

A Framework for the Implementation of Task-based Instruction

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This paper examines recent proposals for task-based approaches to instruction. It reviews relevant research, before going on to examine a number of potential problems with task-based teaching, such as a potential focus away from form and towards lexis. It reviews recent developments in cognitive psychology which support a dual-mode perspective for language processing, and then proposes the goals of accuracy, complexity-restructuring, and fluency as the most relevant for task-based instruction. In the final section, the paper proposes a framework for the implementation of task-based instruction which draws upon relevant theory and research, and which organizes the methods by which such instruction could be put into practice in such a way as to minimize problems, and maximize the probability that all three above goals can be achieved.

INTRODUCTION

In recent years, a number of researchers, syllabus designers, and educational innovators have called for a move in language teaching towards task-based approaches to instruction (Prabhu 1987, Nunan 1989, Long and Crookes 1991, Gass and Crookes 1993a, b). Yet there are a number of critiques of task-based instruction that could be made (Sheen 1994), and it is also unclear how such an approach could be implemented. The present article will examine the critiques, reviewing the theory and research that suggests limits and qualifications for task-based approaches. It then proposes a framework to enable teachers to implement task-based instruction on a more systematic and principled basis.

At the outset, it is helpful to examine some preliminary questions relating to tasks and task-based instruction. Although a number of definitions of task exist (see e.g. Nunan (1989)), for present purposes a task is taken to be an activity in which meaning is primary, there is some sort of relationship to the real world, task completion has some priority, and the assessment of task performance is in terms of task outcome. Of course, translating these criteria into reality is not always a straightforward matter. Most activities combine a number of priorities, and it is a fine judgement to claim that the communication of meaning is a primary goal for any particular task, or to assert that a task has a real-world relationship. Classrooms are classrooms, but even so, a task which requires personal information to be exchanged, or a problem to be solved, or a collective judgement to be made bears a relationship to things that happen outside the classroom in a way that separates these activities from doing, for example, a transformation exercise. One could make similar points about the other two

components of definition that are offered here (task completion and task outcome assessment), but the point is that such a concept of task has sufficient focus to enable it to be a viable component for what goes on in classrooms¹ Long and Crookes (1991) discuss a further quality of tasks that they have a clear pedagogic relationship to out-of-class language use, in that needs analysis should clarify how students will need to use language in real-life, and task design should ensure that classroom tasks bear a developmental relationship to such non-classroom activity For this article, such a quality is regarded as desirable, but difficult to obtain, and the more restrictive approach to characterizing tasks will be used Similarly, there will be no discussion of the interesting possibility that students could be involved in the negotiation of which tasks are used, and how they are used (Breen 1987) The approach taken here is to try to develop a framework which will help the teacher to better understand the tasks s/he is using, and to sequence and implement them more effectively

One can, on the basis of these task characteristics, identify strong and weak forms of the task-based approach A strong form would argue that tasks should be the *unit* of language teaching, and that everything else should be subsidiary In this view, the need to transact tasks is seen as adequate to drive forward language development, as though second language acquisition is the result of the same process of interaction as first language acquisition (Wells 1985) A weak form of task-based instruction would claim that tasks are a vital part of language instruction, but that they are embedded in a more complex pedagogic context They are necessary, but may be preceded by focused instruction, and after use, may be followed by focused instruction which is contingent on task performance This version of task-based instruction is clearly very close to general communicative language teaching It could also be compatible with a traditional presentation, practice, production sequence, only with production based on tasks (as defined above), rather than more stilted and guided production activities (Littlewood 1981)

If we turn next to research studies into task-based learning, a range of approaches are evident Candlin (1987) discusses criteria by which tasks may be analysed, basing the categories used on an essentially data-free account of task properties, an approach developed by Nunan (1989) and Skehan (1992) Pica, Kanagy, and Falodun (1993) take a slightly different perspective, relying on research studies more directly They analyse tasks in terms of interactional patterns and requirements, (i.e. how involved each participant needs to be), as well as the sorts of goals that underlie the tasks-to-be-transacted (e.g. one-way vs two-way)

A number of studies have been more specific in their analyses of tasks, positing particular contrasts or dimensions as the basis for characterizing tasks Prabhu (1987) argues in support of reasoning-gap tasks, Duff (1986) contrasts divergent and convergent tasks, arguing that the latter engage acquisitional processes more effectively, and Berwick (1993) contrasts two dimensions—experiential–expository, and didactic–collaborative There have also been studies of the participants within tasks such as Yule, Powers, and Macdonald

(1992) on 'hearer' effects and Plough and Gass (1993) on participant (and task) familiarity Brown, Anderson, Shilcock, and Yule (1984) have also investigated various task design features, in an attempt to establish task difficulty on an empirical basis They propose that static tasks (e.g. description) are easier than dynamic tasks (e.g. narration), which in turn are easier than abstract tasks (e.g. opinion giving), and that the number of elements, participants, and relationships in a task makes it more difficult There have also been studies of processing influences on tasks Tarone (1985) has shown that attention to form has a clear effect on accuracy of performance Ellis (1987) reported an interaction between the engagement of planned discourse and different forms of the past tense under different task conditions Crookes (1989) reported greater complexity and lexical variety for tasks done under a planning time condition, but, interestingly, no greater accuracy Foster and Skehan (1994) report an interaction between opportunity to plan and task type These research studies are individually revealing, but do not currently provide the basis for more general perspectives on task-based instruction They do, though, play a part in the wider framework which is proposed below

PROBLEMS AND ASSUMPTIONS IN TASK-BASED LEARNING

Approaches to instruction which make meaning primary, such as task-based instruction, obviously have considerable appeal in terms of authenticity and linkage with acquisitional accounts of the course of language development But there are pitfalls with such an approach, generally stemming from the consequences for form of putting such an emphasis on meaning These pitfalls need to be understood if task-based approaches are to be properly exploited

Learners (and native-speakers) will place great emphasis on communicating meanings, but not necessarily worry about the exact form that they use (Kess 1992) In this respect, Grice (1975) has made clear that maxims for conversation make for a considerable processing burden because of what is *not* said To spell everything out in complete and well-formed sentences would soon empty rooms, and get oneself classified as a boring pedant Much adult conversation is elliptical and incomplete in surface form, heavy in the assumptions it makes about background knowledge being the basis for the implicatures that are made about intended meaning, speaker attitude, let alone propositional meaning (Wilson 1994) It goes against the grain, in other words, to do more than use form as one element or pressure in native-speaker communication, where the major emphasis will be on the satisfactoriness of the flow of the conversation, not the correctness, or completeness (or the usefulness for interlanguage development amongst learners) of what is said

Further, if we now turn directly towards learners, two other consequences of such an emphasis on meaning become apparent There is natural and unavoidable use of strategies of *comprehension* (Clark and Clark 1977), in that non-deterministic and non-exhaustive methods are used to recover intended meaning, with the success of this operation often being dependent on only partial use of form as a clue to meaning (Anderson and Lynch 1987) In other

words, processing language to extract meaning does not guarantee automatic sensitivity to form, and the consequent pressures for interlanguage development which is assumed by supporters of the Input Hypothesis (see Skehan (1992) for further details) Further, there is widespread use of *communication* strategies These, too, help the learner succeed with meaning while having the consequence of sometimes bypassing form Cognitive and linguistic communication strategies, that is, (Kellerman 1991) can be used to handle communicative pressure, but in so doing remove the automatic engagement that would be required to constantly stretch interlanguage and lead to change Worst of all, in this regard, is the possibility that reliance on comprehension and communication strategies when meanings need to be communicated under pressure will be *too* effective What this could mean is that 'solutions' to communication problems become proceduralized and re-used on other occasions (Skehan 1992) This would be desirable if the solutions in question led to interlanguage development, but it is equally likely that they will not, since there is little to justify the 'on the fly' improvizations that are involved being part of a desired route for change Their proceduralization could then become a stumbling block for change in the future

There is, though, an even more deep-seated problem—the possibility that much communication is lexical in nature Regarding first language acquisition, Skehan (1992), following Peters (1983, 1985), Nelson (1981), Bates, Bretherton, and Snyder (1989) suggests that initial progress is lexical in nature, but then the initial stock of lexical items becomes syntactized Most important, though, the language system which is developed in this way then becomes *relexicalized* (Skehan 1992), i.e. language which is analysable and has been analysed is actually stored as a repertoire of lexical items Most centrally of all, the unit of storage is now no longer the word, but can consist of multi-word units (Peters 1985) which, when used, are processed as a single item The cost of such a system is that multiple storage is necessary, since each multi-word item requires separate storage as a unit The gain, however, is considerable since during ongoing language processing such a larger unit can be processed as a whole, releasing resources for other aspects of the speech planning and execution required (Bygate 1988)

Such a lexical interpretation of language performance has been argued in recent years by both linguists and psychologists Bolinger (1975), for example, proposes that the idiomaticity of language has been vastly underestimated, and that much language processing is hardly creative at all, but relies upon familiar memorized material Pawley and Syder (1983) argue that speech is planned a clause at a time, and that language users rely on lexicalized sentence stems, (of which they have thousands at their command), as they improvize their way, joining together such elements to produce connected discourse Nattinger and DeCarrico (1992) similarly argue for the importance of lexical units in speech production

These analyses imply that language users have available dual modes of processing (Widdowson 1989) When accessibility and time pressure are

paramount, a lexical mode of communication will be relied upon, which draws upon a capacious, well-organized, and very rapid memory system. In contrast, when exactness or creativity matter, analysability, and a concern for form, for syntax, and for planning, will predominate (Sinclair 1991). Armed with these two possibilities, the language user can switch between the two modes to take account of whatever processing demands are most pressing. Skehan (in press, a) argues that 'ability for use' (Widdowson 1983) can best be understood as the capacity which marshalls processing resources in this manner in order to achieve communication.

If we relate the discussion in this section to task-based approaches for instruction, what this means is that tasks themselves, given their defining properties of meaning primacy, outcome evaluation, and realism, may well predispose those engaged in task completion to engage in a mode of communication which does not prioritize a focus on form, either in terms of using linguistic elements to achieve precision or to achieve accuracy. As a result, it may not be possible to rely on a task-based approach to automatically drive interlanguage forward. Instead, it is likely that it will teach learners simply how to do tasks better, to proceduralize strategic solutions to problems, and to engage in lexicalized communication. These conclusions suggest that it is necessary, if task-based approaches to instruction are to be viable, to devise methods of focusing on form without losing the values of tasks as realistic communicative motivators, and as opportunities to trigger acquisitional processes. Prior to discussing a framework which may achieve this goal, however, it is necessary to try to situate task-based instruction within a theoretical viewpoint more grounded in contemporary psychology—an information processing perspective.

COGNITIVE APPROACHES TO LANGUAGE LEARNING

In recent years, there have been a number of studies which have clarified the theoretical basis for a cognitive approach to language learning. These have concerned the nature of what is learned, the role of consciousness, the role of performance factors, and the way in which attention impacts upon learning. We will examine each of these in turn.

One method of addressing the question of *what* is learned is through laboratory studies of artificial languages (though see Van Patten (1994) for a critique of the relevance of such research). In the learning of such structured material, the issue is whether progress consists of the induction of underlying abstract rules following a process of (possibly implicit) restructuring (Reber 1989, McLaughlin 1990), or the learning of exemplars, i.e. specific, contextually coded items which may contain structure, but which are learned as chunks (Carr and Curren 1994). The former interpretation regards development in terms of the growth and complexity of the underlying system involved, while the latter is more concerned with the accumulation of exemplars, and their utility in performance.

The connection with natural language learning here is clear. The rule-based

interpretation would imply that interlanguage development would be the result of the restructuring that occurs with linguistic material (McLaughlin 1990), motivated by the continued operation of a Universal Grammar or by other cognitive processes. The exemplar-based interpretation, in contrast, would argue for development as being the accumulation of useful chunks of language, i.e. in earlier terms, language as formulaic items. Most interestingly of all, in this regard, is that Carr and Curren (1994), following Mathews, Buss, Stanley, Blachard-Fields, Cho, and Druhan (1989), interpret findings in this area as being most consistent with a dual-mode of processing, in which there is evidence for both structured learning and exemplar-based learning, but with the operation of both modes combining in a synergistic manner to yield results, and degrees of learning, that are more than simply the sum of the parts. The parallel with the use of a relexicalized repertoire of language (Skehan 1992) is clear.

Schmidt (1990, 1994) discusses the role of consciousness in language learning. He distinguishes between several senses of this term, such as awareness, control, and attention. In this section, we will discuss consciousness as awareness, moving on to consider the other two senses in the sections on fluency and attention. For Schmidt (1990, 1994), consciousness has considerable importance in language learning. There is accumulating evidence (see review in Carr and Curren 1994) that explicit learning of structured material is generally superior to implicit learning, suggesting that awareness of the learning itself and of what is to be learned confers advantages. Schmidt (1994) suggests that, for example, awareness enables more efficient solutions to the 'matching' problem (Klein 1986), i.e. noticing the gap between one's current language system and the language one encounters. Similarly, Schmidt (1994) proposes that awareness may enable learners to appreciate better the instruction that they are receiving, especially the correction that is being given. Awareness may also (Karmiloff-Smith 1986) make it easier to transform and recombine material, to restructure, in other words, as the structure of material is more available, and other organizational possibilities become clear. Finally, awareness may help learners operate the sort of dual-mode systems outlined above, where the learner/language user may need to combine rule-based systems and exemplar-based systems during ongoing performance. In this respect, one interesting possibility is that on occasions where rule-based systems are used for the generation of language, the *products* of such activity can themselves become exemplars and then retrieved and used *as exemplars* on subsequent occasions (cf. the earlier discussion on relexicalization, Peters (1985), and discussion below). Clearly, consciousness-as-awareness would be of considerable help in this process.

This possibility takes us into the need to discuss fluency, and the ways in which consciousness-as-control may operate. Schmidt (1992) provides an extensive review of psychological mechanisms underlying fluency in foreign language performance. In general, there seem to be three ways of accounting for the development of fluency: accelerating models, restructuring models, and instance models. The first approach simply suggests that there is a natural

sequence in which initial declarative knowledge becomes proceduralized (Anderson 1989) or automatized (Schiffrin and Schnieder 1977) so that essentially similar processes are used, but more quickly and with less need to use mental resources to control them, i.e. the same steps are followed, but more quickly and efficiently and probably less consciously. Restructuring approaches (Cheng 1985, McLaughlin 1990) regard improved performance as the result of using better algorithms so that performance is better organized. One assumes, following this approach, that restructuring, when it occurs is rapid and immediately available to sustain improved performance (fluency in this case). Instance-based approaches (Logan 1988, Robinson and Ha 1993) regard fluency as performance which is based not on rules which are applied more quickly nor on rules which are more efficiently organized, but on contextually-coded exemplars which function as units. Such units (which may be significantly longer than a word) are the product of previous rule applications which are now stored in exemplar form, and so require far less processing capacity because they are retrieved and used as wholes. On this view (Peters 1985, Schmidt 1992), learning is the result of instance creation, and performance (and the ensuing fluency) the result of instance use.

We will assume here that the restructuring model is not very relevant to second language learning *fluency*, although it is to interlanguage development in general. (It seems more suited to cognitive learning of a more general nature when insight and new algorithms are what lead to problem-solving efficiency.) More important for present purposes are the two other accounts. The first, the proceduralization model, concerns an interplay between declarative knowledge and the fluency which arises from proceduralization, with the cost that less control is available over such material. The contrasting approach, instance theory, portrays the relationship between the rule-governed part of the system and the fluency oriented component differently, giving the latter a greater degree of autonomy.

It is the latter interpretation which is taken to be relevant to foreign language learning even though the proceduralization account has merit. This is so largely because an instance-based interpretation fits in more effectively with the dual-mode account of structured learning presented earlier, as well as with a syntactic-lexical contrast in natural language learning. It also provides an interesting theoretical interpretation of the phenomenon of fossilization, in that one can now regard such an outcome as the premature product of a rule-based system which is then made available as an exemplar in future language use. There is no requirement, in other words, that what are created as exemplars are correct. In beneficial circumstances, rule-created exemplars may be supplanted by other exemplars which are created when the underlying rule-based system has evolved more. But if the underlying system does not so evolve, and if communicative effectiveness is achieved, the erroneous exemplar may survive and stabilize, i.e. become a syntactic fossil.

Finally, we need to consider the role and functioning of attention, the final meaning of consciousness mentioned earlier. In information processing terms,

attention is a process, and is capacity-robbing (Van Patten 1994) One chooses to attend to some things at the expense of others, and the choice of attentional direction, as well as the use of attentional resources themselves, have costs as far as the processing of potential foregone material is concerned Attention, that is, has both a control function for further processes, and also a direct effect in terms of the focus of consciousness attention at any one time (Schmidt 1994) Pursuing the information processing perspective, we can consider that, in foreign language learning and performance, three stages can be distinguished input, central processing, and output (Skehan 1994) We will examine the role of attention in the first two of these, the third having been covered in the discussion on fluency

Regarding input, Van Patten (1990, 1994) has shown that meaning is primary when attentional resources are limited He argues that under such conditions there is attention to form only if it is necessary for the recovery of meaning On the other hand, form can be attended to, even if it is not crucial for meaning, if there is no pressure on attentional resources, i.e. if there is spare attentional capacity Schmidt (1990) argues similarly for the importance of noticing as a means to channel attentional capacity so that input can become intake He proposes that various factors, e.g. salience, traces of previous instruction, and task-demands (i.e. control of attentional capacity on the part of the task-designer) will make it more likely that attention will be directed to form, but that the central issue is that this noticing occurs and that the spare attentional capacity which is involved is directed so that it attends to important aspects of form The challenge for the task designer is, then, to engineer situations in which this is more likely to occur with learners

Essentially, the effective use of attentional capacities during input is intended to create a situation in which input can become intake, and effective processing of material can be triggered so that the implications of existing input for inter-language development can be exploited and acted upon In this respect, we are now concerned, in Schmidt's (1994) terms, with consciousness as focal attention, with the need to commit attentional resources to the material which is being processed Carr and Curren (1994) propose that focal attention of this sort does help in the learning of structured material They suggest that if material is simple and unambiguous, there is no great advantage for explicitness But if material is more complex and ambiguous (as they characterize natural languages), explicitness confers an advantage In particular, Carr and Curren (*ibid*) suggest that focal attention of this sort enables more effective parsing of material and richer coding, with such processes being helpful for language development Focused attention of this sort does not need to lead to the ability to consciously articulate underlying rules for the language being learned, but it is important that there is a self-awareness about the task of learning which is being faced In this respect, Van Patten (1994) offers the analogy of learning to improve a backhand in tennis One may not benefit from an exposition of the underlying physics, or of the metalanguage of tennis strokeplay, but it may be helpful to give one's full attention to the backhands one is playing, and even to

benefit from 'input to intake' hints from a coach, along the lines of 'Think about your footwork' In language, too, attention can be directed without this direction necessarily involving detailed explanation of rules The issue, centrally, is that limited capacity is being focused in the area which is most helpful, with the possibility that what then happens triggers implicit processes Generalizations in data which might otherwise be missed become more accessible with the structuring of the learning experience that is involved

GOALS IN TASK-BASED INSTRUCTION

This discussion demonstrates that task-based approaches to instruction are currently in a transitional position There are clear reasons for the adoption of task-based approaches, principally associated with their potential engagement of acquisitional processes, there is underlying psycholinguistic research which, to some extent is supportive, and there is a range of specifically task-based second language research which is helpful in evaluating this type of instruction On the other hand, there are arguments, both linguistic and psychological, for why a focus on meaning may not engage such acquisitional processes, there is psycholinguistic evidence which argues for a clear role for explicitness and consciousness, for the manipulation of attentional focus, and for the existence of dual modes of processing, structural and exemplar-based This discrepancy places proponents of task-based instruction in a difficult position, since, while it is clear that there are advantages to using such an approach, it is difficult to know how strongly to argue this position, and how exactly to implement such instruction A necessary step, therefore, is to draw on the preceding discussion to set appropriate goals for task-based approaches

It is relatively easy to identify, as a general goal in foreign language learning, that of becoming more native-like in one's performance,² on the grounds that most people have such views about the levels of competence and performance that they would like to achieve Within this general goal, however, it is proposed that it is useful to separate learner goals into three main areas accuracy, complexity, and fluency The first of these, accuracy, is concerned with a learner's capacity to handle whatever level of interlanguage complexity s/he has currently attained Complexity, and its attendant process, restructuring, relates to the stage and elaboration of the underlying interlanguage system Fluency, finally, concerns the learner's capacity to mobilize an interlanguage system to communicate meanings in real time³

To take the first of these goals in more detail, accuracy relates to a learner's belief in norms, and to performance which is native-like through its rule-governed nature Such a goal is desirable for a number of reasons inaccuracy *could* impair communicative effectiveness, it could stigmatize, it could fossilize, and finally self-perceived inaccuracy could be demoralizing to the learner Turning to the causes of inaccuracy, one is that the underlying interlanguage system is inadequate, or transitional, such that the language which has been produced *is* grammatical, but to an incorrect system which needs to change further (Ellis 1994) (see below) One could speculate that the tendency to be

inaccurate on this basis relates to how well established the particular part of the interlanguage system is. But it is also possible that inaccuracy is the result of the competence–performance relationship, and of the way in which communicative pressure has led to an error being made which, under other circumstances, would not be a lapse, in Corder's (1981) terms. And, of course, we cannot ignore the possibility that 'inaccuracy' may itself be targeted as desirable, for whatever reasons the learner is motivated by (Trevisi and Noyau 1984)!

The reverse side of this coin is to consider what *promotes* accurate language use. Clearly, the use of well-integrated aspects of the interlanguage system will be helpful here, i.e. a sort of conservative communication strategy, in which what is well-known is used, and what is not is avoided (Schachter 1974). Learners who dislike risk-taking will, presumably, be drawn to accuracy because of a reluctance to use language they are not sure of. A similar effect will result from a greater concern, on the part of the learner, to be correct, to conform to target language norms, and to value them as important. But other factors are also likely to have an impact, such as the effectiveness with which attentional resources are mobilized, and the processing capacity which is available given other aspects of communicative pressure, i.e. the more attention is diverted elsewhere, the less attention is available for form and accuracy (Van Patten 1990, Van Patten and Cadierno 1993).

In this regard, we need to turn to the next goal that has been proposed for language learning—complexity/restructuring. Restructuring is concerned with the process by which the interlanguage system becomes more complex, elaborate, and structured (McLaughlin 1990), maybe more efficient and less circumlocutious in communication (Cheng 1985), more consistent with input data, and more native-like (Cook 1994). It requires a learner who explicitly accepts such developments as goals and who is driven, by whatever means, to achieve them. More complex interlanguage systems are desirable since they reflect acquisition having taken place, and will enable a greater degree of acceptance as a speaker of the language concerned. Equally important, such IL systems should enable greater precision in communication (Swain 1985), and greater communicative efficiency in the face of difficult performance circumstances. They should also make it more likely that more complex ideas will be expressed effectively (Swain, in press).

If we examine why restructuring may to some extent *fail to occur* a number of reasons present themselves. There may be a lack of interest on the part of the learner either in the goal of becoming more native-like or simply in making the effort to change and re-organize an interlanguage system. There may also be impoverished input (or instruction), such that necessary conditions for restructuring are impaired. But there might also be problems even if the above two influences are not present. For example, learners may prefer not to take risks, relying on less elaborate interlanguage systems which are adapted to communicate meanings in such a way that interlanguage is not pressured for change (Schachter 1974). Such a conservative strategy would promote accuracy at the expense of complexity. Equally, there may be pressure to communicate

which does not provide adequate time for restructuring to occur, since processing resources have to be excessively committed to achieve certain communicative outcomes. In such cases, it is likely that 'solutions' to communicative problems will be proceduralized, and exemplar-based learning will occur (Schmidt 1983, 1992).

Reversing the above analysis makes it clear how restructuring can be more likely to be achieved. There needs to be an interest in achieving native-like performance, and possibly an interest in change more generally. There also needs to be helpful input, both explicit and implicit. It is also important that interactive opportunities, e.g. tasks which need to be transacted, will have a stretching influence on interlanguage, in that precision of expression should be integral to their completion (Swain, in press). It would also be helpful if there were time to engage restructuring processes, and to attend to things other than immediate communication pressures. Finally, it would help if there were support for restructuring, through sequencing of teaching activities, through relevant preparation (Crookes 1989), and through appropriate post-task activities (Willis and Willis 1988, Skehan 1992).

We can turn finally to fluency, the last of the three goals outlined earlier. Fundamentally, this consists of the capacity to mobilize one's linguistic resources in the service of real-time communication, i.e. to produce (and comprehend) speech at relatively normal rates, approaching (but not necessarily identical to) one's own native-language speech rates. In particular, one would look at features such as rate, pausing, reformulation, hesitation, redundancy, and the use of lexical units (Bygate 1987) to establish the level of fluency which has been achieved. It is assumed that to achieve this goal requires a capacity to use implicit knowledge systems in actual performance (Schmidt 1992).

Adequate levels of fluency are desirable if one wants to be acceptable as a worthwhile interlocutor (Schmidt 1983). Poor fluency will lead to difficult (and less frequent) patterns of interaction and further opportunities for learning (Larsen-Freeman and Long 1991). It will also lead to dissatisfaction, as it becomes difficult to express interesting ideas in real-time and the normal orchestration of conceptualization, planning, and execution (Levelt 1989). From a learning perspective, fluency is also desirable to the extent that it integrates, as implicit knowledge, the results of emerging and developing restructuring, and makes accessible the lexicalized products of the operations of the restructuring in actual communication (Carr and Curren 1994). More questionably, the sort of fluency which represents the proceduralization or lexicalization of transitional forms which are incorrect, and whose consolidation may compromise future development, may be undesirable. It may represent communicative progress, but of a type which makes later restructuring more difficult.

Given these perspectives, we next need to examine what promotes (a) lack of fluency, (b) undesirable fluency, and (c) effective fluency. *Lack* of fluency is clearly more likely when the speaker does not value fluency, but instead is more

drawn towards other goals, such as accuracy, or precision and complexity of speech. It is also more likely when there has been insufficient opportunity for the proceduralization of language, and for the development of an adequate repertoire of exemplars (formulaic units) to sustain the pressures involved in real-time communication. This, in turn, besides being accounted for by individual difference factors (Skehan, in press, b), is likely to be the result of inadequate opportunities to make language production automatic in the necessary manner. *Undesirable* fluency is likely to result from excessive proceduralization, perhaps resulting from the use of Strategic Competence to solve communicative problems. Such 'solutions' are what are automatized and compromise future interlanguage growth. Excessive pressure to communicate, that is, may result in transitional forms fossilizing as accessible exemplars which are easy to use, appear to have communicative effectiveness, but are incorrect.

Finally, it can be proposed that *effective* fluency is achieved when previous restructuring becomes automatized or becomes a (correct) exemplar. In such a case, the pressure to achieve fluency comes at the right moment *after* restructuring has occurred. This implies a capacity to engage in cycles of analysis and synthesis on the learner's part (Klein 1986), with the former focusing on restructuring, and the latter on fluency (Skehan 1992). The former is necessary to keep a system open, and capable of change. The latter is vital if the system so developed is not to be simply a rule-system which has to be applied anew in each communication, but instead is made accessible (Widdowson 1989), lexicalized, and automatized. In other words, desirable fluency implies a capacity to operate a dual-mode system, in which well-organized exemplars are available to respond to real-time pressures, but a rule-based system can still be accessed when the need for precision or creativity arises (Carr and Curren 1994). Coming from a corpus-based linguistic perspective, essentially the same claim is made by Sinclair (1991) in his contrast between the idiom principle and the open-choice principle: the former concerns the way choices are reduced in the service of real-time communication, while the latter principle is what enables the language user to access a greater range of lexical choice when this is appropriate.

If we ask how such a level of beneficial fluency can be achieved, it is clear that there have to be opportunities to create exemplars in context which can then be retrieved in later communicative encounters. This implies giving learners communicative problems to solve at the right level of processing difficulty, i.e. avoiding excessive processing demands which would disrupt performance, while also avoiding non-challenging tasks which do not extend ability for use. In this way, learners are more able to bring to bear the effects of recent restructuring, but at the same time achieve a level of fluency. For this to happen with any consistency, it is important that cycles of activity are organized so that there is a balance between a focus on form and a focus on communication (Van Patten 1990, Skehan 1992).

Now, though, that we have discussed accuracy, complexity, and fluency somewhat separately, it is important to examine the interrelationships. A focus

on accuracy makes it less likely that interlanguage change will occur, more likely that speech will be slow, and probably consumes a considerable portion of attentional resources. A focus on complexity and the process of restructuring increases the chances that new forms will be incorporated into interlanguage systems, promotes risk-taking, and requires attention being devoted to the new forms of language which are being assembled (Foster and Skehan 1994). Finally, a focus on fluency will lead to language being produced more quickly, to an emphasis on accessibility (Bygate 1988), and with lower priority being attached to getting language right, or to the use of new forms.

If we consider the processing implications of having these three goals, it is clear that there is not sufficient capacity for learners to devote resources to each of them so that they can be met simultaneously. As a result, decisions about the prioritization of attentional resources have to be made during communication and learning, leading us to need to explore the consequences of allocating attention in one direction, and not another (Van Patten 1994). Performance is likely to prioritize fluency, and relegate restructuring and accuracy to lesser importance. A focus on development, on the other hand, is likely to prioritize restructuring, with accuracy and fluency being more secondary. Further, to the extent that such learning is cumulative, cycles of restructuring, followed by an emphasis on accuracy and fluency, may be followed by contingent, developmental cycles of further restructuring, as a particular interlanguage sub-system is progressively complexified.

We now need to consider how the three goals of accuracy, complexity-restructuring, and fluency have been addressed in language teaching methodology, i.e. what decisions are explicit or implicit in existing approaches to pedagogy. A conventional presentation, practice, production sequence tacitly assumes that change will come about through the presentation phase, and this will be translated into accuracy and fluency through the succeeding practice and production stages (Rivers 1981). Following the earlier discussion, we have seen that there are problems with this approach. It assumes that 'restructuring' can be equated with whatever the teacher (or the syllabus writer) deems to be worth presenting, and ignores the findings of systematicity that have emerged through second language acquisition research (Ellis 1994). It similarly assumes that the teacher's plan can be cumulative, with units chosen and sequenced on non-acquisitional grounds (Breen 1984). Further, it generally assumes that there is a linear sequence to learning the units of language: when they are covered, they are learned, and do not require cyclical revisiting and extension. Finally, there is the problem that the practice model which underlies the development of habits in such a '3Ps' approach, has been itself widely discredited (Stern 1983). So, although there is a sense in which the three terms of restructuring, accuracy, and fluency could be associated with presentation, practice, and production, the match is, on examination, clearly inappropriate.

A task-based approach, in contrast, may achieve the goal of restructuring, if it is assumed that interaction-opportunities have an 'extending' influence on interlanguage development, and engage acquisitional processes. But we have

seen that there is also the possibility of over-prioritization of attentional resources towards fluency, so that the proceduralization of a lexicalized competence emphasizing accessibility is at the expense of complexity,⁷ restructuring and of accuracy. To overcome the difficulties of achieving such conflicting goals, task-based instruction needs to find ways of balancing attention allocation. The next section addresses this issue.

TASK-BASED INSTRUCTION AVOIDING THE DANGERS

The linguistic analysis presented earlier highlights the meaning-driven nature of much communication, and the problems this poses for interlanguage development. The studies from cognitive psychology and psycholinguistics reinforce this meaning-driven nature of communication, and link it to (a) the relevance of a limited-capacity attentional system in which meaning is prioritized for the consumption of scarce resources, and (b) how a dual-mode system may be used to ease the processing burdens that are the consequence of the limited capacities, such that a rule-based system is often implicated, but when processing demands are high, a lexically-organized system comes into operation. Finally, the task-based learning research is relevant, but not in a systematic way. Proposals are accountable to such research but, given its incomplete nature, it cannot be the *guiding* basis for proposals on task-based instruction.

What is proposed in the remainder of the article is a framework to address these problems. Although it is consistent with underlying disciplines and research findings it contains an essentially speculative component, in that it tries to provide an organizational framework which can guide pedagogic decisions, and which can structure the ways in which task-based instruction is implemented. It also provides a framework to which existing research can be related, and which could be useful for decision-making, and organizing future research. The underlying themes for this discussion are that task-based learning should work towards a constant cycle of analysis and synthesis, that this should be achieved by manipulating the focus of attention of the learners, and that there should be balanced development towards the three goals of restructuring, accuracy, and fluency. In practical terms, how these aims can be achieved in task-based learning can best be discussed in terms of the traditional categories of syllabus, i.e. sequencing of tasks, and then methodology, i.e. implementing the tasks which have been chosen.

Sequencing tasks: syllabus considerations

A fundamental tension in communicative language teaching is that it tries to bring together form and meaning (Van Patten 1990) in that the learner has to have something worthwhile to say. But if there is something worthwhile to say (a) content may become of primary importance, and (b) concern with content will consume attentional resources (Van Patten 1994). It is imperative, therefore, that tasks are sequenceable on some principled criterion, since the basis on which tasks are ordered will be a reflection of what attentional resources they require.

Table 1 Task sequencing features

Code complexity
Cognitive complexity
Cognitive processing
Cognitive familiarity
Communicative stress
Time pressure
Modality
Scale
Stakes
Control

Developing this general approach, the scheme shown in Table 1 is proposed for such task sequencing, drawing on previous work by Candlin (1987) and Nunan (1989). In brief, the scheme contrasts formal factors (code complexity) with content (cognitive complexity) and pressure to achieve communication (communicative stress). Code complexity is concerned with traditional areas of syntactic and lexical difficulty and range and will not be pursued further here. Cognitive complexity is concerned with the content of what is said, and relates to the conceptualization stage of Levelt's (1989) model. It distinguishes between the two areas of *processing* and *familiarity*. Processing is concerned with the amount of on-line computation that is required while doing a task, and highlights the extent to which the learner has to actively think through task content. Familiarity, in contrast, involves the extent to which the task draws on ready-made or pre-packaged solutions. It is implicated when all that is required is the accessing of relevant aspects of schematic knowledge if such knowledge contains relevant, already-organized material, and even solutions to comparable tasks, e.g. sensitivity to macrostructures in narratives.

Communicative stress concerns a group of factors unrelated explicitly to code or meaning, but which do have an impact upon the pressure of communication. *Time pressure* is perhaps the most straightforward: it concerns how quickly the task has to be done, and whether there is any urgency in the manner in which it is done (Bygate 1987). Some tasks have a time limit, while others can be done at the speed the learners choose. *Modality* simply concerns the speaking/writing, and listening/reading contrast. It is assumed that speaking leads to more pressure than writing, and listening more pressure than reading (Ellis 1987). *Scale* refers to a range of factors associated with task-based approaches to teaching. It includes the number of participants in the task, the number of relationships involved etc. (Brown, Anderson, Shilcock, and Yule, 1984). *Stakes* depend on how important it is to do the task, and, possibly, to do it correctly. If the process itself is the main thing, and there are no consequences that follow from task completion then stakes are low. If, on the other hand, it is

important not to make mistakes while doing the task, then the stakes are high (Willis 1993) Finally, *control* refers to the extent to which the participants within a task can exert an influence on the task and on how it is done Task goals can be negotiated, or if participants can ask clarification questions to reduce the speed of the input they receive, then one can conclude that control is higher, and task difficulty correspondingly lower (Pica *et al* 1993)

The purpose of having a system such as this is that it allows tasks to be analysed, compared, and, best of all, sequenced according to some principled basis The rewards, if tasks are well-chosen, are

- *An effective balance between fluency and accuracy* Prioritizing fluency as a goal will emphasize lexicalized language production, strategic language use, and the primacy of meaning Accuracy as a goal will require analysis, rule-focus, and attention directed to computation It is difficult to achieve each of these goals simultaneously, but at least tasks of appropriate difficulty will give learners some chance of directing balanced attention to each of these areas (Schmidt 1990) and operate a dual-mode system (Carr and Curren 1994)
- *The opportunity for previous restructuring to be applied* By enabling attentional spare capacity, there will be some chance that previous restructuring can be incorporated into ongoing language use (Swain, in press) and a wider repertoire of language be supported (Crookes 1989, Foster and Skehan 1994)

In contrast, bad task choice will probably lead to the opposite outcome Tasks which are too difficult are likely to over-emphasize fluency, as learners only have the attentional capacity to convey meanings, using production strategies (Faerch and Kaspar 1983), lexicalized language, and making meaning primary (Bygate 1988) The result is that accuracy is seen as less important, or at least, less feasible (Ellis 1987) Similarly, embryonic restructuring, which needs to be integrated carefully into more fluent performance, will not have sufficient attentional capacity to allow it to be exploited (Schachter 1974) Finally, there is the contrasting danger that if tasks are too easy, they will present no challenge, and are not likely to extend any other goals of restructuring, accuracy, or fluency in any effective way

Implementing tasks methodology

It is also important to consider how tasks, once chosen, are actually implemented One can distinguish three major stages in such a methodological implementation These are shown in Table 2 The general purpose of the *pre-emptive*, or pre-task activities is to increase the chance that some restructuring will occur in the underlying language system, and that either new elements will be incorporated, or that some re-arrangement of existing elements will take place (Foster and Skehan 1994) Within this general purpose, there are two more specific aims First of all, pre-task activities can aim to teach, or mobilize, or make salient language which will be relevant to task performance This can be

Table 2 Methodological stages in implementing tasks

Stage	Goal	Typical techniques
Pre-emptive work	Restructuring — establish target language — reduce cognitive load	Consciousness-raising Planning
During	Mediate accuracy and fluency	Task Choice Pressure Manipulation
Post 1	Discourage excessive fluency Encourage accuracy and restructuring	Public Performance Analysis Testing
Post 2	Cycle of synthesis and analysis	Task Sequences Task Families

attempted in a number of different ways. One, the most traditional, would be an approach which simply tries to set up the relevant language for a task, in which case one is essentially dealing with some form of pre-teaching, whether explicit or implicit. More radically, pre-task concern with language may not try to predict what language will be needed, but instead give learners a pre-task to do, and then equip them with the language that they need (Prabhu 1987, Willis and Willis 1988). On this view, the task itself would be the primary factor, and task-completion would be the aim that would dominate.

The second major type of pre-task activity would be to ease the processing load that learners will encounter when actually doing a task, releasing more attention for the actual language that is used (Van Patten 1994). The result will be that more complex language can be attempted (Crookes 1989) and greater accuracy can be achieved as well (Skehan and Foster, forthcoming). A range of activities can be used to reduce cognitive complexity in this way. The cognitive familiarity of the task can be altered by pre-task activation sessions, where learners are induced to recall schematic knowledge that they have that will be relevant to the task they will do. The cognitive processing load during the task to come can also be influenced by a number of procedures. Learners could observe similar tasks being completed on video, or they could listen to or read transcripts of comparable tasks (Willis and Willis 1988). Learners could similarly be given related pre-tasks to do (Prabhu 1987) so that they have clearly activated schemas when the real task is presented. Finally, and very importantly, learners could be asked to engage in pre-task planning (Crookes 1989), either of the language that they will need to use, or of the meanings that they want to express (Foster and Skehan 1994). Then they can devote more attention to how they are going to carry out the task, and can thereby produce more accurate, complex, and fluent language (Foster and Skehan 1994, Skehan and Foster, forthcoming).

The main factor affecting performance *during* the task is the choice of the task itself, with the goal (see Table 1) being to target tasks which are of the appropriate difficulty. Tasks, that is, should not be so difficult that excessive mental processing is required simply to communicate any sort of meaning. If they do, it may produce a reliance on ellipsis, context, strategies, and lexicalization (see above) which reduces the pedagogic value of a task-based approach. Nor should tasks be so easy that learners are bored, and do not engage seriously with the task requirements, with the result that no gain is made in terms of stretching interlanguage or developing greater automaticity (Swain 1985).

But in addition to task choice, as discussed in the section on syllabus, there are implementation decisions that teachers can make to alter the difficulty of a given task, and manipulate the way in which attention is directed. As regards the *code* itself, teachers can be explicit immediately before the task is done as to whether they want accuracy to be stressed, or whether they want specific structures to be used, (i.e. a pressure to conformity in structure choice (Willis 1993)). As regards *cognitive complexity*, there are ways of making a task less or more difficult. To achieve the former, visual support could be provided, such as a diagram, which can ease the amount of material that learners need to keep in mind while responding to the task itself. To make tasks more difficult, surprise elements can be introduced which do not match learner expectations of what the task will require, e.g. additional evidence in a 'judge' task.

But perhaps the major area for adjustment while tasks are being completed is in the area of stress (or communicative pressure). Pressure manipulation can be based on the communicative stress factors mentioned earlier in the section on sequencing, i.e.

- time
- modality
- scale
- stakes
- control

Since the operation of these factors was described in that earlier section, no additional coverage will be provided here. The point is simply that they are susceptible to variation, with consequent impact on communicative pressure.

Finally, we need to look at post-task activities. The assumption made here is that learners' knowledge of what is to come later can influence how they approach attention-management during an actual task. The central problem is that while a task is being done, the teacher needs to withdraw, be non-interventionist, and allow natural language acquisitional processes to operate (Brumfit 1984). But then, the danger is that communication goals will be so predominant that lexicalized communication strategies will become so important that the capacity to change and restructure, to take syntactic risks, and to try to be more accurate, will not come into focus as serious goals, and worthy of attention during the intensity of task completion (Skehan 1992). Post-task activities can change the way in which learners direct their attention during

the task (Willis and Willis 1988, Tarone 1983) They achieve this by reminding learners that fluency is not the only goal during task completion, and that restructuring and accuracy also have importance

Drawing on Table 2, two phases of post-task activities can be used In 'Post 1', the more immediately linked to the teaching which has just occurred, three general post-task activities can be mentioned public performance, analysis, and tests With the first of these, public performance, learners will be asked, after they have completed a task 'in the privacy of their own group' to repeat their performance, publicly, in front of some sort of audience The audience could be the rest of a learning group, (who themselves may also have been doing the same or a similar task, and who could equally well be asked to engage in the public performance), the teacher, or even a video camera, so that the performance could be played back later, with even the participants themselves required to watch In this way, the knowledge while the task is being done that a task may have to be re-done publicly will cause learners to allocate attention to the goals of restructuring and accuracy where otherwise they would not In this way, a concern with syntax and analysis can be infiltrated into the task work without the heavy-handedness of teacher intervention and error correction

There are also other post-task aspects of task-based learning which are important, as shown in 'Post 2' from Table 2 One must examine task sequences, task progression, and generally how sets of tasks relate to one another, and to the underlying and more important goals which are driving forward instruction For example, there may be reasons to repeat tasks, with the idea that learners will be more effective with the analysis and synthesis goals and that the task was meant to embody Similarly, there may be parallel tasks Such tasks are likely to be similar to one another in some important respect, but at the same time contain new elements which are sufficient to engage the interest of the learner (Plough and Gass 1993) Perhaps most generally of all, it is useful to think in terms of 'task families', where a group of tasks resemble one another and may well have similar language or cognitive demands (Candlin 1987) In this way, learners will be clearer about the goals of such task groups, and there will be less tendency for discrepancies to arise between teachers' and learners' views about task requirements

These various methods of analysing tasks, in terms of syllabus and methodology, are brought together in Table 3 This table shows how the three major stages of task implementation, together with the associated goals in each case, cross-reference with syllabus design factors In this way, it is possible to see how systematic decisions can be made regarding the change which it is intended should occur in learners' interlanguage systems One aspect of this table which should be noted in passing is that it suggests that the syllabus-methodology distinction is still relevant, even for task-based learning Nunan (1993) argues that this is not so because we learn to communicate by communicating, we cannot so easily separate the target from the means of achieving it The discussion in the last few pages, however, suggests that while we cannot pretend to offer a comprehensive sequence of tasks, there are methods of analysing

Table 3 Factors influencing task implementation

Stage Goal	Code complexity	Stress	Cognitive complexity
<i>Pre-emptive</i>			
Restructuring	Pre-teach	—	<i>Processing</i>
— establish target language	Consciousness-raising		Observe
— reduce cognitive load	Practice		Solve similar tasks
	— conventional		Plan
	— parallel tasks		— cognitively
	— rehearsal of elements		— linguistically
			<i>Familiarity</i>
			Activate
<i>During</i>		TASK CHOICE	
Mediating accuracy and fluency	Accuracy focus	Time	Support available
	Conformity pressure	Modality	Surprise elements
		Scale	— additional
		Stakes	— conflicting
		Control	
<i>Post 1</i>			
Increases accuracy	Public performance		
Encourages restructuring	— teacher		
Discourages excessive synthesis	— group		
	— camera		
	Degree of analysis		
	Testing		
<i>Post 2</i>			
Cycle of synthesis and analysis	The task sequence		
	— repeating		
	— parallel tasks		
	Task families		

tasks, both for difficulty and for type, and that as a result, we can try to work with syllabus units in a well-defined and principled way. Similarly, viewing task implementation in terms of the three phases of *pre*, *during*, and *post* clearly indicates where methodological choices are relevant in task-based learning, that these choices take as input the units from a syllabus specification, and that the choices themselves are methodologically motivated. So it is argued that the syllabus-methodology distinction can still be relevant, provided that a framework such as that advocated here is used.

CONCLUSIONS

Task-based learning is an area which has grown in importance enormously during the last ten years, and can now be approached from a number of perspectives. The present paper has taken a processing-pedagogic viewpoint and its main ideas are

- Task-based learning, a current vogue in communicative language teaching, contains dangers if implemented without care. In particular, it is likely to create pressure for immediate communication rather than interlanguage change and growth. In the process, it may encourage learners to use excessively and prematurely lexical modes of communication.
- It is possible to draw on cognitive psychology and second language acquisition research, at least of the sort that emphasizes processing factors, to propose a framework which avoids or at least minimizes these dangers.

Task-based learning is an attempt to address one of the dilemmas of language teaching: how, on the one hand, to confront the need to engage naturalistic learning processes, while, on the other, to allow the pedagogic process to be managed in a systematic manner. The proposals outlined in this paper contain partial, but not complete, solutions to this dilemma. The paper accepts that language learning is not any sort of simple, linear, cumulative process. Instead, learners must be able to develop their interlanguage systems in more complex ways, through cycles of analysis and synthesis, revisiting some areas as they are seen to require complexification, learning others in a simple, straightforward manner, developing others by simply relexicalizing that which is available syntactically, but which need not be used on such a basis. The proposals presented here attempt to offer such systematization as is possible within such a complex situation. It attempts, that is, to structure the freedom which learners need to have! It does so, above all, by trying to address the issue of attention, or learners' capacities to focus their attention. In this way, it is hoped that, however inexact our understanding of language learning, the greatest chance is being created for naturalistic mechanisms and processes to come into play.

Clearly, this analysis is more programmatic than based on a range of completed studies. The framework which was presented in Table 3 is an attempt to synthesize what is known about the influence of task variation on learning and performance. Some parts of this table are supported by empirical work. In other places, this is much less true. The table, that is, attempts to be consistent with the evidence that is available, but goes beyond it to try to establish a more general, and therefore useful, framework. But in other ways, what the table does is to demonstrate how much research is needed to investigate the claims that it makes. If it serves any function in addition to that of utility, it has to be that it provides some sort of organizational framework which can stimulate research, and within which future research can be located.

(Revised version received April 1995)

ACKNOWLEDGEMENTS

The author would like to thank Antony Bruton, Graham Crookes, Pauline Foster, and three anonymous reviewers, who read earlier versions of this article. Needless to say, any remaining errors or shortcomings are the responsibility of the author.

NOTES

¹ As an *Applied Linguistics* reviewer pointed out, this represents a narrow interpretation of what a task is. The justification for this, which should become clearer as the argument develops, is that the narrower approach draws upon acquisition research more directly, assuming that interlanguage development is a key goal for pedagogy, particularly in relation to the development of spoken language ability.

² Although it is recognized that to accept this goal makes a number of assumptions, it is accepted here for expository purposes, but is challenging on a number of grounds. First of all, there is the issue of what native-like means. There is also the issue that many language learners may have other models of competence that they aspire to, rather than a particular native-speaker version. Finally, there are learners who reject a native-speaker model completely or partially, which complicates the picture considerably.

³ Again, for expository purposes, the concentration here is on what Bachman and Palmer (in press) would term Organizational Competence, and does not concern their Pragmatic Competence.

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