Chapter 8
Psychology and Psychologies 'from the Language End': Critical Reflections

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Abstract This chapter emphasizes the intimate interdependence of perspectives on linguistic communication and perspectives on mental powers within psychological theory and gives a critical overview of conceptions of language and communication which are either proclaimed or assumed in cultural-historical and critical psychological traditions. Focussing in detail on Vygotskian psychology as an illustration, the chapter argues that key psychological principles within the cultural-historical tradition (mediation, internalization, conceptual development, meaning and sense) betray the influence of mechanistic and decontextualizing perspectives on semiotic and linguistic activity. The chapter argues for an 'actional-integrative' approach to sign-making and examines the implications of adopting such a standpoint for a re-evaluation and reorientation of cultural and critical psychology.

> The source of social behavior and consciousness also lies in speech in the broad sense of the word (Vygotsky, 1987: 42).[1]

> That Russians have tended to profess a near-religious, if not indeed fetishistic, veneration for the power of language – for the Word – is well known, as are the particularly intense declarations of that veneration which appeared in the first part of the twentieth century (Seifrid, 2005: 1).

Introduction

A human life is a communicative life. The collective endeavours in and through which the fabric of our personal lives and identities is woven (or unravelled) require a dynamic, perpetually renewed coordination and integration of individual efforts that can only be achieved communicationally, 'mainly by means of signs of various

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[1] From Vygotsky's 1926 paper, 'The methods of reflexological and psychological demonstration'.

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kinds' (Harris, 1996: 68). Communication, then, 'is not something additional to or separable from the rest of human life and the constantly changing circumstances that it presents, but an integrated part of it' (Harris, 1996: 13).

Since sociality is communicationally accomplished, our views of communication – of these 'signs of various kinds' – and of the organizing values or functions which we create in their making must inform our views about everything else that we are and do. Hence, our conceptions of social organization (including social institutions and social class), of the relationship between individual and collective action, of the mind, of learning, of reason and rationality and of human potential more generally, presuppose or imply particular perspectives on the communicational activities and relations in which such human capacities, whether we call them 'social' or 'psychological', are developed. Conversely, any view of our communicational powers itself projects assumptions about the psychological capacities which such powers presuppose, display and develop as well as the forms of social organization and interpersonal relations on which they depend and to which they contribute: a psychology and a sociology are already implicit in the model of signification which informs the way we account for those aspects of human conduct referred to as 'social' or 'psychological'.

In short, all psychological theories and approaches are underpinned by general conceptions (more or less explicit) of communication. This is not simply a question of how psychological or sociological notions are articulated with respect to a view of communication more broadly or of language more narrowly, but the very identification of and distinction between 'social' and 'psychological' and their relationship. Different views of communication and of the communicational proficiencies exercised in particular episodes (and sequences of episodes) enable or imply quite different views of sociality and, therefore, of socio-historical development and, not least, the potential for social change and transformation. No attempt to construct a 'critical psychology', or a 'cultural-historical' psychology, can afford to ignore this lesson. This is particularly important, as we shall see, in the case of Vygotskian psychology where a particular conception of *the social becoming the psychological* defines the fundamental problematic for the whole theory.

It is this intimate interdependence between conceptions of the 'psychological' and the 'social' on the one hand and conceptions of communication on the other that constitutes the general theme for this chapter and forms the context for the specific argument to be developed. To approach psychologies 'from the language end', then, is to acknowledge, first and foremost, the dependence of psychological constructs on communicational conceptions and the view of the social which such conceptions presuppose and, secondly, to insist that all such communicational conceptions stand in need of critical interrogation and challenge for the view of the social which they assume or promote.

In that light, my particular focus will be on the general problem of how sociality appears in the key linguistic and communicational constructs and methods with which Vygotsky built his psychological theory, with some specific attention given to the notion of 'internalization'. There is particular value in approaching Vygotsky's psychology from the language end because no psychological theory is more

explicitly dependent on ideas about language and communication (Jones, 2007, 2019; in press). Vygotsky's theory is built from the ground up around particular conceptions of speech, writing, word, word meaning, sense, sign, signification, the pointing gesture and the command – to name the most obvious and important linguistic and communicational constructs in Vygotsky's work – and on the dynamic semiological processes of mediation and internalization which such constructs enable. My aim is not so much to attempt a systematic rebuttal, from a communicational perspective, of the psychological principles motivating the hotly disputed conception of 'internalization' (or 'vrashchivanie') (see Yasnitsky, 2019) as to further open up for scholarly reflection the very fact that these principles have a communicational design which is profoundly contestable and, indeed, are a current subject of lively debate (Hauser, 2015; Jones, 2009; Kellogg, 2019; Sawyer & Stetsenko, 2018; Steinbach Kohler & Thorne, 2011; Yasnitsky, 2019).[2] But before we turn directly to this particular issue and its ramifications, let us examine what is at stake more generally in the relationship between communication and society.

Linguistics and Sociality

This fundamental link between semiological, psychological and sociological conceptions and commitments was noted in Harris's critical account of the social theory implicit in the linguistic structuralism of Ferdinand de Saussure:

> The basic questions the *Cours* deals with are questions which will arise wherever a discipline is concerned with elucidating the mechanisms by which the individual and the collectivity are mysteriously united in social interaction. (1987: 236)

Saussure's elucidation, Harris argues, took him along one particular path through the spaghetti jungle of possible directions of travel:

> Durkheim, like Saussure, sees both languages and currencies as obvious examples of social systems which cannot be explained in terms of a fortunate conformity between individual practices. 'The system of signs I use to express my thought, the system of currency I use to pay my debts, the instruments of credit I use in my commercial relations, the practices followed in my profession, etc., function independently of my own use of them. And these statements can be repeated for each member of society. Here, then, are ways of acting, thinking and feeling that present the noteworthy property of existing outside the individual consciousness'. (Harris, 1987: 226)

As a consequence, Saussure's approach to 'linguistic facts' was premised on the 'autonomy of the sign vis-a-vis its users and its uses' Harris (1996: 6). Such a view of language in turn has profound implications for thinking about 'the social' more

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[2] My own theoretical allegiance is principally to the 'integrationist' school developed by Roy Harris and colleagues. For an overview of the integrationist perspective (and its relationship to 'segregationism'), see the Preface and Chapter 1 of Harris (1996). I have attempted to explore the implications of integrationism for Vygotskian theory, and for the internalization conception in particular, in Jones. (2007, 2009, 2011, in press)

generally. Firstly, it projects a clean-cut separation – 'segregation' in Harris's (1996) terms – of an apparent domain of sui generis linguistic 'facts' and principles from all other aspects of social conduct. Furthermore, it licences a view of human sociality itself as founded on such a self-contained system of allegedly shared meanings (or values) rather than as the dynamic, concrete forms of active interaction and interconnection between individuals. Cognition, by the same token, appears as the inculcation and use of a pre-established store of 'shared meanings' which define and delimit what can be meant, rather than seeing thinking as an integral dimension of the creative flow of activity in context. So viewed, language comes to centre stage to play the main fiddle in the orchestration of a distinctively human mode of life. Tim Ingold (2018, Chapter 4) has recently described the impact of Saussurean linguistic structuralism on the conception of sociality in influential traditions of anthropology. But one can also see how this particular semiological view has made its mark on accounts of sociality and human development within sociocultural or (post-Vygotskian) cultural-historical tradition:

> All children are born into a culturally organized community, where people live and work together and communicate their experiences to each other. All transactions in this world are contingent on the individuals' ability to participate in a collective body of knowledge that informs them of how events should be interpreted, what value judgments accompany certain actions, and what the natural texture of everyday life is. *These modes of interpretation are common to all members of a culture. If we transfer our attention from considering the world of nature to that of relationships and social activities, we find ample confirmation that, for example, no object exists that does not presuppose a common interpretation.* (Perinat and Sadurni 1999: 54, my emphasis)

Erica Burman's work (e.g. 2016) has perhaps drawn in sharpest outline the sociohistorical development and ideological significance of the web of interconnected assumptions and positions on sociality and language in the history of developmental psychology more generally. In a striking passage, Burman draws attention to the fundamental significance for psychological theory, and intellectual culture more generally, of the analyst/observer's interpretations of children's communicational behaviours at the smallest scale and the implications, consequently, of the vulnerability and instability of such interpretations:

> Developmental psychology both partakes of and informs cultural representations of the origins and nature of social organisation that are recycled within models of social development. But just as it is by no means clear that we can determine if a baby's cry or smile has meaning, and, even if it has, that this is not fixed or shared except by historical and cultural convention, so significations of children, including what childhood is and what meaning this holds, are by no means as stable and homogeneous as has been assumed. (2016: 65)

Nowhere have the consequences of analytical methodologies applied to communicational conduct been so clearly challenged as in the British sociologist and ethnomethodologist Anthony Wootton's critique of the use of linguistic and discourse frameworks and models in the creation of particular sociological theories and methods (Wootton, 1975). In his remarkable, and underrated, little book published more than 40 years ago, Wootton undertook a critical examination of the role of linguistic 'data', in addition to overt theorizing of language, in a variety of sociological

approaches. Wootton was specifically concerned to explore sociology's investment in, and consequent dependence on, linguistic theory and analysis and, more specifically, to examine the methods of language-based investigation which sociologists put to use in establishing or validating sociological 'facts' or general propositions about social processes. 'Sociology', as he puts it, 'is intimately concerned with the study of what people say' (1975: 13). He goes on:

> Much time is spent in methodology courses discussing the ways in which what people say can be transformed into data, how the context in which a question is being asked influences a person's response, and so on. After some consideration of such issues it soon becomes clear that handling responses and deciding on the status they can be assigned is no easy matter. (1975: 13)

In order to illustrate and probe the problematic nature of this kind of procedure, Wootton examines a range of sociological approaches for which linguistic 'data' and its interpretation are fundamental and which have drawn on particular kinds of explicit linguistic theorizing as support. His careful investigation does not make easy reading for anyone who believes that 'social reality' readily and reliably surrenders itself to methods of linguistic sampling, coding, interpretation or indeed any descriptive or analytic procedure which would allow the sociological researcher to pronounce with confidence on what the participants in such and such an event 'really mean', or what they are up to. Nevertheless, the history of psychology, and of sociology, not to mention the history of operationalizing psychological/sociological concepts and frameworks for educational theory and practice, is a continuous stream of confident pronouncements on what this child 'said' and 'meant', from the perspective of some theoretical frame or other (see Jones, 2013).[3] The lesson of Wootton's study is that what may be uncritically presented as 'analysis' of language 'data' is not a representation of linguistic 'facts' but *is itself*, first and foremost, a communicational practice with its own, often unexamined, assumptions, agendas and blind spots (Jones, 2017).

Vygotsky, Language and the Social

The linguistic and communicational infrastructure of Vygotsky's evolving psychological theorizing has remained relatively free from serious critical attention, despite the voluminous ongoing work of exposition and critical analysis of the semiotically grounded concept of *perezhivanie* in the context of a more general consideration of 'subjectivity' (e.g. González Rey, Mitjáns Martínez, & Goulart, 2019; and cf. Jones, 2019). This is not an issue which exclusively affects Vygotsky's work, of course, but extends to the work of other cultural-historical and activity theory psychologists

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[3] In his later work, in which he attempts to account for his daughter's linguistic development, Wootton also brings his critical insights to bear on Vygotsky's theory (see Wootton, 1997, 2006; and cf Lerner, Zimmerman, & Kidwell, 2011).

and contributors, including A N Leont'ev, Luria, Galperin, Bozhovich and A A Leontiev, as well as to the work of other influential theorists in the post-revolutionary period, notably S L Rubinshtein whose own work on language, on significant points at odds with Vygotsky (Jones, 2002), cries out for scholarly examination. Luria's output is particularly intriguing for the depth of his engagement with contemporary linguistic theory in the Chomskyan age (see Jones, 2018c). Nonetheless, Vygotsky's psychology was distinctive in being grounded on a particular account of those 'signs of various kinds' through which social life was thought to be organized and coordinated. For that reason, it is vital to examine critically the qualities Vygotsky attributes to signs as organizational tools or, putting it another way, the conception of the signifying *power* that words and other signs must possess in order to forge the interpersonal links which social organization presupposes and requires.

In terms of the general sociological commitments which Vygotsky professed, his psychological work is most often painted – by advocates and critics alike – as having its inspiration, intellectual roots and principal concepts and methods in Marx's work. While I believe the relationship between Marx and Vygotsky is problematic (Jones, 2019), there is no doubt that Vygotsky placed the social bond – 'the mechanisms by which the individual and the collectivity are mysteriously united in social interaction' (Harris, 1987, cited above) – at the very heart of his theory and as the key to its semiologically informed principles. And therein lies the rub.

What is at stake appears in particularly acute shape in different authors' accounts of internalization in Vygotsky. Thus, in what is a typical account, internalization is at once 'primarily concerned with social processes', as Wertsch and Stone (1985: 163) put it, while at the same time is rooted in (or constituted by) 'the semiotic mechanisms, especially language, that mediate social and individual functioning' (1985: 163–4). In sum:

> The overall developmental scheme begins with external social activity and ends with internal individual activity. *Vygotsky's account of semiotic mechanisms provide (*sic*) the bridge that connects the external with the internal and the social with the individual*. (my emphasis)

In an earlier account, again fairly typical, of the speech internalization position, Wertsch (1979: 90) expands further on aspects of the semiological assumptions in play:

> 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)

Such accounts have the merit, at least, of vividly depicting the problem area in focus: the intimate connection between conceptions of language and communication on the one hand and a conception of sociality on the other. More particularly, we note the primacy of speech in this whole process whose distinctive role, so conceived, is to enable the 'self-regulation' necessary for independent planning and action of the child whose behaviour is initially purely *reactive* – in thrall to the play of natural forces in the immediate environment or under the direct control and command of other people.

In more recent accounts, some scholars have cast Vygotsky's semiological conception of sociality more squarely in terms of active cooperation and collaboration between child and adult (cf Arievich & Stetsenko, 2014; Sawyer & Stetsenko, 2018; Stetsenko, 2005), thereby seeking to build on the dynamic interactionist and transactional view of sociality which Marx himself espoused (Jones, 2018a). From that point of view, there is no reason to quibble with the penetrating and undeniably uplifting reading of the originality and inspirational character of Vygotsky's work and its significance in the broader context of the intellectual history of the twentieth century that Sawyer and Stetsenko (2018: 148) propose:

> In sum, Vygotsky makes a radical step in charting a new path for understanding how the human mind – including language – emerges within, and out of, collaborative historical practices. These practices are instantiated in socially interactive joint activities starting from simple forms such as adult-child interactions. These interactions, though seemingly mundane and philosophically unsophisticated, are meaningful and highly organized endeavors that are based in cultural rules and norms, mediated by social artifacts, and arranged based on complex principles. As such, adult-child social interactions are enactments of the broad sociocultural practice of parenting on one pole of the process, and of growing up as a child on the other. In drawing on the notion of collaborative social practice – extending through history and saturated with cumulative communal achievements – as the driving source of development, Vygotsky is unique in the history of psychology.

Let us note, however, that such terms as 'interaction' and 'collaboration' imply a communicational perspective, indeed one which the authors develop in some detail in their rebuttal of particular criticisms in Jones (2009) of Vygotsky's conception of internalization. The issue, then, is whether this positive and apparently unexceptional discourse obscures what may yet be fundamental disagreements and incompatible perspectives on the communicational means and powers in and through which interaction and collaboration are enabled and achieved (cf Wootton, 1997), with all the consequences of such differences in perspective for the plausibility of the account at a more fundamental level and, not least, its implications for thinking about social life and its transformational potential.

The whole area remains as controversial as it is central to Vygotskian theory. It is important, therefore, to consider the reasons why Vygotsky adopted an 'internalization' perspective and, more to the point, to examine the semiological/communicational processes which he took to be constitutive of the developmental journey that internalization involved. In that light let us examine the origins and rationale for the internalization position in Vygotsky's work.

The Problem of Internalization

At the heart of Vygotsky's psychological theorizing is an original, and intriguing, proposal according to which individual psychological/mental functions (of a supposed 'higher' category) are derivative of forms and modes of social interaction and communication. This gives us a picture of the social *becoming* the psychological: 'All higher psychological functions are the essence of internalized [*interiorizovanniye*] relations of a social order, a basis for the social structure of the individual' (1997a: 106).[4] Similarly, 'we might say that all higher functions were formed not in biology, not in the history of pure phylogenesis, but that the mechanism itself that is the basis of higher mental functions is *a copy* [*slepok*] *from the social*' (1997a: 106, my emphasis).

But how is the social itself conceived? More specifically, what is Vygotsky's view of the communicational basis of the collaborative and cooperative relations constituting sociality? In truth, Vygotsky rarely addressed specifically and explicitly the character of the communicational-collaborative bonds or processes through which human social activity and social organization were collectively forged and reproduced. But in those passages where such issues are raised, we find clear indications of Vygotsky's allegiance to particular communicational assumptions about sociality. In such passages, as below from work written around 1929–1930, we see the clear influence of the then dominant mechanistic reflexological perspectives projected onto a wider social and historical canvass in the shape of 'a new regulatory principle of behavior' (1997a: 56, 2005: 288) to be located in 'the social determination of behaviour [*v sotsial'noi determinatsii povedeniya*] carried out with the aid of signs':

> Social life creates the need to subject the behavior of the individual to social requirements and together with this, creates complex signalization [*signalizatsionniye*] systems, means of communication [*svyazi*, 'connections'] that guide and regulate the development of conditioned connections [*svyazei*] in the brain of each person. The organization of higher nervous activity creates the necessary prerequisites, creates the possibility of external [*izvne*] regulation of behavior. (1997a: 56)

In similar vein:

> In this way man created a signalization apparatus, a system of artificial conditioned stimuli by means of which he creates any artificial connections and elicits the necessary reactions of the organism. If, following Pavlov, we compare the cortex of the cerebral hemispheres with an immense signal board, then we might say that man created the key to that board – the grandiose signalistics [*signalistiky*] of speech. (1997a: 57)

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[4] My practice here will be to include [*in square brackets*] the original Russian terms (from Vygotsky, 2005) when they are particularly important to the discussion. In this particular case, a better translation of the passage in question might run something like this: 'All higher mental functions are interiorized relations of a social type, the foundation of the social structure of the individual personality' (2005: 356).

In reflecting on the significance of such passages, we see that Vygotsky himself understood that any attempt to develop a sociogenetic approach to individual psychological development had to reckon with the kind of communicational organization that collective social life presupposes (and requires) and on which the personal development of individual members of historically established communities necessarily depends. That the distinctive character of human social organization was a communicational accomplishment (rather than impelled by natural instincts or innate cognitive powers) was a striking, and surely highly productive, premise for investigation of the development of such psychological powers as communal identity and participation involved. On the other hand, there is no attempt in Vygotsky's work, even in broad outline, to explore the concrete dynamic of any particular socially organized activity and its communicational infrastructure or, more to the point, to challenge the crude reflexologically inspired vision of 'signalized' sociality set out so confidently in the above passages. The reason for this neglect appears, in effect, to be the assumption that the distinctive organization of social activity *is due to, and follows from, the properties and powers of the symbolic constructs themselves* and, therefore, that an account of the organizing principles and structuring of social activity would flow more or less directly from an account of the 'signs of various kinds', notably linguistic signs, which organize and regulate this activity. In other words, from the observation that human social life was semiologically organized, it appeared that the very source and ground of sociality itself was to be sought in the power of signs to *control and direct behaviour* 'from the outside' (Jones, 2019), a 'regulating' power which, in Vygotsky's earlier work at least, was accounted for by reflexological principles.

Indeed, it is this agenda of behavioural control ('regulation') by signs which is the motivating agenda for the whole cultural-historical paradigm. 'The process of work' as Vygotsky and Luria put it, 'requires man to exercise a certain degree of control over his own behaviour' (1993: 34). They go on:

> *Once symbols enabling man to control his own behavioural processes* had been invented and were in use, the history of the development of behaviour became transformed, to a large extent, into the history of the development of those auxiliary artificial 'means of behaviour', and the history of man's control over his own behavior. (1993: 35; my emphasis)

Here, then, we see two interdependent moves. In the first, signs (linguistic signs in particular) are conceived of as means of 'social' control of behaviour (i.e. control by 'the Other') and, as such, the principal enablers of socially organized human labour. In the second, signs are seen to exercise such control either through their impelling power as artificially created stimuli or via the 'inner' side of the word-sign, their generalizing power as abstract concepts.[5] If we do not understand both these moves, and their constant reformulation and development in Vygotsky's thinking, it is impossible to fully grasp the source of the internalization conception as well as its fundamental problems and contradictions.

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[5] For more discussion of these two conceptions of the verbal sign – the 'causal-mechanical sign' and the 'abstract scholastic sign' – see Jones (in press).

Note, for instance, how Benjamin Lee's influential account of the Vygotskian perspective makes precisely this equation between the sociality distinctive to human life and the enabling power of linguistic signs (through their 'generalizing' power):

> Language, as a historically determined social institution, is the means through which society converts the principles of cognitive development from biological to social dialectical. (1985: 75)

Lee explains:

Earlier development is of the type Piaget would later call 'sensorimotor', where the development of thought is governed primarily by biological factors and simple reflex learning. When the child learns to speak, however, he is acquiring a system of signs, which, like any social institution, develops according to sociohistorical principles of dialectical materialism. (1985: 75).He goes on:

> Human labour differs from animal tool use because humans are aware of and plan their actions using historically transmitted and socially created means of production. This awareness and planning ability is a form of generalization made possible only through speech. (1985: 75)

In fact, from his first contributions to psychological debate, written as a passionate advocate of reflexology, Vygotsky had seen spoken words, with their power to stimulate and control behaviour, as the key to *both* human sociality *and* individual selfhood. 'The source of social behavior and consciousness', as he put it (1987: 42), 'lies in speech', where 'speech' itself is 'a system of reflexes of social contact and, on the other hand, primarily a system of reflexes of consciousness, i.e., for the reflection of the influence of other systems' (1987: 42). On that basis, Vygotsky declared: 'The mechanism of social behaviour and the mechanism of consciousness is one and the same' (1987: 42). As he explained at greater length:

> We are conscious of ourselves because we are conscious of others, and by the same method by which we are conscious of others, because we are the same vis-à-vis ourselves as others vis-à-vis us. We are conscious of ourselves only to the extent that we are *another* to ourselves, i.e., to the extent that we can again perceive our own reflexes as stimuli. There is in principle no difference in mechanism whatsoever between the fact that I can repeat aloud a word spoken silently and the fact that I can repeat a word spoken by another: both are reversible reflex-stimuli. (1987: 42)

Consequently, the origins and motivating principles of the whole internalization conception remain here. Though these principles would later be couched in the interactional-collaborative (and semantic) terms that Vygotsky would find more adequate, the communicational basis and rationale for the distinctive orientation of his sociogenetic perspective lie in the reflexologically inspired conception of social organization.

The problem can perhaps be seen at its clearest in the significance which Vygotsky attributes to the 'command' and its place in the overall sociogenetic journey. Vygotsky took over his picture of the communicative function of the command and its role in self-regulation from Pierre Janet (cf van der Veer & Valsiner, 1988), whose 'method of research …is completely self-evident from the point of view of the history of cultural development of the child'. In particular:

According to Janet, the word [*slovo*] was initially a command [*komandoi*] for others …
According to Janet, the word is always a command and consequently it is the basic means
of controlling [*ovladeniya*] behaviour. (Vygotsky, 1997a: 103; 2005: 352)

Janet's view was that 'the power of the word over mental functions is based on the real power of the superior over the subordinate' (1997a: 104) with respect to the social relations involved in the division of labour:

If we consider the initial forms of work activity, then we see that the function of fulfilling
and the function of directing are separated there. An important step in the evolution of work
is the following: what the supervisor does and what the underling does is united in one
person. This, as we shall see below, is the basic mechanism of voluntary attention and work.
(1997a: 104)

The crucial point to note, however, is that this social relationship of subordination of supervisor to underling is conceived semiologically as a power that the verbal command has to automatically elicit or evoke the relevant response. The self-regulation of behaviour by the individual is consequently explained as a result of the internalization of this coercive or compelling means of interpersonal regulation:

Regulating another's behavior by means of the word leads gradually to the development of
verbalized [*verbalizovannogo*] behavior of the individual himself. (1997a: 104, 2005: 353)

In other words, the view of language as a means of 'self-regulation' is constructed on the same reflexological semiology we have already examined. Here, Sawyer and Stetsenko's (2018: 150) commentary, though ultimately supportive of Vygotsky's sociogenetic orientation, is instructive:

One of the core implications of the inconsistencies and gaps in Vygotsky's approach is that
society came to be viewed, contra explicit warnings by Marx, as a force outside the individual that merely exerts influences on people – be it in the form of constraints, mediations,
or affordances for acting. In this way, human development is thought to be explained by
Vygotsky as driven by socio-cultural factors that exist prior to and independently of individuals, and which are imposed on individuals in top-down fashion. This position suggests
that 'culture and meanings are on the external plane and must be internalized by the child;
they cannot be created by the child' (Lerman). From this it follows that individuals are passive recipients of cultural forces with little role other than to acquire and internalize (or, in
another terminology, appropriate) outside influences.

The authors comment: 'Whether such a top-down understanding of human development is present in Vygotsky's works or is a result of misinterpretations is a complicated question, *the answer to which is likely both*' (my emphasis).

In this connection, the accounts of Vygotskian theory given by Alexander Luria, Vygotsky's principal collaborator in the development of cultural-historical psychology, are particularly telling with regard to the language-centric social determinism of the internalization perspective. Luria argued:

Vygotsky pointed out that initially the voluntary act is shared by two people. It begins with
the verbal command of the mother and ends with the child's act. 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. This occurs first externally, in the form of overt speech, and later internally,
through inner speech. (1982: 88)

In effect, the adoption of the reflexological frame of Pavlov and others, with its assumptions about scientificity, objectivity and materialistic 'monism' (Veresov, 1999), set peculiarly rigid constraints on how any behaviour – including linguistic behaviour – could be acceptably read and interpreted. The self-imposed monochromatic reductionism of reflexology's own interpretative lens blotted out the interpretative powers of the subjects or agents of communicative action and forced an objective, causal reading onto the play of ethical considerations and creative exercise of communicational intelligence involved in commanding, guiding and self-guiding. At the same time, the communicational terms which it presupposed were premised on a prior categorical distinction between 'natural' and 'cultural' psychological capacities which was necessary to render reflexological conceptions relevant to – indeed fundamental for – subsequent cultural-psychological development. As Vygotsky put it in his *Educational Psychology* (1997b: xvii):

> The study of conditional reflexes constitutes a foundation on which the new psychology will have to be constructed. The term, conditional reflex, is the name given to that mechanism which carries us from biology to sociology and makes it possible to comprehend the very essence and nature of the educational process.

In effect, then, a view of the primacy of the social bond, itself seen initially through reflexological spectacles, was to become the substance of individual development via internalization. The entire explanation had a hole at the centre, as Chris Sinha explained, in an early critique:

> If the individual cognitive subject is seen as being an internalised product of social life and organization, and not a product of biology, then what is the nature of the subject (or proto-subject) which is initially responsible for the act(s) of internalization? To say that this is itself biological is simply to push the problem down a level, for the capacity to become 'fully human' is also a uniquely human characteristic... despite its interactionist and dialectical impulses, the Vygotskyan theory of internalization reproduces in its internal logic the very divisions between the natural and the cultural, and the individual and the social, which it strives to overcome. (in Wootton, 1997: 194–5)

Just as Pavlov could take the physical environment for granted as the source of signal stimuli for conditioned reflexes in the animal, so Vygotsky could take the social environment, notably the established communicational powers and identities of adult members, as the 'external'/'social' matrix for the formation of the child's 'self-regulatory' abilities and inner self. But the social bond, as Janet's account of 'the command' displays most vividly, had already been psychologized by modelling social interaction in the image of reflexological automaticity. Consequently, if the relationship between the individual and the social was presented as an interaction – or form of collaboration – the very conception of interaction/collaboration itself was tightly drawn around the frame of social relating which that communicational model allowed. In that sense, given Vygotsky's assumptions and premises about the nature of human sociality, its 'natural' foundations and the leading role of speech in the sociogenetic process, the internalization principle – from 'other-regulation' to 'self-regulation' – and the associated 'genetic law of cultural development' were the

only game in town, the only possible way to articulate the connection between social organization, so conceived, and the conscious action and inner world of the individual subject.

At the same time, it is crucial to note that Vygotsky, in the course of developing the key principles of his new 'cultural-historical' approach, undertook a critical reappraisal of reflex principles and rejected reflexology as a total account of human behaviour and its controlling semiological mechanisms. His most detailed engagement with the issue was in his 'Tool and sign in child development' (in Vygotsky, 1984/1999) and in his *History of the Development of Higher Psychological Functions* (Vygotsky, 1997a). The former work – despite all the problems in its genesis, textual integrity and interpretation (Yasnitsky & van der Veer, 2016) – provides the most profound reworking of all problems to do with the relationship between linguistic communication, thinking and action and deserves detailed critical treatment for which there is no room here.[6] It also includes a lengthy passage in which Vygotsky attempts to settle accounts with the reflexological method in developing his own distinctive approach. Vygotsky's critique revolves around three main points. Firstly, while reflex theory 'was adequate' in 'the study of simple reflex acts', it was inadequate for 'bringing out those hidden mental mechanisms which facilitate complex mental reactions' (1999: 58). Secondly, the method was 'antigenetic', incapable of understanding 'the appearance of qualitatively new formations and manifestation of mental function in essentially new interrelations' (1999: 58). And thirdly, the method was incapable of capturing the distinctive character of the 'higher mental functions', 'what distinguishes them from elementary systems'.

Vygotsky outlined his alternative approach in the following way:

> In our studies, we proceeded differently. Studying the development of the child, we established that development proceeds along a path of profound change of the structure of child behavior itself and that at each new stage, the child not only changes the form of reaction, but also carries it out differently to a significant degree, using new means of behavior and replacing some mental functions with others. A long-term analysis allowed us to establish that development proceeds mainly in the direction of mediating the psychological operations that at the first stages were accomplished by direct forms of adaptation. (1999: 58)

In Vygotsky's terms, the mental process is thereby 'reconstructed': 'the essential mechanism of such reconstruction is the creation and use of a number of artificial stimuli that play an auxiliary role and allow man to control his own behavior first from outside and later by complex internal operations' (1999: 58–59).

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[6] Indeed, Vygotsky here pushes even further at the very limits of his own semiological-psychological assumptions by addressing the fundamental inadequacy of the associationistic psychology intrinsic to reflexology with respect to the guiding role of communicational processes in purposeful activity (see Jones, in preparation). Similarly, the brilliant and pioneering work that Vygotsky undertook in relation to the communicational organization of practical activity and the planning function of speech involved a novel conception of linguistic and communicational processes which deserves critical attention as well as admiration for its boldness (Jones, 2002, 2017, in preparation).

Note, then, that the reflex, with its entirely *reactive* orientation (the 'reactive mechanism'), is not rejected per se. Vygotsky's approach, rather, is to propose ways in which that 'reactive mechanism' (taken to be the common semiological foundation of human and animal behaviour and learning) can be animated and vehicled in the developmental composition of 'higher' mental capacities and functions. Vygotsky's critique, then, falls far short of a repudiation of reflexological semiology, and the conception of the natural-cultural divide on which this semiology depends, leaving him with the gross explanatory arc with which he began: the process of linguistic internalization as key to the *active and purposeful* character of higher mental functions peculiar to human beings. Furthermore, when Vygotsky began to consider the *meaning* of signs as well as their causal effect on subsequent behaviour, the language-centred symbolic control agenda was maintained: now the general meanings or concepts that words purportedly embodied were taken as necessary prior formulations (as per the account in Wertsch, 1979 above) of intended action ('the planning function of speech'). In this case, too, a vulgar 'materialist' assumption about the representational relationship between concepts and reality forced a view of a developmental ladder from concrete complexes to abstract verbal concepts (Jones, 2016, 2019).

A straightforward rejection of reflexology would have needed a clear position statement: communicational interaction is not accountable for in causal-mechanical terms at all. On that basis, the conditional reflex conception would have been entirely ruled out as an account of communicational interaction, not to mention as a guiding philosophy for the treatment of human sociality more generally. More specifically, this would have involved abandoning the treatment of the 'command' in terms of a psychophysiological automatism and the recognition that there is simply no *objective* grounding or connection to be found between the (issuance of) what we might take to be a 'commanding' or 'ordering' utterance on the one hand and any subsequent responsive understanding or action. In short, just as linguistic interaction cannot be captured by reflexological models or their analogies or metaphorical extensions, observed regularities or conformities in social behaviour cannot be accounted for in terms of properties or powers seemingly possessed by words or other signs (Jones, 2009; Harvey, 2015). To get beyond the internalization conception, therefore, one must challenge both sides of Vygotsky's theoretical account: his view of sociality and his view of communication in general and linguistic communication in particular. Where should such a challenge begin and what would it bring?

The distinctive characteristic of Vygotskyan psychology, as we have seen, lies in the role attributed to signs as controllers or regulators of socially organized activity and as 'self-regulators' for individual voluntary action. But there is a paradox here which plays out in a number of ways. Firstly, if signs are responsible for social organization, then how are we to explain *the social organization of sign-making activity itself*? For, as Charles Goodwin noted: 'in the human sciences language has typically been analysed almost exclusively as a symbolic system rather than a form of social organization in its own right' (2002: 18). The point, then, is not simply that acts of communication cannot be understood independently of the social activities and relations into which they are integrated and to which they contribute, but that

communicational (including linguistic) *interaction* is itself *socially organized, fundamentally cooperative activity*. In other words, one cannot account for social organization by the power of speech since speech itself *is* collaborative activity requiring communicationally enabled social action and organization. This paradox of cultural-historical psychology was disguised in effect by a prior psychologizing of verbal utterances and their social embeddedness, notably in the pivotal case of the 'command'. Secondly, the social organization of the space of interaction itself went unnoticed and the interpersonal and ethical complexities of the communicational relations in play in verbal interaction were removed at a stroke by their reduction to the action of an automatic, 'objective' compelling power somehow contained in the verbal instruction itself. After all, if linguistic communication is raised to the status of explanatory principle or source of the general psychological capacity for voluntary action, or 'free action' in Vygotsky's terms (cf., Jones, 2002), then how can we account for the fact that linguistic communication is itself conscious, voluntary conduct like any other (cf. Jones, 2007)?

As Taylor (1997) argues, communicative practices are 'normative practices', forms of voluntary behaviour subject to all the usual normative pressures of social existence, in particular the pressures to conform to some standard or norm that our peers, or the family or 'society' dictates. To see social regularities and conformities as *due to the power of signs* is, therefore, to misread the whole situation, as Taylor explains:

> To view language as a normative practice is thus not to adopt a form of linguistic determinism (biological, psychological, or structural). Rather it emphasizes the location of the voluntary acts of individual linguistic agents within the coercive moral context of everyday life. The social conformity which we can observe in the linguistic practice of individuals is thus not the product of a social or natural determinism; nor is it the shadow of an underlying shared object: biological, psychological or social. Instead, its source lies in the normative pressures individuals impose on those within and without their communities. That conformity comes from the social imposition of responsibility on the individual, not from the absence of moral responsibility embodied in determinism. (Taylor, 1997: 156)

The paradox we have noted afflicts Vygotsky's entire psychological theory as well as those attempts to 'modernize' Vygotsky's internalization conception by incorporating the insights of more recent research on the interactional and contextualized nature of talk. Sawyer and Stetsenko (2018), for example, reconstruct Vygotsky's speech-led internalization view in the following way:

> A picture emerges of how the development of self-directed speech furthers the practical activity of individual children, always in social connection and collaboration with others, just as the historical development of language facilitated and transformed human labor activity. While Vygotsky's work primarily emphasizes the self-regulating functions of private speech, later research has suggested a multitude of practical functions and developments associated with private speech. These include motivational and playful functions …, creativity …, dialogical perspective-taking …, social understanding …,and enhanced competence in social communication …. Moreover, deaf children have been found to use private sign – self-directed sign language – which appears to play the same role in practical activity that private speech does in hearing children …. The multiplicity of functions and forms that private speech can take are examples of a more general process of internalization, in which a diverse variety of social activities and relations become self-relations. As

> Vygotsky wrote, 'The child begins to practice with respect to himself the same forms of behavior that others formerly practiced with respect to him'. (Sawyer & Stetsenko, 2018: 149, authors' original references removed)

Thus, while the authors forcefully challenge, if not repudiate, the original ground work and motivation for the internalization process (the natural-cultural distinction, the conditional reflex, social determinism), the overall explanatory arc of the internalization conception – semiotic self-regulation of action emerging from the regulatory speech of others – is otherwise, and paradoxically, maintained.

In that light, to challenge Vygotsky's semiology of '(self-)regulation' is at once a challenge to his view of the communicational powers that linguistic sign-making involves and to his view of the defining qualities of human interrelating. Wootton, for example, draws attention to 'the significance of *self-guided processes*' (1997: 196, my emphasis), arguing that the child 'comes to be social by acting strategically so as to take account of what has happened in any given encounter' (1997: 4). In that light:

> The opportunity offered by discourse is the availability of orderly ways which permit interpersonal alignment to be negotiated on each and every occasion, and of ways which permit much more fine-grained co-ordination than is possible without discourse. (1997: 196)

Similarly, by challenging the cultural-historical view of self-communication as derivative of interpersonal communication, Harris (1996) opens up the prospect of thinking quite differently about subjectivity and, at the same time, about how the manifest regularities and conformities of collective human social action might be communicationally enabled (see Jones, 2009 and Sawyer & Stetsenko, 2018 for a response; see also Jones, 2018a, 2018b). Furthermore, by challenging the assumption that verbal utterances, by virtue of conceptual 'content', have a clearly definable, not to say indispensable *cognitive* role to play in planned action (cf Jones, 2016), it is possible to look quite differently at their communicational values in context and, hence, their social grounding and implications, as in Goffman's re-reading of the 'egocentric speech' of Piaget and Vygotsky (Goffman, 1981; Hauser, 2015; Jones, in press). And, finally, if the *creative* and *active* (as opposed to *re*active) character of our communicational powers is restored to primary position, then it is possible to develop a new 'semiotic of activity' in which our relationships and engagements with *things and processes in the world* are not mediated and directed by *inner signs* but, on the contrary, themselves become meaning*ful* and consequential – signs of *our* activity – in relation to our practices, goals and aspirations (Jones, 2011).

Conclusion

At the centre of Vygotsky's work is the nature of human sociality seen as a psychological problem, from the psychological end. But his account of sociality and the psychological development of the selfhood of the social individual is premised on and articulated in terms of specific communicational constructs and principles

which reflect and project a range of problematic assumptions and claims. In effect, human sociality is *defined* in communicational, primarily linguistic, terms. This assumption of a fundamental link, or even identity, between the processes and activities of linguistic communication, distinctively human social organization and the individual self is evident from the very beginning of Vygotsky's project. As Seifrid (2005) in fact argues, this exaltation of articulate speech (at least of the literate, cultured individual) was a consistent feature of the contemporary Russian language tradition. In Vygotsky's case, however, his commitment – at least initially – to the vulgar, pseudo-materialistic semiology of the various brands of physiological reductionism known as 'reflexology' was equally strong. In both the literate tradition and the Cartesian-inspired atheistic 'science' of reflexology, language ruled the roost. Ultimately, then, and despite his brilliant advances, Vygotsky leaves us with the rather familiar dualistic picture of a 'natural', uncultured body animated, directed and controlled by incorporeal verbal meanings.

Though Vygotsky attempted nothing along the lines of the major projects of metalinguistic systematization that constituted the main tramlines of theoretical reflection and analysis of linguistic experience from the beginning of the twentieth century,[7] the reflexological conception of behaviour which Vygotsky took from Pavlov and others came with its own meta-communicational commitments in the shape of the 'signal' as the foundation and vehicle of the conditional reflex vision. In giving this construct – however nuanced, modified or historicized in successive theoretical revisions – the central place in the developmental progression from 'natural' to 'cultural' psychological powers, Vygotsky threatened to sacrifice the social-transformative vision of Marx to a naturalistic reductionism whose limitations became the more obvious as his research programme progressed.

Naturally, Vygotsky cannot be held responsible for the absence of a non-mechanistic, socially informed view of linguistic communication in the field of linguistic theorizing at that time. Indeed, it wasn't until much later – for example, in the work of J L Austin (1962) and that of the interactionists and ethnomethodologists (e.g. Goffman, 1972, 1975) – that attention began to be concentrated on the distinctive forms of social action (e.g. questions, statements, promises, instructions, greetings, etc.) that language use regularly involves and the fine networks of reflexive social relations and organization that such communicational actions presuppose and enable.

It is important that the significance of communicational notions for Vygotskian psychology is being increasingly problematized (Burman, 2016; Jones, 2007, 2019; Zhang, 2019). However, it is also vital to recognize, more generally, the dependence of psychological theory on particular perspectives on language and communication. Ultimately, then, the search for a 'cultural-historical' or 'critical' psychology will be fruitless without a searching examination of the linguistic and communicational

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[7] Aside from the distinctively Russian traditions of linguistic philosophy and theory discussed by Seifrid (2005), one of the most direct and important influences on Vygotsky's views on language, thinking, conceptual thought, inner speech and the non-localization of psychological functions was Edward Sapir, as can be seen from the remarkable Introduction to Sapir (1921).

underpinnings of psychology itself as a specialized discipline and intellectual tradition.

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