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From 'external speech' to 'inner speech' in Vygotsky: A critical appraisal and fresh perspectives

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Abstract

This paper offers a critical exploration of the arguments for the 'internalization' of speech in Lev Vygotsky's cultural-historical psychology. Vygotsky's conception is predicated on the existence of three forms of speech – 'external', 'egocentric', and 'inner' – and pictures a developmental process of 'internalization' in which the first is transformed into the second and third. Vygotsky's case is built around the linguistic and communicative properties of these putative speech forms. The paper argues that the whole conception is informed by the 'segregationist' assumptions about language that constitute what integrationists call the 'language myth'. In particular, Vygotsky's view that 'external speech' is 'internalized' takes for granted the segregationist position that language constitutes a self-contained system which maintains its identity and integrity as between people and contexts. The paper, therefore, rejects the internalization conception and tentatively considers how the communicative phenomena discussed by Vygotsky may be treated differently if viewed from an integrational linguistic perspective. The more general implications for the validity of cultural-historical psychology are briefly examined.
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1. Introduction[1]

This paper continues the critical exploration, begun in Jones (2007), of language theory in Lev Vygotsky's 'cultural-historical' psychology (e.g., Vygotsky, 1986). I will focus here on certain linguistic notions that are crucial to Vygotsky's approach, namely those of 'external speech', 'egocentric speech' and 'inner speech' along with the process of 'internalization' which, in Vygotsky's system, relates these three forms of speech. The discussion of these phenomena will attempt to bring to bear the critical perspectives on theories of communication developed in the 'integrationist' work of Harris (1981, 1996, 2006).

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[1] Part of this paper was initially presented at the Distributed Language Group symposium, organized by Paul Thibault and Stephen Cowley, in 2007 in Grimstad, Norway. I would like to thank them for inviting me and for help and encouragement with the paper. Stephen Cowley gave me some very useful feedback on an earlier version of the paper for which I am extremely grateful. I would also like to thank the other participants at the symposium for their comments and criticisms of my presentation.

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In Vygotsky's developmental (or 'genetic') view, language ('speech') has a pivotal role to play in the emergence of distinctively human forms of thinking and action in the child. Through a process of 'internalization', 'external', or 'social', speech, is transformed from a directly interpersonal, communicative means of regulating and directing the child's behaviour into 'inner speech', the medium of the child's own personal consciousness and will and of his or her capacity for purposeful and independent action. The halfway house in this internalization process is 'egocentric speech' or, the term preferred nowadays (Wertsch, 1979), 'private speech'.

In more prosaic terms, Vygotsky is attempting to account for our ability to do things 'mentally' or 'in our head'. Roughly speaking, the main idea is that we have to first learn to do things publicly – 'externally' – with others before being able to do them 'internally'.[2] Having first learnt to do sums in the classroom with teacher using pen and paper, we later find ourselves able to do 'mental' arithmetic. Similarly, we learn to read out loud and then 'silently'. More broadly, the capacity to *think* to ourselves, to inwardly reflect on what we are doing, to guide our own actions purposefully and self-consciously, depends on 'inner speech', a specially adapted 'inner' form of language use which, according to his premise, must derive from the 'external' practice of using language in dialogue with others. In themselves these claims were not original or unique to Vygotsky's theory. However, Vygotsky bolstered his own speech internalization hypothesis with detailed claims about the *linguistic* properties of his different speech forms. In particular, drawing heavily on contemporary linguistic ideas, he argued that utterances in 'egocentric speech' (and, by extrapolation, those of 'inner speech') had a peculiar elliptical structure which must be the result of clipping, abbreviating or reducing the expanded and complete utterance forms of 'external speech'. In other words, Vygotsky's psychological theory – a whole conception of what it means to be human, no less – is built around a particular conception of language. And if that conception should turn out to be implausible, what then for the Vygotskian tradition?

In this paper, then, I will approach Vygotsky's linguistic journey of 'internalization' critically and sceptically, drawing on the 'integrationist' critique of orthodox linguistics and, for want of a better term, on common sense observations. I will argue that key aspects of the internalization conception are, indeed, implausible on communicative grounds and will suggest how the phenomena in question may be viewed differently if we change our assumptions about language and communication.

I should acknowledge from the outset that controversy surrounds Vygotsky's concept of 'internalization'. What exactly did he mean by this term? And how can the phenomena he sought to account for best be understood? Some scholars, for example, prefer the term (and the idea of) 'appropriation' to 'internalization' (Tolman, 1999). My discussion, however, is not about the relative merits of 'internalization' or 'appropriation' but *about what it is that is thought to be 'internalized' or 'appropriated'*. In other words, it is about how *language* itself is understood and, more specifically, the problem of trying to build a developmental psychology around particular linguistic assumptions.

2. Cultural-historical language theory: where is it?

Language theory is the poor relative in cultural-historical research. There is, in fact, no distinctive cultural-historical linguistic thinking at all (Jones, 2007). Vygotsky himself was not an original thinker when it came to language theory per se. In fact, one can see in the very foundations of the cultural-historical approach the imprint of traditional and ancient prejudices according to which language, as the expression of human spiritual power, is both the key to the self and the foundation of social life.[3] Furthermore, Vygotsky borrowed both fairly liberally and pretty much uncritically from contemporary linguistic research in which language was, by and large, taken to be a well-defined and self-contained public system of symbolic forms and grammatical rules. Luria, for example, who was a close associate of Vygotsky and one of the founders of cultural-historical psychology, has no qualms whatsoever in describing language as 'a system of codes signifying objects and actions' (1982: 27), as 'a system sufficient in itself for the expression of any abstract relationship or thought' (1982: 28).

[2] See Melser (2004) for a detailed discussion of these 'doing things in the head' metaphors and a forceful critique of 'internalization' accounts.

[3] For detailed discussion of Vygotsky's linguistic influences, see Wertsch (1985), Van der Veer and Valsiner (1991), and Seifrid (2005). A fuller treatment of language theory in Vygotsky is underway (Jones, in preparation).

With some reservations (see Jones, 2007), then, I would argue that the cultural-historical psychology of Vygotsky assumes a fairly conventional linguistic perspective embodying what Harris (1981) refers to as 'the language myth'. In a nutshell, Harris argues that the myth has two basic ingredients. First of all, it sees language use as *telementation*, i.e., as the transmission of thoughts (or 'meaning', or 'information') from one person to another by means of verbal packaging. Secondly, it assumes that this thought transference process is realized by means of a *fixed code* in which 'inner' thought contents (meanings) and their forms (the 'external' verbal packaging), plus rules for the combination of such meaningful units, are generally stable and valid for the entire community of language users. Thus, the language myth underpins a *segregationist* (as opposed to an *integrationist*) linguistics (Harris, 1996), in which language is conceived and studied as a self-contained system whose constituent units have an autonomous existence above and beyond the actual concrete practices of communication in real life and, therefore, of the actual individuals who are responsible for these practices.

It would be completely wrong, then, to assume that segregationist linguistic thinking simply presents us with a set of (objective) facts or discoveries about language which can then be safely accepted and borrowed by the psychologist, sociologist, etc. for his or her own purposes. On the contrary, a linguistics based on the language myth *already embodies both a psychology and a sociology*.

The telementation view grounds a conception of thought as an 'inner' process – a 'mental *content*' or 'representation' - to be given 'outer' expression in verbal *form*. The fixed code position, on the other hand, embodies a particular view of sociality, that is, of the relationship between the individual and society (Harris, 1981). Language is taken to be a social phenomenon but 'social' here means *the same for all individuals*. In other words, sociality is construed from the beginning as the *sameness* or *identity* of individuals and of the attributes (words, meanings, values) which they share.

In short, the myth presents us with a reified or de-personalized picture of linguistic activity in which an anonymous language system, predicated on the assumption of social conformity, is taken to be the precondition for any particular communicative act. Instead of taking the term 'language' to be a general, very fuzzy but useful way of referring to the real life communicative behaviours of concrete individuals, the myth turns the whole thing upside down and sees individual communicative behaviour as a realization or instantiation of 'language'. This abstract theoretician's construct will, according to which theoretician you listen to, consist of units of different kinds which remain identical across their instantiation by different speakers in different utterances. So the spoken word 'ball' or the written form *ball*, for example, will be viewed as *instances* or *tokens* of 'the word' 'ball' where 'the word' is taken to be a system unit or *type* existing (or 'stored') somewhere independently of the individual communicator and available for 'use' in speech or writing.

In borrowing from and building on the linguistics of his day, therefore, Vygotsky was placing this reified, conformist construct right at the heart of his psychological theory.[4]

One of the first casualties of this approach, as we shall see, is the sense of anything much in the way of the child's creative or independent contribution to his or her own development or even of just sheer bloody-mindedness on his or her part. Instead, we have quite a rigid transmission model of linguistic and cultural development that sharply contrasts with other work (e.g., Bruner, 1983; Stetsenko, 2005; Cowley et al., 2004), which emphasises the active, and very different, contributions of both adult and child.

I will now address the arguments that are used to support the speech internalization hypothesis. These arguments are of two kinds. The first revolves around the more technical issues to do with the linguistic properties of 'external speech', 'private speech' and 'inner speech'. The second concerns the claim, connected to Vygotsky's general internalization principle, that self-communicative activity (whether 'private' or 'inner') is a derivative of communication with others ('social speech'). I will examine each set of arguments separately.

[4] Even such passionate advocates of the revolutionary import and implications of Vygotsky's work as Newman and Holzman (1993) feel obliged to acknowledge the reifying tendencies present in Vygotsky's 'genetic approach', which they criticize for being an approach to the study of 'the history of things – the history of language, the history of thought, the history of the relationship between them, the history of the unity (learning-and-development), etc.' as opposed to being about 'being in history' (1993: 88). The point is well made in relation to Vygotsky's view of linguistic internalization which tends to be presented as a history of 'things' such as 'external speech' and 'egocentric speech'.

3. From 'external speech' to 'private speech': linguistic properties and relations

Vygotsky's account of speech internalization is premised on the existence of three different forms of speech activity: 'external speech' (or 'social speech'), 'egocentric speech' (or 'private speech') and 'inner speech'. Vygotsky saw these three forms as structurally and functionally distinct but considered the first – 'external speech' – to be the primary linguistic variety from which the others are derived. Thus, he envisioned a developmental (or 'genetic') pathway stretching between the speech addressed to the child by others ('external speech') through to the older child's use of 'private speech' and then to 'inner speech'. As Feigenbaum (1992: 182) puts it:

'Vygotsky viewed private speech as the link between early socially communicative speech and mature inner speech. Social speech is vocalized speech addressed and intellectually adapted to others, and inner speech is subvocalized speech directed and adapted to oneself, whereas private speech is vocalized speech addressed and adapted to oneself. Thus, private speech is neither social communication nor silent thought, but vocalized thought'.

Since, by definition, nobody could directly observe 'inner speech', Vygotsky's case for the internalization of 'external speech' relies on an extrapolation from the structural and communicative properties of 'egocentric' or 'private' speech. Vygotsky argues that 'private speech', as it begins to be adapted to function as a means of 'self-regulation', bears witness to very specific types of structural deformation applied to 'external speech'. While the utterances of 'external speech', the argument goes, tend to be maximally expanded and explicit owing to their need to be understood by other people in the relevant context, the structures of 'private speech' are adapted to a different context, namely the private and personal cognitive needs of the individual acting independently. This form of 'speech out loud but to oneself' can be readily observed in young children. Vygotsky went on to hypothesize that the progressive tailoring of the explicit structure of 'external speech' for private use culminated in a form of speech – 'inner speech' – which has not only freed itself from all need for public, audible (or visual) expression but is also maximally condensed and abbreviated. In effect, then, Vygotsky's whole case for 'inner speech' and speech internalization generally boils down to his arguments for the structural and functional relations between 'external' speech and 'private' speech. Let us now examine these arguments in more detail.

As we have seen, Vygotsky took 'private speech' as a kind of halfway house between 'external' and 'inner' speech but with very distinctive properties:

'The structural and functional properties of egocentric speech grow with the child's development. At three years of age the distinction between this speech and the child's communicative speech is almost zero. At seven years of age we see a form of speech that is fully 100% different from the social speech of the three-year-old in almost all its functional and structural properties' (Vygotsky in Wertsch, 1985: 117).

Now, in theory, the developmental or transitional status of 'private speech' could have been looked at in a number of ways. For example, if we say that the development of 'Modern English' began with 'Old English' and passed through 'Middle English', we do not imply that Chaucer, in order to produce his 'Middle English' utterance, had to start with an 'Old English' structure first, run through the historical linguistic changes in his mind, and then come out with the result. We know that this terminology ('old'–'middle'–'modern') reflects a teleological perspective derived from historical hindsight. However, it would appear that a structural derivation of this kind is required in order to speak the 'Egocentric' (or 'Private') variety. The child has to create a fully worked out 'social speech' sentence first and then drop the bits that he or she does not need to pronounce:

'As it develops, egocentric speech does not manifest a simple tendency toward abbreviation and the omission of words; it does not manifest a simple transition toward a telegraphic style. Rather, it shows a quite unique tendency toward abbreviating phrases and sentences by preserving the predicate and associated parts of the sentence at the expense of deleting the subject and other words associated with it' (Vygotsky in Wertsch, 1985: 122).

As Feigenbaum (1992: 183) puts it:

'The net result of syntactic abbreviation is that words are omitted from sentences uttered to oneself. Hence, private speech sentences tend to become ungrammatical – that is, they become sentence fragments'.

Similarly, Wertsch (1979: 93) argues that 'one can expect to find certain parts of the utterance dropped' when 'analyzing the surface form of private speech'.

In his account of the phenomena of structural 'abbreviation', Vygotsky appealed to contemporary linguistic analyses of sentence structure and what would now be referred to as 'discourse'. Using a distinction between 'grammatical' and 'psychological' subject and predicate,[5] he justified his 'abbreviation' hypothesis for private speech by an appeal to similar 'abbreviations' in contextualised adult discourse:

'Now let us imagine that several people are waiting for a bus. No one will say, on seeing the bus approach, "The bus for which we are waiting is coming". The sentence is likely to be an abbreviated "Coming", or some such expression, because the subject is plain from the situation' (Vygotsky, 1986: 236).

In this example, as Wertsch notes, 'the extra-linguistic context of the utterance is at issue' (1985: 123). Vygotsky also cited similar phenomena in dialogue:

'The answer to "Would you like a cup of tea?" is never "No, I don't want a cup of tea", but a simple "No"' (Vygotsky, 1986: 236).

Now, this game of guessing how people might or might not have said things in one situation or another is quite an amusing one but in itself is not evidence for the abbreviation hypothesis. We might agree that 'No' is *briefer* than 'No, I don't want a cup of tea', but it is quite another thing to claim that the first is produced by *abbreviating* the second. Other assumptions are clearly in play.

The first assumption is that the segregationist's abstract linguistic system actually constitutes a factor in psychological functioning. Wertsch, for instance, argues that Vygotsky 'identified ways in which semiotic functioning eventually reaches a point where decontextualized sign–sign relationships provide the basis for regulating the child's activity' (Wertsch, 1985: 108).[6] Thus, the 'overarching principle of development' for Vygotsky is, he argues, the 'principle of decontextualization of mediational means' (Wertsch, 1985: 32).[7]

But how are we to imagine these 'decontextualized sign–sign relationships'? Enter the second assumption:

'Vygotsky argued that the end points of a continuum that extends from minimal to maximal predicativity are represented by written language and inner speech, respectively' (Wertsch, 1985: 123).

In other words, written language sentences give us the model for fully expanded, explicit 'external speech' utterances because such sentences are 'decontextualized' from the direct situation of action.

Putting these two assumptions together we can understand the rationale for the abbreviation hypothesis. To be a cognitive instrument for 'self-regulation', 'inner speech' must absorb the abstract conceptual content of the 'external speech' by which the adult regulates the child's behaviour. That content is properly and fully on display only in the 'expanded' and 'decontextualized' sentence, of which written language gives us the example and model. Only the full sentence, as the teachers used to say in my grammar school days, expresses 'a complete thought'.

So whether an utterance is 'abbreviated' or not and whether – and how – it is 'predicative' are to be judged, then, in relation to the 'expanded' version that one might suppose to be the written language equivalent. But here several problems with the argument are immediately evident.

First of all, the claim that the degree and manner of 'abbreviatedness' of a spoken utterance can be evaluated and measured by comparing it with 'written language' is to confuse the written mode per se with the communicative function of written forms which can be as diverse and as contextually 'abbreviated' as spoken language utterances.

Secondly, there is no absolute, that is 'decontextualized', measure of the degree of 'explicitness', 'expandedness' or, conversely, of 'abbreviatedness' of utterances. Vygotsky's 'expanded' bus utterance appears abbreviated and inexplicit in relation to something like 'Dear addressee, a single vehicle of the type which we in this part of Russia would normally assign to the "bus" category and which I assume we are both waiting for in

[5] Vygotsky's view of the 'abbreviation' and 'predicativity' of 'private speech' and of its linkage to 'external speech' was informed by a distinction between 'grammatical' and 'psychological' subjects and predicates 'borrowed from Vossler', according to Van der Veer and Valsiner (1991: 362). However (Roy Harris, personal communication), Vossler's own discussion is based on the earlier work by Hermann Paul and others.

[6] Wertsch cites mathematical symbol systems as paradigm cases of 'deccontextualized' semiotic mediational means and implies that grammatical relations between words in a sentence are, like the relations between symbols in an equation, 'decontextualized sign-sign relationships'. See Harris (2003) for a critique of this interpretation of mathematics.

[7] The cultural-historical insistence on the 'emancipation of the word from practical life' (Luria, 1982: 32), or 'decontextualization' (Wertsch), and the decisive importance of such a 'decontextualized' system for distinctively human behaviour was the main target of criticism for Brushlinsky and other adherents of the Rubinshteinian 'subject-activity' approach (Brushlinksky, 1968).

order to arrive at our destination, is coming at us at a speed of 10 km per hour'. If abbreviated, contextualized utterances are produced by hacking off bits of an unabbreviated, non-contextualized sentence, then you have the problem of deciding (before taking the context into account, presumably) what this initial 'expanded' sentence should be. But if you cannot decide or cannot find good reasons for starting with one 'expanded' form rather than another, then the whole abbreviation hypothesis is in some trouble. And this is before we come to the situation in which the first person at the bus stop says nothing at all but merely catches the other person's eye and gestures with his head towards the street. Are we to take this gesture as an 'abbreviation' of some 'expanded' verbal (or non-verbal) formula?

The process of abbreviation or ellipsis, which cultural-historical scholars are invoking to account for the irregular, mangled, ungrammatical and unclassifiable products of everyday communication, is one that Harris (1981: 152) refers to as a 'standard doctrine of the language myth'. The point of it, Harris argues, is to enable orthodox linguistics to deny 'the renewal of language which is our living inheritance'. The argument that some obscure or misshapen utterance is simply an abbreviation of a perfectly grammatical and meaningful sentence is a ploy which 'allows speakers not to mean what they actually say, but to mean something else which they could have said if only they had taken the trouble to express themselves in a fuller or more explicit form'. But the 'doctrine of incomplete sentences' (Harris, 1981: 201), to which Vygotskians have recourse so readily, does not get us very far 'unless it is in principle possible to identify which the "complete" ones are' (Harris, 1981: 201), a futile endeavour, as Harris argues.

Harris also notes the relevance of Wittgenstein's (1968) discussions to the topic at hand. And, in fact, Wittgenstein identified all the fatal flaws in the abbreviation account in his reflections on the production and interpretation of utterances in context. Wittgenstein begins with an imaginary situation in which a builder (A) and builder's assistant (B) communicate with one another in 'a complete primitive language' which consists only of 'the words "block", "pillar", "slab", "beam":

'A calls them out; – B brings the stone which he has learnt to bring at such-and-such a call' (1968: 3e).

So, for example, the builder might say 'Slab!' and the assistant's job is to fetch a slab.

But is this utterance, he asks, 'a sentence or a word'? (1968: 8e). And his discussion proceeds as follows:

'If a word, surely it has not the same meaning as the like-sounding word of our ordinary language, for in Section 2 [i.e. 'Slab!' in the builder's language, PEJ] it is a call. But if a sentence, it is surely not the elliptical sentence: "Slab!" of our language. – As far as the first question goes you can call "Slab!" a word and also a sentence; perhaps it could be appropriately called a "degenerate sentence" (as one speaks of a degenerate hyperbola); in fact it *is* our "elliptical" sentence. – But that is surely only a shortened form of the sentence "Bring me a slab", and there is no such sentence in example (2). – But why should I not on the contrary have called the sentence "Bring me a slab", a *lengthening* of the sentence "Slab!"? – Because if you shout "Slab!" you really mean: "Bring me a slab". – But how do you do this: how do you *mean* that while you *say* "Slab!"? Do you say the unshortened sentence to yourself? And why should I translate the call "Slab!" into a different expression in order to say what someone means by it? And if they mean the same thing – why should I not say: "When he says "Slab!" he means "Slab!"? Again, if you can mean "Bring me the slab", why should you not be able to mean "Slab!"? – But when I call "Slab!", then what I want is, *that he should bring me a slab!* – Certainly, but does "wanting this" consist in thinking in some form or other a different sentence from the one you utter?' (1968: 8e–9e).

Wittgenstein's discussion develops to take in other matters, but then he delivers the coup de grâce:

'The sentence is "elliptical", not because it leaves out something that we think when we utter it, but because it is shortened – in comparison with a particular paradigm of our grammar. – Of course one might object here: "You grant that the shortened and the unshortened sentences have the same sense. – What is this sense, then? Isn't there a verbal expression for this sense?" – But doesn't the fact that sentences have the same sense consist in their having the same *use*?' (1968: 10e).

This brief passage combines two ideas which jointly devastate the abbreviation approach. First of all, Wittgenstein argues that the abbreviatedness of 'Slab!' in comparison with 'Bring me the slab!' (or 'No!' in comparison with 'No I don't want a cup of tea') is a *grammarian*'s and not a *language user*'s perspective. It reflects, in other words, the assumptions, biases and agendas of grammatical tradition (see Harris, 1981) in which, of course, written language (or, at least, certain styles thereof) is primary. If the derivation of 'brief' utterance from 'expanded' sentence takes place in the mind at all, then, it is in the mind of the grammatical

theorist. Wittgenstein's second point turns the abbreviation theorist's argument upside down. Why might we consider 'the bus is coming' to be a decent paraphrase (a 'lengthening') of the sense of 'coming'? (After all, 'coming' could be lengthened in a million different ways corresponding to as many possible senses). It can only be because we have already worked out the 'use' – the contextualized communicative value – of the utterance in that situation. So in fact the 'use' is primary, and any plausible paraphrase or expansion has to be faithful to that. To appreciate Wittgenstein's point a little better, let us follow the abbreviation arguments a stage further.

In his own elaboration of Vygotsky's hypothesis, Wertsch (1979) attempted to rework Vygotsky's notions of abbreviation and predicativity in terms of a distinction between 'new' and 'old' (or 'given') information drawn by linguists such as Chafe and Halliday. Discussing a sentence 'John repaired the rocking chairs', Wertsch argues that 'either the grammatical subject or the grammatical predicate can convey the given or new information' (1979: 83). Thus, if 'two people are talking about John, we can assume that the notion of John is in the consciousness of both people. Therefore it is the given information' (1979: 83). Whereas 'if A and B are discussing rocking chairs that have been repaired' then in A's utterance of the sentence in question '"John" would probably carry the new information. It is the information introduced into B's consciousness' (1979: 93). Thus, on the assumption that there is a representational correlation between parts of the sentence and the extra-linguistic situation (or information) that the sentence is about, then 'the only thing to be vocalized is new information, and the parts of an utterance which would have conveyed given information are dropped entirely' (1979: 91).

But appeals to discourse phenomena in support of some kind of matching between sentence structure and available 'information' look very dubious when we examine more carefully the different kinds of 'abbreviation' in real life dialogue. Talbot Taylor (1998), in his excellent extended analysis of the issue, draws attention to the phenomenon of 'ellipsis' in such examples as

T1 G. I cannot figure out how to start on a hill.
T2 M. By using the handbrake.
T3 G. And your left foot on the foot brake?
T4 M. No, the clutch.

(Taylor, 1998: 191).

If utterances such as these involve abbreviation (ellipsis) of a more expanded form, then presumably the listener in each case must be able to reconstruct the expanded form from which the contextualized utterance is derived, i.e. we must be able to reconstruct Vygotsky's 'psychological subject' or that part of the sentence which embodies Wertsch's 'old' information.

Taylor invites us to think about how a listener might work back from T2 to a complete grammatical sentence such as 'You start on a hill by using the handbrake'. He argues:

'But to arrive at this target sentence the hearer…could not simply follow a formal procedure. For that might well result in the inappropriate target … "By using the handbrake you figure out how to start on a hill" (Taylor, 1998: 191).

In order to choose between the two grammatically plausible expanded target forms the listener 'would need to determine in advance what [the speaker] meant by that reply. But if s/he could do that then there would be no need to edit it to grammatical sentence form, since the utterance would already have been understood and the edit would be pointless' (1998: 191). Similarly, from T4 we could reconstruct either of the following (1998: 191):

'You start on a hill by using the handbrake and the clutch'.

'You start on a hill by using the handbrake and your left foot on the clutch'.

Taylor concludes

'No comprehensive formal rules may be devised without relying on the hearer's prior understanding of the elliptical or discontinuous utterance. But if the hearer already understands the utterance, then there is no need to edit it to grammatical sentence form' (1998: 191–2).

Taylor considers the question about how hearers 'could make sense of ungrammatical, non-fluent and elliptical utterances' (1998: 192) to be a problem of the linguist's own making. He explains

'The first thing to remark about such a question is that it attributes "disorganization" and "incompletion" [or 'abbreviation', 'fragmentation', and 'ungrammaticality', PEJ] only to utterances which do not approximate to written language style. The question further privileges written language by assuming that writing is more transparently interpretable, i.e. less "confusing". The written language (or "scriptist") bias has a long history in the study of language, and it reflects the continuing influence of the prescriptivism of traditional rhetoric on descriptive linguistics' (1998: 192), an influence alluded to in Wittgenstein's own comment about grammatical paradigms. That cultural-historical psychology is itself afflicted by this scriptist bias is clear from Vygotsky's position on written language mentioned above.[8]

This scriptist bias 'leads to the assumption that the differences spoken language style exhibits, in contrast to written language style, are obstacles to spoken communication' (Taylor, 1998: 192). Consequently, the only way to make any sense out of the ungrammatical and uninterpretable dross coming from real speakers' mouths is by 'editing spoken language to written language form' (1998: 192). But, as we have already seen, it is impossible to work out a reliable set of 'editing rules' of this kind. A fine old mess, as Taylor argues

'In other words, the scriptist bias causes us to perceive a puzzle in spoken language and therefore also to seek explanations for how that puzzle never really poses a problem for conversationalists. The trouble is that the puzzle the scriptist sets himself appears to be unsolvable with the techniques of a linguistics based on scriptist assumptions' (1998: 192).

What, then, would be the alternative to the abbreviation perspective? Taylor argues, in a way that chimes with Wittgenstein's point, that we must abandon the scriptist bias, but in so doing we must also abandon the segregationist assumptions that underlie it:

'the question of how a communicative utterance must be structured is not answerable in terms of a specification of what the final verbal output must look like. An examination of the utterances that conversationalists actually produce leads instead to the conclusion that the final output can look like almost anything, i.e. that no fixed limits may be drawn determining what utterances must be like in order to be communicative... in order to make their utterances cohere, speakers can draw on a potentially limitless range of resources: from gesture to "paralinguistic" and poetic features and from situational context to assumptions of prior experience. For making one's utterance cohere is a fundamentally creative act, and that creativity is not explicable in terms of a simple choice between the instantiation of one fixed string of abstract elements or another. In the end nothing prevents the speaker from incorporating anything at all into his attempt to make his utterance cohere syntagmatically. The distinction, crucial to modern linguistics, between linguistic knowledge and non-linguistic knowledge and between linguistic and discourse or conversational structure knowledge can only serve to prevent the linguist from recognising this fact. At the same time, we must not assume (we have no reason to assume) that the criteria according to which the speaker takes his or her utterance to cohere are the same criteria employed by the hearer. For the act of interpretation is no less creative than the act of speaking, and the creative act is fundamentally the act of an individual. Thus, the communicational efficacy, like the syntagmatic coherence, of an utterance is not only *not* determinable in advance, by the grammar of the language, it is also *not* determinable once-and-for-all for all participants and observers alike.' (1998: 196).

An example might help us to see Taylor's point more clearly. Some years ago I filmed groups of student volunteers attempting to find and implement a solution to a practical task I would set for them.[9] The task involved making use of various materials and implements in order to move a small plastic pot full of chocolates from one part of the room to another without approaching the pot directly. The trick was to improvise a set of tools which could be used to manipulate the pot and its contents at a distance. During one of the sessions, one student, Sarah, suddenly came up with a cunning plan which I wrote down as follows:

[8] This scriptist bias is, in fact, all too evident in cultural-historical psychology. Luria, for example, sees the development of language historically as a process of progressive 'emancipation of the word' from its 'sympractical context' leading to a decontextualized or independent 'synsemantic' linguistic system, of which 'written language' is 'the most developed form' (Luria, 1982: 3).

[9] The research, funded by Sheffield Hallam University, was presented for the first time in 1993 at a conference organized by the Moscow Institute of Psychology, at that time under the directorship of the late A.V. Brushlinsky.

'if you've got that – that's like a thing you've got to get – and there's two people – one person at either end with the string – hold that a minute – *so if like that* – I mean you could just – one person there cross over there – that person cross over there – over the top of the yoghurt pot and hold it tight together and then you lift it like that'

Without seeing what Sarah is doing, of course, and without some sense of what the group are up to, it is impossible to work out what Sarah might be proposing. In this connection, the utterance fragment which I have written as *so if like that* is rather interesting. Sarah is holding an empty plastic bottle and some lengths of string. As she utters these words she loops the string around the bottle. We could, therefore, follow the abbreviation model and reconstruct an expanded source clause such as 'so if you loop the string around the bottle like that'. But there would be an unlimited number of other plausible candidates for the expanded source utterance (e.g., 'so if you take a plastic bottle and wrap lengths of string around it like that', or 'so if these two people were to stand at either end of the room and wind the string round the bottle').

In Taylor's terms, if Sarah's utterance was coherent for this listener (me) then this was not because I could, or needed to, reconstruct some written language source sentence, although, as I have shown, I can certainly produce some 'expanded' sentences that might represent plausible explications of its 'use'. It was coherent for me only as an integral part of the practical demonstration of the technique she had thought of. It was coherent because her speech and bodily movements with string and bottle were combined 'syntagmatically' and integrated into this singular communicative act of demonstrating, to which the linguist's 'grammar' - a grammar of 'decontextualized sign–sign relationships', as Wertsch (1985) puts it - simply cannot apply.

But it is also very important to recognise how much the practice of written transcription in itself – the archetypal 'scriptist' procedure – obscures both 'the process of linguistic renewal', as Harris puts it, and the kind of integration of language with purposeful practice that we see in Sarah's utterance. The transcription itself gives us 'the words' over here – the 'same words' that we have seen before - and 'the context' somewhere else. We then have to imagine ways in which the twain could meet. But 'the words' do not, of course, come separately from 'the context' (Toolan, 1996; Harris, 1996). The very act of transcribing, by definition, forces us to make a separation, based on our own creative interpretation of what is going on, that the real actors cannot.

The abbreviation hypothesis, then, is based on a number of faulty ideas which are imported directly from the conventional linguistic models which, in turn, reproduce traditional grammatical teachings. The first is the idea that actual utterances instantiate 'decontextualized' linguistic elements with pre-determined formal and semantic properties; the second is that the linguistic elements – and *only* the linguistic elements – 'have' meaning; the third is that their meaning consists in representing aspects of the non-linguistic context. But Sarah's demonstration shows us that it is people who *make* meaning in quite novel and original ways out of whatever is to hand and that meaning lies in how we connect things together for particular purposes. (Taylor's argument, then, is not aimed solely at the scriptist bias of much contemporary thinking about language but also at what one might call the 'verbalist' bias according to which thinking and understanding in whatever sphere have to be carried out in some language or other, even if only in the 'language of thought').

The idea that 'private speech' derives from 'external speech', therefore, is based on the same faulty foundations and the claims about structural relationships between them are equally vulnerable. Wertsch, for instance, uses the following example to argue that 'parts of the utterance' are 'dropped' (1979: 93):

> 'Ta goo do. This snake, snake. Hey brak. Oh. Snake.'

With some idea of what the child was up to at the time (doing a jigsaw puzzle in this case), we could probably paraphrase these utterances in some plausible sounding (to us at least) 'expanded' fashion. But, once again, as Wittgenstein's and Taylor's arguments show, this is not a demonstration that such utterance fragments are *derived from* expanded sentences. To put their point more crudely, linguistic communication is not a process in which complete sentences (embodying, perhaps, 'complete thoughts') are constructed ('externally' or 'internally') from the social code as abstract representational models of situations or actions and then bits are lopped off if what they represent is known (or 'given') to others (or to self). Instead, every utterance – however, 'expanded' or 'abbreviated' – is a creative act on the part of the speaking and hearing participants, crafted in context to be part of an ongoing activity, collective or solo.

In conclusion, we do not have to accept that there is a structural process of abbreviation at all relating so-called 'social speech' to 'private speech' and, on Taylor's integrationist account, to expect one is evidence of a misconception about how people actually communicate with others or on their own. To look for such alleged structural correlations in the first place involves the segregationist mistake we have already identified which involves believing in a self-contained ('decontextualized') verbal layer premised on a separation in principle between linguistic and non linguistic behaviour and between linguistic and non-linguistic knowledge as a factor in human activity.

Indeed, one could go a step further and say that there is no such thing as 'social speech' or 'private speech' in the Vygotskian sense either, since these notions in themselves are reified spin-offs from segregationist assumptions. Sometimes we talk to other people and sometimes we talk to ourselves in private, and there are bound to be all sorts of differences between our behaviours in such contexts. But then talking to one other person is different from talking to a group of five people, or to three men and their dogs. We do not have to suppose that there is a different and definite type of speech in use in these varying contexts, but only that people will adapt their communicative behaviour in various ways in order to handle the interactional variables as they are able (or want) to.

Furthermore, if the abbreviation approach falls, then so does the case for speech internalization in so far as this case is anchored in the alleged structural continuities and discontinuities between 'private speech' and 'social speech'. For if we cannot account for talking to oneself in terms of structural transformations from talking to other people, then there is no reason to think that the former derives from the latter at all. One might, therefore, suggest that the whole linguistic internalization hypothesis is informed and motivated by the traditional grammarian's scriptist assumptions and results from choosing examples of verbal behaviour (taken from different people and different contexts) which can be arranged in a sequence in accordance with their closeness of fit to the scriptist ideal of a complete ('decontextualized') sentence. This quite artificial, and illusory, sequence can then be viewed in 'developmental' terms as the progressive abbreviation of social speech as it is contextualized in individual experience.

Now this is not to deny that people's communicative and linguistic skills develop over time just as other skills do. From one point of view, we might reasonably describe the expert performance of skilled practitioners in different spheres with words like 'abbreviated', 'fluid', 'streamlined' and 'efficient'. If we stick at it, we can get quicker at doing things and the bodily movements we make in routine practice become smoother, more focussed, more accurate, more effortless and so on. We need to only think about the uncoordinated efforts of a child learning to ride a bike with a parent holding the saddle and compare that to the dazzling accomplishments (wheelies and so on) of that same child several years down the line to note the 'abbreviation' and streamlining of different bodily actions in the seamless dynamic whole of the mature performance. But nobody would want to claim that the skilled maneuver – however *brief* in execution when compared with the early, clumsy attempts – is a real-time *abbreviation* of anything. The child's bike riding ability does not involve a psychological process in which some 'expanded' behavioural template for the maneuver (whether 'external' or 'internal') is invoked and then shortened.

So instead of trying to derive the bursts of verbal activity produced by skilled speakers while going about their business in particular circumstances from some hypothetical 'decontextualized' sentence form, why do we not see them as behaviours which are crafted in situ, with whatever degree of communicative skill they happen to be able to muster, as dialectically integrated aspects of their ongoing (real or imagined) action? And, again, we do not need to doubt that people develop as communicators, as writers or speakers, or as thinkers, or that there may be some developmental direction or logic to the way particular individuals acquire, or display, their habits and abilities (although surely no general 'law').[10]

At this stage, a defender of Vygotsky's position could well argue that I am wilfully overlooking the clear recognition by Vygotsky of the contextual determination of utterances and his detailed discussion of a distinction between 'meaning' and 'sense' (Vygotsky, 1986). Wertsch, for example, argues that Vygotsky 'studied the ways in which the structure and interpretation of linguistic signs depend on their relationship with the context

[10] Feigenbaum (1992: 197) notes that 10 out of the 30 children in his study of private speech, including 'half of the four-year olds', 'never spoke a word throughout the course of the experiment'.

in which they appear. This aspect of his semiotic analysis provides the foundation for his account of inner speech and relies on his notion of "sense" (*smysl*)' (1985: 95). But the very distinction of 'meaning' and 'sense' depends on the prior assumption that words – their forms and meanings – exist first of all as elements of a language system independent of communicative practice and that, subsequently, these system units are 'privatized' through internalization and individualized sense creation. In other words, the kind of contextualization that is envisaged in the internalization account is one in which the already 'decontextualized' abstractions of the language system are progressively immersed in individual practice and personal experience, a process in which elements in the 'complete sentence' of the 'decontextualized' 'external speech' form are 'dropped' if they match elements of the context.

While Wertsch considers the 'decontextualization of mediational means' to be the 'overarching principle' of the cultural-historical perspective (1985: 32), Harris argues the integrationist case that 'it is – humanly – impossible to decontextualize communication' (1996: 71). Instead, then, of starting with such abstractions as 'the language', integrationists begin from 'the first-order activity of making and interpreting linguistic signs, which in turn is a real-time, contextually determined process of investing behaviour or the products of behaviour (vocal, gestural or other) with semiotic significance' (Love, 2004: 530).

On the integrationist view, the very talk of 'internalizing' symbols, signs, linguistic rules or means of semiotic mediation is symptomatic of a reified perspective on human communication:

'Even when located in an appropriate environment, an object only functions semiotically in so far as someone makes it do so. The signhood of the speed-limit sign is not immanent in it... Signhood is conferred on a sign – on what thereby becomes a sign – if and when human beings (or other semiotically competent creatures) attach a signification to it that goes beyond its intrinsic physical properties, whether in furtherance of a particular programme of activities, or to link different aspects or phases of their activities, to enrich their understanding of their local circumstances or general situation' (Love, 2004: 531).[11]

From this point of view 'using language is a matter of creatively endowing certain phenomena with semiotic significance in order to operate relevantly on the world in accordance with the exigencies of an incessant flow of unique, real-time communication situations' (Love, 2004: 532).

Crudely put, the internalization model assumes that the signhood of language units has already been established by 'society' and that these already signifying units then implant themselves into the individual's psyche. So, in 'social speech', first of all, we have 'the word' *ball* and now we see 'the word' – 'the same word' – again in 'private speech'. It stands to reason that the only way this 'external' speech unit, this 'same word', could find itself at the individual's (private) disposal is if it has been 'taken in' by the individual. And it does not matter if we replace 'internalization' with 'appropriation' here: the problem is not about whether 'the word' is internalized or appropriated but whether 'the word' is there to be internalized or appropriated in the first place.

If Harris, Love and Taylor are right, signs are simply not there to be handled in any such fashion. Signs are *created* in an act of endowing phenomena with transient significance as part of an action being purposefully pursued in collaboration or privately. If there is no talk of signhood outside of purposeful activity, purposeful activity does not depend on the prior existence of signs; it is, rather, the condition for their creation (production and interpretation). Meaning is not the property of a thing but a way for the acting subject to 'take' things or make things in relation to what he or she is doing and is about to do.[12]

Communication cannot, then, be a question of 'using' some already signifying sign and of inserting it into a new context: what would it be signifying, and for whom, when not 'in use'? Rather, the sign must be created now at this particular moment to serve as an integrated link or multi-link in the dynamically developing chain of ongoing action.

Whatever degree of similarity we may observe between the communicative practices of 'private' and 'social' speech, we do not need to think of the signs involved in our acts of 'private' (or 'inner') speech as having been

[11] Cf Wittgenstein on this:' How does it come about that this arrow >>- - -→ *points*? Doesn't it seem to carry in it something besides itself? – "No, not the dead line on paper; only the psychical thing, the meaning, can do that". – That is both true and false. The arrow points only in the application that a living being makes of it' (1968: 132e).

[12] For that very reason, the 'material' on which signhood is conferred ('natural' or 'artificial') cannot serve as a criterion for distinguishing 'cultural' signs from 'natural' stimuli. Navigating by the sun, moon and stars is just as much a cultural attainment as writing metaphysical poetry.

imported in from the outside. These self-communicative practices are, like all other communicative practices, 'a real-time, contextually determined process of investing behaviour or the products of behaviour (vocal, gestural or other) with semiotic significance' (Love, 2004, above).

However, is this not throwing the baby out with the bathwater? Looking at the 'private speech' utterances (or, at least, the written transcript) from Wertsch (1979: 93) given above, surely it is absolutely self-evident that this child's utterance of the word 'snake' presupposes the 'appropriation' of the word from 'social speech'? The child has not suddenly and by a strange coincidence invented English, so to speak, all by himself. Does it not make sense, then, to argue that there must be a 'developmental' progression from 'social' to 'private' speech, if not an 'internalization' process going on between the two?

Let us grant that Wertsch's 'private speech' utterances could not be happening without the child's previous experience of what we would casually call 'speaking English' in company. But, if we look beyond the internalization model and the linguistics it presupposes, can we not also see that it would be a mistake to take for granted what the practice of transcription necessarily implies, namely that we can identify 'the words' and their meaning separately from the child's actions? To proceed in this way is, as Taylor argues, to read an abstract and artificial division between 'language' and 'non-language', and between 'linguistic' and 'non-linguistic' meaning, into an integrated and dynamic behavioural totality and, thereby, to prejudge the communicative and cognitive value of segregated bits of behaviour. This is not to deny the continuities that we may perceive between the child's vocal behaviour now and any previous communicative experience, although it is safe to assume (with Taylor) that the continuities perceived will not be the same for everybody. But, rather than considering the child's vocal activity as evidence of the individualized 'use' of 'social speech' (on its way 'inwards'), can we not consider it as an instance of communicative creativity which escapes categorization in traditional linguistic terms altogether? Could we not see these utterances as an indissoluble part of whatever the child is doing, as a contribution to the working out of the child's feelings and actions in which any and all previous experiences, including communicative ones, can be drawn on, or imaginatively 'recreated', 'borrowed' or redesigned, in the act of crafting something of semiotic value in the here-and-now? From this point of view, of course, all the child's communicative acts are creative practices. The child has been 'inventing English' every time he or she has spoken.

At this point, let us move to the second set of arguments for the internalization of social speech, having to do with the derivation of self-communication from 'social speech'.

4. From social communication to self-communication

For Vygotsky, the journey from 'external' to 'inner' speech was both a typical and also a pivotal instance of 'internalization', understood as the 'transition from a social influence outside the individual to a social influence within the individual' (Vygotsky, in Wertsch, 1985: 61), a position enshrined in Vygotsky's 'general genetic law of cultural development':

'Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition' (Vygotsky in Wertsch, 1985: 60–61).

The speech internalization process was considered to be a manifestation of the same law and led to the acquisition by the child of the linguistic instruments of 'self-regulation', i.e., the tools to enable the conscious and deliberate planning and organizing of his or her own actions according to a goal or intention expressed in verbal meanings. As Diaz and Berk (1992: 2) put it: 'In private speech, children begin to use for themselves the tools and signs that caregivers use to regulate their behaviour', and so 'the language of social communication becomes a tool for self-regulation'.

Many cultural-historical scholars are quite explicit about the need for the child to internalize 'social' or 'external' speech as a precondition for voluntary and independent action:

'The child has no capacity for self-direction according to Lurian theory until the acquisition of spoken language, which then mediates between the child and the direct stimulus' (Vocate, 1987: 161).

Luria himself puts it this way:

'The ontogenesis of voluntary action begins with the practical act that the child performs in response to the command of an adult' (1982: 90).

At first, he argues, the child's action is prompted and guided by an adult's verbal commands. It is 'only at the next stage of development that the child learns to speak and can begin to give spoken commands to himself/herself', at first 'externally, in the form of overt speech', and then 'internally, through inner speech' (1982: 89).

Similarly, Wertsch argues that it is not until a child has begun to 'internalize' social speech – taking the other-directed utterances in interpersonal contexts and directing them towards self – that he or she could be said to be 'self-regulating':

'During the time before the child begins to use private speech for self-regulation, we can say that in most cases independent behaviour appearing to be directed toward a goal, does not really constitute an action whose goal requires an abstract representation. The behaviour is guided by phenomena in the physical environment, which attract the child's attention... *Behavioural sequences, which may appear to be actions, are either guided by other-regulation or by object-regulation, rather than self-regulation.* With the appearance of private speech, the child has a means for representing goals. This representation eventually will be independent of any perceptually present phenomena and therefore provides the means for focusing on an abstract goal and ignoring perceptually salient, but task irrelevant, aspects of the environment' (Wertsch, 1979: 90, my emphasis).

Before we look more closely at the theoretical foundations of these accounts, it is perhaps worth raising some common sense worries about the one-sidedness of them. The relationship between the 'social' (care) giver and individual child (receiver) as pictured here seems to be all one-way. What about the 'tools and signs' *that children themselves use to regulate their caregivers' behaviour?* Do not the child's actions and communications – and from a very early age (Cowley et al., 2004; Cowley, 2007) – have a very powerful 'regulating' effect on the adult? Indeed, is it not the case in fact that from the first months of life, baby and caregiver cooperate in 'co-constructing' (Cowley, 2007) their communicative and practical actions (to the extent that one can even distinguish these), thereby developing and exercising 'dual control' (Cowley; 2007) over communicative resources and over the initiation, progress and outcome of particular joint actions? And in exercising this dual control, is the child not *also 'self-regulating*?

In fact there is something deeply paradoxical about the conception of speech in the internalization account. If 'self-regulation' depends on speech in its 'regulating function', then what does speech depend on and who is 'regulating' it? Is not speaking itself a willful, voluntary, 'self-regulated' and 'self-regulating' act? If 'private speech' is necessary to initiate, control and regulate the child's voluntary actions, then who is controlling and regulating 'private speech' which appears to be a spontaneous and voluntary communicative behaviour on the child's part? In attempting to explain voluntary acts by the mediating and regulating role of (privatized) social speech, the internalization approach seems to have forgotten the voluntary act of speaking itself.

Cultural-historical theory is, I believe, in a bit of a 'Catch-22 situation' here. If it can accept what has become fairly commonplace in child language research, namely the idea that the child's own communicative behaviour displays voluntariness, spontaneousness, creativity and originality, then it must also accept that this obvious *cultural* behaviour does not result from internalizing 'external' ('social') speech. If, on the other hand, we want to maintain this strict division between 'cultural' (mediated by 'social speech') and 'natural' functions, we will have to claim that the child's early communicative efforts are not really 'language' at all and that what appears to be voluntary behaviour ('self-regulation') is only an involuntary reaction to situational stimuli or instinctive mimicry of adult vocal (or signed) behaviour.[13] And, indeed, what strikes the sceptical reader is the extent to which the standard cultural-historical picture of child development – of which Diaz's description of self-regulation above is a good instance – is bleached of any sense of willful action or communicative initiative on the child's own part. In general, the child appears not as a subject of activity and a participant in the creation of cultural forms of life, as in Cowley's (2007) account, but as an object to be worked on by the adult's will and to be commanded into action by 'the language of social communication'.[14]

[13] See Ninio (1993: 27) for an eloquent and systematic demolition of the 'situational' interpretation of early child speech as 'under the control of stimulus conditions, rather than the control of the speaker's intent to communicate some meaning'.

[14] But see Stetsenko (2005) for an analysis, in cultural-historical perspective, of the young child's pre-linguistic communication which does not fall into this trap.

But perhaps we can look at the self-communicative practices of child and adult in a different light?

Harris (1996) rightly notes that 'theorists who are willing to recognize the phenomenon of self-communication try to account for it simply by treating it as a special case of interpersonal communication'. Luria is clearly one of those theorists. However, Harris argues

'This is a mistake; and, once again, a mistake that ignores universal lessons of daily experience. It is an absurdity to treat A communicating with A as a special case of A communicating with B, the sole difference being that one person plays both roles' (1996: 172).

He explains

'Between self-communication and interpersonal communication there are ineradicable differences, which integrational theory explains by pointing to the different activities integrated and the different patterns of integration involved. I can greet others and take leave of them, but I can neither greet myself nor bid myself farewell. I can attract the attention of others by a wave or a shout, but waving or shouting to myself does not attract my own attention. I cannot tell myself what I already know: I can at best remind myself of it. And when I discover that I have sent myself an invitation to my own dinner party, it is time I took a holiday or went for a medical check-up. Not, in any case, time to write myself a note of acceptance' (1996: 172).

Taking Harris's point, is it not 'an absurdity' to think that, in order to do something deliberately and voluntarily, you must 'give a verbal instruction' to yourself? (And who is giving you the verbal instruction to issue the verbal instruction?). If I feed my cat every time he meows, but one morning decide to put his food out while he is still asleep, do I have to meow to myself? (Or do it silently in the 'inner speech' equivalent?).

In fact, how would you go about giving a verbal instruction to yourself? I can certainly say out loud to myself: 'Lift your arm!' (or should I say: 'Lift my arm!'?). But I find personally that this does not have any effect. Am I disobeying myself? Certainly, my utterance sounds like a verbal instruction, but the similarity is, so to speak, only skin deep. There is, in principle an ineradicable, functional communicational gulf between communication with others and self-communication. *Indeed, that was one of Vygotsky's main insights*. But that is also why the apparent 'structural' continuities and similarities between 'social' and 'private' speech should not lead us to assume that the latter derives from the former, or that 'private speech' is an individualized version of 'social speech'.

For Harris, all attempts to see self-communication as a sub-category or derivative of interpersonal communication 'mark a stage in the history of communication studies when it was assumed that in order to make any sense of the notion of communication at all, it was necessary to suppose a public code of some kind available' (1996: 173).

However,

'The simple truth about "private" signs is that we construct them all the time. And unless we could do so, we would find life very strange. This private sign-making we usually call by some other name, such as "getting to know" or "familiarizing ourselves with" something (a room, a street, a journey, a routine). I know, for example, that on my way home, by the time I have moved up into third gear from the traffic lights by the bridge, it is time to start signalling for my right turn by the church on the next corner. My daily journey is one continuous process of self-communication, even though much of the sign-making involves public landmarks. But what is public about them is their physical presence, not their semiological function. The church does not mean "turn right here" except with respect to that temporally integrated sequence of events which my journey consists in' (1996: 173).

Harris is not arguing that our sensations and perceptions, even our awareness of our sensations and perceptions, are communicative phenomena in themselves. But one may 'treat them as signs for purposes of some further activity' (1996: 177):

'There are indeed cases where my sensations become signs. Groping my way through a familiar room in the dark (because the lights have fused), what my fingers feel and my feet encounter become signs of chairs, tables, walls, doors, etc. There is no semiological mystery here. These sensations become signs because – and insofar as – they integrate past memories with a current programme of action – i.e. crossing the room in the dark' (Harris, 1996: 176).

For Harris, then, there are two mistakes involved in considering 'self-communication as merely the private counterpart of interpersonal communication' (1996: 183):

'The first mistake is missing the essential point that self-communication is not an adventitious exercise that one happens from time to time to engage in, but *the* instrument by which self-awareness is maintained and developed. The first mistake is bad enough, but the second is worse. The second is failing to see that it is the experience of self-communication which shapes and informs our understanding of interpersonal communication, and not vice versa' (1996: 183).

It is, therefore, the language myth itself - the assumption that the individual can only *use*, can only *instantiate*, but never *create,* language; the assumption that meaning inheres in the elements of the public code – which obscures the continuous, creative self-communicative practices that are the necessary precondition for doing, learning, or thinking anything at all.

All of which brings us, finally, to the phenomena of inner self-communicative experience, including 'inner speech'. We 'talk to ourselves' silently in our heads as we reason out a problem, read to ourselves, recreate or imagine events, relive memories, hear melodies and voices, etc. To talk 'in my head' surely presupposes experience of talking out loud to others: could we not see this inner talking as 'internalization' of outer talking?

Once again, Harris makes us think about the phenomena differently. He notes, following Tomatis, that, in speaking: 'The speaker is the first listener' (Harris, 1996: 167). As you speak to someone you hear yourself speak:

'We learn to speak to others by a process which involves speaking also to ourselves. And this speaking to ourselves is not a mere bonus, accident or redundancy, but an essential component in the larger enterprise' (1996: 167).

In other words, the activity of 'self-communication' is not *derived from* 'other-communication' but is already *part of it* from the very beginning. In communicating, we hear ourselves, we experience ourselves communicating, just as we hear others communicating with us. To say something is to hear it, to feel ourselves say it, to create a memory of saying it and of the sound of it. The 'inner', personal experiential realm of communication is, therefore, an inseparable part of our 'external', social behaviour. While it is true, then, that we would not be able to create the familiar inner streams of self-communicative activity without the experience of communicating with other people, these inner signs are not the outer ones internalized but are novel semiotic creations which feed on both private and public experiences but are crafted afresh as integrated parts of our ongoing thinking or acting. They are evidence of our adaptive communicative ability to make new signs from – 'to confer signhood' on – material of any kind, including the material of our inner experiences and memories.

What applies to communication also applies to any other activity: we have the experience of performing it as we perform it, as well as knowledge of its results and outcomes. And this experience informs future performance as well as providing one source of material, to be combined 'syntagmatically' (or simultaneously) with whatever else is available to us ('internally' or 'externally) to create our own private 're-playing', 'rehearsal', 'recreation' or 'redesign' of the activity in the self-communicational flow of our imagination.

5. Conclusion

I have argued that the cultural-historical conception of linguistic internalization betrays the powerful influence of what Harris (1981) calls the 'language myth' and can be challenged on that score at crucial points.

The problems I have identified in Vygotsky's account of the movement from 'external' to 'inner' speech stem from the segregationist assumption that language constitutes a self-contained realm of meaningful forms which maintains its integrity and identity as between people and contexts. This assumption leads him to take a reified language system – in effect, his 'external' or 'social' speech – as the necessary basis for individual communication and cognition and then to derive 'private speech' from it by processes of structural simplification and modification.

But what seems to be a technical linguistic argument has profound implications not only for our understanding of the communicative and cognitive practices of individuals but for our understanding of individual subjectivity itself. This is because the language myth leads us in one way or another, to one degree or another, to see human sociality in terms of abstract identity rather than in terms of the myriad interdependencies and reciprocal interactions of concrete individuals.

What I have produced here is only a start, and a poor one at that, in the direction of a critical review of the linguistics embodied in Vygotsky's ideas and legacy. But I hope my slightly irreverent romp around cultural-historical doctrine may provoke some discussion.

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