that learners receive does not afford them the opportunity first to develop declarative knowledge and then to carefully proceduralize it, it is hardly surprising that their communicative L2 output is based on lexical chunks. A case in point here is an often-quoted study by Myles, Hooper, and Mitchell (1998). It shows how young (11-13) learners of French as a foreign language analyse (or quite often fail to analyse) rote-learnt formulas or chunks. What needs to be stressed is that this study does not show that explicit grammar instruction is ineffective and that it results in learners simply memorizing chunks of language. The reason it does not do so is because the learners who were investigated received very little explicit grammar teaching. The instruction the learners did receive is documented in Mitchell and Martin (1997), who state unambiguously that their 'learners were explicitly taught a curriculum consisting very largely of unanalysed phrases', which essentially meant drilling unanalysed formulas with an emphasis on correctness. Had those learners been provided with more systematic attention to grammar, their progress might have been different.

This is not to say that pupils as young as 11 should be subjected to grammar-based instruction. In the case of learners who are entering the stage of formal operations, prefabricated patterns are certainly useful, even if they only enable learners to engage in communication. It is up to the teacher to assess his or her learners' cognitive readiness and administer grammar instruction accordingly.

Implementing the grammar-first approach

Some general guidelines for the implementation of the grammar-first approach have already been presented in the discussion of Argument 2 above. The discussion indicates that instructional procedures are needed for learners first to develop declarative knowledge and then to proceduralize it. In

practical terms, this means that the relevant structure first needs to be presented in a meaningful context and explained to 'achieve a maximum of understanding' (DeKeyser 1998: 58). There is room here for some form of processing instruction, as proposed by VanPatten (1996). This should be followed by practice, and if, as for example DeKeyser and Sokalski (1996) show, practice has skill-specific effects, then both comprehension and production practice is necessary. Muñoz (2007: 232), taking into account the implications of learners' cognitive development, describes 'adequate L2 learning practice activities for older learners' in the following way:

- they may involve logical reasoning;
- they may involve multiple cognitive operations;
- they can be disembedded from the immediate context.

In more specific terms, three types of output practice can be envisaged, the first consisting of fairly traditional grammar exercises, the second involving communicative drills, and the third communicative tasks. Communicative drills are defined by DeKeyser (1998: 52) as production activities which require 'the student to use the language to convey real meaning, while some recently taught rules, the focus of the drill, can be kept in mind'. Communicative tasks seem an ideal tool through which learners can receive feedback on the structures they produce, notice elements in the target language and deficiencies in their own interlanguage, and be led to modify their output (cf. Swain 1995; Mackey 2007). Finally, to promote fluency learners should be engaged in communicative activities in which the amount of attention they can allocate to a particular language form is gradually decreased. This can be achieved by, for example, the teacher manipulating the time available to perform an activity or the degree to which an activity is message focused (Johnson 1996).

Any consistent implementation of skill acquisition theory in L2 instruction will involve a specification of grammatical items to be covered, that is, a grammar syllabus of some sort. One point that needs to stressed here is that this does not exclude other considerations: in many modern foreign language textbooks the syllabus may contain a systematic treatment of language forms, but in addition to this there are also lexical and functional strands. The focus of this article is on the place of grammar in L2 teaching, but, of course, there is much more to L2 acquisition than grammatical competence.

L2 performance and the explicit/implicit interface debate

A skill-based view of L2 learning assumes that (some) explicit rules can be converted into procedural knowledge which can be drawn upon in fluent spontaneous speech. This, however, need not mean that explicit knowledge is converted into implicit competence which is identical to the product of

implicit acquisition. According to Paradis (2009: 87), proceduralization in this context refers to 'the production of the *same* type of knowledge, but prepackaged, faster and more efficient'.

Just how fast this production can be is a matter of debate. For Hulstijn (2002: 211), the application of explicit knowledge can only be speeded up to a limited extent: this is in his opinion 'false automatization', as fluent meaning-focused performance can only be based on implicit knowledge. However, despite this limitation, there is room for output grammar practice in Hulstijn's framework. In Hulstijn's (2002: 206) view, implicit learning is an autonomous process consisting in the construction of a neural network, which takes place 'whenever information is processed receptively [...] That is, once we have decided to listen, read, speak, or write, we cannot choose not to encode and store information.' This means that if a learner produces output thanks to explicit knowledge in working memory, at the same time he or she creates an opportunity for implicit learning: linguistic features in the utterances that are produced in this way are registered by the implicit learning mechanism. Implicit knowledge is, then, built *'separately from* and *in addition to'* learners' explicit knowledge.

The view that the application of declarative rules can only be speeded up to a limited extent is not shared by Ullman (2005) and Paradis (2009). Ullman (2005: 152) talks about 'a fairly high degree of proficiency' resulting from memorized complex forms and rules in declarative memory, and Paradis (2009: 118) states that the controlled use of rules 'can be sufficiently speeded up to be perceived as native-like'. Further, for both of these researchers, L2 (as opposed to L1) grammatical performance is largely dependent on declarative rather than procedural memory (i.e. it largely depends on memory primarily responsible for learning factual/lexical information rather than on procedural memory involved in implicit grammar acquisition). Ullman (2001; 2005) presents extensive empirical evidence from lesion, neuroimaging, and electrophysiological studies that this is the case, particularly in early L2 learning. As far as lesions to the brain are concerned, L2 speakers suffering from damage to temporal lobe regions, that is, regions responsible for declarative memory, experience more severe grammatical impairments than L1 speakers affected by the same condition. Conversely, damage to left basal ganglia and the left frontal lobe, which subserve procedural memory, has more profound consequences for L1 than for L2 grammar. Positron emission tomography and functional magnetic resonance imaging also indicate differences between L1 and L2 speakers: in grammar processing tasks, these instruments have revealed greater activation of temporal lobe regions in the latter than in the former. Finally, studies of event-related potentials have yielded similar types of electrophysiological brain activity for L1 learners involved in lexical processing and L2 learners processing grammatical violations.

Ullman (2005) and Paradis (2009) differ as to the degree to which procedural memory is accessible to L2 learners. For Ullman (2005), extensive experience can make procedural L2 learning successful. Paradis (2009) argues for a

genetically determined 'optimal period' for language acquisition, which takes place between the ages of 2 and 5. After this period, procedural learning is 'far less available' and in the case of adults, foreign language achievement 'is mainly the result of conscious learning and conscious control of their output' (2009: 117).

Conclusion

In this article, the meaning of the term 'grammar' has been restricted to pedagogical grammar rules. For some SLA researchers, the word 'rule' is a dirty word. Long and Robinson (1998: 16) associate grammar-based instruction with methods like Grammar Translation, the Audiolingual Method, and classroom practices used in them. This is not, of course, the kind of grammar instruction advocated here. Grammar in the framework of skill acquisition theory is supposed to be a mechanism which ultimately enables communication in the target language. This cannot be achieved without providing learners with rules of both form and use and numerous communicative activities needed to develop fluent and accurate performance. As Sheen (2003: 226) states, skill-based teaching 'adopts an eclectic approach to classroom activities' and 'does not preclude any of the techniques used in a focus on form'.

For many adult foreign language learners, communication based on simple grammar rules supplemented by prefabricated chunks may be all they can achieve. For some, grammar may also be the driving force of implicit L2 development: using grammar to engage in interaction and obtain input, they may acquire some target features implicitly and, given enough time, may gradually make their performance more lexically based and idiomatic. As we have seen, the extent to which adults are capable of learning implicitly from input is a matter of debate: on the one hand, for example, DeKeyser (2003) is sceptical about adults' capacity for implicit learning; on the other, Hulstijn (2002: 206) regards such learning as 'unstoppable'. However, considering some general characteristics of adult L2 acquisition, it seems that DeKeyser's scepticism is justified: if implicit learning is indeed unstoppable, then why is complete success so rare among adult learners and why is there so much variation in the degree of success that learners achieve? Such variation, as Bley-Vroman (1989: 45) points out, occurs 'even when age, exposure, instruction, and so forth are held constant'. All this fits in much better with an account of adult L2 development based on an explicit learning mechanism rather than on some implicit mechanism which is beyond learners' control.

Skill acquisition theory has not been developed specifically to account for how foreign languages are learnt: it does not distinguish between language and other cognitive skills, and thus does not address directly phenomena that are unique to language. This, however, need not be seen as a problem. First, many uniquely linguistic properties are learnable through the general

cognitive learning mechanism: language rules needed for L2 communication concern relatively superficial phenomena, and differ from general abstract principles postulated by linguists (cf. Gregg 1984). Second, adult L2 learners do not come to the task unprepared: they already know one language natively and thus have a reasonable notion of what to expect in another language: 'A great deal of information about the general character of language – about language universals – is implicit in a single language precisely because universals are universal' (Bley-Vroman 1989: 51). So, for example, an L2 learner will probably find it easy to handle properties of grammatical structure like embedding without the need for any formal instruction in this area and without the need to access Universal Grammar (assuming the existence of innate linguistic knowledge and its accessibility to adult learners; see e.g. the discussion in Dąbrowska 2004 or Bley-Vroman 2009).

L2 learning is a highly complex phenomenon which it is probable that no single theory will explain. Skill acquisition theory is no different in this respect: as DeKeyser (2007: 103) says, it cannot – and is not supposed to – explain every single characteristic of the process: it should primarily be applied to 'what happens in (a) high aptitude adult learners engaged in (b) the learning of simple structures at (c) fairly early stages of learning in (d) instructional contexts'. In these ideal conditions, learners in some areas of grammar are likely to follow the declarative-procedural path as the theory predicts, and it would be unwise to deprive them of this option, as for example R. Ellis (2002; 2003) and Willis (2007) propose for the initial stages of instruction.

In spite of its limitations, skill acquisition theory does provide a comprehensive account of how cognitive skills are learnt, and it clearly lends itself to being translated into practicable language teaching procedures. Not all grammatical phenomena can be presented as straightforward rules, but even in cases in which this is not possible, learners may still benefit from explicit explanations of the relevant issues: explicit instruction may help them to notice and comprehend such features in input, and in this way contribute to acquisition.

Johnson (2002: 190) says there are many teachers who have a 'skill-based frame of mind', that is, who are open to the idea of treating L2 learning as skill learning. I hope to have shown that such teachers should not feel discouraged by those who reject such a view and argue for a syllabus organization in which systematic grammar instruction is delayed and assigned to a secondary component. There is good reason to believe that structurally based teaching is fully legitimate from the onset of instruction, at least in an adult foreign language context.

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References

- Anderson, J. (2000) *Learning and memory: an integrated approach.* 2nd edn. New York: Wiley.
- Bley-Vroman, R. (1989) What is the logical problem of foreign language learning? In S. Gass and J. Schachter (eds.), *Linguistic perspectives on second language acquisition*. Cambridge: Cambridge University Press, 41–68.
- (2009) The evolving context of the fundamental difference hypothesis. *Studies in* Second Language Acquisition 31.2: 175–98.
- Dąbrowska, E. (2004) Language, mind and brain. Edinburgh: Edinburgh University Press.
- DeKeyser, R. M. (1997) Beyond explicit rule learning: automatizing second language morphosyntax. *Studies in Second Language Acquisition* 19.2: 195–221.
- (1998) Beyond focus on form: cognitive perspectives on learning and practising second language grammar. In C. Doughty and J. Williams (eds.), *Focus on form in classroom second language acquisition*. Cambridge: Cambridge University Press, 114– 38.
- (2000) The robustness of critical period effects in second language acquisition. Studies in Second Language Acquisition 22.4: 499–533.
- (2003) Implicit and explicit learning. In C. Doughty and M. Long (eds.), *The handbook of second language acquisition*. Oxford: Blackwell, 313–48.
- (2007) Skill acquisition theory. In J. Williams and B. VanPatten (eds.), *Theories in second language acquisition: an introduction*. Mahwah, NJ: Erlbaum, 97–113.
- and K. Sokalski (1996) The differential role of comprehension and production practice. *Language Learning* 46.4: 613–42.
- Ellis, N. (2003) Constructions, chunking, and connectionism: the emergence of second language structure. In C. Doughty and M. Long (eds.), *The handbook of second language acquisition*. Oxford: Blackwell, 63–103.
- (2005) At the interface: dynamic interactions of explicit and implicit knowledge. *Studies in Second Language Acquisition* 27.2: 305–52.

Ellis, R. (1994) The study of second language acquisition. Oxford: Oxford University Press.

- (2002) The place of grammar instruction in the second/foreign language curriculum. In E. Hinkel and S. Fotos (eds.), *New perspectives on grammar teaching in second language classrooms*. Mahwah, NJ: Erlbaum, 313–48.
- (2003) Task-based language learning and teaching. Oxford: Oxford University Press.
- (2005) Measuring implicit and explicit knowledge of a second language: a psychometric study. *Studies in Second Language Acquisition* 27.2: 141–72.
- (2008) Investigating grammatical difficulty in second language learning: implications for second language acquisition research and language testing. *International Journal of Applied Linguistics* 18.1: 4–22.

Gregg, K. (1984) Krashen's Monitor and Occam's Razor. Applied Linguistics 5.2: 79–100.

- Housen, A., M. Pierrard, and S. Van Daele (2005) Structure complexity and the efficacy of explicit grammar instruction. In A. Housen and M. Pierrard (eds.), *Investigations in instructed second language acquisition*. Berlin: Mouton de Gruyter, 235–69.
- Hulstijn, J. H. (2002) Towards a unified account of the representation, processing and acquisition of second language knowledge. *Second Language Research* 18.3: 193–223.
- Inhelder, B., and J. Piaget (1958) *The growth of logical thinking from childhood to adolescence*. New York: Basic Books.

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Johnson, K. (1996) Language teaching and skill learning. Oxford: Blackwell.

- (2002) Language as skill. English Language Teaching Journal 56.2: 190–91.
- Long, M., and P. Robinson (1998) Focus on form. Theory, research and practice. In C. Doughty and J. Williams (eds.), *Focus on form in classroom second language* acquisition. Cambridge: Cambridge University Press, 15–41.
- Mackey, A. (2007) Interaction as practice. In R. M. DeKeyser (ed.), *Practice in a second language*. Cambridge: Cambridge University Press, 85–110.
- Macrory, G., and V. Stone (2000) Pupil progress in the acquisition of the present perfect tense in French: the relationship between knowledge and use. *Language Teaching Research* 4.1: 55–82.
- Mitchell, R., and C. Martin (1997) Rote learning, creativity and 'understanding' in classroom foreign language teaching. *Language Teaching Research* 1.1: 1–27.
- Muñoz, C. (2007) Age-related differences and second language practice. In R. M. DeKeyser (ed.), *Practice in a second language*. Cambridge: Cambridge University Press, 229–55.
- Myles, F., J. Hooper, and R. Mitchell (1998) Rote or rule? Exploring the role of formulaic language in classroom foreign language learning. *Language Learning* 48.3: 323–64.
- Norris, J. M., and L. Ortega (2000) Effectiveness of L2 instruction: a research synthesis and quantitative meta-analysis. *Language Learning* 50.3: 417–528.
- Nunan, D. (2004) Task-based language teaching. Cambridge: Cambridge University Press.
- Paradis, M. (2009) *Declarative and procedural determinants of second languages*. Amsterdam: Benjamins.
- Scheffler, P. (2008) The natural approach to adult learning and teaching of L2 grammar. *IRAL* 46.4: 289–313.
- Schmidt, R. (1990) The role of consciousness in second language learning. *Applied Linguistics* 11.2: 17–46.
- (2001) Attention. In P. Robinson (ed.), *Cognition and second language instruction*. Cambridge: Cambridge University Press, 1–32.
- Sharwood Smith, M. (2004) In two minds about grammar: on the interaction of linguistic and metalinguistic knowledge in performance. *Transactions of the Philological Society* 102.2: 255–80.
- Sheen, R. (2003) Focus on form a myth in the making? *English Language Teaching Journal* 57.3: 225–33.
- (2005) Focus on forms as a means of improving accurate oral production. In A. Housen and M. Pierrard (eds.), *Investigations in instructed second language acquisition*. Berlin: Mouton de Gruyter, 271–310.
- Skehan, P. (1982) Memory and motivation in language aptitude testing. PhD thesis, University of London.
- (1998) A cognitive approach to language learning. Oxford: Oxford University Press.
- Spada, N., and P. Lightbown (1993) Instruction and the development of questions in the L2 classroom. *Studies in Second Language Acquisition* 15.2: 137–55.
- Swain, M. (1995) Three functions of output in second language learning. In G. Cook and B. Seidlhofer (eds.), *Principles and practice in applied linguistics: studies in honour* of H. G. Widdowson. Oxford: Oxford University Press, 158–64.
- Swan, M. (2005) Legislation by hypothesis: the case of task-based instruction. *Applied Linguistics* 26.3: 376–401.

- Ullman, M. T. (2001) The neural basis of lexicon and grammar in first and second language: the declarative/procedural model. *Bilingualism: Language and Cognition* 4.1: 105–22.
- (2005) A cognitive neuroscience perspective on second language acquisition: the declarative/procedural model. In C. Sanz (ed.), *Mind and context in adult second language acquisition: methods, theory, and practice.* Washington, DC: Georgetown University Press, 141–78.
- VanPatten, B. (1996) Input processing and grammar instruction. Norwood, NJ: Ablex.
- White, L., N. Spada, P. Lightbown, and L. Ranta (1991) Input enhancement and L2 question formation. *Applied Linguistics* 12.4: 416–32.
- Willis, D., and J. Willis (2007) *Doing task-based teaching*. Oxford: Oxford University Press.
- Willis, J. (1996) A framework for task-based learning. Harlow: Longman.

email: spawel@ifa.amu.edu.pl