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## Vygotsky, Wittgenstein, and sociocultural theory

Stephen Newman <sup>a\*</sup>

<sup>a</sup> *Carnegie School of Education, Leeds Beckett University, Leeds, England*

Correspondence details

Dr Stephen Newman

Carnegie School of Education

Room 124, Carnegie Hall

Leeds Beckett University

Headingley Campus

Leeds LS6 3QQ

\* email: [s.n.newman@leedsbeckett.ac.uk](mailto:s.n.newman@leedsbeckett.ac.uk)

ORCID: 0000-0002-2674-9154

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## Abstract

This paper considers the use made of Vygotsky's work by many who take a sociocultural perspective and, in particular, by those who use his work to advance a particular view of second language acquisition and the 'silent period'. It is argued that Vygotsky's account as represented in *Thought and Language* (Vygotsky, 1986) needs to be thought of as consisting of two distinct aspects: first, the observations he made (or claimed to have made) and, second, the theoretical account he proposed to explain them. It is shown that some of Vygotsky's observations are problematic but that, even if they are accepted, Vygotsky's theoretical account suffers from fundamental difficulties. Thus the support claimed from Vygotsky in accounts of second language acquisition is misplaced, first because of those difficulties and, second, because many who claim support from Vygotsky, do not need or even use his theory but instead focus their attention on his empirical observations and assume incorrectly that if their own empirical observations match Vygotsky's, then Vygotsky's theory can be accepted. Wittgenstein's later philosophy is shown to provide a perspective which dispels confusions about, and gives us a clearer insight into, the issues.

**Keywords:** Wittgenstein, Vygotsky, first language acquisition, second language acquisition, sociocultural

Lt. Colin Race: This murder gets more complicated by the minute.  
Hercule Poirot: Mais oui. Which can only mean one thing, mon ami. The solution, it must be very simple.<sup>1</sup>

### **Introduction:**

One of the most prominent names in sociocultural accounts and, in particular, those concerning second language acquisition (SLA) is that of Lev Vygotsky - the social, cultural and historical approach provided by Vygotsky is one of the bases for the “socio-cultural approach to the language and learning development of bilingual children” (Drury, 2013, p. 358) and “sociocultural theorizing [is] an essential element in the interpretation” of second language acquisition (Bligh & Drury, 2015, p. 261). Vygotsky is often linked to “sociocultural theory” (Aimin, 2013; Drury, 2013; Lantolf & Thorne, 2007); he has been termed the “founding father of sociocultural research” (Mercer, 2002, p. 141), and “the ‘father’ of SCT” [sociocultural theory] (Swain, Kinnear, & Steinman, 2011, p. x). There can be no doubt that even if Vygotsky himself did not use the term ‘sociocultural’ (although Cole argues that “Vygotsky and his students called their approach a ‘sociocultural’ or ‘sociohistorical’ theory of psychological processes” (Cole, 1985, p. 148)), it is nevertheless a term firmly associated with his name. It is, however, worth noting that “SCT was not originally intended as a theory of second language acquisition” (Swain et al., 2011, p. xvi), and there are good grounds for arguing that Vygotsky’s work is best seen as involving an account of first language acquisition (FLA) (F. Newman & Holzman, 2014, p. 109).

Consequently, an examination of Vygotsky's account of language, and the use made of it by sociocultural theorists of SLA, would seem to be in order.

The literature on SLA makes links to diverse theoretical perspectives concerning FLA. It was suggested as long ago as 1977 that the relationship between FLA and SLA is not fully understood (Cook, 1977, online); Cook later arguing that, as far as FLA acquisition is concerned, there is "no single unifying model" (Cook, 2010/2013, p. 155). This multiplicity of perspectives on FLA influences accounts of SLA where, according to Long, one of the problems facing progress in SLA is "theory proliferation" (Long, 2007, p. vii), with "as many as 60 theories, models, hypotheses, and theoretical frameworks" (Long, 2007, p. 4), not all of them compatible (Long, 2007, p. 3). For one writer,

These models might appear contradictory at first sight, but in fact they can be reconciled in so far as they are concerned with different aspects of SLA, which is, after all, a highly complex process (Myles, 2013).

Others consider that these different theories are "contrasting and complementary" (Bligh, 2014, p. 41), each adding to the larger body of knowledge in order "to provide an adequate understanding of SLA" (Saville-Troike, 2006, p. 28).

This notion of complexity is common in much of the literature concerning FLA and SLA; Soderman and Oshio (2008, p. 298) consider FLA "complex", and Clark writes that "second-language acquisition is as complex as the acquisition of the first language but with a wide variety of variables added in" (Clark, 2000, p. 184), this being one factor leading, presumably, to the "complexity of early years pedagogy" (Bligh, 2014, p. 12). Yet the nature of FLA, and the theories associated with it, are sometimes seen as unproblematic for understanding SLA; Parke and Drury, for example, merely note that a "full, 'normal' linguistic environment ... is

essential for the development of language in young children” (Parke & Drury, 2001, p. 125), leading them to the conjecture that “it does look as though there is a common storage of languages in the mind” (Parke & Drury, 2001, p. 126). Another example which sees the relationship between FLA and SLA as largely unproblematic comes from Clarke (2009), who writes:

The first language ... forms the foundation for all later language development (Clarke, 2009, p. 9).

Similarly, in relation to language acquisition, Soderman and Oshio write:

The process of becoming competent in a first language requires very young children to master: phonology (the sounds of the language); vocabulary (the words of the language); grammar (the way the words are ordered and put together); discourse (the way the sentences are put together); and pragmatics (the rules of how to use the language) ... Though complex, a child’s initial foray into language development begins at birth as the child interacts with others, building both a receptive vocabulary and a phenomenal ability to express all of the other important pieces of their language in a fairly competent manner by the age of five (Soderman & Oshio, 2008, p. 298).

Quite how children do ‘master’ phonology, grammar, discourse and pragmatics is left unexplained.

One name conspicuous by its absence in much of the literature on SLA is that of Ludwig Wittgenstein. Wittgenstein, in his later work, took the view that philosophy is a battle against the bewitchment of our intelligence by means of language (Wittgenstein, 1958, § 109, p. 47e) <sup>2</sup>. Put another way, philosophy, for Wittgenstein, could be seen as untying the knots in our understanding (Z, § 452, p. 81e). However, although the results of philosophy are simple, the activity of philosophy has to be as complicated as the knots it is trying to untie (Z, § 452, p.

81e). It will be argued here that Vygotsky's account as used by many sociocultural accounts of SLA does contain some significant 'knots' and that the approach Wittgenstein adopted can be helpful in identifying and untying them.

Some qualifications are needed here. First, it is not to be supposed that the work of either Vygotsky or Wittgenstein can be conceived of as a consistent 'whole'. In the cases of both writers, there are significant changes in their work over time, as well as some continuities. As far as Vygotsky's work is concerned, it has been argued that it can be divided into at least three stages or is, at least, not to be considered monolithic (González Rey, 2009, pp. 62-63). Some have argued that Vygotsky's account not only evolved over time, but also contains contradictions (González Rey, 2009; Wertsch & Tulviste, 1992; Yasnitsky, 2011). One of the important aspects of Vygotsky's works between 1928 and 1931 was the notion of internalization (González Rey, 2009, p. 62), a notion that, as I shall show, is prominent in sociocultural accounts of SLA. Its importance to many sociocultural accounts of SLA means that it deserves close attention here.

Similarly, I follow the widely accepted view that Wittgenstein's work can be divided into an early, a middle, and a later stage (Luckhardt, 1979; Monk, 1990). I shall base my use of Wittgenstein on his later work, and especially around the *Philosophical Investigations*, one of the few writings which Wittgenstein prepared for publication and with much of which he is thought to have been reasonably satisfied (Monk, 1990, pp. 363-364).

A second qualification is closely related to the first. Many of both Vygotsky's and Wittgenstein's works have been published posthumously; some of their remarks may not have been intended for publication, and others have their origins in records of course notes (Malcolm, 1958/1984; Yasnitsky, 2011). One

example makes the point: Wittgenstein's *Vermischte Bemerkungen* (Wittgenstein, 1978), first published in German well after Wittgenstein's death, has as a subtitle in a later translation into English under the title *Culture and Value* (Wittgenstein, 1998) the phrase "A selection from the Posthumous Remains" of Wittgenstein's writing.

A third qualification is that the reader of both Vygotsky and Wittgenstein who is not fortunate enough to be able to read and understand their works in their original language, faces the issue of translation. Van der Veer and Yasnitsky (2011), for example, argue that many translations of Vygotsky's work

are marred by mistakes and outright falsifications...[and] tend to downplay the collaborative and experimental nature of his research (van der Veer & Yasnitsky, 2011, p. 475).

It is also important that any translation captures the intended meanings and subtleties of the respective writer, of the cultural contexts which informed the writing (van der Veer & Yasnitsky, 2011, p. 475), and of subtle changes in the meanings of words since the translations were written (Yengoyan, 2003, p. 25). Thus, notwithstanding that Elizabeth Anscombe's translation of Wittgenstein's *Philosophical Investigations* is often "quoted all over the world as if it were verbatim Wittgenstein rather than a translation, being written in an English style which is itself compelling" (O'Grady, 2001), subsequent editions have often made changes to the translations, though not always receiving approval (Cartwright, 2011). It is worth bearing in mind that in relation to the work of both Vygotsky and Wittgenstein

history always implies different interpretations, which are largely dependent on the interpreters' own positions as well as the context from which such interpretations are produced (González Rey, 2009, p. 60).

Both Wittgenstein and Vygotsky lived in times of great social and cultural changes. Vygotsky for example, lived during the Russian Revolution, and it seems this directly affected his work (González Rey, 2009; Yasnitsky, 2011). The wider contexts of Vygotsky's work have been described by others – see for example, Marginson and Dang (2017, pp. 116-117). Wittgenstein too lived through times of great change, experiencing the First and Second World Wars for example, which impacted on him directly (Monk, 1990).

With these caveats in mind, it is now necessary to give an overview of Vygotsky's account as represented in *Thought and Language* (Vygotsky, 1986), following which I shall turn to show how it is used in at least some sociocultural accounts of SLA.

## **Vygotsky**

For Vygotsky, the earliest stage of thought and speech are biological, based on an “innate, natural form of behaviour” (Vygotsky, 1986, p. 94). Vygotsky refers to Goethe, and Faust's remark: “In the beginning was the deed” (Vygotsky, 1986, p. 255); Vygotsky writes that

we can accept this version if we emphasize it differently: in the *beginning* was the deed. The word was not the beginning—action was there first; it is the end of development, crowning the deed (Vygotsky, 1986, p. 255).

At this early stage, Vygotsky notes “the independence of the rudimentary intellectual reactions from language” (Vygotsky, 1986, p. 81); they are “preintellectual” and “prelinguistic” (Vygotsky, 1986, p. 83). Vygotsky writes that



“laughter, inarticulate sounds, movements, etc., are means of social contact from the first months of the child’s life” (Vygotsky, 1986, p. 81). Vygotsky claims that at this stage, an analogy can be drawn between human children and chimpanzees in that they have natural biological abilities which enable them to react to stimuli (Vygotsky, 1986, p. 80).

However, Vygotsky continues, after about two years, the child comes to have “the first dim realization of the purpose of speech” (Vygotsky, 1986, p. 82), and (quoting Stern), to realise that “each thing has its name” (Stern, 1914, p. 108, cited by Vygotsky, 1986, p. 82). Thus the child has moved onto the developmental continuum and is participating in External Speech (Berducci, 2004, p. 337).

The components of this continuum have been well described by others (for example, Berducci, 2004) and so I shall confine myself here to a brief summary of the main components. At one end of this continuum is, according to Vygotsky, Written Speech. This

is monologous; it is a conversation with a blank sheet of paper. Thus, writing requires a double abstraction: abstraction from the sound of speech and abstraction from the interlocutor (Vygotsky, 1986, p. 181).

It is “the most mature and least abbreviated and predicated component of Vygotsky’s developmental continuum” (Berducci, 2004, p. 332).

Next on the continuum is External Speech. This is “the form Vygotsky dubs as the source of all of the continuum’s components” (Berducci, 2004, p. 332) and consists, initially at least, of “speech addressed to the child by others” (Jones, 2009, p. 169), and “all forms of social interaction: lectures, conversations, arguments, and so on” (Berducci, 2004, p. 332). Vygotsky writes that,

In mastering external speech, the child starts from one word, then connects two or three words; a little later, he advances from simple sentences to more complicated ones, and finally to coherent speech made up of series of such sentences; in other words, he proceeds from a part to the whole. In regard to meaning, on the other hand, the first word of the child is a whole sentence (Vygotsky, 1986, pp. 218-219).

This is followed by Private Speech, sometimes called ‘egocentric speech’, which is, for Vygotsky, “the link between early socially communicative speech and mature inner speech” (Jones, 2009, p. 169). Private Speech has both an internal and external form (Berducci, 2004, p. 333). We then come to Inner Speech, which is “speech for oneself... [whereas] external speech is for others” (Vygotsky, 1986, p. 225). Inner Speech “is considered to be an important factor in the transition from thought to external speech” (Vygotsky, 1986, p. 3) and, “compared with external speech, inner speech appears disconnected and incomplete” (Vygotsky, 1986, p. 235). This being so,

the transition from inner speech to external speech is not a simple translation from one language into another. It cannot be achieved by merely vocalizing silent speech. It is a complex, dynamic process involving the transformation of the predicative, idiomatic structure of inner speech into syntactically articulated speech intelligible to others (Vygotsky, 1986, pp. 248-249).

The next stage on the continuum is Thought, which is “still more inward than inner speech” (Vygotsky, 1986, p. 249). For Vygotsky, “every sentence that we say in real life has some kind of subtext, a thought hidden behind it” (Vygotsky, 1986, p. 250). This, in turn, brings Vygotsky to Motivation:

We come now to the last step in our analysis of inner planes of verbal thought. Thought is not the superior authority in this process. Thought is not begotten by thought; it is engendered by motivation... Behind every thought there is an

affective-volitional tendency, which holds the answer to the last “why” in the analysis of thinking (Vygotsky, 1986, p. 252).

Together, these comprise the developmental continuum.

There are three additional aspects of significance in consideration of Vygotsky’s continuum. One of these is the notion of ‘transformation’; significant because, for Vygotsky, the different components of the continuum are not different things, but best thought of as different aspects of one and the same thing (Berducci, 2004, p. 337). A second notion is ‘internalisation’. Vygotsky believed that speech was a crucial aspect of the development of children’s thinking and acting and, in broad terms, believed that, through a process of ‘internalisation’, external speech (interpersonal communication) is transformed into ‘inner speech’ (Jones, 2009, p. 167). A third notion of significance is that of abbreviation. For Vygotsky, private speech is seen as an abbreviated form of external speech; “compared with external speech, inner speech appears disconnected and incomplete” (Vygotsky, 1986, p. 235); it has an “abbreviated character” (Vygotsky, 1986, p. 235). For Vygotsky, this abbreviation has a specific characteristic:

as egocentric [private] speech develops, it shows a tendency toward an altogether specific form of abbreviation, namely: omitting the subject of a sentence and all words connected with it, while preserving the predicate. This tendency toward predication appears in all our experiments with such regularity that we must assume it to be the basic form of syntax of inner speech (Vygotsky, 1986, p. 236).

Here Vygotsky presents three examples, in an attempt to show that they all support his notion of abbreviation. He writes:

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.” Obviously, such a sentence is possible only

because its subject is tacitly understood by both parties. To “Has your brother read this book?” no one ever replies, “Yes, my brother has read this book.” The answer is a short “Yes,” or “Yes, he has.” 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, p. 236).

Abbreviation increases as we move down the continuum from Written Speech (the least abbreviated) to Motivation (the most abbreviated) (Berducci, 2004, p. 333).

Vygotsky makes some other observations of children. For example, he has noted that “in learning to speak, as in learning school subjects, imitation is indispensable” (Vygotsky, 1986, p. 188), and that “what the child can do in cooperation today he can do alone tomorrow” (Vygotsky, 1986, p. 188). Vygotsky describes one set of observations thus:

Having found that the mental age of two children was, let us say, eight, we gave each of them harder problems than he could manage on his own and provided some slight assistance: the first step in a solution, a leading question, or some other form of help. We discovered that one child could, in cooperation, solve problems designed for twelve-year-olds, while the other could not go beyond problems intended for nine-year-olds. The discrepancy between a child’s actual mental age and the level he reaches in solving problems with assistance indicates the zone of his proximal development (Vygotsky, 1986, p. 187).

This aspect of Vygotsky’s account, the ‘zone of proximal development’, is one of the most popularly referred to aspects of Vygotsky’s account, though often misunderstood (Lantolf, Thorne, & Poehner, 2015, p. 214). I shall return to consider it again shortly.

## Identifying the knots: Critiquing Vygotsky

Having outlined some of the key aspects of Vygotsky's account as represented in *Thought and Language*, it is my intention now to begin to identify some of the 'knots' contained therein. The first of these 'knots' concerns the supposed empirical observations which Vygotsky uses to lend support to his thesis. Vygotsky himself considered that a large part of his analysis was based on "fact-finding experiments" (Vygotsky, 1986, p. lix), and these observations are often taken by others as lending credence to Vygotsky's account.

However, the supposed empirical basis of much of Vygotsky's work is more transparent than real. In part, this is because his work does not consist of the results of a large number of empirical studies (Grigorenko, 2007, p. ix). Leaving this point to one side however, as a starting point, let us re-consider the examples that Vygotsky did give; of asking someone whether they would like a cup of tea, or of asking if your brother has read this book, or people waiting for a bus (Vygotsky, 1986, p. 236). The first point to make here is that to assert (as Vygotsky does) that 'No, I don't want a cup of tea' is *never* an answer to the question 'Would you like a cup of tea?', or that *no one ever* replies 'Yes, my brother has read this book' to the question 'Has your brother read this book?', or that *no one* waiting for a bus at a bus stop will say 'The bus for which we are waiting is coming' are statements that would seem, as empirical observations, problematic. Even if that is what Vygotsky has observed, if we take (or imagine) a "more varied diet of examples" (S. Newman, 1999, p. 94), it is easy to think of certain situations when exactly those phrases could be said, without seeming odd. In fact, this point is hinted at by Vygotsky when he makes a reference to the significance of "the situation" in which such phrases are used (Vygotsky, 1986, p. 236). Significant too, in terms of

examining the supposed empirical support Vygotsky claims for his account, is the fact that, after making the observation that human infants possess *a priori* biological abilities (Berducci, 2004, p. 337) and natural reactions (Berducci, 2004, p. 350), Vygotsky has used his observations of children learning a first language to *infer* the existence of the inner modes of Private Speech, Inner Speech, Thought, and Motivation (Berducci, 2004, pp. 350-351). The attempted resolution of this problem, namely that the inner modes are transformations of the outer modes and can thus be seen directly (Berducci, 2004, pp. 344-345), merely assumes the continuum that it is meant to justify.

The second ‘knot’ to begin to untie concerns Vygotsky’s notion of ‘abbreviation’. As has already been noted, the examples Vygotsky gives of abbreviation in dialogues are dependent on contextual understandings (Wertsch, 1985, p. 123). However, they do not provide any evidence for the abbreviation thesis (Jones, 2009, p. 170); they just make a range of assumptions which cannot be justified (Jones, 2009, pp. 169-172). In arguing that private speech shows “a tendency toward an altogether specific form of abbreviation, namely: omitting the subject of a sentence and all words connected with it, while preserving the predicate” (Vygotsky, 1986, p. 236), Vygotsky seems to suggest that the child has a fully formed sentence worked out as it would appear in social speech, and then decides to drop some particular parts of it (Jones, 2009, p. 169). Just such a proposition is suggested by Lantolf and Pavlenko (1995, p. 111) when they give the example of a speaker trying to solve a jigsaw puzzle who utters the word ‘Green’. This utterance, they argue, is an abbreviated version of “The next piece I need to place into the puzzle is the green one”, or something similar. Does the child or other speaker have to work out the fully fledged version of social speech before

dropping some of it? How can we decide what a complete unabbreviated sentence might be, devoid of any context? Why start with one fully fledged version of a sentence rather than another? If we do consider one expansion of an abbreviated sentence to be appropriate, it can only be because we have already worked out the use (Jones, 2009, p. 172). Clearly then, as Jones puts it, “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” (Jones, 2009, p. 171).

It may well be, as has been suggested to me, that, in Russian, answers to certain questions are rather curt and abrupt and that this needs to be taken into account when discussing Vygotsky’s notion of abbreviation. However, even if this is the case, first, the examples Vygotsky gives in *Thought and Language* are not dissimilar to those we might find used in English, and so the examples seem to have the ring of authenticity to them, even within a different context and language. Second, we can easily imagine contexts in which the longer answer might be given and so, in that regard, we may want to question Vygotsky’s assertion that we would ‘never’ use the longer forms. A third point is that these observations are irrelevant to the posit of the so-called continuum.

A third ‘knot’ that needs to be untied concerns Vygotsky’s theory of meaning. Vygotsky’s arguments need to be seen within a wider view of language (Jones, 2009, p. 168). Despite the fact that Vygotsky’s theory of meaning is an “essential aspect” of his work (Mahn, 2013, p. 6), it has often been ignored or at least largely overlooked by those who rely on his work, not least by those using Vygotsky in their work on SLA (Mahn, 2013, p. 6). Yet, as Vygotsky himself noted,

One might say without exaggeration that the whole structure of a theory is determined by its translation of the first words of the child (Vygotsky, 1986, p. 64).

However, Vygotsky's theory of meaning encounters several difficulties, as has been pointed out by Williams (Williams, 1999, p. 274). How does the word come to refer to a particular object, or to have a particular sense? How does a word *refer* to an object, as opposed to merely being associated with it? What is it for a word to have meaning? Williams argues that Vygotsky cannot have recourse to the child's intellect or understanding to explain these things, because these are the very things his theory proposes are only developed as a result of such activity. Thus, as Williams points out, "reference and sense presuppose the very phenomena they are intended to make possible" (Williams, 1999, p. 274). When we look again at the quotations from Vygotsky given above, and elsewhere from his work, we see that there is no explanation of this process. The child "*seems to have* discovered the symbolic function of words" (Vygotsky, 1986, p. 82 (emphasis added)) but we are not told how; a child '*grasps*' the external structure, and later the inner structure (Vygotsky, 1986, p. 61), but again, we are not told how. What are the 'basic intellectual functions', and how do words and signs "direct our mental operations, control their course, and channel them toward the solution of the problem confronting us" (Vygotsky, 1986, pp. 106-107)? How *does* the child's speech come to have a signifying function? And what are we to make of Vygotsky's remark, that the first step towards concept formation is when the child

puts together a number of objects in an unorganized... heap, consisting of disparate objects grouped together without any basis, [which] *reveals a diffuse, undirected extension of the meaning of the sign* (artificial word) to



inherently unrelated objects *linked by chance* in the child's perception [and where]

At that stage, word meaning denotes nothing more to the child than a vague ... conglomeration of individual objects that have *somehow or other coalesced into an image in his mind* (Vygotsky, 1986, p. 110 (Vygotsky's emphases omitted, and mine added))?

Thus the claim that a sociocultural approach based on Vygotsky's work in *Thought and Language* "assists in recognizing the complexities involved in comprehending how new understandings and ways of knowing (meaning making) are acquired" (Bligh & Drury, 2015, p. 262) is to be rejected. Moreover, when one reads sociocultural accounts of SLA which claim to show Vygotsky's modes in practice (for example, the claim of Swain, Kinnear, and Steinman (2011, p. xiii) that they are going to present "narratives to demonstrate SCT concepts-in-context", or the vignettes of Nazma and Nina (Bligh & Drury, 2015; Drury, 2000, 2013) and of Suki and Adyta (Bligh, 2012, 2014; Bligh & Drury, 2015)), one is struck by the fact that they provide no evidence of Vygotsky's 'inner modes'. This is not surprising, for no amount of empirical work can demonstrate that Vygotsky's developmental continuum exists. In addition, the idea that Vygotsky's is a social theory of meaning is to be rejected; at heart, it is an individualistic theory of meaning (Williams, 1999, p. 275).

At this point, I return to consider in passing the 'zone of proximal development'. As was noted earlier, this is a term used by Vygotsky as a result of the observation that a child can often achieve more when given guidance than another who is not (Vygotsky, 1986, pp. 186-187). In this context, it is important to note again that the observations made, and the labels attached to them, are not evidence of Vygotsky's inferred continuum.

## Untying the knots: Wittgenstein

I turn now to consider the work of the person I identified earlier as being conspicuous by its absence from the literature on SLA, namely that of Ludwig Wittgenstein. In particular, attention will be focussed here on work representing his later philosophy, particularly that in *Philosophical Investigations* (Wittgenstein, 1958), (henceforth *PI*). My approach takes the view that any epistemology presupposes a theory of meaning. As indicative of this approach, I claim support from McGinn, who argues that

the philosophy of language is ... for Wittgenstein...to be conceived as anterior and foundational. We need to be clear about the nature of meaning before we can hope to be clear about anything else. It follows that if we are to be in a position to understand and assess Wittgenstein's philosophy we need to acquire a firm grasp of his view of language (McGinn, 1984, p. xi).

Wittgenstein did not conduct empirical research, nor did he claim to, as his work was concerned with clearing up conceptual confusions. However, in his work he brings forward many examples; some real; some imaginary (Malcolm, 1958/1984, p. 27). His purpose in so doing was to dispel confusions caused by our failure to command a clear view of our language; "it disperses the fog to study the phenomena of language in primitive kinds of application in which one can command a clear view of the aim and functioning of the words" (*PI*, § 5, p. 4e). The many and diverse examples thus counteract our tendency to ask questions and make statements which ignore our actual uses of language (*PI*, §§ 23-27, pp. 11e-13e):

A main cause of philosophical disease—a one-sided diet: one nourishes one's thinking with only one kind of example (*PI*, § 593, p. 155e).

Wittgenstein was advancing a multitude of examples in an attempt to remind the reader that things which look the same may be different:

We remain unconscious of the prodigious diversity of all the everyday language-games because the clothing of our language makes everything alike (*PI*, p. 224e).

The initial stages of learning language for Wittgenstein have similarities to Vygotsky's account. Indeed, the quote from *Faust* makes a reappearance in consideration of Wittgenstein's approach, Monk arguing that

His [Wittgenstein's] attitude is summed up by Goethe's line in *Faust*: ... 'In the beginning was the deed' ... which he quotes with approval, and which might, with some justification, be regarded as the motto of *On Certainty*—and, indeed, of the whole of Wittgenstein's later philosophy (Monk, 1990, p. 579).

In the case of infants who have yet to acquire a first language, they cannot 'mean' anything by any linguistic or non-linguistic behaviour. This follows from Wittgenstein's arguments against private languages, which I have elaborated elsewhere (S. Newman, 1999, pp. 98-106). Wittgenstein reminds us that there are natural expressions of anger, fear and so on. A human may cry, may limp, may hold an injured arm, may moan—these are 'primitive expressions' of pain. Wittgenstein's suggestion is that concepts such as being naughty, friendly, thankful, desiring something, reacting to something (a noise, an animal, to something hot or cold, being surprised or afraid), have meaning by being used by others to describe certain behaviour in certain circumstances (Malcolm, 1981, pp. 1-7), and not by describing an underlying psychological state or process. For Wittgenstein, the origin of language is grounded in primitive reactions.

At what point then, it might be asked, can a child be said to have acquired a first language? By what criteria is such an acquisition to be judged and by whom? Perhaps such questions assume that a child's first language is purely verbal, and that somehow the language has to be acquired in its entirety (whatever that could mean) before one could say it has been acquired.

A Wittgensteinian account recognises the significance of non-verbal language (i.e. behaviour). Thus when an infant behaves in this or that way, the infant does not mean anything by that behaviour, but that behaviour may be taken as meaningful by others. If, following Wittgenstein, we allow 'language' to include the non-verbal (see, for example, Gilroy, 1996, pp. 156-164), then we do not have to assume that a meaning exists 'behind' or 'beneath' an infant's behaviour. We merely recognise that many of these behaviours are natural to human infants *qua* human infants. On this view, instead of thinking that a neonate wants to communicate hunger, thirst, separation anxiety, and so on, we can take as our starting point that hungry neonates often behave like *this*, that thirsty neonates will often behave like *that*, and that anxious neonates will often behave in some other way. The infant just behaves, and the meaning is attributed by others. It is a natural instinctive behaviour that neonates seek the breast when hungry and pull away when full; they may indeed cry for no apparent reason and become calm when cuddled. In one context, we might want to say an infant is non-verbal; in another, we might not. It might be that a child makes a sound which is interpreted by others as meaning something; it may be that they remain silent and that this too is interpreted by others as being meaningful. Whether they do so take the behaviour as meaningful (and, indeed, whether they say that the child has acquired a first language) would depend on the behaviours and the contexts.

With the Wittgensteinian perspective, we are thus led to the idea that it is the whole context which provides the ‘frame of reference’ for deciding on the meaning of a particular linguistic or non-linguistic behaviour (Pears, 1988, p. 279).

We observe gestures, actions, expressions, tone of voice, and the like:

I know that a sick man is lying here? Nonsense! I am sitting at his bedside, I am looking attentively into his face.—So I don’t know, then, that there is a sick man lying here? Neither the question nor the assertion make any sense ... And “I know that there’s a sick man lying here”, used in an *unsuitable* situation, seems not to be nonsense but rather seems matter-of-course, only because one can fairly easily imagine a situation to fit it (*OC*, § 10, p. 3e).

What we need to attend to is the context in which the behaviour occurs. If

I just assume with some degree of certainty that he has pain although I have no reason ... for it ... [and] sent them all to the doctor although they showed no sign of pain (illness), I should just be called mad (*PESD*, p. 291).

We can on occasions see pain-behaviour in others and doubt that they are in pain, and there may also be occasions when someone could be in pain, or angry, with no outward expression of that pain or anger, but the criteria are (conventionally) necessarily good evidence in normal circumstances rather than conclusive evidence in all circumstances (*PI*, § 33, p. 16e; § 87, pp.40e-41e):

The kind of certainty is the kind of language-game (*PI*, p. 224e).

“While you can have complete certainty about someone else’s state of mind, still it is always merely subjective, not objective, certainty.”—These two words betoken a difference between language-games (*PI*, p. 225e).

It is thus “our *acting*, which lies at the bottom of the language-game” (*OC*, § 204, p. 28e), and provides the grounding where

the infant, *qua* potential communicator, has certain of its functional (that is, primitive means/ends), non-verbal behaviours treated as verbal communicative behaviours through the shared medium of the non-verbal (Gilroy, 1996, p. 161).

Such a description may initially seem consistent with the view of Vygotsky, especially in the case of infants. But, as Berducci points out, a key difference here to remember is that, for Wittgenstein, infants come to obey public rules whereas, for Vygotsky, infants “come to obey their own *internal* rules...through applying the internal modes of Vygotsky’s continuum” (Berducci, 2004, p. 340). We can see Vygotsky’s stance in the assertion that

Vygotsky’s theory of cognitive development ... is reflected in the construct of the zone of proximal development (ZPD), in which knowledge is constructed first on a social plane (interpsychological) and then internalized ... on an individual level (intrapyschological) (Sluss & Stremmel, 2004, p. 293).

In contrast, Wittgenstein reminds us that language is part of a social whole, consisting of both verbal and non-verbal behaviours in specific contexts, in particular times and places (*PI*, § 7, § 23), where linguistic and non-linguistic behaviour “are woven together into an intricate organic whole” (Pitcher, 1964, p. 240). It is that whole context or ‘language-game’ that provides the ‘frame of reference’ for deciding on the meaning of a particular linguistic or non-linguistic behaviour (Berducci, 2004, p. 342). The rules which provide that ‘frame of reference’ for any particular language-game may be implicit or explicit; clear or opaque. Sometimes they are just used; sometimes they need to be explained (Gilroy, 2012, p. 56); meanings “are rule and criteria dependent in subtle and complex ways” (Gilroy, 2012, p. 56). These “elusive networks” (Thomas, Shah, & Thornton, 2009, p. 15) of rules form the ‘grammar’ of the language, that is:

a set of locally agreed conventions or customs accepted by native language speakers, and which are important in enabling them to make sense of each other's utterances (Thomas et al., 2009, p. 16)

where

the term “language-*game*” is meant to bring into prominence the fact that the *speaking* of language is part of an activity, or of a form of life (*PI*, § 23, p. 11e).

How then does the infant move from this pre-intellectual phase to have language? How does the child begin to “master his [or her] surroundings with the help of speech” (Vygotsky, 1978, p. 25)? With a Wittgensteinian perspective, learning new meanings may be achieved in a variety of ways. We may begin to pick up the rules of a language-game by imitation, participation, by observation, or by ‘trial and error’. We may in the first instance, imitate others around us – this can be considered as where we are beginning to play a language-game without a full understanding of the rules. The rules of a language-game may be written down and codified to help us begin to know what they are and to understand them. On occasions, an explicit explanation or demonstration of the rules of that language-game may be helpful. Applying this approach to the examples that Vygotsky gave to support his notion of abbreviation, we can see that the so-called ‘zone of proximal development’ is nothing more than a label that can remind us that we, and others, can often solve problems and learn more with assistance than we could alone. The observation that this is so does not support, and does not require, Vygotsky’s theoretical arguments. There is no need to posit some internal aspects of a supposed developmental continuum, as Vygotsky does (Berducci, 2004, p. 347). When we encounter a new ‘language-game’, we may well be surprised,

confused, unsure what is expected of us. The actions and words of an unfamiliar language-game will have some differences to those we have encountered in other language-games with which we are more familiar. We may feel stressed or worried, or perhaps excited. In the case of second language acquisition then, we may expect most or all of the verbal and written language to be different, as well as in some cases, the wider context or 'language-game'. Take, for example, the vignettes of Drury and Bligh to which reference has already been made. These are all examples of additional language acquisition, and so it is, by definition, the case that Suki, Tamsin, and Adyta (and others) were, at the time of the observations, users of their respective first languages. What they may be less clear about is the nature of the various 'rules' of the social contexts or 'language-games' in which they find themselves. In the descriptions of Nazma entering nursery (Bligh & Drury, 2015; Drury, 2007, 2013), we see that it is not just the verbal (additional) language that is new, but also the *language-game*, i.e. the whole social context. Nazma is a relative newcomer to the nursery setting (Drury, 2013, p. 381) and the sorts of behaviours described are entirely consistent with what might be expected of a such a newcomer to that particular language-game. We do not need to invoke Vygotsky's developmental continuum to conclude that Nazma is "clearly distressed by the early transition from home to school" (Drury, 2013, p. 383); it is obvious from everything that is happening in the context. We see the importance of social interaction and imitation in SLA (Saville-Troike, 1988, pp. 578-579), of actions as well as words in particular contexts (Saville-Troike, 1988, pp. 579-581), and of trying out new sounds and new words (Saville-Troike, 1988, p. 586). As Clarke argues, "children learning English as a second language need explicit modelling and language teaching" (Clarke, 2009, p. 7). True; sometimes speakers of a



language may make no eye contact with others and have no apparent expectation of a response (Saville-Troike, 1988, p. 573). It is not surprising that in such circumstances, “children become reluctant to interact socially in their second language” (Lantolf & Pavlenko, 1995, p. 114). Such behaviours “*may be interpreted*” (Saville-Troike, 1988, p. 587, emphasis added) as support for Vygotsky’s account, but they do not provide evidence of its veracity. It may be that the ‘silent period’ marks a period in SLA when “linguistic development...has ‘gone underground’, *so to speak*” (Saville-Troike, 1988, p. 568, emphasis added), when these learners “*appeared to talk to themselves*” (Saville-Troike, 1988, p. 568, emphasis added). We may *describe* certain behaviour as showing ‘private speech’ if we like. But that phrasing presents us with a misleading picture. Thus, a sociocultural perspective that seeks to “problematize” the ‘silent period’ (Bligh & Drury, 2015, p. 259), and then

articulates the silent period in terms of the child actively participating through her/his inner thoughts—deep in her or his mind through internalization of the spoken word (Bligh & Drury, 2015, p. 271)

and where, in Vygotsky’s view (Fernyhough & Fradley, 2005, p. 104), “private speech represents a stage in the gradual internalisation of interpersonal linguistic exchanges whose final ontogenetic destination is inner speech, or verbal thought”, is seen from a Wittgensteinian perspective to be describing the situation in a misleading way. Far from Vygotsky’s work providing “additional understandings on how a bilingual learner creates meaning” (Bligh, 2014, p. 11), we can now see that it creates additional *misunderstandings*. The studies of Nazma and Nina (Bligh & Drury, 2015; Drury, 2000, 2013), and of Suki and Adyta (Bligh, 2012, 2014; Bligh & Drury, 2015), merely remind us that we

need explicitly to recognise that the human ability to develop and share meanings develops from organic social interactions in which children freely respond to partners with whom they are flexibly and authentically engaged in activity and related conversation (Jarvis, Newman, & Swiniarski, 2014, p. 56).

A perspective informed by Wittgenstein's reminders is therefore consistent with the empirical observations that have been made, and is capable of dealing with real-life examples (such as the one referred to by Saville-Troike (1988, p. 588)) which do not seem to be predictable using Vygotsky's account. It is the Wittgensteinian approach, not Vygotsky's, which successfully "focusses on the inextricable link between culture and cognition through engagement in activities, tasks, or events" (Gregory, 2008, p. 2, cited by Bligh and Drury, 2015, p. 262). We can see this inextricable link by reconsidering Vygotsky's assertions concerning abbreviation; contrary to Vygotsky's assertions, the answer to 'Would you like a cup of tea?' *could* be 'No, I don't want a cup of tea'; that the answer to the question 'Has your brother read this book?' *could* be 'Yes, my brother has read this book', and that in the case of several people waiting for a bus, that someone *could* indeed say, on seeing the bus approach, 'The bus for which we are waiting is coming'. We just have to imagine different contexts in which such replies could be given. Even if an answer was abbreviated as Vygotsky suggests, this is

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*? (*PI*, §20, p.10e).

## **Concluding remarks**

It is certainly the case that “no psychological theory is more explicitly dependent on ideas about language and communication than Vygotsky’s” (Jones, 2016, p. 2). Yet the issues in his work identified above call into question the uncritical use of Vygotsky’s work in support of a sociocultural account of SLA and of the so-called ‘silent period’. How far and in what direction Vygotsky’s ideas evolved in the later stages of his work are a matter of debate (see, for example, Jones (2016), González Rey & Martínez (2016), and Veresov (2017)). Nevertheless, it has been argued here that it is Wittgenstein’s account, not the one of Vygotsky’s which has been examined, which offers a sociocultural perspective, is supported by observations, and provides a coherent account of meaning. With such a reinterpretation, which recognises the significance of verbal and non-verbal language, we can see that it is an account of first and second language acquisition based on Wittgenstein’s reminders that “erases the boundary between language learning and language using” (Lantolf & Pavlenko, 1995, p. 116), and that “situates the locus of learning in the dialogic interactions that arise between socially constituted individuals engaged in activities” (Lantolf & Pavlenko, 1995, p. 116), with the wider perspective of ‘dialogic’ provided by the later Wittgenstein. A perspective based on Wittgenstein’s reminders is fully in accord with the notion that learners of a second language are “located in a social context, moving from ...apprenticeship to situated learning and ...to peripheral participation” (Bligh & Drury, 2015, p. 262), and onwards, presumably, to full participation. We do not need “psychological meta-concepts” (Berducci, 2004, p. 351); we make our judgements of whether people are (for example) in pain, motivated, happy, upset, and so on in particular circumstances (Berducci, 2004, pp. 346-347). We can recognise that “learning and

teaching combine as an essentially social process that is situated within, and shaped by, social and cultural contexts” (Bligh & Fathima, 2017, p. 530), and that “collaboration and participation with knowledgeable others” (Bligh & Fathima, 2017, p. 531) can help children to learn, and helps us to make sense of the notions of “apprenticeship, guided participation, and participatory appropriation” (Bligh & Fathima, 2017, p. 531). None of the observations of how imitation, observation, trying things out, discussion, and other forms of social interaction, including play (Mathis, 2016, p. 626), can help learning (Bligh & Fathima, 2017, pp. 538-545) are explained by Vygotsky’s theoretical account, and none of them need Vygotsky’s theoretical account to be explicable.

It was noted earlier that many theoretical accounts have been drawn on by those interested in SLA, and that the prevailing view of FLA and SLA amongst such writers is that both FLA and SLA are “highly complex” (Myles, 2013). That supposed complexity as exhibited in Vygotsky’s account in *Thought and Language* has been shown to be based on misunderstandings about language acquisition. Returning to Wittgenstein’s remark that philosophy is concerned with untying knots in our understanding (Z, § 452), we have seen that, although the results of philosophy are simple, the activity of philosophising must be as complicated as the knots it unties. But, as Malcolm (1971, p. xi) put it, once these knots have been untied, what we are left with is “not a theory but simply—no knots!”.

## Endnotes

1. This quotation is taken from the screenplay for *Agatha Christie’s Poirot: The Clocks* by Stewart Harcourt, dramatizing Agatha Christie’s *The Clocks* (Christie, 1963).

2. In view of the posthumous publication of most of Wittgenstein's work, the conventional referencing system has, for in-text references and citations of Wittgenstein's work, been abandoned in favour of the following abbreviations, as is now customary (Stickney & Peters, 2017, p. 6) for that purpose.

*PESD*: Notes for Lectures on "Private Experience" and "Sense Data"

(Wittgenstein, 1968), written 1934-1936.

*PI*: *Philosophical Investigations* (Wittgenstein, 1958), first published in 1953, written 1945-1949.

*OC*: *On Certainty* (Wittgenstein, 1969), written 1949-1951.

*Z*: *Zettel* (Wittgenstein, 1967), written 1945-1948.

Paragraph numbers (where applicable) are shown thus: §

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## References

- Aimin, L. (2013). The study of second language acquisition under socio-cultural theory. *American Journal of Educational Research*, 1, 162-167.  
doi:10.12691/education-1-5-3
- Berducci, D. F. (2004). Vygotsky through Wittgenstein: A new perspective on Vygotsky's developmental continuum. *Theory and Psychology*, 14(3), 329-353. doi:10.1177/0959354304043639
- Bligh, C. A. (2012). *Sociocultural understandings of the silent period: Young bilingual learners in early years settings*. Paper presented at the Developing early years practice: Reflecting on developments in practice and research, Birmingham.  
[http://tactyc.org.uk/workshop/Dr.%20Caroline%20Bligh\\_Bilingual%20Learners%20in%20the%20EYs.pdf](http://tactyc.org.uk/workshop/Dr.%20Caroline%20Bligh_Bilingual%20Learners%20in%20the%20EYs.pdf)
- Bligh, C. A. (2014). *The silent experiences of young bilingual learners: A sociocultural study into the silent period*. Rotterdam: Sense Publishers.
- Bligh, C. A., & Drury, R. (2015). Perspectives on the "Silent Period" for emergent bilinguals in England. *Journal of Research in Childhood Education*, 29(2), 259-274. doi:10.1080/02568543.2015.1009589
- Bligh, C. A., & Fathima, M. (2017). A sociocultural analysis of social interaction and collaboration within the cooking practices of children. *Journal of Research in Childhood Education*, 31(4), 530-547.  
doi:10.1080/02568543.2017.1344162
- Cartwright, P. (2011). Some Thoughts on Translating Wittgenstein. Retrieved from <http://lwpi.blogspot.co.uk/2011/09/some-thoughts-on-translating.html>
- Christie, A. (1963). *The clocks*. London: Collins.

- Clark, B. A. (2000). First- and second-language acquisition in early childhood. In D. Rothenberg (Ed.), *Issues in early childhood education: Curriculum, teacher education, & dissemination of information. Proceedings of the Lilian Katz symposium. November 5-7, 2000* (pp. 181-188). Champaign, IL.: ERIC Clearinghouse on Elementary and Early Childhood Education.
- Clarke, P. (2009). *Supporting children learning English as a second language in the early years (birth to six years)*. Melbourne, Victoria: Australia: Victorian Curriculum and Assessment Authority.
- Cole, M. (1985). The zone of proximal development: where culture and cognition create each other. In J. V. Wertsch (Ed.), *Culture, communication, and cognition: Vygotskian perspectives* (pp. 146-161). Cambridge: Cambridge University Press.
- Cook, V. (1977). Cognitive processes in second language learning. *International Review of Applied Linguistics in Language Teaching*, 15, 1-20. Retrieved from <http://www.viviancook.uk/Writings/Papers/IRAL77.htm>
- Cook, V. (2010/2013). The relationship between first and second language acquisition revisited. In E. Macaro (Ed.), *The Bloomsbury companion to second language acquisition* (pp. 137–157). London: Bloomsbury.
- Drury, R. (2000). Bilingual children in the pre-school years: Different experiences of early learning. In R. Drury, R. Cambell, & L. Miller (Eds.), *Looking at early years education and care* (pp. 81-91). London: David Fulton (2013: Abingdon: Routledge).
- Drury, R. (2007). *Young bilingual learners at home and school: Researching multilingual voices*. Stoke-on-Trent: Trentham Books.
- Drury, R. (2013). How silent is the ‘Silent Period’ for young bilinguals in early years settings in England? *European Early Childhood Education Research Journal*, 21, 380-391. doi:10.1080/1350293X.2013.814362
- Fernyhough, C., & Fradley, E. (2005). Private speech on an executive task: Relations with task difficulty and task performance. *Cognitive development*, 20, 103-120. doi:10.1016/j.cogdev.2004.11.002
- Gilroy, P. (1996). *Meaning without words: Philosophy and non-verbal communication*. Aldershot: Avebury.
- Gilroy, P. (2012). Lifelong learning: A language game in search of its rules. In D. N. Aspin, J. D. Chapman, K. Evans, & R. Bagnall (Eds.), *Second international handbook of lifelong learning. Part 1* (pp. 51-59). London: Springer.
- González Rey, F. L. (2009). Historical relevance of Vygotsky’s work: Its significance for a new approach to the problem of subjectivity in psychology. *Outlines*, 1, 59-73. Retrieved from [http://www.fernandogonzalezrey.com/images/PDFs/producao\\_biblio/fernando/artigos/Psicologia\\_historico\\_Cultural/Historical\\_relevance\\_of\\_Vygotsky.pdf](http://www.fernandogonzalezrey.com/images/PDFs/producao_biblio/fernando/artigos/Psicologia_historico_Cultural/Historical_relevance_of_Vygotsky.pdf)
- González Rey, F. L., & Martínez, A. M. (2016). *Perezhivanie*: Advancing on its implications for the cultural-historical approach. *International Research in Early Childhood Education*, 7(1), 142-160.
- Gregory, E. (2008). *Learning to read in a new language*. London: Sage.
- Grigorenko, E. L. (2007). Foreword. In R. van der Veer, *Lev Vygotsky* (pp. vii-ix). London: Continuum.
- Harcourt, S. (2009). Agatha Christie’s Poirot: The Clocks [Screenplay]. Retrieved from [http://www.imdb.com/title/tt0981209/trivia?tab=qt&ref=tt\\_trv\\_qu](http://www.imdb.com/title/tt0981209/trivia?tab=qt&ref=tt_trv_qu)

- Jarvis, P., Newman, S., & Swiniarski, L. (2014). On 'becoming social': The importance of collaborative free play in childhood. *International Journal of Play*, 3, 53-68. doi:10.1080/21594937.2013.863440
- Jones, P. E. (2009). From 'external speech' to 'inner speech' in Vygotsky: A critical appraisal and fresh perspectives. *Language & Communication*, 29, 166-181. Retrieved from <https://pdfs.semanticscholar.org/7c1f/d51d7ef8ff3e6ac630c3f51e42e8f83d8359.pdf>
- Jones, P. E. (2016). Language and social determinism in the Vygotskian tradition: A response to Ratner (2015). *Language and Sociocultural Theory*, 3(1), 1-8.
- Lantolf, J. P., & Pavlenko, A. (1995). Sociocultural Theory and Second Language Acquisition. *Annual Review of Applied Linguistics*, 15, 108-124.
- Lantolf, J. P., & Thorne, S. L. (2007). Sociocultural theory and second language learning. In B. VanPatten & J. Williams (Eds.), *Theories in second language acquisition* (pp. 197-221). London: Routledge.
- Lantolf, J. P., Thorne, S. L., & Poehner, M. E. (2015). Theories in Second Language Acquisition: An Introduction. In B. VanPatten & J. Williams (Eds.), *Sociocultural Theory and Second Language Development* (2 ed., pp. 207-226). New York and London: Routledge.
- Long, M. H. (2007). *Problems in SLA*. London: Lawrence Erlbaum Associates.
- Luckhardt, C. G. (1979). Editor's Introduction. In C. G. Luckhardt (Ed.), *Wittgenstein: Sources and Perspectives* (pp. 13-22). Hassocks: The Harvester Press.
- Mahn, H. (2013). Vygotsky and Second Language Acquisition. In C. A. Chapelle (Ed.), *The Encyclopedia of Applied Linguistics* (pp. 1-7). Oxford: Blackwell.
- Malcolm, N. (1958/1984). A Memoir. In N. Malcolm, *Ludwig Wittgenstein: A Memoir* (2nd ed., pp. 21-84). Oxford: Oxford University Press.
- Malcolm, N. (1971). *Problems of mind: Descartes to Wittgenstein*. London: George Allen and Unwin.
- Malcolm, N. (1981). *Wittgenstein: The relation of language to instinctive behaviour*. Swansea: University College of Swansea.
- Marginson, S., & Dang, T. K. A. (2017). Vygotsky's sociocultural theory in the context of globalization. *Asia Pacific Journal of Education*, 37(1), 116-129. doi:10.1080/02188791
- Mathis, J. B. (2016). Literature and the Young Child: Engagement, Enactment, and Agency From a Sociocultural Perspective. *Journal of Research in Childhood Education*, 30(4), 618-629. doi:10.1080/02568543.2016.1214650
- McGinn, C. (1984). *Wittgenstein on Meaning: An Interpretation and Evaluation* (Vol. 1). Oxford: Basil Blackwell.
- Mercer, N. (2002). Developing dialogues. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education* (pp. 141-153). Oxford: Blackwell.
- Monk, R. (1990). *Ludwig Wittgenstein: The Duty of Genius*. London: Jonathan Cape.
- Myles, F. (2013). Second language acquisition (SLA) research: Its significance for learning and teaching issues. Retrieved from <https://www.llas.ac.uk/resources/gpg/421>
- Newman, F., & Holzman, L. (2014). *Lev Vygotsky: Revolutionary scientist*. Hove: Psychology Press.

- Newman, S. (1999). *Philosophy and teacher education: A reinterpretation of Donald A. Schön's epistemology of reflective practice*. Aldershot: Ashgate.
- O'Grady, J. (2001). Elizabeth Anscombe: An exhilarating philosopher, she took to sporting a monocle and smoking cigars. *The Guardian*. Retrieved from <https://www.theguardian.com/news/2001/jan/11/guardianobituaries.highereducation>
- Parke, T., & Drury, R. (2001). Language development at home and school: Gains and losses in young bilinguals. *Early Years*, 21(2), 117-127. doi:10.1080/713667701
- Pears, D. (1988). *The False Prison: A Study of the Development of Wittgenstein's Philosophy, Volume II*. Oxford: Clarendon Press.
- Pitcher, G. (1964). *The philosophy of Wittgenstein*. Englewood Cliffs, NJ: Prentice-Hall.
- Saville-Troike, M. (1988). Private speech: Evidence for second language learning strategies during the 'silent' period. *Journal of Child Language*, 15, 567-590. doi:10.1017/S0305000900012575
- Saville-Troike, M. (2006). *Introducing second language acquisition*. Cambridge: Cambridge University Press.
- Sluss, D. J., & Stremmel, A. J. (2004). A sociocultural investigation of the effects of peer interaction on play. *Journal of Research in Childhood Education*, 18(4), 293-305. doi:10.1080/02568540409595042
- Soderman, A. K., & Oshio, T. (2008). The social and cultural contexts of second language acquisition in young children. *European Early Childhood Education Research Journal*, 16(3), 297-311. doi:10.1080/13502930802291959
- Stern, W. (1914). *Psychologie der fruehen Kindheit*. Leipzig: Quelle and Meyer.
- Stickney, J., & Peters, M. A. (2017). Journeys with Wittgenstein: Assembling Sketches of a Philosophical Landscape. In M. A. Peters & J. Stickney (Eds.), *A Companion to Wittgenstein on Education: Pedagogical Investigations* (pp. 3-25). Singapore: Springer.
- Swain, M., Kinnear, P., & Steinman, L. (2011). *Sociocultural theory in second language education: An introduction through narratives*. Bristol: Multilingual Matters.
- Thomas, P., Shah, A., & Thornton, T. (2009). Language, games and the role of interpreters in psychiatric diagnosis: A Wittgensteinian thought experiment. *Journal of Medical Humanities*, 35, 13-18. doi:10.1136/jmh.2008.000422
- van der Veer, R., & Yasnitsky, A. (2011). Vygotsky in English: What Still Needs to Be Done. *Integrative Psychological and Behavioral Science*, 45(4), 475-493. doi:10.1007/s12124-011-9172-9
- Veresov, N. (2017). The Concept of Perekhivanie in Cultural-Historical Theory: Content and Contexts. In M. Fleer, F. L. González Rey, & N. Veresov (Eds.), *Perekhivanie, Emotions and Subjectivity: Advancing Vygotsky's Legacy* (pp. 47-70). Singapore: Springer.
- Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman Eds.). Cambridge, MA and London, UK: Harvard University Press.
- Vygotsky, L. (1986). *Thought and Language* (A. Kozulin, Trans.). Cambridge, MA; London, England: The MIT Press.
- Wertsch, J. V. (1985). *Vygotsky and the Social Formation of Mind*. Cambridge, MA: Harvard University Press.



- Wertsch, J. V., & Tulviste, P. (1992). L.S. Vygotsky and Contemporary Developmental Psychology. *Developmental Psychology*, 28(4), 548-557.
- Williams, M. (1999). *Wittgenstein, Mind and Meaning: Towards a Social Conception of Mind*. Abingdon: Routledge.
- Wittgenstein, L. (1958). *Philosophical Investigations* (G. E. M. Anscombe, Trans. 2 ed.). Oxford: Basil Blackwell.
- Wittgenstein, L. (1967). *Zettel* (G. E. M. Anscombe, Trans. G. E. M. Anscombe & G. H. von Wright Eds.). Oxford: Basil Blackwell.
- Wittgenstein, L. (1968). Notes for Lectures on "Private Experience" and "Sense Data". *Philosophical Review*, 77(3), 275-320. Retrieved from <https://www.jstor.org/stable/pdf/2183568.pdf?refreqid=excelsior%3A31720bcf94cbfd13ad7023ebb51b7357>
- Wittgenstein, L. (1969). *On Certainty* (D. Paul & G. E. M. Anscombe, Trans. G. E. M. Anscombe & G. H. von Wright Eds.). Oxford: Basil Blackwell.
- Wittgenstein, L. (1978). *Vermischte Bemerkungen: eine Auswahl aus dem Nachlass*. Frankfurt am Main: Suhrkamp.
- Wittgenstein, L. (1998). *Culture and Value: A Selection from the Posthumous Remains* (P. Winch, Trans. G. H. von Wright & H. Nyman Eds. Revised second ed.). Oxford: Blackwell.
- Yasnitsky, A. (2011). The Vygotsky That We (Do Not) Know: Vygotsky's Main Works and the Chronology of their Composition. *Psychological Journal*, 4(4), 53-61. Retrieved from <http://www.psyanima.su/journal/2011/4/2011n4a1/2011n4a1.1.pdf>
- Yengoyan, A. A. (2003). Lyotard and Wittgenstein and the Question of Translation. In P. G. Rubel & A. Abraham Rosman (Eds.), *Translating Cultures: Perspectives on Translation and Anthropology* (pp. 25-43). Oxford and New York: Berg.