A discussion of the work of Lev Vygotsky in the field of cognitive development focuses on how the Vygotskian concepts of internalization and mediated knowledge are crucial to the development of both learner and teacher autonomy in second language instruction. Focus is on theory, with empirical studies used as illustration. First, the Vygotskian notions of spontaneous and scientific concepts, scaffolding, and internalization in the zone of proximal development are explored as they relate to the concept of learner autonomy. It is then suggested that learner autonomy is dependent on teacher autonomy, and teacher autonomy is examined as both a pragmatic and a scientific concept. The roles of guided practice and self-regulation in such autonomy are considered. The final section applies what has been discussed to a number of issues, including teacher education, the classroom environment, the role of the first language in second language learning, and recent Vygotskian approaches in second language acquisition research. Contains 43 references. (MSE)
Teacher autonomy: a Vygotskian theoretical framework

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0 Introduction

Defining what happens in a classroom is problematic. Here are some assumptions which are often made in relation to classroom activity: there is a teacher in control; there are learners who are taught a topic with a view to learning it; there is a subject that is to be taught/learnt; teachers (sometimes trained, sometimes untrained) present the information to be learnt/taught by lecturing; learners learn by attending classes, by reading textbooks, which are used as support (sometimes replacement) tools for classes, and by applying newly acquired knowledge.

In relation to learning second languages these assumptions are apparently on firm ground: there is a language to be learnt; the teacher does his/her job, using whatever means are provided, according to established practice or the latest trends (grammar-translation, audiovisual, or more recently communicative approaches); learners attend classes and practise in class and, whenever possible, outside class, in line with prescribed exercises. Officially, acquiring a second language is a matter of the learner listening, understanding and repeating/applying what has been taught. It is still commonly thought that teaching/learning a language can be achieved by using the right "method" and by working at it sufficiently.

So why is it that, with the best intentions in the world, motivated would-be learners do not always learn as they were intended/intending to? It is a common experience that anyone learning/teaching becomes aware of a gap between what they intend to do and what they achieve. No one learns what is taught, and no one teaches what is learnt. This gap is particularly strongly felt in the second language classroom, where what I referred to earlier as the "topic" is not immediately accessible to the learner; to some extent some parts of it
always remain inaccessible. This is because there is no such thing as a discipline called language, readily available and pliable to pedagogical use for the classroom. The languages people speak are socially determined, and no language course could ever claim to impart full knowledge of the language nominally being taught. Tharp and Gallimore (1988) report that to this day most interactive teaching relies on “recitation” methods which involve the teacher quizzing students by asking unrelated or decontextualized questions that allow learners to display the (arbitrary) information they are meant to know. Yet learning does happen, which implies that out there there are successful teachers and successful learners. How do we explain this?

Traditional models of teaching/learning are clearly inadequate, in the sense that they do not explain what actually happens in the classroom. On the other hand, they are not inadequate to the extent that they prevent all teaching/learning from taking place. In linguistics and language acquisition, 20th-century theory and research have gone a long way towards defining the links between language and cognition. One of the core issues for linguistics has been to establish whether or not early language is a reflection of basic cognitive understanding or whether language develops separately from cognition. This challenge was originally taken up by Piaget, who tried to link language and cognitive development in an integrated model. According to Piaget,

Language skills are regarded as a reflection of a more general underlying competence that manifests itself in various activities, including language behaviour. Piaget often stresses that language reflects rather than determines cognitive development.

(Moore and Harris 1978, p.132)

Vygotsky (1986) turned Piaget's argument upside down by altering the starting point of the Piagetian dialectic proposed in The Language and Thought of the Child (Piaget 1923) and by superimposing a social-interactive view of language development. Vygotsky proposed a cognitive process that goes from social intent to acquisition of knowledge by internalization. It is fundamental to this paper that Vygotsky's model of cognitive development provides a fertile model for classroom language learning.

Cognition through the acquisition of “spontaneous” and “scientific” concepts is at the heart of Vygotsky's psychology of learning. This is currently popular as it provides a cognitive theory of education, as was pointed out by Bruner in his introduction to the first published
English translation of Thought and Language in 1962. To Vygotsky scientific concepts have a special role to play in the child’s cognitive development, and it is through social contact with adults largely mediated through speech that the child accesses higher cognitive processes. This model potentially allows us to identify what is achieved by particular teaching methods (recitation, role play, etc.) and, in principle, should allow us to identify the teaching methods appropriate to language learning as distinct from other types of learning, because it includes a specific model of language acquisition. Indeed, it should even be possible to distinguish more or less suitable methods depending on the purpose for which language is being learnt and the social context within which it is being used. But it will be seen that the key to applying the Vygotskian model in a way which achieves these goals, requires recognition of the central place of learner and teacher autonomy in the Vygotskian model.

In this paper I shall identify the basic elements of such an analysis by showing how the Vygostkian concepts of internalization and mediated knowledge are crucially relevant to the development of learner/teacher autonomy in the second language classroom. In this regard I mean by “autonomy” the state of being liberated within the learning process from obstacles which could operate inside or outside the learning process to significantly and unnecessarily retard the ability to impart understanding.

Because the general aim of the paper is to place the concept of learner/teacher autonomy within the parameters of a Vygotskian theoretical framework, the main emphasis will be on the articulation of the model. The use made of empirical studies will be primarily illustrative and supportive. But it is important to recognize that setting up a theoretical paradigm is only justified as a guide and test for empirical research. A reading of Vygotsky’s own work quickly reveals its dependence on empirical studies – often deceptively simple but penetrating experiments. Insofar as this paper is successful, it can be so only as an attempt to establish a fruitful framework for empirical study. Ultimately the secrets of successful language teaching are not to be found by quiet reflection, but by scientific study. A paper such as this, which foregrounds such reflection, must be read with that proviso in mind.

In section 1, I explore the Vygotskian notions of “spontaneous” and “scientific” concepts, “scaffolding” and “internalization” in the “zone of proximal development”; in section 2 I argue that learner autonomy
is dependent on teacher autonomy; and in section 3 I draw upon the views expressed in the previous sections to articulate some basic issues relating to teacher autonomy and teacher education.

1 The relevance of Vygotskian principles to the concept of learner autonomy

1.1 Preliminaries

In the educational field, cognition is traditionally seen as a matter of absorbing and manipulating facts (learning "history", for instance). In this objectivist-behaviourist perspective, actions are causally explained as responses to stimuli. Irrespective of how complex the stimulus-response model employed, the method requires a strictly quantitative definition of the "actions" to be specified. In the case of second language learning "[d]epending on the materials concerned, an image may be projected of, for example, language learning as largely a matter of item accumulation (lexis, idioms, etc.) and the manipulation of rules of structure and/or use" (Littlejohn and Windeatt 1989, p.162).

This pre- and neo-Skinnerian view respectively of knowledge and language acquisition has long been challenged in the field of psychology and more recently in the realm of second language acquisition (SLA) research. The criticisms are centred on two insights. First, it is not a formal knowledge of "language" that is being acquired in SLA so much as a capacity to speak in order to communicate; consequently, what is learnt is not open to the strict quantification required for the Skinnerian approach. Secondly, speech acts are not discrete actions, but are defined by the context of their utterance; thus they need to be understood as much in terms of their consequences as in terms of their causal context. So, an awareness has developed of the need to understand SLA as a process of externalization of self rather than internalization of facts, an externalization which becomes, in part, a creation of self.

The work of Piaget and Bruner has proved to be fundamental in identifying the central role of language in children's cognitive development. Furthermore, Bruner (1966) established that child language development was largely based on interaction with caregivers, consequently linking the processes of individual cognition and the social process of interaction. Bruner based his research on a criticism of Piaget influenced by the theoretical framework of the Russian literary
critic turned psychologist Lev Vygotsky and on the empirical studies he and his followers initiated. To Bruner the attraction of this framework was primarily that it offered a theory of learning based on the development of the individual which had substantial implications for theories of education and cultural transmission. This dialectical conception of a process between individual development on the one hand and education and culture on the other relies mainly on a theory of the interface between thought and language development. Vygotsky proposes a framework of development which is not a matter of the accumulation of unitary changes but

a complex dialectical process, characterized by periodicity, unevenness in the development of different functions, metamorphosis or qualitative transformation of one form into another, intertwining of external and internal factors, and adaptive processes.

(Vygotsky 1978, p.73)

If language learning theory is to fully integrate these insights in its view of the second language classroom, it needs to relate its understanding of the educational issues to an overall model of developmental learning capacities.

SLA research shows that in many respects second language acquisition echoes the developmental processes involved in L1 acquisition (Little 1993, pp.24ff.). This implies that second language learning does not confine itself to the almost accidental conditions of activity-driven classrooms, according to the parameters described earlier. Rather, all language learning entails developmental processes that largely operate below the level of consciousness.

The following sub-section provides a short description of Vygotsky’s social-interactive view of cognitive development, which is articulated around the concepts of the internalization of speech and the zone of proximal development. From these ideas I draw some implications in relation to the learning process, and in particular in relation to the possibility of elaborating a theoretical framework for the kind of learner-centred classroom environment illustrated by Leni Dam’s experience of the second language classroom in Denmark with secondary school children learning English (Dam 1995).

1.2 The Vygotskian framework

In Mind in Society (1978) Vygotsky argues that what makes us unique is our ability to develop higher as well as elementary mental
capacities, which depends on the convergence of two genetically different capacities – thought and speech – around the age of two:

The most significant moment in the course of intellectual development, which gives birth to the purely human forms of practical and abstract intelligence occurs when speech and practical activity, two previously completely independent lines of development, converge. (Vygotsky 1978, p.24)

Once the two functions are merged, speech plays a central role in the focussing of thought to facilitate task performance. By speaking about what they are doing, children work toward the resolution of problems which arise in relation to the various often complex activities carried out by humans in a social context (Vygotsky 1978, pp.25f.). Vygotsky argues that for children problem-solving is “socially” rather than instinctively rooted. This allows them to sequence information into separate parts which can be turned into independent problems. These in turn can be formulated through speech. This process and other features of the higher mental functions linked to the voluntary activity of the individual are the products of “specific conditions of social development” (Vygotsky 1978, pp.37ff.). In effect, because the individual learns in a social context, a method of cognitive development is available in which an “external” voice, as a complex stimulant, is a central element:

The central characteristic of elementary functions is that they are totally and directly determined by stimulation from the environment. For higher functions [such as memory] the central feature is self-generated stimulation, that is, the creation and use of artificial stimuli which become the immediate course of behavior. (Vygotsky 1978, p.39)

Vygotsky illustrates his point by identifying both the personal and the social nature of the mnemonic significance of a knotted handkerchief. Clearly, the knotted handkerchief has no intrinsic relationship to whatever it reminds us of; it works only because it functions, in essence, as a speech act. He later argues that external forms of mediated behaviour taken on by higher functions, such as memory training, are subject to development via “transitional systems”:

sign-using activity in children is neither simply invented nor passed down by adults; rather it arises from something that is originally not a sign-operation and becomes one only after a series of qualitative
This is a significant point. It allows Vygotsky not only to identify the linguistic elements involved in cognitive activity required for higher functions, but also to present a developmental model of the emergence of this phenomenon.

One of the aims of Vygotsky’s experimental work was to show that verbalization allowed children to solve problems and to plan future actions. In essence Vygotsky outlines a pattern of the function of the external voice in relation to creating dynamic learning patterns in the child, which is then transformed into an internal voice (which retains externalizing or dualistic characteristics in relation to particular mental activity), insofar as the child assimilates the capacity to carry out the tasks being learnt. This “egocentric speech”, which (as Piaget clearly showed) plays a specific part in cognition and the socialization process, allowed Vygotsky to go further and to identify the dual nature of speech as a tool for “interaction” and “intra-action”:

The greatest change in children’s capacity to use language as a problem solving tool takes place somewhat later in their development, when socialized speech (which has previously been used to address an adult) is turned inward. Instead of appealing to the adult, children appeal to themselves; language then takes on an intrapersonal function in addition to its interpersonal use. When children develop a method of behavior for guiding themselves that had previously been used in relation to another person, when they organize their own activities according to a social form of behavior, they succeed in applying a social attitude to themselves. The history of the process of the internalization of social speech is also the history of the socialization if children’s practical intellect.

(Vygotsky 1978, p.27; emphasis in original)

Vygotsky was to break away from Piaget’s view of the early socializing function of “egocentric” or “autistic” speech because he believed that the relationship between thought and speech was not originally rooted in autistic thinking. To Vygotsky “[m]ental abilities are conditioned from the outset by social relationships” (Boyle 1969, p.129). Vygotsky’s dialectic between thought and language goes from social intent to internalization. It reflects his assumption – derived from the Hegelian and Marxist philosophical traditions – that human actions are in essence social rather than attributes of the individuals. Vygotsky argues that once “egocentric” speech is internalized, it becomes inner
speech, which the adult develops to enter into a dialogue with him/herself. In other words, inner speech during adulthood is a voice in the mind used to solve problems in the same way as children use verbalization in order to solve problems. This is, in turn, the same as the way the infant uses the adult to solve problems – or rather the same as the way the adult volunteers to solve problems for the infant. Therefore during adulthood the function of speech continues to be one of cognitive assimilation and appropriation. Vygotsky further argues that cognitive development relies on the internalization through speech of "spontaneous" and "scientific" concepts. The purpose of this distinction is to allow Vygotsky to identify characteristically distinctive forms of cognition (the "scientific") which flow from this distinct cognitive method derived from the use of language.

For Vygotsky, children first develop spontaneous concepts because their actions are closely associated with certain social situations:

To Vygotsky the word first functions as an invitation to a concept, calling attention to yet another instance. Later the word comes to symbolize the concept itself as a child's accumulating experience.

(Cazden 1972, p.229)

In effect, Vygotsky claims that "spontaneous" concepts are acquired from the empirical to the verbal, whereas the acquisition of "scientific" concepts goes from the verbal to the empirical. To Vygotsky scientific concepts have a special role to play in the child's cognitive development: "reflective consciousness comes to the child through the portals of scientific concepts" (Vygotsky 1934/1962, p.92).

Therefore language is seen as the product of a conceptual communicative dialogue between child and adult which precedes verbal dialogue: "language is the medium of dialogue and it is in dialogue that knowledge of language per se developed" (Bruner 1978, p.247). Interaction with adults provides the framework onto which the internal mechanisms of inner speech graft themselves. The consequence of this is that a spontaneous model of cognition (individual and reactive) must increasingly be replaced by a social – not just interactive – model based on the identification of the "scaffolding" process. This dual scaffolding system – interpersonal and intra-personal – is best described in the concept of the zone of proximal development, which Vygotsky defines as

the distance between the [child's] actual developmental level as determined by independent problem solving and the level of
potential development as determined through problem solving under adult guidance or in collaboration with more capable peers. (Vygotsky 1978, p.86)

This model provides a theoretical framework in which the relationship of learner and instructor in the classroom or other instructional environment can be analysed. In particular it allows the importance of one of the key points in the social view to be understood, viz. the view that not only is it important for learners to be instructed in a manner which relates to their explicit knowledge, but also that instructors need to "understand the principles on which their practice is based" (Little 1994, p.118).

What is being recognized here is the need to create and understand the mechanisms of the zone of proximal development in which learner and instructor carry out different functions, both of which contribute to learning which is more beneficial than could be achieved either by the spontaneous efforts of the learner alone or by the mere transmission from instructor to learner of the principles of a second language. This is a learning environment based not on the learning methods of the youngest infants but on the social learning methods which have been developed by the child and his/her interlocutors as the child has gradually developed complex social skills.

In the next sub-section I seek to relate the Vygotskian framework as described above to the concept of learner autonomy in the second language classroom. The danger in SLA is that individual awareness of learning methods will lag so far behind the complex learning methods of our social consciousness that when learning comes under self-conscious manipulation (i.e., the classroom) we will be unable to purposely replicate the use of methods that we actually use ourselves spontaneously in other circumstances.

I will illustrate the relevance of this relationship by analysing a concrete example of how learner autonomy can be fostered and practised in the classroom (Dam 1995). This will shed light on the kind of self-consciously applied techniques required to overcome the obstacles to cognitive operations which the classroom can otherwise impose.

1.3 Cognition mediated in the ZPD

According to Vygotsky, cognition and thought are moulded by the society we live in and develop as tools for shared problem-
solving as part of the developmental progress of individuals in an environment organized around socially determined activity. This theory emphasizes the active and interactive processes involved in cognition, specifically the role played by dialogue and language in instruction, as opposed to a view that cognition is based on perception and reflection on perception (cf. Locke 1690/1980, pp.119-131). There is a tension in Vygotsky’s view, or at least among interpreters of Vygotsky, as regards the meaning of “socially determined”. Two schools can be identified, the Marxist and the pragmatist. The former school seeks to graft on to Vygotsky an historical-materialist conception of social action, while the latter school, influenced by Dewey and Bruner, tends to reduce the Vygotskian conception of the social to one of interaction of at least two distinct subjective consciousnesses. While the former school, led by Leontiev and Luria, has been dominant in Russia, having organized the publication of Vygotsky’s works during the existence of the USSR, it is the latter school, dominant in the USA, which primarily concerns us here. This school has been chiefly concerned to produce empirical support for the role of the external voice in the learning process and has been able to further elucidate the mechanisms whereby the teacher or caregiver works with the child to achieve cognitive progress. Rogoff (1990), for example, argues that interactive problem solving integrates mental processes, including “remembering, planning, and categorizing”, as well as “cognitive processes that have been studied as skills in using technologies (such as writing and calculating) and problems that involve figuring out how to reach interpersonal goals (such as using other people instrumentally to reach goals, constructing narratives, and communicating successfully)” (Rogoff 1990, p.9).

The central mechanism in this interactive view of cognition is the development of psychological “scaffolding” to allow the transfer of responsibility, understanding and skills between caregiver and child at a pace functional to the development of learner autonomy in relation to the skill being acquired. Wood, Bruner and Ross (1976, cited in Rogoff 1990, pp.93f.) identify six functions that the tutor engages in in order to facilitate the child’s performance:

1. Recruiting the child’s interest in the task as it is defined by the tutor.
2. Reducing the number of steps required to solve a problem by simplifying the task, so that the learner manages components of the process and recognizes when a fit with task requirements is
achieved.

3. Maintaining the pursuit of the goal, through motivation of the child and direction of the activity.

4. Marking critical features of discrepancies between what a child has produced and the ideal solution.

5. Controlling frustration and risk in problem solving.

6. Demonstrating an idealized version of the act to be performed.

This dynamic framework provides the basis for Rogoff's concept of "guided participation" (1990). She views the development of the cognitive process in children and adults as an apprenticeship (ibid., p.39), arguing that "development is assumed to proceed throughout the life span, with individuals' ways of thinking, reorganizing with successive advances in reaching and contributing to the understanding, skills, and perspectives of their community" (ibid., p.11). She considers that guided participation plays an important part in the learning of skills and understanding by children and adults, and outlines a model in which the expert undergoes a parallel cognitive scaffolding process to that of the trainee, whereby "the expert too is still developing breadth and depth of skill and understanding in the process of carrying out an activity and guiding others in it" (ibid., p.39). Her definition of guided participation is as follows:

Guided participation involves children and their caregivers and their companions in the collaborative process of (1) building bridges from children's present understanding and skills to reach new understanding and skills, and (2) arranging and structuring children's participation in activities, with dynamic shifts over development in children's responsibilities.

[...] From guided participation involving shared understanding and problem solving, children appropriate and increasingly advance understanding of and skill in managing the intellectual problems of their community. (Rogoff 1990, p.8; emphasis added)

According to this definition, progress is achieved through involvement in shared activities, learning occurs as a result of doing. In the case of young children and their social environment, learning occurs through participating in domestic life and tasks. Many children initiate the learning process by volunteering to help their caregivers. However, they are often not satisfied with restricting themselves to performing
tasks that they are fully able to do. Progress through the zone of proximal development takes place when the child is challenged by the task he or she undertakes under the supervision of the caregiver, who is then in a position to make sure that the child participates in the activity at “a safe but challenging level” (ibid., p.109). The key definition of the zone is that within it the child or other learner can attempt tasks in a manner which is cognitively useful and which could otherwise not be attempted in a useful way. This can only be achieved by carrying out the activity using skills and sub-tasks contributed by the caregiver.

In this model, the learning process is mediated and negotiated by both parties rather than imposed by one on the other. It is through the dynamic shifts over development in children’s responsibilities that progress takes place and that strategic transfer of responsibility is achieved. So cognitive development is understood as something which occurs between human beings as part of social interaction rather than as part of a supposedly discrete process of individual perception and behaviour modification. This is achieved through the construction and dismantling of a support structure provided by the teacher to the student in relation to set tasks.

The argument that follows is based on this elaboration of the mechanisms of the zone of proximal development. It is important to note, however, that its schematic and uncontradictory character is alien to the Marxist and Hegelian philosophical schools which influenced Vygotsky, and which Russian Vygotskians have since been at pains to continue to include in their model of cognition. In essence, the Russian argument is that it is not possible to abstract from the nature of the action or task being learnt when considering the character of the learning process. The tasks people engage in have particular social and economic characters which dictate the significance of those tasks for the individual and consequently influence the learning process. Thus in the Russian interpretation it would not be accepted that we can assume that learning involves a non-hierarchical or symmetrically reciprocal relationship between teacher and student. Rather, neo-Vygotskian “activity theory” (Lantolf and Appel 1994, pp.16 pass.) in Russia has emphasized how a complex analysis of the goal of cognition is required in order to understand the socializing patterns of learning which are generated to achieve it.

If the pragmatic school has used “action” and “goal” as if these could be simply defined, and if the Marxist school sometimes appears in danger of reducing the psychology of cognition to a sociology of
education, both also differ from Vygotsky in that they tend to subsume the explanation of learning into the explanation of behaviour, something Vygotsky was at pains to avoid. This problem arises particularly in relation to SLA: to what extent can we analyse language cognition as anything else but the development of the capacity to speak effectively? Vygotsky was sufficiently influenced by phenomenology (Husserl) to believe that this could be done. Accordingly, his analysis focuses not only on effective learning but also on ineffective learning; he is not just describing what happens when something is learnt, rather what happens whenever learning is attempted. Consequently we may say that presence of the elements Rogoff identifies does not guarantee successful learning; it is a necessary but not a sufficient condition of successful learning, of undesirable as well as desirable learning. Also in Vygotsky there is no insistence on the interactive model. His developmental approach at least allows the possibility that the interactive methods of learning can be sufficiently internalized and sufficiently abstracted from practice for efficient learning to be carried out by the isolated individual and in isolation from any practical purpose. It is not at all clear that Rogoff’s view can adequately cope with this patently observable alternative.

Rogoff’s approach is arguably too schematic. By treating the goal of learning as self-evident and unproblematic she repeats the error of the behaviourist school and reduces the mental activity of learning to an enumeration of the supposed environmental preconditions sufficient for learning. The “Marxist” interpretation of Vygotsky, on the other hand, tends to reduce Vygotsky’s theory to the status of a social psychology of the role of individuals in mediating social needs by explaining how they come to carry out socially necessary actions. Each view contains an important truth – the pragmatist view emphasizes the centrality of the teacher to the learning process, the Marxist view emphasizes the social determinants of what it is that is learnt and the resources used to learn it. But both tend to different forms of reductionism in which the specific reality of individual learning is lost in the attempt to explain on the one hand the agenda of learning (Marxism) and on the other the causes of learning (pragmatism).

1.4 A Vygotskian interpretation of a learner-centred classroom

With these reservations in mind, it is already possible to use the conceptions of the “zone of proximal development” and “scaf-
folding” to identify the relevance of the Vygotskian model to current problems in SLA. As pointed out above, recent research has highlighted the developmental nature of SLA. This runs counter to the widespread assumption that all learners learn the same thing at the same rate, which is the scenario generally assumed (although not explicitly stated) in the second language classroom. This is true even of communicative methods, which seek to adopt a more spontaneous/naturalistic approach to language learning by creating frameworks that break down the barrier of artificiality. However, if the process of learning is a developmental one, the question of whether teachers can cater for individual learners’ differences and needs within the context of the second language classroom must be addressed.

The ZISA project carried out in the late 1970s (Larsen-Freeman and Long 1991, pp. 270-83) showed that “salient” materials presented during instruction helped learners to jump from one developmental stage to another (from the “scientific” to the “spontaneous”), but also warned about the potential negative effects of learning materials deemed too challenging. The suggestion is that the teachability of any programme depends not only on its being delivered by the teacher, but also on its being meaningfully accessed by learners. It seems that if teachers and learners are aware of learning processes, this may help them to overcome the artificiality constraint so easily imposed by the second language classroom. In Vygotskian terms, this interface between what can be taught and what can be learnt in the classroom constitutes a zone of proximal development, where learners’ individual needs are catered for in an interactive way. In this way the Vygotskian model points the way to the solution of the problems brought to attention by recognizing the uneven and individualized character of learning – by showing how social interaction can encompass individual needs. Little (1991) defines learner autonomy thus:

Essentially, autonomy is a capacity – for detachment, critical reflection, decision-making, and independent action. It presupposes, but also entails, that the learner will develop a particular kind of psychological relation to the process and content of his learning. The capacity for autonomy will be displayed both in the way the learner learns and in the way he or she transfers what has been learned to wider contexts.

[........]

[....] The developmental learning that unimpaired small children undergo takes place in interaction with parents, brothers and sisters,
grandparents, family friends, neighbours and so on. Education, whether institutionalized or not, is likewise an interactive, social process. For most of us, important learning experiences are likely to be remembered at least partly in terms of our relationship either with one or more other learners or with a teacher. What is more our capacity for self-instruction probably develops out of our experience of learning in interaction with others: in order to teach ourselves, we must create an internal substitute for the interaction of home or classroom.  

(Vygotsky 1991, pp.4f.)

Vygotsky makes a fundamental distinction between first and second language acquisition which can be used to identify “internalization” as a key stage in SLA, a stage in relation to which language acquisition as defined above makes particular sense. Vygotsky argues that in children spontaneous concepts must reach a certain degree of development before they can provide a basis for scientific concepts. By the same token, scientific concepts must have reached a certain level of development to provide a basis for improving upon the spontaneous development of concepts:

The influence of scientific concepts on the mental development of the child is analogous to the effect of learning a foreign language, a process that is conscious and deliberate from the start. In one’s native language, the primitive aspects of speech are required before the more complex ones. The latter presuppose more awareness of phonetic, grammatical and syntactic forms. With a foreign language, the higher forms develop before spontaneous fluent speech.

(Vygotsky 1986, p.195)

Vygotsky recognizes also that developmental process lags behind the learning process; this sequence then results in zones of proximal development. [...] The major consequence of analyzing the educational process in this manner is to show that the initial mastery of, for example the four arithmetic operations provides the basis for the subsequent development of a variety of highly complex internal processes in children’s thinking.

Our hypothesis establishes the unity but not the identity of learning processes and internal developmental processes. It presupposes that the one is converted into the other. Therefore, it becomes an important concern of psychological research to show how external knowledge and abilities in children become internalized.

(Vygotsky 1978, pp.90f.)
This framework can clearly be applied to the second language classroom. It underlines the importance of the scaffolding process in SLA, but only until it is removed and replaced by an internalization of knowledge by the individual learner.

Traditional teacher-oriented classrooms, it could be argued, are well adapted to provide some sort of scaffolding, though not to organize the removal of scaffolding necessary for internalization by learners. Dam (1995) proposes to solve this problem by putting responsibility for the learning process in the hands of the learners: “Seen in a lifelong perspective, aims for language learning can and should only be decided by the learners themselves” (Dam 1995, p.3). In order to achieve the “communicative competence” that is the primary aim of second language learners (Dam 1995, p.3), Leni Dam does two things: she constructs learner groups in which individuals retain an individually customized position, and she creates scaffolding designed in advance to be vulnerable to destruction by learners.

Dam proposes to provide this progressively self-eroding scaffolding structure by creating a teacher/learner-directed learning environment based on:

1. A shift in focus from teaching to learning
2. A change in the learner’s role
3. A change in the teacher’s role
4. The role of evaluation
5. A view of the language classroom as a rich learning environment

(Dam 1995, pp.4f.)

One of the basic principles of Dam’s classroom is that the “learning process is made visible” (Dam 1995, p.6). This implies that learner autonomy is not activity-driven but principle-driven. There are no set techniques or tasks; rather, decisions are made jointly with the teacher, within each working group and with oneself. The word “responsibility” recurs frequently in the literature on learner autonomy. It embodies a principle that is fundamental to carrying out meaningful activity that will gradually promote proficiency in the target language. It is interesting that in Dam’s classes the concept of “responsibility” is socially determined within working groups. In other words, she attempts to make the classroom situation transparent to her learners by making them aware of the link between what they do, how they do
it, why they do it, and what they have learnt.

From a practical point of view, the keeping of individual learner diaries is one of the pivots of the teaching/learning process. The diary is a kind of "inner voice" whose purpose it is to facilitate internalization of what is being taught/learnt. In principle the diary should report the relationship between process and content: "In all my classes I keep a diary to document and to evaluate the ongoing teaching/learning process" (Dam 1995, p.10; emphasis added). The teacher's diary features as a provisional plan which seeks to identify what to do and why, and a comments section is included to evaluate how the decisions made worked and to prepare the next activity in the light of these experiences. It is made clear that the teaching process is also a learning process where knowledge, rather than being imparted by the teacher, is re-invented by the learner with the help and under the guidance of the teacher. In this way the role of teacher-originated scaffolding is fundamentally subordinated to a larger process. Thus language acquisition sets the framework for the construction of the ZPD in order that the ZPD may support rather than impede internalization and in order that it may include within itself the basis for its own erosion. This might be contrasted with a static view of autonomy according to which both parties (teacher and learner) carry out similar roles (see, e.g., Rogoff 1990). Instead, this view of learner autonomy defines it as a dynamic process which establishes first a hierarchy under the teacher and then a different hierarchy dominated by the learner. Here are two examples of diary entries, each fulfilling a different function relating to the classroom as a socially determined environment:

What: Look at materials brought in by the learners.
Why: I have given them a task. It is my responsibility to follow it up. And if they have brought along anything they will probably be eager to show it to the rest of the class. (Dam 1995, p.13)

This example is interesting in that the teacher recognizes the "human" element of the teaching/learning environment as part of the teaching/learning process: assimilating the psychological construct brought by the learner is as much part of the teaching/learning process as the content of what is being studied/learnt; not to use it to facilitate scaffolding will create an obstacle to the subsequent stage of internalization.

What: Introduce "My English Diary" [the learner's diary] – an ordinary exercise book – to the learners and ask them to write about themselves in English.
Why: Partly to get to know the learners better. Partly to show the learners that with a little help they can communicate in English – their first real communicative task. (ibid., p.14; emphasis added)

Here teaching/learning is conceived within the spirit of the scaffolding given by caregivers to children (cf. 1.3 above): again, guidance is provided in order for a learner to internalize a course of action that he/she can then go on carrying out him/herself.

This is how Dam records her introduction of the learner diary:

This book is going to be your own diary. (I showed them my diary). A book where you can write down the things you do, the things you like or do not like, words you would like to remember. On the first page (I showed them the first page) I would like you to tell me something about yourself in English. Think about what you would like to tell me. If you don’t know how to say it in English you can ask me – or perhaps you can find the word in your Picture Dictionary – or perhaps your partner knows how to say it. (Dam 1995, p.15)

Because the learners are given a choice of courses of action when they get to a stressful point in the learning process, they become personally involved in their learning process. They enter into a dialogue with themselves as well as with the teacher, their peers, and the classroom situation at large, at exactly the moment of stress which Vygotsky identifies as the moment when external voices are sought to facilitate learning. In this way the self as a source of an external voice (which is the basis of internalization) is introduced even as the teacher’s voice is establishing itself as the scaffolding. Again, scaffolding is built with a view to its dismantling.

The learner’s diary is also used for homework. The range of homework options is negotiated with the class as a whole and then an activity is selected individually:

IDEAS FOR HOMEWORK
Write a story
Read a book
Practise words
Make word cards
English traditions
Talk English. (Dam 1995, p.19)

Learners are not expected to learn the same things at the same rate.
Individual development is respected within the framework of the classroom and of the curriculum: “The actual choice of homework will depend partly on overall aims, partly on individual needs and interests” (Dam 1995, p.33).

**CRITERIA FOR CHOICE OF HOMEWORK [chosen by learners themselves]**
- Learn English [awareness of overall aims/curricular demands].
- Not too easy and not too difficult because then it gets boring [awareness of own developmental growth].
- Something you are really interested in and want to do [individual interest].
- Something you can manage on your own – parents might not be able to help [becoming autonomous].

(ibid., p.34; parenthetic glosses added)

In this case scaffolding is customized according to a recognition that even prior to internalization a direct “communication” of two focussed voices recurs, rather than a generic communication from one voice (the teacher’s) to a group.

Another element central to the autonomous second language classroom is group work. In the autonomous classroom the group is an integral part of the individual learning process rather than being driven by the processes of group activity. Groups are formed by requiring individual learners to apply the following principles:

1. What do I want to be better at? Why?
2. What do I want to do? Why?
3. Who would I like to work with? Why?  

(ibid., p.44)

Because the individual knows in advance what he/she can contribute to the group and why, he/she is more likely to learn. Peer learning can therefore be seen as an active agent of the learning process as it serves as another layer of scaffolding for the individual learner.

Finally a major aspect of the autonomous classroom must be its method for checking that objectives have been met which also establishes “a basis of experience and awareness that can be used in further learning” (Dam 1995, p.49). First-year end-of-term evaluation comments are organized along the lines of “What do you feel you have learned this year?” (ibid., p.51) Second-year comments are interested in the learners’ view of the learning process going on in the classroom (focus on how they had learned rather than what they had learned):
"What was good/what was bad about the way we have worked this year?" (ibid., p.52). At the end of the third year Dam felt that learners were ready to give a more detailed evaluation of the learning process. This was carried out by answering a questionnaire (ibid., p.53). Interestingly, the learners identified the teacher’s mood as an important factor in the learning process. The good mood of the teacher was considered a positive element and the teacher being bad-tempered or too demanding was considered to be a negative factor. In this way, we see that the learners are also sensitive to the personal construct of the teacher and the way his/her psychology influences the scaffolding provided in the context of the classroom (well or badly pitched according to learners’ stage of development).

Concluding her book, Dam points out that despite the complexities involved in creating a learner-centred environment, “the most important aspect of developing learner autonomy is probably a growing awareness of social as well as learning processes, for teachers as well as for learners” (Dam 1995, p.80).

In this section, I have described the Vygotskian principles of cognitive development. I have argued that these provide a theoretical framework for establishing practices to be implemented in the learner-centred classroom by analysing how theory could be applied to the second language classroom. I have established that “the capacity for autonomous learning [in formal contexts] is not inborn” (Little 1991, p.7) and redefined learner experience in the light of concepts such as guided participation within the context of zones of proximal development which help learners and teachers acquire and deliver knowledge in a meaningful and autonomous manner via a transition from teaching to learning.

Such findings are not unproblematic, and the issue of the role of the teacher in such a model must be addressed. “Learner autonomy is not about undermining the role of instruction or making teachers redundant” (Little 1991). On the contrary, it is about maximizing relationships between learner and teacher by setting up a framework which will allow positions of responsibility to develop. This is the reason why we must now turn to the analysis of the role of the teacher in the learner-centred classroom and address the question of teacher autonomy.
2 The relevance of Vygotskian principles to the concept of teacher autonomy

2.1 Preliminaries

In the previous section I outlined a theoretical framework of learning which shows the relevance of Vygotskian principles to the concept of learner autonomy. If, with Vygotsky, we argue that the classroom is a socially determined environment and that the learning process coincides with developmental and experiential social processes, then this framework also allows us to argue that teaching follows the same pattern – teaching can equally be seen as a developmental learning process of a dialectical nature (intrapsychological and interpsychological).

The question which then arises is: what significance does this model of learning have for the classroom? The significant variable in this regard proves to be the extent to which the teacher can fulfil the role of the external voice for the class collectively and for each separate person within it, in a manner which facilitates learning as both an intrapsychological and interpsychological process.

According to the traditional view, teaching is a matter of the active management of information transfer from one individual to another. If such were the case, then a scenario could be envisaged in which every teacher should be able to teach more or less the same thing, in the same way, and at the same rate. But such is not the case. Each teacher has his/her own distinct interpretation of the curriculum (Salmon 1988); and as Tharp and Gallimore argue, “what teachers do to a curriculum once adopted, is more crucial than the nature of the curriculum itself” (1988, p.189). This means that the teacher is no more neutral to the activity he/she carries out than the learner.

Initially, the teacher’s contribution can be understood as a reflection of his/her individual character. The ideal teacher has been described as possessing the capacity for empathy with others, as able to “read” another’s feelings accurately. Such a person also needs great warmth of feeling and the ability to sustain affection despite occasional moments of irritation. But finally, the teacher must be an honest truthful person, not someone who puts on a false front from time to time. If teachers pretend to feel what they do not feel, or disguise their real response, they cannot hope to inspire learners to trust
their own deepest feelings. (Salmon 1988, p.34)

This description emphasizes the capacity of the individual to sustain communicative efficiency. It draws out the importance of emotions and indicates reasons why these can become obstacles to effective teaching/learning. Salmon remarks that teachers are sometimes asked to follow a curriculum which "they do not like, do not respect and do not personally value" (Salmon 1988, p.37); and that "[i]f teaching means offering others your personal sense of the curriculum, then feelings of alienation from what you teach have to be taken seriously" (ibid., p.38).

In the case of SLA we speak about individual learners' differences and needs, about differential success among second language learners, and the influence of such factors as age, aptitude, motivation, and personality (see Larsen-Freeman and Long 1991, pp.153-220). On this view, the same factors must also weigh in the balance when it comes to describing differential effectiveness among teachers.

To illustrate this point, we can easily imagine that native speakers and non-native speakers teaching a particular target language do not share the same perceptions and understanding of what it is they are teaching. To the former the language "taught" has been learnt in a "spontaneous" manner, whereas to the latter, it has been internalized "scientifically", to borrow the terminology used in the previous section. Thus native-speaker teachers must cope with the inability of learners to recognize forms which "sound right" without themselves having had the experience of learning the language by rote or by drill and practice.

As well as being a social experiential process, teaching can also be seen as an intrapersonal developmental process. In a study of the changing views teachers have about interactive comprehension instruction, Au (1990) found that their pedagogical practice changed over the course of the study as they became more aware of their own practice. Awareness of the teaching process seemed to operate in a self-regulatory manner as the teacher entered a dialogue with herself through introspection, via a close analysis of videotaped lessons which she had taught, and verbalized problem-solving under the guidance of an expert who promoted the inter/intrapsychological dialogue. Once verbalized, perceived problems were each time tackled more successfully during the course of the next lesson. Au concludes that "the development of practical knowledge of teaching is an intellectually demanding process" (1990, p.285).
Arguably, these two views of teaching, as a reflection of character and as a process which involves modifying the kind of behaviour character spontaneously generates, are difficult to reconcile. At the very least, they emphasize different aspects of a complex process. At the same time, both describe teaching as a process involving the avoidance or overcoming of obstacles.

In the remainder of this section, the Vygotskian model of learning will be seen to generate a model of classroom teaching which encompasses both these aspects of the appearance of teaching in a framework which suggests that promoting teacher autonomy is essential to the creation of a learner-centred environment in the second language classroom, where both individual differences and the individual needs of teachers/learners can be addressed. This can only be done by developing a model of the teacher's role in the classroom in relation to which a norm for teacher autonomy can be articulated, which encompasses both an understanding of the learning process the student is involved in and the characteristic social interaction and psychological self-discipline of the teacher.

In the next section, I outline a first approach to the concept of teacher autonomy. Vygotskian principles will then once again be invoked in order to establish a theoretical framework which can be applied in order to explain the need to redefine the role of the teacher within the classroom context.

2.2 The pragmatist approach to the concept of teacher autonomy

As can be seen from the previous section on learner autonomy, the process of theoretically explaining and at the same time justifying the concept of autonomy involves, paradoxically, identifying those points in the learning process where learners need to be dependent as well as those where they need to be independent. This is more problematic in relation to teacher autonomy, since the proper function of the learner (to acquire a body of knowledge or a practice) is more obvious than the proper function of the teacher. If, for example, a student attends a class and acquires a certain body of knowledge, it remains uncertain to what extent that person has been "taught" by others or has taught him/herself. Despite the fact that in many instances teaching may be perceived as "the active management of information transfer from one individual to the other", the role of the teacher is not discrete and there are therefore no discrete observables with which to
measure it. How then can a discrete autonomous realm of pedagogic activity be recognized?

Little (1995) argues that just as autonomous learners have always existed, there is nothing novel about teacher autonomy. The traditional humanist view of "teacher autonomy" was one of critical loyalty to the achievements of human understanding – the concomitant of a requirement to pass on the essence of that great human achievement to a new generation. This should be understood as deriving from the humanist observation that the systematic secular elaboration of a wide variety of subjects in the late medieval and early modern period had allowed knowledge to escape the vagaries of individual personality and religious authority. Humanism advocated systematic knowledge for its own sake and developed a conception of the role of the teacher which was functional to that conception of a humanist education.

A conception of teacher autonomy based on this humanist perspective, but updated to take such considerations into account, has been articulated in recent years by Margaret Buchmann, writing in the tradition of John Dewey. The updating of this conception radically alters it, however. The development of the social sciences has had its effect on the theory of education through an increasingly problematic awareness of the purposes and contexts of education. The institutions of education, exams and curricula are now recognized to serve not merely moral but also vocational purposes. This leads to a definition of the teacher not primarily as an agent of knowledge, but as an agent of the institution or of society. The role of the teacher is no longer conceived as one of loyalty to human understanding alone.

Buchmann reaffirms the importance of the classroom as the location for learning, as against any view which suggests that the best learning is done spontaneously. Learning for her is about abandoning the immediate, common-sense attitude and ascending to systematic understanding. To become a teacher, on her argument, is still to take on a role in the community as the agent of understanding. The teacher is in a process of "enlightening and perfecting others" (Buchmann and Floden 1993, p.6), and consequently is involved in a highly prescriptive role as the bearer of standards of excellence and morality. Ultimately, she believes the goal of teaching is to create intellectual and moral autonomy in individual students, to get them to that point where they can each use knowledge independently and identify valid goals for which knowledge can be used. Thus the teacher bears and passes on the characteristic structure of concepts and purpose in a subject matter
which otherwise remains hidden from the student under the complex appearance of knowledge.

But Buchmann accepts that the autonomy of the teacher can no longer depend one-sidedly on a purported loyalty to the systematic nature of the subject. There are two central themes in Buchmann’s conception of teacher authenticity – moral integrity and role orientation (1993, p.157). Buchmann’s choice of the word “authenticity” (rather than, for example, “autonomy”) is significant. It substitutes the paradigm of truthfulness for the paradigm of freedom. By implication it condemns the “false” teacher rather than the “bad” teacher. Consequently it seeks out an evaluative rather than a cognitive model of learning for the teacher to relate to. It therefore has a philosophical rather than a psychological character.

Thus the concept of “role orientation” is crucial for Buchmann in defining a meaningful conception of teacher autonomy and generally replaces the loyalty to science which characterizes the traditional humanist view. It is the role of the teacher to ensure that learning takes place. The teacher is committed to the subject matter and should not seek to overturn either the subject or the curriculum in order to escape the problem of learning:

in making decisions, teachers should be mindful of student learning and their own obligations to ideal and real communities (including those of the subject-matter disciplines, the teaching profession, society and humanity) rather than relying on self-centred criteria, such as the teacher’s enjoyment of a topic or the ease with which instruction can be managed. If considerations are legitimate and productive, it is primarily because they contribute to growth and learning. (Buchmann 1993, p.207)

This is a definition of teacher autonomy in which “teaching” is whatever facilitates learning and “learning” is a matter of entering into the normative and scientific standards of society. Buchmann treats these as identifiable givens, structures which teachers can depend on to define their role. On this view, autonomy is informed dependence.

What is problematic here is the assumed clarity of the norms which define success and therefore facilitate the identification of effective autonomy. Whereas the traditional humanist view had a clear conception of what it was that was to be achieved – the ability to enter creatively into the process of improving human understanding and operating society in a rational manner – this is no longer the case in
Buchmann's modern pragmatist version of the humanist view. To say that one should be loyal to the community and should be its agent in relation to the teaching process, involves conceiving the community in a homogeneous, unproblematic, univocal, singular way. Once we start to analyse the conflicting demands society and subject matter place on the learning process we find that Buchmann has only displaced the problem. Consequently her view does not generate practical imperatives for the teacher. She may have listed relevant concerns, but she has not helped teachers to identify a proper basis for carrying out their role in relation to the various demands of subject matter, institution, self and student. In the maze of dependencies Buchmann outlines, the only autonomy she seems actually to advocate is the teacher's independence, as teacher, of personal idiosyncrasies. Such an "autonomy" is not specific to teaching at all but is a general moral point, relevant at least to all public servants and arguably to everyone.

The critical lesson which emerges from an examination of Buchmann's theory of the role of the teacher is that it cannot be read off from the process of the appointment of the teacher, just as it cannot be read off from the nature of the subject being taught. Certainly the teacher has a certain sociological character: teachers, after all, come from institutions; but simply adding that insight to the traditional view that teachers are the transmitters of human understanding will not generate a practical conception of teacher autonomy. On the other hand Buchmann's view allows us to avoid the danger of writing off the institution as merely an obstacle to the teacher. The institution mediates the limitation of the classical humanist education, but this cannot be rejected as completely illegitimate. It is Buchmann's strongest point that teacher autonomy must be defined, primarily, within the limits of the actual classroom.

Thus while the nature of the subject matter and the nature of the institution are important considerations, I want to argue that a conception of the role of the teacher in relation to the institution and in relation to the subject can best be understood by being grafted on to a conception of the role of the teacher as pedagogue derived from an understanding of the learning process as outlined in the previous section of this paper. However the institution may seek to define the content and purpose of learning, the specific reality of the classroom remains an attempt to replicate in a collective forum the interactive developmental cognitive process of the individual learning child.

In the remainder of this section I shall look again at the Vygotskian
model of learning in order to identify the characteristics the teacher must possess if the ZPD is to be an effective teaching/learning context.

2.3 Teacher autonomy as a scientific concept

We start with the specifics of the classroom situation, which can be defined as a group of people trying to learn under the guidance of a teacher trying to facilitate learning. However, it is an artificially created situation which differs from the assisted learning model (a one-to-one relationship between adult and child, expert and non-expert), unassisted learning by the individual (self-instruction), and non-hierarchical group learning (peer learning). On the one hand, an artificial collectivity of potential learners has been brought into existence; on the other hand, the teacher has been introduced as authoritative arbiter of success and failure in relation to the subject-matter, an arbiter who is at least first among equals and more likely to take on a hierarchical role of interactive authority.

The Vygotskian model claims to show what happens when someone tries to learn something in the presence of an expert who responds to the learner’s needs. It is possible to conceive this as one pole in a scale of learning interactions of varying social structure – at the other pole is the self-instructional learner. In between these two, one possibility is peer group learning. But as Forman and Cazden point out, peer group learning is dynamic and will constantly revert to peer tutoring despite the lack of an expert in the group:

[I]t appears that a similar process of interpsychological regulation transformed into intrapsychological regulation may also occur in collaborative contexts where neither partner can objectively be seen as “more capable”, but where the partners may assume separate but complementary social roles [...]. When collaborators assume complementary roles, they begin to resemble the peer tutors described earlier [where one peer is one step ahead of the other one on a particular topic]. (Forman and Cazden 1985, p.329)

This shows that in the presence of more than one person, the dynamic of group formation is to tend to adhere to the Vygotskian model of the ZPD, where assistance is provided by expert guidance at a point of stress. The peer group and peer tutoring models then need to be distinguished from the classroom. However, it is society, not the group itself, which takes the next step in the direction of moving the group towards the Vygotskian model by introducing the teacher as the expert.
This has two consequences. Firstly it prevents peer tutor nomination and cuts off the dynamic attempt of the group to resolve its own teaching problems. Secondly, it takes the expert out of the one-to-one relationship posited by Vygotsky, in which he/she is able to act in response to a learning pattern in an individual learner.

These are the characteristics of the classroom situation. At first sight they imply that the classroom is an extremely inefficient learning forum, because the presence of the teacher impedes spontaneous group learning structures without achieving one-to-one efficient interaction. Nonetheless, in complex societies the classroom is the bearer of a large body of scientific knowledge, so that the problems it poses do not justify abandoning it. The point about the classroom is this: viewed merely from the point of view of the learning process, it is a highly inefficient learning structure. But this inefficiency is the price paid in order to introduce into group learning an authoritative arbiter of knowledge. Such an arbiter is essential to scientific learning. Each learning group cannot be expected to recreate the science being learnt in the way each child recreates the perception of reality and the fundamental social skills it learns spontaneously. It is the unavoidable inefficiency which the teacher must grapple with in order to optimize learning.

What this means in practice is that the teacher must reappropriate as scientific practice the spontaneous adult scaffolding behaviour that Vygotsky observes in the one-to-one situation. Thus we find that keeping a group together is possibly the most important item on the classroom’s hidden agenda because the presence of the teacher makes it problematic. The dynamic of group formation features high on Dam’s priority list when it comes to promoting a learner-centred environment, as is illustrated by the following entries in her diary:

After a few introductory remarks, [...] I asked the learners to turn around and face the pair sitting behind them and share homework with other members of their group.

[...] [T]hey were eager to show the group which words they could understand.

After fifty minutes, when everybody had shared his/her homework with the group and I had time to join all the groups, we placed ourselves in a kind of a circle for our joint talk. (Dam 1995, p.21)

Group dynamics are high on Dam’s list of priorities because she argues that a cohesive group helps to develop in the learners an “awareness of their role as well as the role of others in the learning process”
and that it promotes a "readiness to co-operate" (Dam 1995, p.8). It constitutes a first step in the direction of making the social nature of learning transparent to the agents involved. However, she stresses that group work is not easily achieved without sufficient guidance, and this is the point illuminated by Vygotskian theory. She feels that

the learners do not make sufficient use of each other – of peer tutoring; too often they return to the traditional teacher-learner role and ask me for help. I have a feeling that I am helping everybody and nobody at the same time – some kind of octopus syndrome.

[...]

But there is a problem, I would like to sit down quietly with the groups without being disturbed, and at the moment I feel too many of you want my help at the same time. Would any of you be willing to be "helpers" when I am working with somebody?

(ibid., pp.26f.; emphasis added)

This example shows how peer collaboration tends to revert to peer tutor nomination (in this case by the teacher, thus reinforcing the social and institutional nomination of the teacher to the tutor role) and how under careful guidance (the nomination of helpers) the classroom is re-channelled in search of the Vygotskian model of one-to-one relationships. What Dam feels as the "octopus syndrome" is in fact highlighted by her "scientific" understanding of the classroom situation and is best described by Figures 1 and 2.

![Diagram](image)

T = Teacher
S = Student

**Figure 1**

The "octopus syndrome": what happens in the traditional "spontaneous" classroom
Dam's octopus model needs revision. The tendency to nominate the teacher is not the only spontaneous learning strategy which occurs in the classroom. Rather it is one of a whole series of strategies illustrated in Figure 2 which operate in the classroom, each often impeding or complementing the others, and each capable of being understood in a Vygotskian framework. Thus, it was argued in the last section that the Vygotskian model is in essence a description not of successful learning, but of how people try to learn. Consequently we see this pattern in the classroom, but not in the simple way Vygotsky studied, involving one "parent/teacher" and one child. In order to account for more complex situations, we need to differentiate between the general form of the ZPD and the use of external and internal voices as scaffolding.

The traditional classroom model considers that the classroom is nothing more than the replication (according to the number of students) of the one-to-one relationship between an expert and a novice, hence the "octopus syndrome". On the other hand the "scientific" model
proposes a series of simultaneous or sequenced interactions which can be equated to various types of zones of proximal development superimposed upon one another. This dialectical view of the classroom situation allows one to identify various voices within the realm of the classic ZPD, an intrapersonal voice (the internal voice; Figure 2, (1) and (6)), peer voices (one-to-one or one-to-group; Figure 2, (2) and (3)), and a pedagogical voice (teacher–learner(s); Figure 2, (4) and, in the case of peer tutoring, (2) and (3)), all of which operate within the same ZPD learning mechanism. Dam's feeling of "helplessness" comes from the fact that all these different zones come into conflict with each other and this impedes the learning process. Therefore she feels that it is necessary to reinstate the original one-to-one "scaffolding" model through peer interaction.

According to the ZPD model, classroom teaching is a matter of avoiding or overcoming what we identify as obstacles to learning. In Vygotskian terms we can thus start to understand teacher autonomy as primarily the liberation of teachers from dependence on spontaneous teaching behaviour which is inappropriate to the artificial classroom situation.

The relevance of this can already be seen in the experience of the currently dominant communicative approaches to language teaching, which reveal complex patterns of repeatedly broken and reconstituted ZPDs. This is because in the second language classroom, learners' participation is currently seen as an essential element of success, by contrast with older teaching methods (grammar-translation) where imposing silence on a classroom was a vain attempt at recreating the one-to-one scaffolding structure by destroying all other structures in the group. In the communicative approach, peer interaction is encouraged (i.e., you ask John to book a hotel room), but the structure is so artificial in the classroom situation that the ZPD has not been created and inefficiencies appear more clearly. So the teacher constantly comes face-to-face with evidence of the learning having occurred, not having occurred, having occurred and being lost, and so on, in a complex pattern which can best be explained as an appearance of learning flux caused by a complex of interacting and mutually destabilizing ZPDs.

This model of the classroom, in which there is a constant dynamic flux of learning mechanisms, implies that there is no single paradigm for the role of the teacher in the classroom. Consequently, it is crucial for the teacher to be in a position to adapt to the flux in the manner most likely to optimize the teacher's role, in the particular spectrum of
mechanisms at each moment, and in particular to achieve autonomy from the various social, institutional and curricular preconditions of the classroom situation in so far as they impede this. So Leni Dam recounts that the teacher must be aware of these patterns of behaviour. As an alternative to the "octopus syndrome", the Vygotskian model proposes a pattern which could be equated to a "chaos theory" of the classroom situation, where all participants are affected by factors which can contribute to the learning process, but which can also prevent learning. Awareness of these factors can improve performance.

In the mid 1970s I started for the first time to work with unstreamed language classes. I was up against the tired-of-school attitude that this age group often displays, as well as a general lack of interest for English as a school subject. In order to survive I felt I had to change my usual teacher role. I tried to involve the pupils – or rather I forced them to be involved – in the decisions concerning, for example, the choice of classroom activities and learning materials. I soon realized that giving the learners a share of the responsibility for planning and conducting teaching–learning activities caused them to be actively involved and led to better learning.

(Dam 1995, p.2; emphasis added)

The "organization of classroom work" (ibid., pp.32–48) is therefore a crucial element of concern to the "autonomous teacher", because it provides elements of the temporary scaffolding necessary to help learners appropriate knowledge. In Dam’s case it is clear that this scaffolding is principle-driven rather than activity driven; autonomy from a pro forma role in initiating activities has been achieved, at least in this respect. So she continues:

After three weeks of English – 12 lessons – a general framework for an English period has developed.
"Input" from the teacher
"Fixed procedures"
"Free activities"
Homework for the following lesson(s)
"Together" – a whole class session, including evaluation. (ibid., p.32)

In this principle-driven model, Dam as the expert manages in practice to identify and make transparent the various voices within the ZPD which contribute to the learning process, so that the learners know at all times what they are doing and why. Thus in Dam’s model,
it could be said that the "input" principle caters for the pedagogical voice, "homework" for the personal voice, "fixed procedures" for peer voice(s), "free activities" for peer and/or personal voice(s), and so on. The implications of such a model are that they free the teacher from the illusion that there is a right way and a right method. It is therefore essential to develop through teacher education an awareness of the way various ZPDs interact or come into conflict in the classroom context:

We must provide trainee teachers with the skills to develop autonomy in the learners who will be given into their charge, but we must also give them a first-hand experience of learner autonomy in their training. (Little 1995, p.180)

2.4 Guided practice

On this basis we can come back to the appearance of teaching as something experiential, as a reflection of character. According to Vygotsky the function of teaching is to mediate the cognitive development of the individual by focussing upon what functions and capacities the individual is capable of. Tharp and Gallimore (1988, p.31) define teaching as "assisted performance": "Teaching can be said to occur when assistance is offered at points in the ZPD at which performance requires assistance." In Rogoff’s view (1990), the interactive structure, previously analysed in Bruner’s work on the role of utterances by caregivers in first language acquisition, has much in common with the way knowledge is efficiently transferred from teacher to student through interactive dialogue in the classroom. Fundamentally, the capacity of people to engage in interactive social behaviour is at the heart of teaching. The reason why teaching appears to be a reflection of character, then, is because of its dependence on social skills spontaneously learnt long before anyone becomes a teacher.

Thus notwithstanding the reservations expressed in section 1 about the pragmatist approach to the conditions which determine the learning process, effective teaching can be compared to "good parenting" and allows work done on parenting norms to be applied to teaching. This is the reason why Rogoff can argue that the concept of guided participation is relevant to the classroom context. Diane Baumrind’s parenting model (1973, cited in Diaz, Neal, Amaya-Williams 1990, p.139) identifies three types of parents: authoritarian, permissive and authoritative. Authoritarian parents "believe in the need to restrict the child’s auton-
authoritarian parents are high in control and low in nurturance, whereas permissive parents are low in control and high in nurturance.

In contrast to the first two types, authoritative parents are seen both as controlling and nurturant [...]. Authoritative parents are seen as encouraging and nurturing while placing constant pressure for mature and obedient behavior. Above all, authoritative parents accompany their control efforts with verbal reasoning [emphasis added], willingly providing the rationale for their requests, commands, and directives.

Authoritativeness is evidently one of the many qualities which the autonomous teacher needs to master in order to strike the right balance. This is made particularly problematic by the artificial, temporary and uncertain nature of classroom hierarchical structures. However, verbal interactions play a most important function in mediating authoritativeness. For this reason, the question of authoritativeness should not be divided off from the learning process, but rather needs to be seen as emerging through the pedagogic verbalizing of the teacher when it emerges in a manner which promotes the autonomy of the learner (a fortiori in the second language classroom).

An authoritative teacher displays his/her efficiency by using techniques to create student engagement and by managing time allocation to sustain student engagement (Brophy and Good 1986). It is self-evident that the structures of organization provided by the authoritative teacher are useful in developing organized understanding. But the concept of the "authoritative teacher" merely identifies the nurturing and supportive effect of whatever it is the authoritative teacher does. It is not clear what the teacher does. These factors do not cater for the myth and mystery which make a teacher someone who can explain and be understood clearly.

If authoritativeness is assumed to flow from personality, the efficient teacher might be assumed to emerge as an effect of personality alone and not to be amenable to development by teacher training. More specifically, it might be speculated that efficient teaching derives from the teacher’s attitude to the subject matter. Salmon (1988) emphasizes the individuality of teaching, which she compares to the individuality of learning: efficient teaching comes from the personal understanding that teachers subjectively entertain of the curriculum. Knowledge is
passed on in a meaningful, socially determined manner rather than being just an item to be crossed out as the curriculum is covered. On this basis, we can see that the two traditional views of efficient teaching – teaching as a function of the authoritative personality and of personal aptitude for understanding – situate teacher efficiency outside any specific teaching function and fail to locate a quality in the teaching process which constitutes efficient teaching. They may, therefore, be seen as models of the good teacher which hold sway only in the absence of an adequate model of what classroom learning is.

The practical point here is that effectiveness does not have to be seen as innate to the teacher: learning happens even in classrooms where the teacher is not perceived as "good" or "efficient". Models of the teaching process can be constructed in which efficiency can be acquired by proper analysis of the phenomenon and then by proper training. Arguably, in the Vygotskian conception the skills used by the efficient teacher are actually the common skills of human interaction. But these are the most general interactive skills. Efficiency arises not because of their presence/absence but from the specific way they are applied to the complex and unsystematized learning processes in the classroom. The problem is that some people are aware that these need to be applied to the teaching situation, while others are not aware and need to have a model of the teaching process which values their scaffolding capacity in order to motivate them to mobilize that.

In a study of the teaching of reading skills to 5th graders, Roehler and Duffy (1986) give an example of how Vygotsky’s ideas can be applied in order to maximize teacher effectiveness. The twenty-two teachers involved in the study all received instruction in order to help them to be explicit in their explanations of reading skills. After analysing transcripts of audio tapes, and observations, it was found that whilst teacher explanation and student awareness of reading skills were found to be highly correlated, the quantity of explanation given did not necessarily lead to increased student skill awareness and therefore did not constitute the sole criterion for explaining teacher efficiency.

The real difference between efficient and less efficient explainers was found to be a qualitative one, and can be summarized thus. Firstly, efficient teachers established the usefulness of the skill taught during the initial phase of "instruction". This provided "a scaffold for students – a temporary, adjustable system for learning the new information" (Roehler and Duffy 1986, p.277). Efficient explainers also placed the
usefulness of the skill in the context of a larger problem-solving strategy, as well as by identifying non-examples:

We have been reading stories and when you are going through a story you quite often find words that you don’t know the meaning of. We’ve talked about different strategies that we can use when we come to a word in a story we don’t know. We can divide it up into two words (compound words). There is another way, you can look in the word and recognize a root word and then recognize a suffix. You think of the meanings of word parts and put the meanings together. Regardless, we always ask ourselves, Does it makes sense? (ibid., p.277)

Here is a demonstration of a non-example:

I could divide it [the word is jealous] there and say “Oh, I recognize this suffix: ous is a suffix and I remember ous means full of or having. Here is the root word. Now I’m going to figure it out what it means. “Full of jeal” (student laughter). And I look back at my sentence and my sentence says “the boy was full of jeal for his brother”.

(ibid., p.278)

Secondly, efficient teachers provided opportunities for students to assume responsibility for their learning through gradual guided practice. This phase included first directing students as to how to perform a task in order to facilitate the transfer of responsibility in the subsequent phases. This included verbalization of mental steps at every stage. Thirdly, students were involved by the teacher in verbalizing the mental steps they were going through at every opportunity.

The process described by Roehler and Duffy (1986) is strikingly similar to that described earlier in classes conducted by Leni Dam. It goes beyond the traditional model of time spent on tasks and student engagement, and provides an authoritative (rather than authoritarian or permissive) framework for nurturing knowledge and for the gradual weaning from power to empowerment of student (and teacher). The process is very similar to the one described earlier in the context of “authoritative parenting”, but now specified in relation to a definite model of teacher-learner interaction.

It is important that, amongst other skills, verbal mediation is included in teacher training courses, so that teachers themselves go through the same process of control and empowerment in relation to the subject they teach. Tharp and Gallimore (1988) point to “the lack
of a social context of training and professional development” (p.190). They argue that teachers have their own ZPDs, but that because they are socially isolated in their practice, they have no access to “receiving assistance through modelling and feedback”, which they consider “essential to the acquisition of complex social repertoires” (ibid., p.191). In the KEEP programme teachers are assisted through various activity settings which include self-assistance, peer assistance, and assistance from administrators, consultants, trainers and specialists. In a study of teacher training through collaboration, Schlumberger and Clymer (1989, p.157) argue that including peer collaboration at the level of teacher-training programmes proved highly beneficial because “teaching is a dynamic process requiring more than a set pattern of responses”, and because collaborative activities engaged teachers in an “analytic dialogue [external scaffolding in the ZPD] in which their theoretical and experiential knowledge was sifted and synthesized [internalization]” (ibid., p.157; parenthetic glosses added). Tharp and Gallimore nonetheless acknowledge that peer coaching cannot act as a substitute for “expert consultation”: “Particularly in implementing innovation, teachers need joint activity with program developers and supervisors” (Ellis 1986, cited in Tharp and Gallimore 1988, p.202).

In turn, experts must be trained as “knowledge of curriculum, teaching methods and the techniques of assistance must be sensitively employed in assisting teachers assist students” (Tharp and Gallimore 1988, p.202). Consequently it is necessary to conclude that the testing emotional structure of the classroom cannot be dissociated from the curriculum, but more fundamentally, it cannot be dissociated from the nature of the particular interactive process – the learning process.

2.5 Self-regulation

The second aspect of the appearance of teaching pointed to at the beginning of this section is the pattern of interactive self-regulation, where teachers appear to act, not in accordance with individual character, but as part of a process of developmental adaptation. Just as the influence of character proves to be dependent on the mechanics of the learning process, so also adaptation by the teacher cannot be seen as a response to successful learning but as part of teaching as such.

In relation to teaching strategies, Diaz, Neal and Amaya-Williams (1990, pp.140f.) argue that the concepts of scaffolding and the zone of proximal development rely on socially determined factors such as the process of self-regulation of the individual. Cognition is first deter-
mined by joint interaction between adult and child; the "regulatory role" is then gradually taken over by the child; and finally the passage from other- to self- regulation is achieved through "specific teaching interactions".

In the second language classroom, the case for the teacher to encourage the learner's self-regulation process is particularly important. Communicative approaches have been useful in highlighting the importance of interaction in language learning; it is nonetheless arguable that these remain activity-driven rather than principle-driven:

many studies suggest that recitation constitutes a large percentage of all interactive teaching (Duffy, 1980; Durkin, 1978–1979; Hoetkert and Ahlbrand 1969). (Gallimore, Dalton and Tharp 1986, p.617)

The scaffolding leading to skill acquisition referred to above has to be considered as a two-way process. Instruction which is provided by the teacher and constitutes part of the scaffolding involved in the cognitive process, is also a product of his/her internalization of the teaching/learning process. This is the reason why, beyond the "authentic" appeal of communicative approaches, there is also a failure to achieve real cognition on either side of the learning process, mainly because these remain method teaching based on recitation techniques which engage neither the learner's nor the teacher's ability to relate to principle-driven cognition (consider, for example, the actual use of role play in the second language classroom when the teacher tries to engage students' interest in booking a hotel room for two with shower or bath at the Hôtel de la Concorde).

In their study of the KEEP programme, Gallimore, Dalton and Tharp (1986) advocate an alternative to teacher's discourse in the classroom. They explain that in this project, teachers were "explicitly trained and expected to use responsive questioning. Through it, the teacher guides, assists and regulates students' information processing, thinking and expression of ideas" (1986, p.617). They measure the efficiency of "responsive questioning" compared to "recitation questioning" by learners' productions and the use that is made of these in order to "regulate" or "scaffold" learners' productions more constructively.

If with Gallimore, Dalton and Tharp (1986), we argue that the cognitive process of second language learners is not predictable, second language teachers need to be particularly attentive to grasping the cognitive process involved in the development of individual learners. It is also the very unpredictability of the process which creates
opportunities for assistance and instruction. It is therefore particularly important for teachers to engage in an interaction which not only takes into account the learner’s experience and understanding at its developmental stage, but also takes into account the intrapsychological strategies which he/she will use responsively to trigger scaffolding and eventually skill acquisition.

Recognizing the intricacies of this dual scaffolding process towards autonomy is not easy for either party and shows that self-regulation on the part of the teacher echoes closely the learner’s cognitive process:

During each stage of training, when trainers provided – even imposed – an unfamiliar pattern of teaching, some teachers were stressed, anxious and others resentful. Gradually these new patterns and strategies became internalized, personalized adapted and owned. (Gallimore, Dalton and Tharp 1986, p.627)

This study illustrates accurately Vygotsky’s theory of learning according to which “self-regulatory cognition will occur under conditions of learning, stress and disruption” (ibid., p.619). In this respect, the use of “scripted teaching” is not entirely rejected. It can be useful to trigger self-directed speech in the early stages of teacher training as part of the three stages of Vygotsky’s theory of skill acquisition – external regulation by other, self-regulation, and automatization.

2.6 Discussion

On the basis of this conception of the role of the teacher in the ZPD we come back now to the question of the institution and the subject matter as considered by Buchmann and traditional humanists. The conception outlined above is a specification of the dependence on the learner which is the heart of what teacher autonomy must be. In essence the point so far is this: the existence of the classroom group impedes the emergence of one-to-one ZPD mechanisms and so forces the teacher back on to dependence upon recitation, imposition of authority, and patterns of non-learning hierarchical group behaviour. No stable dynamic learning pattern ever occurs in the classroom, unlike the one-to-one model. Consequently the teacher is involved in a constant process of preferably informed adaptation in search of learning structures by manipulating learning materials in order to create a momentary or partial ZPD structure, which constitutes the partial or momentary responsiveness of teacher to learner. To complete an understanding of teacher autonomy it is necessary to reconsider the
elements relevant to teacher autonomy as conceived by Buchmann and the humanist tradition, but this time as obstacles to that dependence on the learner which the Vygotskian model has allowed us to identify.

The first point to make is that there is no moral dimension to the learning model outlined here. The human capacity to learn is, in essence, a technical matter. Morality is a pattern of behaviour, one among many. It may be taught, but it is not of the essence of teaching or learning. To introduce an imperative to create a moral sense in students would actually be an alternative source of dependence impeding the dependence on the learner. Teachers must have autonomy from wider social requirements in order to function effectively.

Secondly, it is clear that in itself the institutional setting is not either functional or dysfunctional to the learning process. Its relationship to the learning process depends on what is being learnt. It may well be that what students come to learn, and what the institution wishes to teach, is not the subject as classically defined. Vocational training, for example, often does not have as its goal the teaching of traditional systematic subjects ("French", "physics", etc.). It is necessary, while making all possible use of systematic knowledge, to devise a curriculum which adapts systematic knowledge to the specific learning needs of particular students. So there is a paradoxical need for "autonomy" from the subject being taught.

Thirdly, the fact that they come to the classroom does not necessarily imply either that the teacher wishes to "teach" or that the student wishes to "learn". Large elements of the education system are based on legal compulsion. Many other elements gain their students as a consequence of economic compulsion. As motives for teaching and learning these must be suspect. For that reason it becomes necessary to create an autonomy from the obstacles to learning which arise from the economic and social motives which send both student and teacher to the classroom.

Insofar as these obstacles can be dealt with, they can be dealt with only by facilitating the autonomy of the teacher from as many of the obstacles to the learners' cognitive process as possible.

3 Teacher autonomy and teacher education

In the previous two sections I have sought to establish that Vygotskian principles underpin the concept of learner/teacher autonomy within the classroom context. As far as learner autonomy is
concerned, a body of evidence has emerged that shows the particular relevance of this concept and its applications to the language classroom (see Little 1991). Vygotsky’s own arguments against any model of learning which tried to picture learning as monovocal activity were taken as read and a model based on Vygotsky’s views was elaborated. This made it possible to identify the role of learner autonomy in the learning process. In the section 2 it was found to be necessary to include in the model of the learning process specific details concerning the classroom situation if Vygotsky’s approach was to be applicable to classroom learning. In particular, the complexities derived from the mutual presence of more than one learner voice, more than one potential tutoring voice, and one authoritative teaching voice, had to be included in the model in order for it to be applicable to classroom learning. It was argued that in order for the Vygotskyian learning mechanisms to operate optimally in this environment it was desirable to maximize teacher autonomy. We now face the question of how that can be done. It is argued in this section that in order to specify ways in which teachers can be helped to optimize their autonomy it is necessary for them to operate with a model of classroom learning which has one further level of complication added to it, namely the specific nature of the subject or subject type which is to be taught and learnt.

So far in this paper I have used language learning as my main example of the learning and teaching processes, but the specific character of SLA has not been an integral part of the model which has been elaborated. In this section I first seek to establish the specifics of the second language classroom, then relate them to the Vygotskian model and recent Vygotskian trends in SLA research. I conclude by seeking to draw implications for teacher education based on the framework discussed in this paper.

3.1 The specifics of the second language classroom

As pointed out in earlier sections, studies have successfully shown the developmental nature of SLA. As a result, the second language classroom has in many cases become an arena for learning by trying to replicate the naturalistic mode of language acquisition. Communicative approaches, for example, sought to break away from the artificiality of the classroom. Although this is an entirely justified concern, given that second language teaching aims to develop a skill which, in comparison to some other academic disciplines, has direct implications and applications outside the classroom, the ambiguities
and difficulties linked to the idea that a naturalistic framework could work within the context of the classroom remain, for many reasons, including those discussed in the previous section.

First, the limitations of SLA research are becoming an increasing concern to SLA researchers. Kachru (1994) argues that up to now the dominant paradigms in SLA research have resulted from a monolingual bias and that they ought to be approached from a bi/multilingual perspective. Sridhar (1994) also observes that in evaluating SLA theories a "reality check" should be performed on methodologies used, taking into account, amongst other factors, that "[m]ore SLA takes place in nonnative contexts, where the L2 is not spoken as the primary language, than in native contexts [...]. A great deal of successful SLA takes place through formal instruction acquisition" (Sridhar 1994, p.800). The monolingual bias is therefore flawed since "native speaker norms are a distraction when the primary interlocutors are nonnative or non standard speakers" (Sridhar 1994, p.801). Little argues, for example, that "fossilized errors are no barrier to effective target language use, even at very advanced levels" (1995, p.179).

Other important considerations are language learning's lack of immediacy as far as learners and teachers are concerned, and the lack of understanding of what the main objective of learning a language is – viz. the development of communicative competence – on the part of traditional institutions and examining bodies. In traditional classroom contexts, beginners are faced with a language system for which they have no natural context of use; more proficient learners still face difficulties as far as meaning and expression are concerned when removed from a "natural" environment, and teachers face a constant struggle to evaluate and work upon individual learner differences. These limitations must be carefully considered when trying to construct a scaffolding structure for learners which, when gradually removed, will truly empower them and make them autonomous. To this end we need to go back to Vygotsky and his ideas about classrooms representing "the best 'cultural laboratories' to study thinking: social settings specifically designed to modify thinking" (Rivière 1984, cit. Moll 1990, p.1)

So what are the specifics of the second language classroom by contrast with other school disciplines? First we must distinguish language learning in the classroom context from learning a second language in a naturalistic environment within a "spontaneous" framework of cognitive development (cf. my earlier discussion of
child/adult/peer scaffolding). Such a contrast is not possible in relation to many of the subjects taught in classrooms, for which a naturalistic learning alternative does not exist. They may be said to have a more purely "scientific" character than language. However, in the school context, language learning is decontextualized and becomes, unavoidably, a scientific subject, taught and learnt in isolation from the social contexts in which it has emerged, developed and is used, but also presented in a manner which inevitably foregrounds the scientific appreciation of its structural regularities. Communicative approaches attempt to overcome this by combining the insights which can be derived from a scientific understanding of language with the naturalistic learning methods which occur in spontaneous language learning environments.

However, this "fusion" approach to language learning – seeking to merge the advantages of scientific understanding and the spontaneous learning mechanisms for language – has not been an unqualified success. The sequencing of external activities traditionally used in the second language classroom is often arbitrary and debatable and generally the attempt to treat the classroom as an environment for naturalistic learning depends on trivialized verisimilitude to trigger spontaneous learning processes in an effective way. The specific problems of learning a language as a scientific body of knowledge are avoided. From the point of view of the learner, learning languages shares many similarities with learning maths or physics, which need to be taught "scientifically" because they are not immediately transparent to the learner.

But there is a balance to be maintained. In the case of languages the situation is more complex, because the subject taught is at the same time product and process. The reason it needs to be taught scientifically is in order to speed up automatization in order to achieve communicative competence, rather than scientific knowledge. There is no specific body of knowledge to be acquired. What is to be learnt requires to be defined, whether in the naturalistic terms sometimes provided by communicative approaches or by a sort of game theory of language learning which arbitrarily sets down the purpose and content of the exercise.

SLA is unique in the intensity with which it requires these problems to be faced in the classroom, and this is a matter which requires particular attention from the teacher. The problem cannot be solved outside the classroom. The teacher must learn to negotiate the tension
between institutional and curricular imperatives on the one hand and
the criteria for success which we derive from the SLA process itself;
but she must do this without either relativizing everything to the extent
that her authoritative role is undermined or impeding learning by
imposing inappropriate external standards. What is to be taught here
is not unlike, if not quite as difficult as, teaching someone to swim in a
classroom – without any water. Such a task can be accomplished only
by knowing what kind of feedback the aspirant swimmer gets from
being in the water and replacing it – rather than trying to replicate it –
by another form of feedback. In this regard the crucial aid to the teacher
is the “natural” language the student already possesses – something
far more important than the images of a naturalistic environment
presented in the video tapes and textbooks of communicative language
courses.

3.2 The dependence of SLA on L1: a Vygotskian model
of second language acquisition

John-Steiner (1985) reports that the question of second language
acquisition was crucial to Vygotsky because of its social relevance
within the rich multilingual context of the USSR, but also because it
illustrated the dynamic role of literacy within the psychology of
language and thought. In his view automatized proficiency in a second
language depended on proficiency in the first language:

if the development of the native language begins with free, sponta-
nous use of speech and is culminated in the conscious realization
of linguistic forms and their mastery, then development of a foreign
language begins with conscious realization of language and
arbitrary command of it and culminates in spontaneous, free speech.
But, between those opposing paths of development, there exists a
mutual dependency just as between the development of scientific
and spontaneous concepts. This kind of conscious and deliberate
acquisition of a foreign language depends on a known level of
development of the native language [...].


Recent SLA research supports this position by highlighting the
interaction between interpersonal and intrapersonal language learning
processes – for instance Schumann’s social and psychological distance
hypothesis, Krashen’s comprehensible input and monitoring theory,
or Cummins’s CALP. To Vygotsky the adult learner uses his/her literacy
skills in his/her native language as an internal scaffold which is then "dismantled slowly and painfully" (John-Steiner 1985, p.368) as the learner becomes more proficient in the second language. This dynamic process involves a unification of the two languages at the level of verbal meaning and thought.

In the realm of second language acquisition, the example of Dam's classroom cited in earlier sections shows how it is possible to use transparency to mobilize children's cognitive maturity in order to launch this dialectic process of dependence towards autonomy.

One other such example of autonomous learning in the classroom is given by Mangelsdorf's study of the parallel mechanisms involved in speaking and writing a second language. Dam (1995) suggests that "the development of learner autonomy is a long and difficult process – especially for the teacher. 'Letting go' and trusting the learners' ability to 'take hold' seem to be the biggest problem" (p.79). Mangelsdorf claims to have experienced the same success by letting the learners take control of the learning situation. In fact she did not "let go" of her own accord; she was made to "let go" by the learners themselves:

A few years ago I couldn't get one of my ESL composition classes to stop talking. The students were university freshmen; their major writing assignment was a response to Orwell's [...] novel 1984. Big Brother intrigued them. Some hated him, a few admired him; still others were fascinated by the machinations of his society. Some class days I'd plan for a 20 minutes discussion of part of the book, and after 45 minutes the students would still be at it [...]. I was worried that I hadn't spent enough time on organizational strategies or transitions; I expected their drafts to be rambling, possibly even incoherent. But these papers turned out to be the best I'd ever received on that course. They were rich with ideas developed in the class discussion; they had a strong sense of audience and voice far removed from the careful textbook language I was used to reading. (Mangelsdorf 1989, p.134)

Mangelsdorf explains this appropriation of knowledge by students in Vygotskian terms, by stressing the importance of spoken dialogue in written composition skills. She posits that teaching these two skills together can strengthen second language acquisition because the process involved was one of "communication through the construction and negotiation of meaning" (ibid., p.136). The dialogue that students involved themselves in revealed once again the cognitive processes
described by Vygotsky. A variety of ZPD processes emerged from the
dialogic nature of this specific learning situation:

In my class discussions, for instance, a student would begin a
sentence, falter, begin again, be interrupted by a student with
another idea, respond to that idea, try again to finish the original
idea, be assisted by another student, and so on. (ibid., p.138)

These apparently cacophonous ZPD processes gave birth to external
voices, an external scaffold which helped the students to write better
pieces because when it came to the point of writing an essay on their
own, they had internalized the other voices which in turn allowed
them to develop an awareness and to anticipate reader’s reactions,
and thus to become autonomous learners:

The peer reviews and multiple drafts in my unit on 1984 helped
students come closer to this “fiction” [the writer’s audience] by
allowing them to test and change their writing according to their
readers’ responses – just as they tested and changed what they said
in class according to their listener’s reactions. (ibid., p.138)

Mangelsdorf clearly attributes the success of her class to the fact
that the dialogue which the students engaged in allowed them to
become autonomous for two reasons. First, they were involved in a
process not of learning language but of self-discovery, and secondly,
this cognitive growth, arising from the use of language as it is normally
used – i.e. to communicate ideas rather than for “display” purposes
(Widdowson 1978, cit. Mangelsdorf 1989, p.142) – was possible because
she allowed herself to exercise her prerogative as an autonomous
teacher and “let go” (Dam 1995) from the curricular demands of teach-
ing “expository and argumentative strategies” (Mangelsdorf 1989,
p.142).

Because I could not silence my students’ voices, I unknowingly gave
them more ways to discover and explore ideas, to find the right
words to express these ideas, and to negotiate with their audience
about these ideas – all of which are critical in second language
acquisition and cognitive growth. (ibid. p.143)

This example suggests that real acquisition is achieved through
using language as a tool for negotiating meaning. In this case the teacher
fulfils the role of the guide who makes sure that learners “assume full
control of diverse purposes and uses of oral and written language”
so that instruction/scaffolding (from teacher or peer) is no longer a matter of getting learners to give the right answers; rather, lessons become a matter of "communicating beliefs, ideas, and knowledge" (Moll 1989, p.67). By providing a dynamic model of cognition, this process allows learners to practise their autonomy in the face of new or more complex learning contexts.

Here, of course, it is necessary to enter a caveat against an over-optimistic assumption that making language learning the indirect beneficiary of an alternatively directed task resolves the problem of naturalism in the classroom. The problem here is still the point raised in section 1 against what was then loosely labelled the "pragmatist school". It was argued there, and again in section 2, that peer interaction does not necessarily guarantee autonomous learning, although that is often the motive of those who advocate it. One cannot expect a single dynamic model of learning to emerge as an effective tool of teaching in the SLA classroom. Inevitably, such models break down. The complex and opaque nature of an unknown language alone prevents it and requires the regular intervention of the teacher to establish standards, correct errors and focus behaviour on achievable tasks. Nevertheless, the nature of the second language classroom is such that neither learner nor teacher autonomy can emerge unless there is a comprehensive dependence, engineered and sustained by the teacher, on the cognitive and linguistic skills the learners bring to the task of learning a foreign language. This is truly naturalistic SLA in the classroom.

3.3 Recent Vygotskian approaches in SLA research

Research in SLA has tried to establish the value of group work. In an evaluation of collaborative language tasks carried out by L2 learners in peer groups, Donato (1994) found that collective scaffolding "occurred routinely" (p.52) in these groups, that L2 learners were "quite capable and skillful at providing the type of scaffolded help that is associated in the developmental literature with only the most noticeable forms of expert-novice interaction" (ibid., p.52). Finally, scaffolding provided during these interactions had yielded results not only in the individuals involved in a pair dialogue, but also in all group participants being able to re-use utterances which had been the subject of pair scaffolding within the group. This seems to confirm in practice what the Vygotskian framework stipulates – knowledge is derived socially and dialogically in the second language classroom (ibid., p.51).

Vygotskian empirical studies have also sought to establish parallels
and dialectical relationships between the development and the role of inner speech in cognitive growth and the development of L2 skills. McCafferty (1994) argues that like children, L2 learners at a lesser level of proficiency use private speech (the egocentric speech referred to above, p.7) in order to solve problems. The level of private speech used seems also to be in inverse proportion to the proficiency level of the L2 learner. In a study where learners were asked to learn a fictitious language, Ushakova concluded that her findings showed a high dependency of the L2 acquired upon the inner speech mechanisms of the L1 already in place, so that “To put it figuratively, second language is looking into the windows cut out by the first language” (Ushakova 1994, p.154).

De Guerrero argues that because of its nature as “a cognitive instrument for planning, guiding, and evaluation of action” inner speech is “inextricably involved in the four modes of language perception and production: listening, speaking, reading and writing” (1994, p.85). He too established that the form and function of inner speech were inversely proportionate to the degree of proficiency, i.e. the more advanced learners made more use of inner speech mechanisms than beginners. In this way we see that this study matches the results of McCafferty’s study, in which private speech is gradually internalized and becomes self-regulated in functions such as “correction of grammar errors (an evaluative role), using inner speech to clarify thought (an ideational role), imagining conversations with others (interpersonal role), and talking to oneself (intrapersonal role)” (ibid., p.92). De Guerrero concludes by arguing that

The internalization and condensation of other people’s voices that occurs during the acquisition of a second language by adult learners thus closely parallels the social-to-the-individual movement proposed by Vygotsky (1962/1979) as the typical ontogenetic trait of L1 inner speech. (ibid., p.98)

This research provides support for the theoretical framework in which the relationship of learner and expert (teacher or peer, according to the situation) in the classroom or other instructional environment can be analysed. In particular it allows the importance of one of the key points in the social interactive view to be understood, viz. the view that not only is it important for learners to be instructed in a manner which relates to their explicit knowledge, but also that there need to be instructors who “understand the principles on which their practice
is based” (Little 1994, p.118).

3.4 From teacher training to scientific training

It would clearly be a reasonable conclusion to draw from all this that if teachers are to promote learning “in a lifelong perspective” (Dam 1995, p.3), the processes of cognition involved need to be made as immediate as possible to them. Teachers need to be aware that SLA should piggyback on L1 capacity; they also need to know the particular way in which groups and internal voices operate. Also, the centrality of teacher autonomy to the learning process as outlined in section 2 bursts the illusion, if ever it existed, that these insights into cognitive psychology can be integrated at the level of the curriculum or method by which the SLA subject matter is initially defined and that the teacher requires no more than a good prescribed language method and native wit. Little (1995) argues that teachers must recognize that most learning is “messy and indeterminate” (p.180) and that this awareness is bound to bring about “insecurities and uncertainties” (ibid., p.180). The possibility of organizing teacher training so as to increase the efficiency of the classroom is therefore called into question.

One way of trying to come to terms with this problem is to help teachers to become autonomous from curricular demands, pedagogical material and discourse, as well as from research, by being able to acknowledge the virtues and the limitations of these areas. This is the reason why the issue of teacher education is at the heart of the concept of learner/teacher autonomy (Little 1995).

But there are fundamental problems with teacher training which cannot be glossed over. As far as research is concerned, Gillette (1994) and Coughlan and Duff (1994) further support the reservations of Kachru and Sridhar in relation to SLA research (see p.42 above). In a study of the role of learner goals in L2 success, Gillette questions, for instance, the validity of the applications of research on positive learning strategies, in which ineffective learners are taught strategies used by effective learners. Her reservations are substantiated by further research which has shown that

Attempts to train ineffective language learners to adopt specific strategies identified among effective learners have been less than successful (see Chamot and Küpper, 1989; O’Malley, Chamot, Stewener-Manzanares, Russo and Küpper, 1985; and Sutter, 1987).

(Gillette 1994, p.211)
In turn, Coughlan and Duff (1994) point out that SLA cannot be measured independently of the sociocultural context in which it takes place. Thus the field of SLA is particularly vulnerable as linguistic tasks can never be either duplicated or replicated (even by the same individual): the activity/context which underpins the task is and can never be repeated even when the subject and the task are the same.

The difficulties this raises cannot be overestimated. The implication is that the findings of research into cognitive learning processes in SLA should determine neither what is taught in teacher training courses nor how the teacher proceeds in the second language classroom. The only way for teachers to catch a glimpse of the learners' black box in a scientific/autonomous manner is to have access to a dynamic system of teacher education which does not confine itself to overcoming the limits of ad hoc individual observation in the classroom. One can, for example, question the validity of action research programmes which seek to analyse learning processes in a spontaneous way because the teacher is a non-scientific observer.

It is necessary here to articulate a goal: scientific teacher education allows teachers to develop autonomous relationships of dialectical dependence on and independence from variables such as curriculum, research, and classroom discourse, among other variables mentioned in earlier sections of this paper.

An initial point towards realizing this goal is pointed out by Little (1995), who states that "language teachers are more likely to succeed in promoting learner autonomy if their own education has encouraged them to be autonomous" (p.180). There is clearly a symmetry here. Just as psychoanalysts are required to go through analysis in order both to understand what it is like and to elevate themselves above the position of the analysed, so too the teacher needs both to understand how successful classroom learning of a second language works and to come to stand above the learner by having already had the experience of SLA that the learner is entering into. Tharp and Gallimore (1988) refer to an inter/intra-psychological plane of teacher training which, like the training of psychoanalysts, allows teachers to go through a learning process not so much symmetrical as theoretically similar to that undertaken by their learners, and which also fits into the Vygotskian model of learning previously discussed in this paper.

A second point is closely related. Seen in a Vygotskian perspective, it can be argued that teaching is also a developmental process: "teaching is a complex humane activity at which a teacher can grow steadily
more proficient over years by disciplined curiosity, continuous training and skilful assistance” (Bird and Little 1986, cit. Tharp and Gallimore 1988, p.188). Learning how to teach should therefore not confine itself to the knowledge of teaching techniques. On the contrary, the autonomous teacher is one who is aware of why, when, where and how pedagogical skills can be acquired and used in the self-conscious awareness of teaching practice itself. This is the reason why teacher education that promotes teacher autonomy must in turn be principle-driven rather than activity-driven.

Thirdly, Tharp and Gallimore point to the current lack of social context in the field of teacher training and professional development: “most teachers work alone, in splendid isolation” (Tharp and Gallimore 1988, p.190). To counteract the isolation of teachers they propose a model whereby teacher education is provided through mutual assistance of students, teachers, institutions, consultants, researchers, curriculum developers, all dynamically linked together at the interpsychological and at the intrapsychological level.

3.5 Conclusion

At this point it is necessary to draw a conclusion. Reference has been made above to on-going SLA-related research within a Vygotskian framework. It is already clear from this research, even at its current early stage, that a dynamic interactive model of how second languages are acquired reveals a whole range of features of the second language classroom which in their particular emphasis and combination are unique to second language learning. That has real significance for the teacher seeking to be autonomous in the second language classroom. She needs to be able to respond to a wide variety of problematic interactive situations. To do that she needs to be able to understand what makes them problematic in relation to what is being taught (SLA) as well as in relation to the nature of learning in general and the nature of the classroom.

No one has that knowledge spontaneously; it needs to be developed by research and communicated as science – the science of teaching. At the same time, no one can afford to have illusions that the science of teaching can identify triggers for automatically setting off effective learning mechanisms. Such triggers do not exist. Scientific research serves the autonomy of the teacher only if it helps to generate an effective programme of teacher training. It achieves this despite the paradox that teacher training which facilitates teacher autonomy,
ultimately fails – or rather refuses – to tell the teacher what to do in the classroom, and instead is satisfied to help the teacher to make informed choices. This is nevertheless the best option, because the autonomy of the teacher is the only trigger we have which, being set off, can optimally facilitate the development of learner autonomy, and hence learning.

References


John-Steiner, V., 1985: "The road to competence in an alien land: a Vygotskian
perspective on bilingualism". In J. V. Wertsch (ed.), Culture, Communication
Kachru, Y., 1994: "Monolingual bias in SLA research", TESOL Quarterly, 28.4,
pp.795–800.
Larsen-Freeman, D., & M. H. Long, 1991: An Introduction to Second Language
Acquisition Research. London: Longman.
Authentik.
Centre for Language and Communication Studies.
Little, D., 1994: "Words and their properties: arguments for a lexical approach
to pedagogical grammar". In T. Odlin (ed.), Perspectives on Pedagogical Gram-
mar. Cambridge: Cambridge University Press.
Little, D., 1995: "Learning as dialogue: the dependence of learner autonomy
to consolidate and develop foreign language modules for students of other
disciplines implemented by the Centre for Language and Communication Studies
1 October 1993 – 30 September 1994. Dublin: Trinity College, Centre for
Language and Communication Studies.
Littlejohn, A., & S. Windeatt, 1989: "Beyond language learning: perspectives
on material design". In R. K. Johnson (ed.), The Second Language Curriculum.
Cambridge: Cambridge University Press.
McCafferty, S. G., 1994: "The use of private speech by adult ESL learners at
different levels of proficiency". In J. P. Lantolf & G. Appel (eds), Vygotskian
Mangelsdorf, K., 1989: "Parallels between speaking and writing in second
language acquisition". In D. Johnson & D. Roen (eds), Richness in Writing:
Moll, L. C., 1989: "Teaching second language students: a Vygotskian perspec-
tive". In D. Johnsn & D. Roen (eds), Richness in Writing: Empowering ESL
Students. New York: Longman.
sity Press.
Moore, T. E., & A. E. Harris, 1978: "Language and thought in Piagetian theory".
Books.

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