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1

Introduction

Behaviourist and structuralist linguistics gave second language teachers a concept of form where the grammatical and lexical units through which a language was presented were held to be the same as those through which it was processed. This provided a unity of approach that was once an assumption of applied linguistics:

There is no conflict between application and theory: *the methods most useful in application are to be found among those that are most valid and powerful in theory*

(Halliday, McIntosh and Stevens 1964: 166–7; cited in Widdowson 1973; author's italics)

Unfortunately, this unity between the psycholinguistic and pedagogic approaches to language was achieved at the cost of a considerable simplification, both of grammar, and of the language learning process.

One problem derived from structuralism's analysis of form itself. A language structure is defined according to its properties of formal differentiation (Bloomfield 1914; Thorndike 1932; Skinner 1957). For the language learner this resulted in an over-emphasis upon the formal properties of language and their disassociation from the creation of useful meanings. Drilled through substitutions or transformations, the learner was forever producing versions of a structure that represented meanings they might never use. Moreover, the view of language as correct habits acquired through repetitive manipulation led to a stress upon providing students with the correct model of the target language, and hence a disproportionate emphasis on native-speaker teachers and teacher-centred classrooms.

The demise of behaviourism has left applied linguistics in no less a quandary, however. Fundamentally, we were left with a divided treatment where mainstream approaches to the description of form offered next to nothing to the teacher who was looking for ways to present second language content to learners. The language teacher fell prey to what Widdowson (1979) defined as a dichotomy between a linguistics applied (LA) approach and an applied linguistics (AL) approach. In the LA model, one accepted the dominant linguistic theory and examined its implications for second language learning. In an AL model one evolved modes of analysis that treated second language issues on their own terms, analysing the language that was used by learners and native speakers. This divide meant that teachers adopted one of two equally unsatisfactory approaches to teaching forms. On the one hand they searched for ways to apply descriptive procedures whose abstractness and complexity made them unusable as part of a language teaching approach. On the other hand they had to fall back upon rules of language use that were formulated for their transparency and not for their identification of the forms from which language was processed and produced. The first approach can be identified with studies that sought to apply generative linguistic theory to such processes as second language acquisition (SLA). The second is associated with the more social and discourse-oriented approaches to linguistic analysis typified by the systemic functional school.

The linguistics applied approach: generative linguistics and second language learning

The inapplicability of generative theory is unsurprising, since it achieved theoretical consistency by recreating language as a stable entity within what was called an ‘ideal speaker–hearer relationship’. Chomsky rationalised this process of abstraction inside another metaphor, the nature of water as it is studied:

Why do chemists study H₂O and not the stuff you get out of the Charles River? You assume that anything as complicated as what is in the Charles River will only be understandable, if at all, on the basis of discovery of the fundamental principles that determine the nature of all matter, and those you have to learn about by studying pure cases.

(Chomsky *ca* 1985, cited by Cook 2005, personal communication).

The argument was that like water, language could not be understood in all its variable states. We had to reduce language to its essential common elements, otherwise we would be dealing with an entity whose almost infinite variation would make it impossible to study.

Not only did language have to be isolated from its social context to reveal its essential nature, it also had to be isolated from the mind's larger array of cognitive functions and their engagement with the plethora of scenarios that our reality presents. Language was therefore perceived of as cognitively modularised, or largely processed in a part of the brain that was isolated from others and structured for the purpose. Just as when we open our eyes we have no choice over whether we do or do not see the world before us, so when we hear a language that we know, we cannot fail to recognise its meaningfulness (Fodor 1985). Language was therefore described as occupying a specialised module in the brain. This module had an innate grammar that was the same at birth for every human. The parameters of this universal grammar (UG) were reset by the input of the particular language to which it was exposed from birth.

Some second language acquisition (SLA) specialists were attracted to the generative treatment of language because it allowed acquisition to be closed off as a process that was immune to social variation. In a generative model SLA was an interaction between a model in the mind of the idealised speaker–hearer and a language that could be construed as a logical system. But these scholars faced the quandary of how one could acquire another language when one had already set the parameters of a universal grammar within a first language, then modularised this knowledge as a set of reflexive operations with which the rest of the mind could not interfere. Broadly, three models were proposed. In the full transfer, full-access model learners were thought to transfer the settings of the UG that result from the first language. This created the phenomenon of first language interference. In the next stage we obtained access to our universal grammar and acquisition would then start to accelerate (see for example, Schwarz 1986, 1987, 1993). The second model could be called partial transfer. In this model learners could not access their universal grammar directly but could only do so through the grammar of the first language. In the third model there was held to be no access to universal grammar and second language acquisition was held to occur through alternative versions of the language derived by broader learning strategies (see for example, Bley-Vroman 1990).

The lack of resolution in the debate about these models has revealed larger problems, however. For example, the proposal that languages were

only acquired from naturalistic input was demonstrably untrue. Because some students did learn second languages, albeit to different degrees, it became necessary to postulate modules dedicated to second language learning. Since first and second languages interfered with each other, this created a cognitive architecture where one module had throughput to another, thus undermining the very principle that modularity had sought to defend. More generally, by searching for applications for a theory that made a virtue of its inapplicability, generative SLA theory undermined the very integrity of the construct it set out to sustain. In other words, the generative model had achieved consistency by failing to notice the messier processes of second language learning and when it was brought into contact with these processes, that consistency could no longer be sustained.

The applied linguistics of second language learning

After the demise of structuralism an alternative consensus to generativism perceived that language was finally about communication, or the conveyance of meaning. Conveying meanings is a social process so a language was a system that evolved to reflect its social role. Hymes (1971) famously argued that Chomsky's concept of competence would produce utterances that were socially so inappropriate they could only belong to a lunatic. This focus on the limited, extra-social nature of the generative conception of language knowledge missed how it was precisely these limitations which were perceived as essential to the scientific exploration of language (see for example, Chomsky 1985). In Chomskyan terms, Hyme's notion of a communicative competence was nonsensical. A linguistic competence arose when the parameters of a learner's innate and universal grammar were set by the language with which they came into contact. This contact was with the language as a performance, or as a contextualised and inconsistent entity. The external, social language then evolved into a 'steady state' through the process of its acquisition and could thus be studied as a consistent entity, or competence. Essentially, it took on an internal, extra-social complexion. To treat that competence as social or communicative therefore entailed its self-reaction as a type of performance. However, in their eagerness to grasp language as a social phenomenon, applied linguists ignored the evident contradictions of Hymes' conception by formulating it as a pedagogical goal (see for example, Brumfit and Johnson 1979; Savignon 1983). The objective of giving second language learners a communicative competence implied a strong link between linguistic

form and the social objectives and meanings the form realised. Therefore support was sought in theories which saw language as structured by its social nature, or which perceived it as a social semiotic (see for example, Halliday 1993).

Language as a social semiotic

This social conception of Systemic Functional Linguistics (SFL) appealed to language teachers because of the way grammar was linked to principles of use. However, SFL also raised a series of difficult problems. First, Halliday described language as an external entity, and so located it in exactly the realm of social confusion from which the generative linguistic wanted to remove it. The linguist therefore addressed a construct which was located outside a stabilising concept of mind. To provide stability in a social arena, scholars had to reify language as an extraneous object. It was now 'an outlying system for meaning exchange', which built cognition rather than being built by it (Holme 2007), for in Halliday's view, cognition was just 'a way of talking about language' (Halliday and Matthiessen 1999). The difficult implication was that language had to pre-exist the cognition it created, or was at least mutually constitutive of the same.

Linguistic form, or the lexico-grammar, then, was delivered to the classroom teacher as an entity that was simply a response to a social need. A difficulty was that there was no convincing explanation for the cognitive processes through which the development of those forms and their meanings had been mediated. An advantage of the structuralist concept of form had lain in how it came ready-packaged with a learning theory. The problem with a communicative notion of form was not that this package was unbundled, but rather, that learning arose purely from a social imperative. Reductively, the imprint of cognition upon language was effectively nullified because the mind was postulated as a kind of microcosmic society, building language as an unmediated response to social need. Teachers had been furnished with a concept of mind as simply reflecting social experiences then ciphering those reflections back into society. They lacked an understanding of how cognition had first to categorise and interpret experience before construing it as a usable set of meanings. In pedagogy, an even more reductive consequence of the reification of language as a social entity was to de-emphasise its grammar entirely. Language was perceived less as a rule system designed to match utterances to social objectives, and more as a set of pairings between fixed expressions and their functional meanings.

The need to treat language as an extraneous object found a supportive metaphor in the language corpus. Although research tools of great promise, language corpora postulated a metaphor of a language as something captured as a totality, or as an extraneous and complete product. Corpus studies themselves gave unwitting support to this metaphorical interpretation when they emphasised the repetitive and ritualised nature of much communication (see for example, Eeg-Olofsson and Altenberg 1994; Moon 1998). The argument that teaching should take greater account of these fixed expressions (Nattinger and DeCarrico 1992) helped develop a new lexical emphasis in the language teaching syllabus (Lewis 1993) that stimulated interest in the neglected area of vocabulary teaching, but which raised no concomitant theory of meaning, grammar and linguistic creativity. Students doubtless benefited from an enhanced repertoire of lexical phrases, but over-encouraged to seek the safety of the fixed forms, they still lost control of their larger meaning and found themselves stranded on phrasal islands of incongruous correctness by the error-infested nature of their larger sentence.

The emergence of cognitive linguistics

Cognitive linguistics (CL) emerged largely from dissatisfactions with the limitations of formal linguistics and generative linguistics in particular. These dissatisfactions did not, of course, relate to the second language problem of applicability, for this was never an interest within the discipline. The issue was with the assumptions of the generative enterprise itself.

Generative linguistics had set itself the task of deducing the principles and parameters that are common to all languages from the data that these languages provide. Yet these principles have proved remarkably elusive and have hitherto amounted to little more than a few highly limited statements about the nature of language (Lakoff and Johnson 1999).

A second problem for generative linguistics lay in how it took syntax as the prime object of study. In Chomsky's minimalist model, language study was divided between syntax and the lexicon (Chomsky 1995). Words and their meanings were specific to a language, rather than to language itself, and therefore did not have structures that could be generalised across languages and established as a set of scientifically credible parameters. The generative interest was therefore in syntax. But it had always been acknowledged that the way syntax treated lexis was partly a consequence of the nature of that lexis, or of its grammatical marking.

For example, the lexicon would have to store verbs as either transitive or intransitive so that intransitive verbs would not be made available to a transitive sentence structure, or vice versa. However, students of syntax became increasingly aware that many idiomatic patterns violated the principles of such marking, making intransitive verbs transitive, or creating passive sentences from intransitive ones. The resultant expressions could be taken out of the syntactic system and set up as a rival system of semi-fixed expressions called constructions (see for example, Culicover and Jackendoff 2005). Constructions could then be seen as being learnt much in the way that lexis and idioms were, but their frequency seemed to make a language with two systems, one governed by syntax and one not.

A third problematic area concerned the relationship between the model of the mind postulated by the generative model and the picture of cognition that was starting to emerge. Central to generative linguistics was how the structures perceived in the language were thought to have been generated out of simpler common structures by a series of transformations. Finally a language could be broken down into the universal grammar which underpinned all languages. A model where basically more was made from less could therefore claim the virtue of cognitive efficiency, or the maximisation of what was thought to be limited cognitive space. It allowed us to produce an almost infinite number of sentences with limited grammatical means. But the transformations needed to achieve this were found to be incredibly complex. It therefore became increasingly difficult to postulate this as a cognitively efficient method of producing language. Further, new models of the brain questioned the requirement that models of language should be based upon limited processing capacity. Cognitive development was seen less as the exploitation of specific structures to overcome capacity constraints and more as an exercise in capacity reduction in order to focus on such tasks as language acquisition (see for example, Ramachandran 2005). Finally, UG was seen as a series of innate mental structures that were vested in a language module, but our increasing knowledge of the brain has failed to find any area that is structurally different in the way such a model requires (Edelman 1992).

A fourth problem related more to the formal approaches to linguistics themselves and to the question of how meanings were actually gathered from the world. As Saussure (1974) had recognised, language could not simply represent objects or states in the world. The word 'tree' did not represent a single object and 'happy' did not represent a one-off condition. The first term represented the thousands of trees we had seen and the putative trees that we had not. The formal response to our need

to deal in meaning as a concept rather an exactly equivalent object was to suggest that a category such as 'tree' arose from its possession of an objectively identifiable set of features. Thus a tree had to have a trunk, sap, branches and leaves, or whatever. So finally 'a tree' was a tree when, and only when, it could be feature-matched with that concept. If the features were present, the item conformed to the category and if absent it had to be something else. However, as Wittgenstein had already understood, some of the entities that composed a category did not have features in common with all the other entities (1957). The category then seemed to have no binding set of features. Thus, in Wittgenstein's famous example, many of the activities that are called games had almost nothing in common with each other. For example, chess had little in common with a game of football and almost nothing to do with the meaning implied by the question, 'what's your game (job)?' Another problem lay in how abstract categories such as 'happiness' were derived from our experience of that state and had no objective set of features to which we could match anything.

The re-evaluation of how we derived meanings was further stimulated by Lakoff and Johnson's exploration of the nature of metaphor (1980). Lakoff and Johnson built on work in philosophy which had already reopened a longstanding enquiry into metaphor and the questions that it raised about the relationship of language and meaning (Richards 1936; Black 1962; Ricoeur 1975; Derrida 1978). Metaphors asked severe questions of truth-condition semantics, or of a view where the meaningfulness of a proposition rested in how well it corresponded to the facts of the world. When we used a metaphor, 'Juliet is the sun', for example, this was technically meaningless, because we knew that Juliet could never be a solar object. Yet in the world of rhetoric such metaphors were intensely meaningful.

Lakoff and Johnson's first contribution was to consolidate the understanding that metaphorical language was not confined to the literary domain. They thus developed Michael Reddy's (1993) insight into how a metaphor could structure our everyday discourse and fashion our perception of a given topic. Reddy had perceived that the abstract idea of 'communication' was structured by what he called 'the conduit' metaphor. For example, we talked about 'getting through to' somebody or perceived the act of communication as a 'channel' through which we could 'pass' our message or 'get it across' (*ibid.*). Lakoff and Johnson (1980) saw in this insight a larger process where much of our everyday discourse was structured by metaphors. For example, we perceived happiness as being 'up' and sadness as being 'down'. Equally, consciousness

was 'up' and 'unconsciousness' was 'down', 'buried', or 'under' as when we slept *deeply* then woke *up*. Other examples were our conceptualisation of people as 'plants' that must be 'nurtured', and emotions as temperatures, as when feelings were 'cold' (indifferent to hostile) or 'hot' (angry or passionate).

Lakoff and Johnson's enquiry did not just confine itself to metaphor. Metonymy was also analysed as fundamental to how we grasped our experience of the world (see for example Lakoff 1987; Gibbs 1994). The exact nature of a metonymy was a topic of some debate, but at root it represented a relationship where a part stood for a whole as in a 'sail' for a ship, or 'smoke' for fire. Thus, in British English, we identified one of the government's most senior standing committees after the type of room where it was sequestered away, thus calling it a 'cabinet'. In this way a physical space or room in which a council met was used to conceptualise and name the council itself.

The enquiry into metaphor and metonymy furnished three key points to the larger cognitive linguistic enterprise that has developed since. First, meaning-making could no longer be treated as the straightforward symbolisation of the facts of our world. The understanding that we used metaphor and metonymy to capture such common meanings as 'happiness' or 'time' refocused attention on how a meaning had to be a product of some form of conceptual process. The second point was that our conceptualisations were derived from experience. The third was the often improperly accredited adoption of Merleau-Ponty's idea that experience was shaped by our physical interactions with the world (Merleau-Ponty 1945, 1962). In other words, cognition was not a straightforward repository of perceived reality but was itself embodied, or shaped by our bodily existence and the nature of the anatomy on which it depended.

Lakoff and Johnson's interest in how the conceptualisation of experience underpinned our meanings has been further extended by our larger perception of meaning and category formation. Since all meaning is basically categorisation, all linguistic meaning is abstracted to some extent and so requires an act of conceptualisation. The study of how categories are conceptualised has been extended into a larger examination of the ways in which language reflects our cognitive grasp of the world.

To see grammar as derived from experience was also to understand that it was not simply some organisational principle from which we interpreted meanings. Grammar, in Langacker's (1999) view was itself 'conceptualisation'. Grammar was therefore meanings that had been conceptualised out of the wellspring of experience.

The CL interest in metaphor and metonymy was only part of a broader concern for linguistic meaning, for how it was derived and how the process of its derivation structured language. Language's central feature was therefore the more traditional one of meaning representation or symbolisation. Key to the symbol was the fact that it was a conventionalised entity. Thus we did not interpret a symbol because it was like its meaning or in some way physically associated with it. A symbol's meaning arose from a social consensus. In this cognitive model, language's social nature was thus restored to it but as a function of our need for a society and culture in which to conventionalise signs as symbols.

Ending the LA–AL divide

The LA–AL divide was unsatisfactory because it amounted to an admission that both of the enterprises it characterised would end in failure. On the one hand we were saying that to construct an adequate linguistic theory we had to idealise language. Having done this, we would then be unable to apply the idealised model to the language we found in the world or in the classroom without the model coming apart. If, on the other hand, we tried to develop an applied approach to the complexity of those circumstances we risked obtaining no more than a series of fragmentary observations that would never coalesce into an idea of over-arching explanatory power. CL provides a path out of this dilemma because it proposes a concept of form that is at once cognitive and socio-cultural.

In CL, form is cognitive because it is derived from the way the reality we inhabit is a product of cognition. For example, when we look at a scene, one object in it will capture our attention whilst the others will be de-emphasised. Cognitive psychologists called the object of attention a 'figure' and the rest of the scene 'the ground'. Sentence structures reflect this. They pay attention to one entity as a subject and process it against the 'ground' or an object (Talmy 1978). This is fundamental to how language structures its representations as a reflection of experience.

In CL, linguistic form is also social. First, form is honed by the social function of passing experience from one person to another then it is collected as the repository of meanings that constitutes a culture. Second, linguistic form is social because the cognition whose operations it encodes is also social. This can be exemplified most clearly if we think about the symbolic nature of language.

It is self-evident that words are meaningful, or are symbols. Less self-evident is how we bind words together into *constructions* that are

also meaningful. For example, a transitive sentence, 'Nancy loves John' proposes 'John' as a love object and Nancy as the agent of the action. English uses a construction of Agent (Nancy) +Process (loves) +Object (John) to express this state of affairs. This is a symbolic complex or construction. Japanese, on the other hand, might use 'Agent+Object+Process', or particles that mark grammatical functions to express that meaning. Thus each language expresses the same meaning with a different construction. Like words, these forms mean what they do as a result of a social convention. Symbols need society, and a society needs a culture to preserve and develop the conventions that determine what symbols mean.

Language, then, cannot exist in an autonomous and extra-social modularity. Language expresses how a given society conventionalises its grasp of experience over time. Language is in this sense cognitive, and cognition is experiential and social. 'Languages are viewed as nothing other than sets of social conventions by means of which human beings communicate with one another about their experience' (Tomasello 1998: 486). Language's response to social need is 'composed of the same basic elements as many other cognitive skills, event cognition, categorisation, joint attention and cultural learning' (*ibid*: 486).

This is not to suggest that CL is conceived with the applied linguist in mind. It is not an enquiry that is limited by some concept of how useful it might be. But, for the applied linguist, CL offers a less fractured starting point because it treats language as cognitive and assumes cognition to be social. In this book, language can be seen less as a 'mirror of mind' and more as an evolving response to how we conceptualise the world through mind and body. According to such an understanding, the human infant does not *acquire* a language because they have an innate grammar whose parameters are reset by that language's input. By the same token, the human adult does not fail to achieve a native-like knowledge of a second language, because their maturity denies them access to that innate grammar. Second languages are difficult to acquire for the same reason that first languages are easy to acquire (Larsen-Freeman and Cameron 2007). Languages have evolved in ways that make them friendly to infant cognition. If they had not they would have died out. When we obtain maturity we also need to retain a language and its meanings. We therefore resist the new, or need to operate its new forms with our previously acquired meanings, creating the types of distortion that are characteristic of second language use.

A first language also gives second language learners the capacity to interfere positively and negatively in their need to *proceduralise* or

gain an automatic control over the forms they encounter. Different individuals will learn differently, with some setting out to consciously analyse a form, and others trying simply to acquire it through practice. In successful learning, conscious analysis, however, can promote greater uptake through usage, or by keeping a form and its manner of use in focus. Thus we no longer need to see language teaching as being an activity that either promotes the conscious isolation and presentation of form, or encourages an intuitive uptake through usage. In the model that will be proposed, the first activity will support the second.

We do not have to de-emphasise 'form' by stressing that language should be arranged around 'topics' or that usage should be promoted through tasks. The analysis of a form must be a preliminary to the promotion of its use, and usage the precursor of a form's isolation and analysis. Further, to see the uptake of a language feature as usage-driven also means the learner must disengage it from the context or situation through which it is first practised. For example, if a conditional construction is presented through a scenario of advice-giving, as in 'if I were you I would...', the form should then become a vehicle through which its larger meaning can be explored in other analogous contexts. Thus, for the conditional, advice can be developed into a negative appraisal, as in 'if we took that road we could get help up here', and the student's grasp of the form's meaning will be extended. Finally, it is more important to explore a form's meaning across contexts than to express a context through an array of different forms. If this principle is adopted, we can grasp the difference between the classroom and the language-using world outside as one of the degree to which we exploit our linguistically constructed ability to focus language upon itself, and the learner upon the processes of learning.

The purpose of the book

In this study, our objective is to begin looking at how the classroom teacher can make use of some of the key principles of CL, and hence develop a pedagogy that will start to bridge the AL-LA divide. To achieve this aim, each chapter will set out a central tenet of cognitive linguistic theory then show how it might re-orient our approach to classroom language teaching. CL is quite a new enterprise, so it contains some quite strong areas of disagreement. In a book of this length I am unable to focus on the detail of these disagreements. Instead, my strategy will be to adopt the perspective that is most consistent with the production of a new model of second language teaching.

The book is divided into four parts. Each part summarises a central tenet in CL then looks at possible classroom applications. Within each chapter I will exemplify my broader discussion of classroom relevance by setting out teaching activities. The larger summary of these methods can then be construed as a first step in the formulation of a CL approach.

Neither the activities nor the book as a whole make any claim to methodological novelty, however. The language teaching literature already abounds with prescriptions for how to teach a certain item of lexis or grammar, or how to foster second language use in class. The activities detailed here do not try to open new methodological ground so much as to exemplify the types of approach that CL emphasises.

The activities have been set out in an instructional format that addresses the teacher directly. They have also been the subject of some classroom experimentation and adaptation. In the main, however, the experimental process is not recounted, since the larger aim was to typify an approach with a repertoire of usable teaching ideas. My objective was not to show how those ideas were derived.

The activities are written for people who are familiar with teaching. The need for clarity means that they are written as instructions. However, finally they are ideas for adaptation that let the teacher decide whether they will fit the level, age and interests of their class. Some may find them under-specified – for example I do not indicate the age or level for which they are suitable. This is because they are not provided as a resource for instant access but as a way of exemplifying an idea that the teacher can adapt to the circumstances in which they work.

Part 1 of the book considers how CL sought answers to some traditional or classical problems concerning the nature of meaning. It then sets out some of the broad tenets of CL regarding experience and embodied cognition. Theories of embodied cognition are found to have particular relevance, not just for how we teach language but for education generally. This relevance is explored in more detail when I look at some research on gesture.

Part 2 looks at meaning as a product of conceptualisation. This topic provides us with two broad themes. The first considers how conceptualisation entails that different cultures and their languages operate with different meanings. This extends the language teaching task into the domain of meaning exploration and comparison, then argues that teachers should look more closely at the cultures from which their target language meanings have evolved. The second theme will be to examine the difference between conceptualisation and construal, then

to consider how construal operations shape language and language teaching activities.

Part 3 takes language's symbolism as its theme and explains a usage-based approach to meaning. It looks first at the CL notion of encyclopaedic meaning and discusses its significance for second language learners. It then looks at the concept of a construction, or at a meaning that combines others to create forms beyond the word.

Part 4 draws conclusions and isolates some principles that the designers of second language syllabi should take into account.

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