Learner autonomy – the first language/second language: some reflections on the nature and role of metalinguistic knowledge.¹

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Introduction

Learner autonomy is classically defined as "the ability to take charge of one's learning" (Holec 1981:3). Such an ability presupposes a positive attitude towards the process, content and goals of learning, and is sustained and strengthened by a developing capacity for "detachment, critical reflection, decision-making, and independent action" (Little 1991:4). The freedom that characterizes the autonomous learner is not absolute, but conditional and constrained. Learning, whether developmental/experiential or formal, is always embedded in an interactive, social process (selfinstruction entails an internalization of this process, so that our capacity for learning on our own develops out of our experience of learning in interaction with others; cf. Little 1991:5). This explains the paradox that learner autonomy can be fully understood as a theoretical construct and effectively pursued as a pedagogical goal only when we take full account of the social context in which learning takes place.

The argument in favour of fostering learner autonomy has been conducted in both social and psychological terms. In adult education, for example, there has been a tendency to stress "the need to develop the individual's freedom by developing those abilities which will enable him to act more responsibly in running the affairs of the society in which he lives" (Holec 1981:1.). The link between educational purpose and political ideal could scarcely be plainer. Other explorations of the theory and practice of learner autonomy, by contrast, have focussed on the psychological dimension of learning, emphasizing that we can only ever learn on the basis of what we already know, and that no two individuals have exactly the same store of knowledge. Barnes (1976:23), for instance, makes this point by appealing to Kelly's (1963) psychology of personal constructs:

The universe [...] is open to piecemeal interpretation. Different men contrue it in

different ways. Since it owes no prior allegiance to any one man's construction system, it is always open to reconstruction. Some of the alternative ways of construing are better adapted to man's purpose than others. Thus, man comes to understand his world through an infinite series of successive approximations. [...]

Life is characterized [...] by the capacity of the living thing to represent its environment. Especially is this true of man, who builds construction systems through which to view the world.

(Kelly 1963:43)

Barnes's point is that learning in formal contexts depends on communication, but communication will be effective only to the extent that it takes account of the personal constructs of each participant in the learning dialogue. This argument has clear implications for power relationships in the classroom and demonstrates the ultimate impossibility of separating the psychological from the social dimension of learning both generally and in the theory and practice of learner autonomy.

In the case of second and foreign language learning, the interaction of the social and psychological dimensions is central to our understanding of the language learning process and the means by which it is most effectively promoted. It is now widely accepted that proficiency in a second or foreign language – understood as a capacity for spontaneous language use – is developed procedurally, by using the target language as a medium of communication (see, for example, Bialystok and Hakuta 1994:158); thus if instructed language learners are to achieve a specified level of proficiency, their learning must be firmly embedded in the performance of appropriate target language tasks. This has clear implications for the organization of their learning as social process. At

the same time, however, language learning in formal contexts is inevitably an intentional process shaped by various analytical procedures which depend on but also produce various kinds of analytical knowledge. The capacity for critical reflection and analysis on which I have suggested learner autonomy partly depends, develops in interaction with these analytical procedures and analytical knowledge, including metalinguistic knowledge.

Metalinguistic knowledge, defined as knowledge about the structures, functions, and processes of language, is the central concern of this article. My purpose is theoretical rather than practical: not to offer detailed guidelines for pedagogical practice, but to sketch a framework within which such guidelines might be elaborated. I am particularly concerned to explore the origin and nature of metalinguistic knowledge and the role it plays not only in second/foreign language learning but also in mother tongue education. I begin by suggesting that the development of metalinguistic knowledge is an integral part of first language acquisition, and I distinguish two sources of metalinguistic knowledge, one internal and the other external to the learner. Next I discuss the relation between metalinguistic knowledge and the acquisition of literacy in the mother tongue. And finally I focus on the role played by metalinguistic knowledge in second/foreign language learning, with particular reference to the interaction between the development of mother tongue literacy and second/foreign language learning.

The development of metalinguistic knowledge as part of first language acquisition

Karmiloff-Smith (1992:31) proposes that there is a fundamental difference between human and non-human intelligence:

Unlike the spider, which stops at web weaving, the human child – and, I maintain, only the human child – has the potential to take its own representations as objects of cognitive attention. Normally developing children not only become efficient users of language; they also spontaneously become little grammarians.

In other words, humans "spontaneously go beyond successful behaviour", so that normally developing children "are not content with using the right words and structures; they go beyond expert usage to exploit the knowledge that they have already stored" (ibid., p. 32). Karmiloff-Smith argues that

what makes this possible is a repeated process of "representational redescription" (ibid.), which she defines as "a process by which implicit information in the mind subsequently becomes explicit knowledge to the mind" (ibid., p. 18).

Karmiloff-Smith's model of representational redescription posits four levels at which knowledge is represented and re-represented. She labels these Implicit, Explicit-1, Explicit-2, and Explicit-3 (1992:20). At the Implicit level, information is encoded in procedural form and new representations are independently stored. In first language acquisition, Implicit level knowledge underpins language use that is context-bound and relatively inflexible. At Explicit-1 level, representations are "reduced descriptions that lose many of the details of the procedurally encoded information" (ibid., p. 21) but as a consequence become more cognitively flexible. As an example Karmiloff-Smith offers the redescription of "zebra" into "striped animal", which makes possible the analogy between an actual zebra and a zebra (pedestrian) crossing. Although Explicit-1 level representations are available to the cognitive system as data, they are not available to conscious access and verbal report (ibid., p. 22). At Explicit-2 level, representations are accessible to consciousness but not to verbal report, whereas at Explicit-3 level, representations are accessible to both consciousness and verbal report.

By proposing more than two levels of representations, Karmiloff-Smith is arguing against a dichotomous relation between procedural and declarative knowledge – and it should be noted that in her model, mature humans possess knowledge at all levels. She is also arguing that metalinguistic knowledge can be both unconscious and conscious – unconscious in the example of the four-year-old child who pointed to a typewriter and said to her mother: "You're the typewriter, that's a typewrite" (Karmiloff-Smith 1992:31); conscious and verbalizable in the example of the ten-year-old who explained that he said

"my watch" because it belongs to me, but I said: "you hid the watch" because there are no other watches there. If you'd put yours out, I would have had to say "you hid my watch", because it could have been confusing, but this way it's better for me to say "you hid the watch" so someone doesn't think yours was there too.

(Karmiloff-Smith 1992:50)

The unconscious metalinguistic knowledge that exists at Explicit-1 level is the inevitable product of the

internal operations of the mind; without it, creative language use, in the Chomskyan sense, would be impossible. By contrast, although metalinguistic knowledge at Explicit-2 and Explicit-3 levels is to an indeterminate degree continuous with that at Explicit-1 level, the closer we come to verbalizable knowledge, the greater the likelehood that it derives from external as well as internal sources. For example, parents, siblings and caregivers may talk to children about language in many different ways, and from this children can derive folk theories about linguistic form and process which supplement their own intuitions. More generally, the species-specific mechanisms of first language acquisition are activated and fed by the child's interaction with others, so that the operation of universal biological processes is constrained and coloured by an almost infinite variety of historical, social and cultural factors.

Metalinguistic knowledge and the development of literacy

Wells (1981:240f) distinguishes three major phases in the child's linguistic development. In the first phase, "language functions first and foremost as a means for the regulation of activity and interaction"; in the second phase "the child gradually takes over the language of his community and, in the process, absorbs the cultural values and working assumptions that are encoded in that particular community's use of language"; and in the third phase "the function that language performs of representing the objects and events of experience is drawn upon to provide a 'tool for thinking' and a means of communicating to others the results of the thinking process". For most children growing up in western societies, this third phase of linguistic development is closely bound up with schooling and the acquisition of literacy.

The written language has developed its own characteristic functions, which according to some scholars entail "psychological changes, altered forms of representation and forms of consciousness" (Olson 1991:149). Thus Goody has argued that "it was the setting down of speech that enabled man clearly to separate words, to manipulate their order and to develop syllogistic forms of reasoning" (1977:11), and that "writing presents us with an instrument capable of transforming our intellectual operations from the inside; it is not simply a question of a skill in the limiting sense but a change of capacity" (1986:255). This concern with the effect of literacy on cognitive functioning can be traced back to Vygotsky's argument that "the acquisition of literacy automatically

results in an increased decontextualization of mediational means" (Wertsch 1985:36). Luria and Vygotsky found, for example, that literacy affected the way in which subjects categorized familiar objects: literate subjects "grouped objects on the basis of abstract word meanings", whereas nonliterate subjects "indicated a strong tendency to group items on the basis of concrete settings with which they were familiar" (ibid., p. 34).

Arguments such as these can easily give the impression that there is an essential discontinuity between early language development and the acquisition of literacy. This is very far from being the case, however. Learning to read and write depends on analytical processes - both conscious and unconscious - which would be inconceivable without the developing metalinguistic knowledge which, as Karmiloff-Smith proposes, is an involuntary part of first language acquisition. What is more, Wells found that educational success is determined by the place given to literacy and the value attached to it in the child's early experience (1981:259), and that the best predictor of attainment in literacy is the "extent of children's own understanding of the purposes and mechanics of literacy" when they start school (ibid., p. 263).

If the acquisition of literacy depends on the prior development of (mostly) unconscious metalinguistic knowledge, it also has the power to greatly enhance the learner's unconscious but also conscious metalinguistic knowledge. The fact that it does not do so automatically and invariably means that the way in which literacy is developed and the educational uses to which it is then put remain fundamental issues for theorists of schooling in general amd mother tongue education in particular.

Wells (1981:253) suggests that when we talk about the effect of literacy on cognitive functioning, it is necessary to distinguish between reading and writing. He argues that, complex though the process of reading undeniably is, "it is particularly in the creation of written text that the individual is made most aware of the symbolising function of language" (ibid., p. 254; for a similar conclusion, see Hildyard and Hidi 1985:303). It is important to notice, however, that this awareness of the symbolising function of language may have much in common with Karmiloff-Smith's Explicit-1 level of knowledge, since it is not necessarily conscious, analytical and self-referential. It is also important to notice, as Wells points out, that it "is not literacy, as such, [...] that is of such significance, but rather the symbolic manipulation of experience

through the sort of language which is most characteristic of written text" (ibid., p. 255). In other words, certain forms of spoken language are also apt to make the same demands and have the same effect as the creation of those kinds of written text that Wells associates with higher levels of cognitive functioning.

How, then, are we to promote the growth of higher cognitive functions within mother tongue education? Donaldson's answer to the question requires the development of that capacity for "detachment, critical reflection, decision-making, and independent action" which I associated with learner autonomy at the beginning of this article:

What is going to be required for success in our educational system is that [the child] should learn to turn language and thought in upon themselves. He must become able to direct his own thought processes in a thoughtful manner. He must become able not just to talk but to choose what he will say, not just to interpret but to weigh possible interpretations. His conceptual system must expand in the direction of increasing ability to represent itself.

(Donaldson 1978:88f)

In a similar vein, Astington (1994:183) points out that in traditional systems of schooling, children do not have to think about their thinking, whereas in progressive systems they are thought of as constructing their knowledge and thus needing to think about their thinking. She argues in favour of progressive systems on the ground that in their cognitive functioning human beings are naturally "second-order systems":

First-order systems have mental states, they have beliefs, desires, and intentions, as do second-order systems. However, beyond that, second-order systems have concepts of these mental states, they have beliefs, and they can attribute beliefs and other mental states to themselves and others.

(Astington 1994:183f)

Arguments of this kind declare the need for a pedagogy that develops learners' literacy on the basis of their largely unconscious metalinguistic knowledge, but goes on to engage them in tasks that require a high degree of conscious analysis. The role of the teacher in such a pedagogy is to support learners as they develop the capacity to deal with ever more demanding tasks, identifying the limits of learners' present capacity and facilitating further growth by focussing attention on the "zone of proximal development", to borrow

Vygotsky's celebrated notion (see especially Vygotsky 1978:79-91). A general sense of how this support may be articulated is provided by Bruner's description of the effective tutoring of young children:

To begin with, it was [the tutor] who controlled the focus of attention. It was she who, by slow and often dramatized presentation, demonstrated the task to be possible. She was the one with a monopoly on foresight. She kept the segments of the task on which the child worked to a size and complexity appropriate to the child's powers. She set things up in such a way that the child could recognize a solution and perform it later even though the child could neither do it on his own nor follow the solution when it was simply told to him. In this respect, she made capital out of the "zone" that exists between what people can recognize or comprehend when present before them, and what they can generate on their own [...]. In general what the tutor did was what the child could not do. For the rest, she made things such that the child could do with her what he plainly could not do without her. And as the tutoring proceeded, the child took over from her parts of the task that he was not able to do at first but, with mastery, became consciously able to do under his own control. And she gladly handed these over.

(Bruner 1986:75f)

Note that in this account the gradual handing over of control to the learner – in other words, the development of learner autonomy – is not an option that the tutor may or may not adopt according to ideological preference: it is essential to the success of the tutoring process. Note also that the handing over of control to the learner is more than a psychological phenomenon. In order to gain the psychological benefits of successful learning, the learner must gradually assume control of the social interaction that gives outward form and substance to the learning process. Once more we are reminded that the social and psychological dimensions of learning are inseparable.

When we are concerned with the development of literacy via the performance of writing tasks that require increasingly high degrees of conscious analysis, pedagogical support must inevitably focus not only on the process by which the tasks are performed, but also on an analytical understanding of the linguistic resources at the learner's disposal. This understanding comprises elements of metalinguistic knowledge derived from the theories of language and literacy

current in the society of which the learner is a member. At the same time, as the learner's skill in task performance develops, so too will that metalinguistic knowledge that grows as it were from the inside out, as an involuntary part of every individual's linguistic development. The interface between these two kinds of metalinguistic knowledge, the one conscious and external, the other largely unconscious and internal, is problematic. In some respects it seems certain that there is continuity between them, whereas in others there may well be discontinuity. But such problematicity is beside the point as far as pedagogical procedures are concerned: it is enough that an analytical focus (metalinguistic knowledge from the outside) provided an indispensable scaffolding for the performance of tasks that gradually generate a skill, one of whose components is metalinguistic knowledge of the internal, largely unconscious variety.

The argument of this section of the article applies to mother tongue education understood as that part of the curriculum specifically concerned with the development of learners' linguistic skills. But it applies with equal force to mother tongue education understood as all those parts of the curriculum mediated through the mother tongue. For as Bruner has pointed out,

the language of education, if it is to be an invitation to reflection and culture creating, cannot be the so-called uncontaminated language of fact and "objectivity". It must express stance and must invite counter-stance and in the process leave place for reflection, for metacognition. It is this that permits one to reach higher ground, this process of objectifying in language or image what one has thought and then turning around on it and reconsidering it.

(Bruner 1986:129)

In the light of this argument, it is hardly surprising that for Bruner the goal of all education is what I have defined as learner autonomy:

If [the learner] fails to develop any sense of what I shall call reflective intervention in the knowledge he encounters, the young person will be operating continually from the outside in – knowledge will control and guide him. If he succeeds in developing such a sense, he will control and select knowledge as needed. If he develops a sense of self that is premised on his ability to penetrate knowledge for his own uses, and if he can share and negotiate the result of his

penetrations, then he becomes a member of the culture-creating community.

(Bruner 1986:132)

Learner autonomy and metalinguistic knowledge in second/foreign language learning

In general, then, if we want our educational systems to develop learners' higher cognitive functions, we must adopt a pedagogy that makes it possible for teachers to support learners in the "zone of proximal development". In order to achieve its cognitive goals, such a pedagogy must possess certain social characteristics. Specifically, it must be organized in such a way as to allow the teacher to give regular and close attention to individual learners, and its discourse structures must allow the free negotiation of meaning, the sharing of power, and the gradual transfer of control from the teacher to the learners.

Tharp and Gallimore (1988) provide a full account of the theoretical (Vygotskyan) foundation and practical application of just such a pedagogy. In their project, primary classes were divided into groups of five or six learners, which rotated around a number of different activity centres, one of which was controlled by the teacher. This procedure had two closely related benefits: it allowed the teacher to interact in a focussed and concentrated way with five or six learners at a time, and it required those learners who were not working with the teacher to discover how to conduct learning conversations among themselves, supporting one another in the zone of proximal development. Naturally, these learning conversations were likely to derive some of their principal characteristics from the conversations controlled by the teacher.

The successful implementation of such a pedagogy for mother tongue education (whether understood in its narrower or its broader sense) will create expectations and capacities in our learners that should be transferrable to the learning of second/foreign languages. In particular, learners who are familiar from mother tongue education with the structures, requirements and processes of group work bring to the second/foreign language classroom a ready-made framework for the development of proficiency via target language use. But what about the analytical skills and metalinguistic knowledge that learners have developed as part of their growing literacy in their mother tongue?

I have argued in relation to the development of mother tongue literacy that it is necessary to

distinguish between two kinds of metalinguistic knowledge – that which grows as it were from the inside out as an inevitable part of expanding linguistic competence, and that which derives from theories of language and literacy current in the society of which the learner is a member. I have also argued that the interface between these two kinds of metalinguistic knowledge is problematic, but essentially irrelevant to our pedagogical concerns. Paradis (1994) makes the same point in relation to second/foreign language learning, insisting that "metalinguistic knowledge formally learned in school, is not integrated into linguistic competence and does not become available for automatic use" (p. 393). He goes on:

This does not mean that metalinguistic knowledge cannot be useful in the process of learning another language, whether by focusing attention on some aspect of the linguistic data that would otherwise have gone unnoticed, or by allowing one to check one's output, or to deduce who does what to whom through a conscious identification of case markers, and thereby improving one's practice. But it is the practice, not the metalinguistic knowledge, which improves automatic performance (and by implication, linguistic competence)

(ibid., p. 405)

In second/foreign language learning as in mother tongue education, then, metalinguistic knowledge can provide learners with a basis for analysing their performance, reflecting on the learning process, setting learning goals, and choosing particular learning strategies. In other words, it can provide a stimulus and framework for the performance of tasks calculated to develop proficiency, even though it cannot itself become part of that proficiency.

There is, however, an obvious and important difference between second/foreign language learning and the development of mother tongue literacy skills. Vygotsky (1986:159) puts it thus:

It is well known that to learn a foreign language at school and to develop one's native language involve two entirely different processes. While learning a foreign language, we use word meanings that are already well developed in the native language, and only translate them; the advanced knowledge of one's own language also plays an important role in the study of the foreign one, as well as those inner and outer relations that are characteristic only in the study of a foreign language.

In terms of the central concerns of this article, we can expand Vygotsky's point by saying that whereas in our first language we develop proficiency and unconscious metalinguistic knowledge before we develop conscious metalinguistic knowledge, from the beginning of second/foreign language learning we can bring a measure of conscious metalinguistic knowledge to bear on the learning task. This fact has an important corollary: whereas in our first language literacy is acquired on the basis of a developed oral proficiency, in second and foreign language learning we can in principle learn literacy in advance of oral proficiency.

Second and foreign language pedagogy has always used the technology of writing to support learning - for example, learners have traditionally compiled lists of the vocabulary they need to master, and have been encouraged to write down grammatical rules and examples of their application. There are, moreover, many educational systems that produce learners whose second or foreign language writing skills are better developed than their oral skills. This is not surprising, since in most circumstances writing is less "immediate" than speaking, and thus permits a higher degree of "off-line" processing. But the fact that the social and psychological dimensions of learning are so strongly interdependent should encourage us to seek ways of exploiting the early development of creative writing skills in the second or foreign language to support the development of oral skills. For example, if a class of learners is given a writing task - perhaps a brief description of themselves and their interests preparatory whole-class discussion, including analysis of the linguistic resources needed to perform the task, embeds the individual act of writing in a context of oral and social interaction, while the writing process itself inevitably maintains an analytical focus on the words and structures each individual learner decides to employ. The texts that the learners produce can then be used as the basis for further interactive oral tasks - they can be shared with other learners, and they can serve to prompt oral self-descriptions and discussion. In turn these oral activities can feed into further writing activities, and so on. In this way, it is possible to establish a chain of learning tasks in which writing interacts with speaking and the use and further development of "external" metalinguistic knowledge interacts with the use and gradual growth of proficiency, including the development of "internal" metalinguistic knowledge (for a sustained example of this approach in practice, see Dam 1995).

Of course, we may expect that learning a foreign language has an impact on the learner's awareness of

his or her mother tongue. Vygotsky (1986:195f.) makes the point as follows:

Success in learning a foreign language is contingent on a certain degree of maturity in the native language. The child can transfer to the new language the system of meanings he already possesses in his own. The reverse is also true — a foreign language facilitates mastering the higher forms of the native language. The child learns to see his language as one particular system among many, to view its phenomena under more general categories, and this leads to awareness of his linguistic operations.

This reciprocal – or "dialogic" (Bialystok and Hakuta 1994:184) – relation between first and second/ foreign language learning turns upon the role played in either case by both unconscious and conscious metalinguistic knowledge. It must be emphasized, however, that the full potential of this "dialogic" relation between first and second/foreign language learning will not be realized spontaneously: its effect inevitably depends on the development of a critical pedagogy focussed socially and cognitively on the growth of learner autonomy.

Conclusion

I began this article by proposing that learner autonomy is sustained and strengthened by a developing capacity for "detachment, critical reflection, decision-making, and independent action". While arguing that the social and psychological dimensions of learning are ultimately inseparable, I associated the capacity for critical reflection and analysis with the psychological dimension, and identified metalinguistic knowledge as a central component of that capacity.

I followed Karmiloff-Smith in arguing that the growth of metalinguistic knowledge "from the inside out" is an essential part of first language acquisition; but I went on to argue that explicit, verbalizable metalinguistic knowledge may also be derived from sources external to the learner, for example, the theories about language and literacy that are current in the society of which he or she is a member. I then considered the role of metalinguistic knowledge in the development of mother tongue literacy, suggesting that the acquisition of literacy depends in the first place on largely unconscious, "developmental" metalinguistic knowledge, but that the exploitation of literacy with a view to developing higher cognitive

functions depends on analytical processes that both presuppose and promote the further growth of explicit and (at least in part) externally derived metalinguistic knowledge. Turning my attention to the role of metalinguistic knowledge in second/foreign language learning, I followed Paradis in arguing that although externally derived metalinguistic knowledge cannot be converted into the "internal" metalinguistic knowledge that is part of proficiency, it can be used to stimulate, frame, focus and monitor the language use that does promote growth in proficiency, and thus in "internal" metalinguistic knowledge. I illustrated this point with an example that showed how literacy skills can be used in the earliest stages of second/foreign language learning to help develop oral proficiency. Finally, I noted that second/foreign language learning necessarily has an impact on the learner's awareness of his or her mother tongue. Those parts of my argument that have to do with formal education carry important implications for the social organization of learning, especially as regards power and control. This fact should lead us to see learner autonomy, defined as "the ability to take charge of one's learning", not as an optional extra but as a prerequisite of successful learning. It has been the purpose of this article to suggest that we shall achieve the full effect of learner autonomy in second/foreign language classrooms only when it is also an explicit and central goal of our mother tongue pedagogy: if the social and psychological dimensions of learning are ultimately inseparable, so too are the cognitive effects of first, second and foreign language learning.

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