

**PERSONALITY, EMOTIONS, AND BEHAVIOURAL MASTERY  
IN THE THOUGHT OF LEV VYGOTSKY**

**By**

**Michael G. Levykh  
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# APPROVAL

**Name:** Michael G. Levykh  
**Degree:** Doctor of Philosophy  
**Title of Thesis:** Personality, Emotions, and Behavioural Mastery in the Thought of Lev Vygotsky

**Examining Committee:**

**Chair:** Paul Neufeld, Associate Professor

---

**Jack Martin, Professor**  
Senior Supervisor

---

**Jeff Sugarman, Associate Professor**  
Committee Member

---

**Natalia Gajdamaschko, Lecturer**  
Committee Member

---

**Dr. Lucy LeMare, Associate Professor**  
Internal/External Examiner

---

**Dr. Jennifer Vadeboncoeur, Associate Professor,**  
**UBC**  
External Examiner

**Date Defended/Approved:**

September 29, 2008



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## ABSTRACT

In this thesis I interpret and apply the ideas of Lev Vygotsky concerning emotions and relationships among emotions, personality, and behavioural mastery. The application is to current debates and controversies over the use of Vygotsky's concept of the zone of proximal development (ZPD) in educational contexts. I will argue that the ZPD can successfully facilitate learning and development if, and only if, it is understood and employed in the context of a holistic conception of cultural development – a conception that assumes the tripartite relationship among emotion, behavioural mastery, and personality.

In the course of my investigation, I will analyze in detail the concepts of cultural development, socio-cultural-historical context, emotions, personality, mastery of behaviour, and their educational applications. I will explain what cultural development within the dialectical paradigm entails for Vygotsky. More specifically, I will discuss the mechanisms, processes, and products of cultural development (i.e., the notions of mediation, internalization, externalization, struggle, culture, and neo-formation). I also will consider whether or not cultural development goes beyond adolescence. I will examine: (a) the concepts of emotion in general, and cultural emotion in particular; (b) the way in which Vygotsky understood emotions and their purpose; (c) the notion of emotional experience (*perezhivaniye*), as Vygotsky's last and most complete unit of analysis of cultural development; (d) practical considerations concerning the cultural

development of emotions; and (e) the consequences of disintegrated and undeveloped emotions.

I will further clarify and develop Vygotsky's ideas concerning relations among emotions, behavioural mastery, and personality (leachnost) – the **Tripartite Model** – within a social-historical context. Of particular importance will be to demonstrate exactly how these ideas and relations enable the conception of a holistic cultural development. Here, I will argue that Vygotsky's understanding of cultural development can be explicated most clearly and fully with the Tripartite Model in place. Then, I will clarify Vygotsky's understanding of learning within the Russian cultural-historical-educational context. This interpretive analysis will be followed by the application of my Tripartite Model to achieve an enriched understanding of the ZPD, an understanding that also will be illustrated with respect to its implications for educational practice.

**Keywords:** Vygotsky; personality; leachnost; emotional experience; perezhivaniye; behavioural mastery; teaching-learning; obucheniye; vospitaniye; obrazovaniye; neoformation; novo-obrazovaniye; struggle; bor'ba protivorechiy; zone of proximal development

**Subject Terms:** Vygotsky; Personality-Social Aspects; Personality and Culture; Educational Psychology; Social-Emotional Development

*To my family,  
for their continuing support, encouragement, and demands,  
without which the present thesis would not be possible*

*No moral sermon educates like a real pain, like a real feeling*  
(Vygotsky, 1997c, p. 104)

*Get [your students] habitually to tell the truth, not so much  
through showing them the wickedness of lying as by  
arousing their enthusiasm for honour and veracity*  
(Vygotsky, 1997c, chap. 12, p. 7)

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# 1. INTRODUCTION

## Purpose and Overview

The present thesis is not intended to examine every aspect of Vygotsky's cultural-historical theory, nor does it claim to describe what Vygotsky's theory "really" is. Rather, its purpose is to shed greater light on Vygotsky's ideas and writings with respect to the interaction and interdependency among personality, emotions, and behavioural mastery, especially as these are relevant to cultural development and education. Particular texts of Vygotsky and some of his followers were selected for intensive study because of their direct relevance to this project.

More specifically, I focus my analysis of the ideas of Lev Vygotsky concerning emotions and relationships among emotions, personality, and behavioural mastery on current debates and controversies over the use of Vygotsky's concept of the zone of proximal development (ZPD) in educational contexts. I argue that the ZPD can successfully facilitate learning and development if, and only if, it is understood and employed in the context of a holistic conception of cultural development – a conception that assumes the tripartite relationship among emotion, behavioural mastery, and personality that I describe herein.

In order to appreciate the full scope of Vygotsky's work, it must be approached dialectically.<sup>1</sup> Such an approach should include an interpretive analysis of Vygotsky's work, including its history, development, and current interpretations and applications. Interpreting the topics of emotion, behavioural mastery, and personality separately, in relation to each other, and through the logic of dialectical development, enables an understanding of the cultural development of the whole person, as understood by Vygotsky. With such an understanding in place, Vygotsky's theory of education, especially with respect to the ZPD, can be explicated fully.

In the course of my investigation, I will analyze in detail the concepts of cultural development, socio-cultural-historical context, emotions, personality, mastery of behaviour, and their educational applications. Following this brief introductory chapter, in chapter 2, I will explain what cultural development within the dialectical paradigm entails for Vygotsky. More specifically, I will discuss the mechanisms, processes, and products of cultural development (i.e., the notions of mediation, internalization, externalization, struggle, culture, and neo-formation). I also will consider whether or not cultural development goes beyond adolescence. Chapter 3 will examine: (a) the concepts of emotion in general, and cultural emotion in particular; (b) the way in which Vygotsky understood emotions and their purpose; (c) the notion of emotional experience (*perezhivaniye*), as Vygotsky's last and most complete unit of analysis of cultural development; (d) practical considerations concerning the cultural development of emotions; and (e) the consequences of disintegrated and undeveloped emotions.

The purpose of chapter 4 is to clarify and develop further Vygotsky's ideas concerning relations among emotions, behavioural mastery, and personality (*leachnost*) –

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<sup>1</sup> See chapter 2 for a detailed explanation of what the dialectical paradigm entails.

the **Tripartite Model** – within a social-historical context. Of particular importance will be to demonstrate exactly how these ideas and relations enable the conception of a holistic cultural development. Although this is not the only possible interpretation, I will argue that Vygotsky’s understanding of cultural development can be explicated most clearly and fully with the Tripartite Model in place. In chapter 5, I will use the conceptual and theoretical work conducted in the first four chapters of the thesis to clarify Vygotsky’s understanding of learning within the Russian cultural-historical-educational context. The Russian concepts of *obrazovaniye*, *obucheniye*, and *vospitaniye* will be introduced, prior to a detailed discussion of the concept of the zone of proximal development and the related notion of imitation. Questions will be raised concerning the validity of different extant interpretations of the concept of the ZPD. This interpretive analysis will be followed by the application of my Tripartite Model to achieve an enriched understanding of the ZPD, an understanding that also will be illustrated with respect to its implications for educational practice. Finally, in chapter 6, I will summarize all that I have attempted in the thesis, and evaluate the strengths, weaknesses, and limitations of my investigation, noting issues that remain unresolved.

### **On Interpreting Vygotsky’s Writings**

Many of Vygotsky’s writings were translated into English quickly at the height of the “cognitive revolution” in the West, sometimes in multiple translations or editions, and thus have been subject to multiple interpretations – and sometimes misinterpretations (e.g., using the term *cognitive tools* instead of the more appropriate translation, *psychological tools*). It is difficult to claim any final authority in interpreting Vygotsky’s

texts -- “an authoritative text...is alive as a part of ever-changing interpretive communities and theoretical purposes” (Glick, 2004, p. 346). Glick recommends that

the best approach to reading Vygotsky is to suspend attempts to offer a “true” and “eternal” to the “real meaning” of his text. At best, we can attempt to render the spirit of his method as revealed in his writings... (p. 348)

Since it is difficult to establish one, and only one, interpretation of Vygotsky’s writings, it is equally difficult to claim one, and only one, way to apply Vygotsky’s theory.

Establishing the one right way to develop the unfilled [*sic*] program of [Vygotsky] and his colleagues is not an attractive task. Seeking to explore ways to enrich, correct, make relevant to our times, and in general, make those ideas equipment for our living and the prospects for living of our progeny IS an attractive task. (Cole, XMCA Discussion Group, October 20, 2006)

Nonetheless, certain distinctive features of Vygotsky’s theory of development are relatively uncontested. For example, it now is commonly acknowledged that in contrast to much mainstream Western developmental psychology, Vygotsky differentiated between lower and higher mental functions and processes. Lower mental functions and processes are direct, natural, biological, and primitive (e.g., thought, memory, will, behavioural reactions, elementary perception, spontaneous attention, and practical intellect). Unlike lower mental functions that develop independently of consciousness and learning, higher mental functions (e.g., abstract-conceptual thinking, logical memory, selective/voluntary attention, decision making, language, free will, and other higher forms of behaviour) can only be developed through the internalization of social means mediated by cultural tools.

However, other aspects of Vygotsky’s thought that distinguish it from a good deal of Western developmental theory are less widely recognized. Of particular importance to

my work herein, is that the significance of affect in Vygotsky's developmental theory is often underestimated or completely ignored in many contemporary educational and psychological interpretations and applications of Vygotsky's work. Some likely reasons for this oversight include the following.

- (1) There is a gap between the typical Western treatment of emotions as grounded in the exclusively personal experience of individuals and Vygotsky's approach, which considers emotional development in the context of historically and culturally established practices.
- (2) Unlike many Westerners, Vygotsky believed that affect and intellect are not two mutually exclusive, but rather, two inseparable mental functions. His individual belief in this regard reflected the entire Russian culture where "the emotional/motivational aspect of [learning and teaching] has always been at the center of attention both theoretically...and practically..." (Kozulin & Gindis, 2007, p. 359).
- (3) Although affect for Vygotsky was "the beginning and the end" of the child's entire cultural development, Vygotsky's fatal illness (tuberculosis) prevented him from completing his theory of emotions.

Many Western readers have criticized Vygotsky's writings without understanding the full linguistic and cultural context in which his work is situated. Poor translations and/or interpretations do not help. To counter this tendency, it is important to keep in mind that (a) Vygotsky lived a very short (thirty-seven years) yet scientifically prolific life; (b) his last ten years were plagued by dogmatic socialist attacks directed against his political and psycho-educational views by the Russian government and its scientific

community (including some of his friends, colleagues, and students); (c) due to illness during the last two years of his life, most of his work during this period was dictated, without notes, to a few remaining loyal students, colleagues, and his wife; and (d) he never had a chance to review, polish, and re-write much of his work. Nonetheless, although written three quarters of a century ago under far from ideal circumstances, even in translation, his work addresses some of the most burning issues that still lie at the center of current educational debates. Thus, Vygotsky's work deserves to be approached respectfully and generously, even as it is considered critically.



## 2. VYGOTSKY'S NOTION OF CULTURAL DEVELOPMENT

*Every function in the cultural development of the child appears on the stage twice, in two planes, first, the social plane, then the psychological, first between people, then within the child.*

(Vygotsky, 1997b, p. 106)

### Introductory Comments

Vygotsky's conception of cultural development was based on<sup>2</sup> Hegel's and Marx's dialectical philosophies. He meant this theory to be understood through the dynamics of a socio-cultural-historical context. From the age of 15, Vygotsky was fascinated with Hegelian dialectical philosophy and used it as the basis for his scientific inquiry. Vygotsky applied Marx's historical method and social theory of human activity<sup>3</sup> to the psychology of the formation of higher mental functions in ontogenesis and phylogenesis. From this perspective, structural relationships among all the psychological functions within the child and between the child and the environment constitute a holistic explanation of each period in the child's development. Not only does this approach mark a difference between Vygotsky and other psychologists of his time in understanding

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<sup>2</sup> It is important to acknowledge that Vygotsky did not follow blindly every Hegelian aspect of dialectics, but rather synthesized them with philosophies of others and of his own.

<sup>3</sup> Human activity theory originates in Hegel and (through Marx and Engels) was invoked by Vygotsky. The concept of activity has undergone metamorphoses and has been extremely difficult to define clearly (see Kozulin, 1996).

cultural development, but it also indicates an important difference between the theoretical orientations of Russian and Western psychologists in general. According to Gindis (1999), Kozulin (1990), Robbins (2001), and Yaroshevsky (1989), it is the individual within the context of historical and cultural change that is highlighted in Russian psychological research.

Vygotsky also incorporated aspects of monism into his dialectic philosophy. For Vygotsky, “Spinoza<sup>4</sup>...represented a far superior variety of monism” (Bakhurst, 2007, p. 59), in part because of Spinoza’s belief that emotions could only be understood through intellect. A “traditional” monism represents a philosophy where all things are forms of one ultimate reality. However, as asserted by Liu and Matthews (2005), “Vygotsky’s monist position should not be confused with traditional monist philosophy ....His is a functional monism where all living factors exist in interdependency and form a dialectic organic whole” (p. 397). Vygotsky’s functional monism is reflected in his notions of functional relationships between the individual and social (i.e., mind and reality), and within the individual (i.e., between emotions and thinking). As supported by Fulani (2000), “Vygotsky’s views on learning and development are refreshingly and radically monistic” (p. 242) and are also reflected in the fact that consciousness represents a unified whole – a synthesis of affect and intellect – as it emerges from the inter-functional development of mental capacities. Although such a treatment of Vygotsky’s philosophical perspective has not achieved popularity, I believe this viewpoint is necessary to appreciate fully his unique cultural-historical developmental theory, especially when applied to education. “Vygotsky’s educational theory is guided by an

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<sup>4</sup>Vygotsky’s attempt to present Spinoza’s writings as a better “tool” to solve the problem of mind-body dualism (reflected in James-Lange Theory) will be elaborated on in Chapter 3.

alternative epistemological paradigm – that of historical-dialectical-monism” (Liu & Matthews, 2005, p. 398).

Thus, to understand Vygotsky and his notion of cultural development, one has to depart from the traditions of Western philosophy as influenced by the assumption of a Cartesian mental theatre, and “establish a dialogue with the Russian-Spinozian background” (Robbins, 2001, p. 14), where affect and intellect are synthesized. A non-dialectical way of thinking reflects an “either-or” approach; for example, either cognitive or affective, either individual or collective, either thesis or antithesis. A non-dialectical approach represents a linear way of thinking. In contrast, a dialectical approach allows these “seeming” opposites to interact (or negotiate) with each other in a dialogical way. Such dialogical interaction brings to light the “struggle” of opposites that leads to a synthesis (e.g., not either teaching or learning, but rather teaching through learning and learning through teaching). The synthesis reveals the internal dynamics of cultural development as a “revolutionary” process.

As previously mentioned, Vygotsky’s views on the role of struggle did not arise from blindly following any specific dialectical philosophy. Rather, his views reflect a synthesis of the dialectical philosophies of Hegel and Marx, and his own beliefs.<sup>5</sup> For example, according to Hegel, man is a logical subject, while for Vygotsky, “a man is a social person = an aggregate of social relations, embodied in an individual (psychological functions built according to social structure)” (Vygotsky, 1986a, p. 66). As supported by Bakhurst (2007), “He [Vygotsky] was not the kind of rationalist who preferred to see human beings as cold, abstract reasoners. On the contrary, he insisted on the importance

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<sup>5</sup> As asserted by Kotik-Friedgut and Friedgut (2008), “Vygotsky’s life was spent in search of a synthesis in which he and the world about him would be in full harmony” (p. 36).

of the emotions in guiding and informing cognition” (p. 68). And neither did Vygotsky believe in the Hegelian idea that “the real is rational and the rational is real” (Bakhurst, 2007, p. 60). In fact, taking into consideration that for Vygotsky human emotions and desires represent the alpha and omega of human cultural development, it would be difficult (if not impossible) to assume that he considered cultural development as a mere collection of emotionless contradictions and negations in the “pure” spirit of Hegelian dialectics.<sup>6</sup>

Within the dialectical paradigm, it is not how the child behaves in a group that is indicative of cultural development, but rather how the group creates higher psychological functions in the child. In the following sections, some of the mechanisms, processes, and products of cultural development – the notions of mediation, internalization, externalization, struggle, culture, and neo-formation – will be explicated.

### **Mediation and Internalization**

Vygotsky brings into his scientific inquiry the notion of *mediation* involving cultural tools or artefacts – anything made by human work (e.g., schemes, maps, algebraic formulas) or art. However, it is not only artefacts that can serve as tools. Vygotsky suggests that after being internalized (mastered) gestures, language, meaningful sign systems, and human emotions also can be used as psychological tools to mediate the development of higher mental functions. “These signs<sup>7</sup> [any conventional meaningful symbols] are special psychological tools by means of which the individual

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<sup>6</sup> As also supported by Kotik-Friedgut and Friedgut (2008), “his [Vygotsky’s] dialectic was that of Spinoza rather than Hegel [or Marx, K-F. & F.] and his materialism, like Spinoza’s, made room for the influence of the mental and spiritual in humans” (p. 33).

<sup>7</sup> Gestures and emotions can be used as psychological tools only after they are internalized.

organizes his behaviour and learns to direct them voluntarily” (Yaroshevsky & Gurgenidze, 1997, p. 350).

A basic, natural form of human behaviour can be extended with the help of material tools (Vygotsky, 1997a). For example, the tools of agriculture are used as material tools to collect (“master”) the crop. All of these tools serve as mediators between humans and the world by helping them master the (natural and material) world around them and, in doing so, to master themselves. While we use tools (which are externally oriented) to influence the environment, we use signs and psychological tools (which are internally oriented) to influence other people and ourselves. That is, people use mediators not only to change the world, but also to transform and regulate their own development. Mediators (internalized<sup>8</sup> psychological tools) enable the individual to master one’s own natural psychological functions (i.e., basic forms of perception, memory, attention). Vygotsky stipulates that mediation also can be achieved through another human being; that is, “genetically, social relations, real relations of people, stand behind all the higher functions and their relations” (Vygotsky, 1997b, p. 106). Thus, within the context of organized learning activity it is the child’s interactions with the adult that are internalized and become the child’s higher psychological functions. Sometimes, the very presence of an adult, who can encourage the child by providing a secure learning environment, can serve as mediation. Human mediation is what makes it possible for a child to use artefacts and symbols as psychological tools. “The mere availability of signs or texts does not imply that they will be used by students as psychological tools” unless their meaning is adequately mediated by the adult (Kozulin, 2003, p. 24).

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<sup>8</sup> The notion of internalization will be explained further.

Originally, while studying the processes of mediation, Vygotsky focused on signs and symbols, individual activity, and interpersonal relations. In 1928, he began outlining his cultural-historical theory and, only in 1930, was joined by Luria – who, in contrast to Vygotsky, was greatly influenced by Freudian theory. Shortly after that, Vygotsky and Luria were joined by Leontiev (who did not play a visible role at the beginning). In fact, according to Van der Veer and Valsiner (1993), “the idea of the heroic and inseparable three musketeers [the famous troika, i.e., Vygotsky, Luria, and Leontiev] fighting against traditional psychology is, then, a romantic reconstruction favoured by Leontiev and Luria” (p. 184). Further support for the historically inaccurate interpretation that the work of Leontiev and Luria somehow represents a “natural” continuation of Vygotsky’s work (sanctioned by Vygotsky) can be found in Yaroshevsky (1996), who asserts that “Vygotsky was credited with the creation of activity theory, which he did not even mention in his works” (Yaroshevsky, 1996, p. 112; cited in Koshmanova, 2007, p. 68). It is only much later, after Vygotsky’s death, that Leontiev and Luria began to work on Activity Theory (Kozulin, 1990, p. 247). The new theory, a Cultural Historical Activity Theory (CHAT), uses a somewhat different basic unit of analysis (practical activity) than that of the original Vygotskian theorizing.

Although differentiating between Vygotsky’s writings and that of the CHAT followers is not intended to diminish the works of Luria and Leontiev, these differences go beyond a mere triviality. Koshmanova (2007) affirms that the views of CHAT followers bear similarity with Vygotsky’s notions of learning and development. Nonetheless, contrary to Vygotsky, their emphasis is on “the active role of the teacher who directs, manages, and controls student learning, [however] without leaving space for

student self-development, free choice, or their revealing of emotions” (p. 64). Although the notions of the students’ agentic self-development through interpersonal interaction in collaboration, the role of the learning environment, and the unity between affect and intellect were extremely important to Vygotsky, these notions were not the focus of Leontiev’s work. In fact, Koshmanova (2007) asserts that fundamental differences between Vygotsky and Leontiev can be found in their treatment of the notion of internalization. Internalization is given more significant treatment in Vygotsky’s writings than in the writings of Leontiev, Luria, and their followers; specifically, according to Vygotsky, “during the process of interpersonal interaction, students internalize not only their visions, understandings, feelings, emotions, and attitudes [as believed by Leontiev, Luria, and their followers], but also their friends’ and teachers’ experiences as well” (p. 83). However, for all of these groups (Vygotskians and neo-Vygotskians alike) the principle of mediated activity remained the same. That is, signs and symbols are first mastered externally and then internally. For example, in Western culture, a child usually learns to read out loud before reading silently.<sup>9</sup>

For Vygotsky, the process of mediation is reciprocal. Such reciprocity is evident in the central claims of his position. For example, development of personality facilitates mastery of behaviour,<sup>10</sup> and vice versa, both through emotions as mediators. Further, while in the process of serving as a mediator for the development of personality and behavioural mastery, emotions are also being developed. In other words, the objects of development (personality and behavioural mastery) become mediators to their original mediator (emotions), while the original mediator develops as a focal object.

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<sup>9</sup> Notice the similarity with the process of transformation from social to inner speech.

<sup>10</sup> For a detailed explanation of what personality development and behavioural mastery entails see chapter 4 of the present thesis.

The process of mediation can be contrasted with the direct cause and effect of traditional psychology and reflects the emergent nature of mind within jointly mediated activity. Understood in this way, mediation implies that there is no direct connection between the subject and the object. Rather, subject and object are connected only through the intermediary of a mediating tool. However, as interpreted by Cole (2005), Vygotsky was convinced that the presence of mediation does not eliminate direct interaction. The process of interaction, rather, goes through both channels (mediated and direct) which mingle with each other. To illustrate by analogy, a loving married couple is a unit of two human beings in constant direct interaction with each other. Once they have a child, their interaction is mediated by their child. The adults don't lose their direct connection with each other, but the connection is enhanced by the child. Specifically, the wife, for the husband, is now more than the person he married – she is also the mother of their child. Likewise, for the wife, the husband is now much more than the person she married – he is the father of their child. Similarly, the child is not just a child for either of the parents separately, but rather simultaneously a child for both of them and of both of them. The child develops through the care her parents provide for her and the care they provide for each other, which in turn, develops the parents.

With every new level of the child's development, the changes in the child are also reflected in the parents. It is not only that the parents' expectations facilitate changes in the child. The ways those expectations are manifested in actions, which trigger the child's developmental changes, also facilitate changes in the parents as well. Once changes in the child occur, the parents also are affected in re-adjusting to the child's changes and to the constantly evolving societal demands placed on the child, the parents,



and the family as a whole. Thus, the family triangle represents more than a merely two-dimensional geometrical figure. The family triangle is a system of enhanced representations. That is, not only are both direct and mediated interactions possible, but moreover, they are enhanced by (mingle with) each other in a dialectical way, creating a new unit – a family – a qualitatively different system from a three-separate-person model: two adults and one child. It is important to notice that the process of mediation facilitates a qualitative change in all the members of the “triangle” – the man and the woman are now not only husband and wife to each other, but also father and mother to their child, and also members of a holistic unit, the family.

When explicating the word *culture*, Cole (2005) elaborates the complex of relations that issue from mediation: “Mediated activity has multidirectional consequences; it simultaneously modifies the subject in relation to others and the subject/object nexus in relation to the situation as a whole, as well as the medium in which self and other interact” (p. 221). Although Cole’s treatment of mediation refers to Leontiev’s Activity Theory, my interpretation of Vygotsky’s understanding of the process of mediation is quite similar. Development of personality facilitates mastery of behaviour, and vice versa, both through emotions as mediators. According to Vygotsky, while in the process of changing the world through the use of tools and signs as mediators, man changes himself. That is, the external (social) relationships are transformed into individual higher psychological functions (i.e., culturally developed emotions, logical memory, abstract thinking, and other higher forms of behaviour). When, in turn, these higher functions are used as psychological tools to further mediate cultural development, the relationship between and among these higher functions changes

and, hence, the functions themselves are also changed. For example, language (being considered by Vygotsky as a special type of behaviour) is used as a psychological tool to influence people around us and, in turn, to further our own psychological development. That is why, in my understanding of Vygotsky's notion of mediation as a reciprocal process, mediation facilitates qualitative changes -- not only reciprocally in the object and the subject of mediation, but also in the mediator itself.

Vygotsky's approach to cultural development, which applies a notion of mediation through tools and signs, also is based on the concept of *internalization* – a process that allows lower mental functions to be developed into higher mental functions. Internalization is a process of transformation from the social to the individual, and lies at the root of cultural development. It is the consequence of an individual's (conscious and unconscious) urge to interiorize or appropriate certain elements of social behaviour. Vygotsky called this process a “revolution” (Vygotsky, 1978; 1997a, pp. 117-119; 1999, p. 55) because, according to him, there must be some extreme change within the child to internalize what was once social.

During such a revolutionary process, the functions that are internalized have moved inward. However, internalization is not a simple copying of an external world, nor is it a plain transfer of one of the functions inward, but rather “a complex reconstruction of its whole structure” (Vygotsky, 1999, p. 55). Vygotsky's experimental work demonstrates that during the process of internalization, natural functions are changed qualitatively and are immersed within newly created psychological systems. For example, according to Vygotsky (1997b), private speech reflects the intrapersonal communication produced by learners in concrete, objective circumstances. The process

of internalization allows social speech (speech for others, or an inter-mental process) to be transformed to egocentric speech, and then to inner (private) speech, speech for oneself.

It is interesting that the word “internalization” does not quite reflect the dynamic, affective, and developmental characteristics of the Russian word *vrashchivaniye*. *Vrashchivaniye* means *ingrowing* or growing into something new, and reflects the appearance of “active, *nurturing* [italics added] transformation of externals into personally meaningful experience” (Fawley, 1997; cited by Lantoff, 2003, p. 350). For example, the child’s successful internalization during infancy depends on the quality of the affective relationship established by the caregiver. According to some neo-Vygotskians (Elkonin, 1989; Zaporozhets & Lisina, 1974; cited in Karpov, 2003, p. 142), infants’ initial interests in the external world and their positive attitudes towards adults are generalized towards every activity presented by adults. Thus, a successful internalization (*vrashchivaniye*) can take place when emotionally positive relationships are established by adults or caregivers.

During the process of internalization, which reflects a meaningful transformation of social interactions in general, what students specifically internalize is reflected in both the emotional and intellectual experiences of their teachers and peers, and in their own understandings, attitudes, emotions, and visions (Koshmanova, 2007). That is, the transformation proceeds according to the synthesis between the external relationships and the way these relationships are perceived by an individual child. “Each [student] perceives the external influences in his/her own way, which is mediated by his/her own experiences and psychological specificity” (Koshmanova, 2007, p. 83). Furthermore,

DiPardo and Potter (2003) affirm that internalization, being a synthesis of teaching through learning and learning through teaching,<sup>11</sup> is an emotionally laden process: “We would argue that the process [of internalization] is also profoundly and inextricably emotional – that is, if all learning is imbued with emotional meanings and influences, all teaching is, too” (p. 326). Hence, a process of internalization is considered to be successful not only when adults establish positive affective relationships with the child, but also when the child’s individual perception allows her to accept and reciprocate such positively established relationships.

The process of internalization is not complete unless the newly internalized behaviour is also externalized. For example, after a child internalizes certain cultural morals and values (e.g., not to steal food when hungry), his/her lower mental functions (i.e., experience of being hungry) are subordinated by higher functions (cultural morals and values). Such subordination results in behavioural changes – the child most likely will not resort to stealing food to satisfy his/her hunger, but rather will ask an adult or a caregiver to feed him/her. All the previously separated functions are united under one roof and serve to motivate future behaviour. The child’s internalized morals and values are externalized into higher forms of behaviour (which reflect higher psychological functioning). Vygotsky (1998) asserted that such a complex reconstruction of the internal mental structure “is rooted in the change of the basic factor that determines the relation of the child to the environment, specifically, in the change in needs and motives that control the behaviour of the child” (p. 296).

It is important to recognize that externalization is one of the last stages of internalization, and leads to automaticity. That is, the process of internalization is not

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<sup>11</sup> See chapter 5 for more explication on teaching and learning.

complete without the newly internalized behaviour being externalized and developed habitually. For example, when Vygotsky argued about the validity of his and Leontiev's experiments<sup>12</sup> showing similarities in the process of the mastering of memory (using colour cards as mediators) and attention through mediation, he asserted:

The child would (1) at first show incomplete and inefficient use of the color cards; (2) proceed to their use and become completely dominated by them; (3) master the efficient use of color cards; and (4) start ignoring the color cards and relying on internal procedures. (Vygotsky, 1931/1983, p. 210; cited in Van der Veer and Valsiner, 1993, p. 237)

At the fourth stage, the child is "ignoring" the newly internalized behaviour because by that time she has already achieved the level of behavioural mastery, that is, automaticity in its externalization. Thus, according to Vygotsky, the external cultural cues disappear from the child's consciousness when the newly internalized behaviour achieves full automaticity.<sup>13</sup>

Although Vygotsky (1930) opposed the "botanical" view of the child's development, he admitted that the psychologists of his time still "talk about the growth (development) of the child personality (leachnost) and...call the system of cultivation and fostering in young age (vospitaniye) the garden (short for kindergarten)" (chapter 1, para. 2; my translation). However, despite being a part of the garden metaphor, *vrashivaniye*, for him, was the only word to fully identify the process of internalization. Just as a successful *vrashivaniye* leads to the growth of plants, trees, bushes, and flowers, a successful internalization leads to cultural development – the development of higher psychological functions and systems.

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<sup>12</sup> "The so-called "forbidden colours game" introduced the method of double stimulation (Vygotsky, 1997b; Leontiev, 1932).

<sup>13</sup> A discussion of the importance of automaticity will be presented in the chapter on behavioural mastery, chapter 4.

Should any process of transformation from social to individual under less desirable (than optimal) conditions, which does not lead to cultural development, be called internalization? Although he does not provide answers to this question, Vygotsky (1993) specifically makes a distinction between cultural development and cultural disintegration, calling the regression of development a *disontogenesis* (roughly equivalent to “defective” or “distorted development,” Kozulin & Gindis, 2007, pp. 340, 342). Building on this distinction, I will refer to any transformation from social to individual that does not facilitate individual cultural development as an *appropriation* and/or *interiorization*, reserving the word internalization for instances in which emotionally laden transformation is successful, and hence leads to cultural development.<sup>14</sup>

During the process of internalization (as it was described earlier), the reconstruction is triggered by the formation of a new system, “the appearance of new psychological, functional systems (or systemic functions), taking on in the general structure of behaviour a role that had been carried out thus far by separate functions” (Vygotsky, 1999, p. 55). The unification of all functions reflects the individual’s internalization of the social in the form of higher behaviour, and represents the process and the product of cultural development. Now that the concepts of mediation and

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<sup>14</sup> It should be noted that it is common among the CHAT followers to use the word “appropriation” instead of “internalization” (Lave & Wenger, 1991; Rogoff, 1995; Wertsch, 1991, 1995). Although among other words related to the process of internalization Vygotsky (2005/1930) also used the foreign word “interiorizatciya” (interiorization), it might seem premature to draw overly strong conclusions from pure linguistic considerations and comparisons, especially concerning the meaning and usage of foreign words. For example, due to the similarity in sound and spelling, the word “aktual’niy” in Russian might be mistakenly translated into the English word “actual” which means genuine, factual, and realistic (Funk & Wagnalls, 1982; Wheeler, 1972). However, the first and foremost meaning of the Russian adjective “aktual’niy” is “current or very important to current issues” (Ozhegov, 1961). In addition, as supported by A.A. Leontiev (2001; cited in Vygotsky, 2005, Introduction, p. 7), Vygotsky’s favorite way of expressing the process of internalization was “vraschivaniye” (in-growing, growing into).

internalization have been introduced, it is useful to consider in greater detail what other essentials of cultural development – the notions of culture, struggle, and neo-formation – are involved and why they are so significant in the child’s development.

### **Culture, Struggle, and Neo-Formations**

Before elaborating the processes and the products of cultural development, it is necessary to clarify what culture entails and why it is so important to the process of development. It is interesting to note that the very concept of cultural tools collectively reflects the culturally developed values, aesthetics, and emotions of a society. If we examine the word *kul'tura* (culture) in the Russian language, we find that kul'tura is a sum-total of achievements in an industrial, social, and intellectual sense. It also refers to the highest level of something -- e.g., development, a specific ability (physical culture, the culture of speech), education and upbringing (Ozhegov, 1961). Similarly, in English, the word culture represents

(1) the totality of socially transmitted behaviour patterns, arts, beliefs, institutions, and all other products of human work and thought; (2) intellectual and artistic activity, the works produced by it, and (3) a high degree of taste and refinement formed by aesthetic and intellectual training. (FreeDictionary.com)

According to Cole and Gajdamaschko (2007), the word culture appears in Vygotsky’s writings in three different forms, reflecting: (a) the processes of creation and the products of art (including literature), (b) an essential mediational asset to the development of higher psychological functioning (as a result of cultural development), and (c) a distinction between “cultural” and more primitive people (p. 193). In other words, the word culture in Vygotsky’s writings seems to presuppose (1) the work of art,

the creational process of which begins, proceeds, and is replete with human passion and emotions, from both the creator of the art and the user or appropriator; (2) the process of cultural development that leads to the development of higher psychological functions; and (3) a cultural or cultured person. That is, “culture is not a random array of artifacts, but rather a heterogeneously, dynamically changing set of practices and resources that require constant active engagement for their continued existence” (Cole, 1996; cited in Cole & Gajdamaschko, 2007, p. 208). Consequently, the word “culture” in Vygotsky’s notion of cultural development reflects the highest status of human development, where all social interactions are mediated by cultural (psychological) tools and internalized into the formation of higher psychological functions that serve reciprocally to realize, maintain, and extend the existence of cultural practices and resources.

Vygotsky (1998) equates cultural development with the development of personality. He states that cultural development “represents the creation and re-creation of a child’s personality” (Vygotsky, 1993, p. 34). In fact, he further asserts:

Just as the flow of a current is defined by its shores and its river beds; similarly, the main psychology line of a growing child’s development is defined out of objective necessity by the social channel and social shorelines shaping personality. (Vygotsky, 1993, pp. 55-56)

Personality development is always situated in, influenced by, and undertaken for the sake of, the historically-established socio-cultural context. As the child grows, physiological changes in her body and the struggle with the surrounding environment develop the child further, thus creating a new, dynamic, qualitatively different “super-system” (personality) that reflects the “dynamic and dialectical process of a struggle between man and the world and within man” (Vygotsky, 1997a, p. 157).



For Vygotsky “development is [also]...a continuous process of reorganization of mental structures in relation to one another” (cited in Tudge & Scrimsher, 2003, p. 213). Such reorganization and the struggle either with an outside world or within the person never really stops over the course of a lifetime, and neither does the development of the human being. This view of an unceasing and difficult process of individual development is supported by Leontiev, “the psychology of personality is a dramatic psychology. The field and the center of this drama is the struggle of personality....This struggle never ceases” (Leontiev, cited in Asmolov, 1998, p. xiii). Vygotsky, relying on Hegel’s philosophy of dialectics, concludes that the process of development never stops because the difference between inner reality (individual emotions, desires, etc.) and the reality of the world (the cultural environment) will inevitably result in struggle (Vygotsky, 1997a). That is why for him, “All of mental life is permeated by a *furious* [italics added] struggle between these two realities” (Vygotsky, 1997c, p. 207). Here, it might be useful to appreciate the emotionally laden roots of the word “struggle.”

Hegel (1998) talks about a “life-and-death” struggle for recognition. In *The Communist Manifesto*, Marx (Marx & Engels, 1848) asserts that “The proletariat goes through various stages of development. With its birth begins its struggle with the bourgeoisie” (p. 228). It is what the proletariat feels – alienation – that leads to the violent revolution, being for Marx a manifestation of “class struggle.” Marx (1844) goes further with the idea of struggle, stating that struggle results in humankind’s reward, what he calls “the rights of man.” These rights, says Marx, are innate, but can only be possessed through a struggle with the existing culture. Marx goes on to say that such a struggle, while not natural to human nature, is normal due to established social structures.

Thus, one can argue that Hegel's and Marx's influences on Vygotsky led to the latter incorporating the idea of struggle into his developmental theory.

The Russian term *bor'ba protivorechiy* actually means a struggle, fight, or conflict between contradictions or oppositional forces. According to *Funk and Wagnall's Standard College Dictionary*<sup>15</sup> (1982), struggle is a noun that represents: (1) a violent effort, or series of efforts; and (2) a conflict, strife, or battle. According to Kunin's *Phraseology Dictionary* (1967), the word struggle is used in phrases like: class struggle, a life-and-death struggle, a struggle for existence, and the struggle for peace. It is interesting to note that, although the result of a struggle (e.g., the struggle for peace) might be a positive outcome and thus reflect positive emotions, the process of struggle itself is often far from pleasant. Of course, there are many cases where the word struggle is used more freely. For example, when we say that we thrive on our struggle to solve a complex problem, what we really mean to say is that we thrive on the challenge, and thus, the interest that solving a problem holds for us. Commenting on the emotional-volitional origin of thought Vygotsky stated: "Thinking always arises out of difficulty. Where everything flows smoothly and where there are no obstacles, there thought does not yet have a reason to emerge. Thought arises wherever behaviour encounters a barrier" (Vygotsky, 1997c, p. 173). That is, encountering a challenge, a problem, and/or any difficulties is usually accompanied by an emotionally laden (and quite often, a negative) experience. Vygotsky (2004) affirmed that "nothing important is achieved in life without a great deal of emotion" (p. 55), especially, when it concerns the child's

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<sup>15</sup> My detours into dictionaries are not intended to downplay the importance of looking up a scientific term in a specialized philosophical and theoretical literature which lies beyond the dictionary definition. Rather, as far as the word "struggle" is concerned, what I am trying to show is that most often, the very basic way of defining this word shows an emotionally laden connotation. That is, one does not have to go far or out of the way to acknowledge the common emotional import of the word and notion of struggle.

struggle with the environment leading to his cultural development. Vygotsky compared cultural development with a dramatic collision, which “occurs in multidimensional (social-individual) space. [Such] dramatical collisions in interaction between the real and ideal forms, emotionally experiencing as an actual collision, are the core of the process where the social becomes individual” (Veresov, 2004, p. 10).

No matter what context it is used in and what philosophy or culture it comes from, the conception of struggle (based on general connotation) typically invokes an emotionally laden, negative experience of tension, disagreement, and battle between two (or more) opposite forces. Notice, that there is no question here as to whether the experience of struggle is emotional or not. The question is not even whether this emotional experience is negative or positive. The word struggle first and foremost denotes negative emotional experience because of the negative denotations of the word itself. [Such a negative meaning of the word struggle is also supported by the synonyms<sup>16</sup> and etymological roots of this word<sup>17</sup> (i.e., “ill will”).] It is interesting that folk wisdom identifies the child’s development with a metaphorical expression of “growing pains” and not of “growing pleasures.”

Asserting that the child’s experiencing of the difference between inner reality and the reality of the world will inevitably result in struggle (Vygotsky, 1997a), Vygotsky (1997c) further qualifies that struggle with the adjective *furious*; which is characterized (according to TheFreeDictionary.Com) by extreme anger and rage: “All of mental life is

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<sup>16</sup> Synonyms: oppose, contest, fight, conflict; endeavour, exertion. Struggle, brush, clash refer to a hostile meeting of opposing persons, parties, or forces. Struggle implies vigorous bodily effort or violent exertion: a hand-to-hand struggle. Clash implies a direct and sharp collision between opposing parties, efforts, interests, etc.: a clash of opinions.

<sup>17</sup> struggle. (n.d.). *Online Etymology Dictionary*. Retrieved January 26, 2008, from Dictionary.com website: <http://dictionary.reference.com/browse/struggle>. c.1386, probably a frequentative form, of uncertain origin. Skeat suggests O.N. *strugr* "ill will;" = Unfriendly feeling; enmity.

permeated by a *furious* [italics added] struggle between these two realities” (Vygotsky, 1997c, p. 207). Although Hegel’s idea of struggle as a mechanism of development does not denote any emotional features, it becomes obvious that the process of struggle for Vygotsky reflects a process laden with negative emotional experience.<sup>18</sup> Because Vygotsky recognized the struggle of the child’s cultural development as being a negative emotionally laden process, he insisted on facilitating and/or developing the child’s specifically positive emotional experiences as if to compensate for the eminent *furiousness* of the child’s struggle with the environment. He affirms that “one must always proceed not from evil, but from good (Vygotsky, 1997c, chap. 12, p. 7).

For Vygotsky, struggle is an interaction between opposite forces (i.e., the developmental abilities of the child and the demands of the environment); an interaction that comes from the instinctive need and willingness of the child to recognize the necessity to adapt. On the one hand, the struggle itself is initiated by the experience of emotional dissonance between opposite forces, and, on the other hand, the struggle results in emotional outcomes. That is, all new formations that appear and develop as a result of a struggle will carry an emotional imprint. As an outcome of the struggle, new culturally developed emotions reflect a wide spectrum of complexity, penetrate the deepest layers of the culturally developed personality, and emerge in every stage and process of the child’s cultural development.

Such complexity in the nature of psychological struggle is revealed through the dynamically emerging process of new, qualitatively different super systems, which represent relationships among individual mental functions and between the individual and

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<sup>18</sup> Vygotsky’s optimistic views on child development did not preclude him from acknowledging the negative nature of “*bor’ba protivorechiy*” (struggle).

the environment. Vygotsky “arbitrarily call[s] these psychological systems, these units of a higher order that replace the homogeneous, single, elementary functions, the *higher mental functions*” because these “new psychological systems... unite in complex cooperation a number of separate elementary functions” (1999, p. 61). Accordingly, formation and development (and thus any changes) in such complex entities (super systems) facilitate new formations in the relational development of every higher mental function. Consequently, such super systems become dynamic cultural mediators to further the cultural development of the child.

To recapitulate, for Vygotsky, the process of cultural development is manifested in a systemic, dynamic emergence from the past to the present, and through the present, into the future. Such a continuum of historical development is not a smooth, direct transition from one stage to the next or from the development of a lower psychological function to a higher one, but rather a zigzag of fundamental changes in quality and direction, arriving onto a completely new plane. Vygotsky states that “each higher mental function is a specific neoformation” (*novo-obrazovaniye*) (Vygotsky, 1999, p. 42). The Russian word *obrazovaniye* has a dual meaning: *education* and *formation*. Thus, in my translation and interpretation, the term *novo-obrazovaniye* reflects the formation of a new mental and, metaphorically speaking, “educational” system, a system that can “educate” or guide the other mental systems (and their functions) that it encompasses, so as to advance cultural development. Every neoformation is the result of a personality struggle with constantly evolving demands of the environment during a period of crisis, and reflects the origin of the new psychological structure, a

reconstruction of the personality that reveals “a dialectical understanding of the process” (Vygotsky, 1998, p. 190) of development.

Such a dynamic notion of development is reflected not only in the constant emergence of new systemic formations, but also in the ever-changing relationships between the new and the old systems, and between the child’s personality and the environment. A newly formed system, or basic neoformation as Vygotsky (1998, p. 197) called it, is a selected mental function (or a combination of several functions) which reflects the central line of development,<sup>19</sup> and might not necessarily be entirely new to the child. Because the relational meaning and the importance of one system in the totality of the whole development can change, a system that once served as a peripheral<sup>20</sup> system, or line of development, can become a new central system at a different age. Vygotsky is convinced that “Processes that are central lines of development at one age become peripheral lines of development at the following age and conversely, peripheral lines of development of one age are brought to the forefront and become central lines” (Vygotsky, 1998, p. 197).

For Vygotsky (1997a), a higher mental function (within the social context of cultural development) reflects “a uniquely cultural form of adaptation which involve[s] both an overlay on and a reorganization of more basic psychological functions” (p. 107). Such cultural reorganization, Vygotsky contends, can only take place with the formation of new systems (neoformations). Vygotsky emphasizes the inter- and intra-dependent nature of dynamic reciprocity between the emergence of the new system and further

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<sup>19</sup> Central lines of development are all developmental processes that are directly connected with the basic neoformation.

<sup>20</sup> Peripheral lines of development are all partial developmental processes that are related to all partial neoformations, which are grouped around the central (basic) neoformation.

development of its parts. Based on the evidence of his empirical and theoretical research, he states that “in development there is just exactly a reverse dependence: the child’s personality changes as a whole in its internal structure and the movement of each of its parts is determined by the laws of change of this whole” (Vygotsky, 1998, p. 196). Accordingly, the origin of all the newly formed systems in the process of cultural development is social. Those systems become part of an individual personality after being internalized from the social relationships between people. Hence, one of the main themes in Vygotsky’s scientific inquiry is the social nature of cultural development: what was once social (among other people) becomes individual.

The following quotation from Vygotsky, asserting the social nature of cultural development, is probably one of the most popular and the most cited in the vast educational, social, and psychological literature:

every function in the cultural development of the child appears on the stage twice, in two planes, first, the social, then the psychological, first between people as an intermental category, then within the child as an intramental category....it is understood that the transition from outside inward transforms the process itself, changes its structure and functions. Genetically, social relations, real relations of people, stand behind all the higher functions and their relations. (Vygotsky, 1997b, p. 106)

In other words, the process of development is a process of individual internalization – whatever was first social becomes individual. On the one hand, Vygotsky puts the social-historical context at the centre of the struggle that leads to the child’s development; and, on the other hand, he emphasizes that the very process of internalization that comes as a result of such a struggle is, in fact, the foundation of cultural development. It is because of the process of internalization that the child’s individual personality develops. The individual is not a mere reflection of the social, but

rather, a dynamic synthesis that comes as a result of the individual struggle. Vygotsky affirms in *Concrete Human Psychology* that “the individual and personal are not in opposition [to social, LSV], but a higher form of sociality” (Vygotsky, 1986a, p. 59). Individualization, he states, “is actually two aspects of one and the same process” (1997b, p. 250) that leads inevitably to the cultural development of the personality. Thus, we understand ourselves through others. However, understanding of one’s own personality through others comes with a price, which Vygotsky calls the struggle.

As we recall, Vygotsky operates within a Hegelian dialectical paradigm which understands the development of human beings as a struggle. Transferring this paradigm to the child’s development, Vygotsky believes that it is the child’s struggle against the demands of the social environment that facilitates the child’s development. For example, the child’s immediate wants and wishes are not always realized due to the social constraints of his environment, thus creating an affective dissonance that reflects the child’s struggle against the demands of society. This affective dissonance helps the child to restrict some of her wants and wishes. Social constraints represent certain societal norms of behaviour. By internalizing the social norm of behaviour, the child transforms herself and, thus, develops culturally. The child’s struggle with social demands facilitates her cultural development. Where there is no struggle, there is no development.

The struggle also takes place within the child’s organism, that is, between her lower and higher mental functions, and within the higher mental functions. For example, when a culturally developed child experiences hunger (a predominantly lower psychological function), she most likely will not resort to stealing food to satisfy her hunger, but rather will ask an adult or a caregiver to feed her (higher psychological



function). Her hunger does not go away just because the child is culturally developed. However, the dissonance (struggle) she experiences between her lower mental functions (being hungry) and higher mental functions (culturally developed sense of restrictions, values, and morals) will facilitate higher forms of behaviour and further her cultural development.

Does the child's every interaction with the environment or within herself reflect struggle? Of course, it does not. The child's development goes through stable and unstable periods.<sup>21</sup> In order for a struggle to take place, there must be at least two opposites, whether they are located within the individual or between the individual and the environment. The development of the individual is directly related to and dependent on oppositions (e.g., with the demands of family and society at large). However, it is not merely the existence of two opposites that creates a struggle. There has to be interdependency between these opposites. Even more essential (to creating the condition of struggle) is a situation where one opposite cannot survive without the other, no matter how different (or opposite) the other is. It is the child's struggle with the environment – a transformation of her social behaviour – that facilitates further development of new psychological systems (neoformations). So, the child's interaction with the environment and with herself or herself always involves a struggle from which psychological development emerges. The processes of systemic cultural development represented by the appearance of neoformations require more detailed consideration.

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<sup>21</sup> More on stable and unstable periods is offered in the next section.

## One System Leads Development

Although there is an internal reorganization of every separate mental function within the process of development, Vygotsky believes that an analytical unit should represent not a separate individual mental function in isolation but rather a new relationship between mental functions. “The development of such new flexible relationships between functions,” Vygotsky states, “we will call *a psychological system*, giving it all the content that is usually attached to this, unfortunately, too broad concept” (1997a, p. 92). Vygotsky calls the formation of such new psychological systems *neoformations* (novo-obrazovaniya). According to him, a psychological system may represent a relationship between two or more specific mental functions. There also can appear a variety of “super systems” (e.g., conceptual thinking, self-consciousness, world-view, wisdom) that reflect a relational connection between the systems, and thus, influence both relationships between the systems and the functions of which these systems are comprised.

In every age period<sup>22</sup> there appears to be one system that becomes particularly influential in the development of personality and plays a central role in guiding the entire cultural development. Vygotsky (1998) writes in *Child Psychology*:

at each given age level, we always find a central neoformation seemingly leading the whole process of development and characterizing the reconstruction of the whole personality of the child on a new base. Around the basic or central neoformation of the given age are grouped all the other partial neoformations pertaining to separate aspects of the child’s personality and the processes of development connected with the neoformations of preceding age levels. (p. 197)

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<sup>22</sup> Veresov (2006), commenting on Elkonin’s writings on the problem of age period, stipulates that *periodization* is no more than a hypothesis. “Elkonin is not to blame if some people have taken his periodization not as a hypothesis...but as a dogma, an ultimate truth beyond criticism” (p. 12).

The appearance of neoformation does not come from the social interaction, but rather the transformation of the social behaviour of the child facilitates further maturation of a newly formed personality system.<sup>23</sup> Such maturation goes through three stages: an action for itself, an action for others, and an action for oneself. The third stage, the action for oneself, is the highest stage of every mental function that becomes a function of the child's personality and, thus, changes the structure of the entire personality – a system that guides the child's entire cultural development.

Elaborating further on the nature of the relationship between mental functions, Vygotsky contends that:

at each age level, certain functions are in a certain relation to each other and form a certain system of consciousness. For early childhood, such an interrelation of separate functions is characteristic so that affectively coloured perception is dominant and is at the center of the structure, and all the other functions of consciousness operate around it, leading through affect to action. (1998, p. 278)

For example, when a one year old child passes through her crisis (a transition from infancy to early childhood), her autonomous speech (manifested in the forms of babbling and vocalization) reflects only oral thinking connected directly to her visual thinking (i.e., whatever objects the child sees can be included in her speech). However, such speech also transmits affective-volitional content. Affective-volitional content incorporates our judgment, affective colouring and attitude in our voice, and our emotional-volitional reaction. A synthesis of the child's perception of the affective-volitional content, the child's immediate orientation, and her own affective-volitional thinking (which is reflected in her autonomous speech), is her newly formed psychological system (central

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<sup>23</sup> In his later writings Vygotsky states that neoformations appear as a result of personality's interaction with the social environment (Langford, 2005, p. 111).

neoformation) which becomes the function of the child's personality and "leads" the child's development. In addition to the emergence of affect, will, and autonomous speech, the child's first year crisis is also accompanied by the development and establishment of walking. It is, however, the child's emotional communication with her caregivers (as manifested in autonomous speech) that becomes the leading (central) neoformation of this period, as it is this that is connected with the emergence of consciousness.

The child's development encompasses relatively firm and/or stable age periods which represent the longer portion of childhood, as well as the stages of crisis which falsely seem to appear as "abnormalities" or "deviations" from the "normal," much slower developmental path (Vygotsky, 1998, pp. 190-191). In fact, these periods of severe crisis – the times of onset and cessation of which are almost impossible to pinpoint – like "revolutions" are reflected in extremely abrupt, stormy, and even catastrophic changes in the child's personality. In such critical periods, development seems to reverse and change appears regressive. Vygotsky describes such a period of qualitative change (crisis) as a temporary disintegration of personality – whatever the child was interested in and excelled at is suddenly abandoned with no apparent reason. The fact that periods of crisis alternate with stable periods confirms that "the development of the child is a dialectical process [and] is accomplished not along an evolutionary, but along a revolutionary path" (Vygotsky, 1998, p. 193).

In explaining the nature of crisis, Vygotsky borrows an idea from Friedrich Engels: "To live means to die" (cited in Vygotsky, 1998, p. 330), which is grounded in the belief that any emergence of the new requires the dying off of the old. Studying

neoformations as the basis for dividing development into separate age periods is of paramount importance to Vygotsky. During the period of crisis, unstable neoformations appear. They possess a transitional quality; that is, they are absorbed by stable neoformations of the following stable age period. Since development never stops even during the periods of crisis, the destructive nature of unstable neoformations is subordinated by the stable neoformations of the subsequent age period. The central neoformation that appears at each given age level seems to lead the whole process of development by reconstructing the child's whole personality. As a result, such a reconstructed personality develops a unique relationship with the social environment at the beginning of every new age period, what Vygotsky calls "the social situation of development" (1998, p. 198). The significance of the social situation of development can be found in its ability to explain "wholly and completely the forms and the path along which the child will acquire ever newer personality characteristics...the path along which the social becomes the individual" (Vygotsky, 1998, p. 198).

Within such a social situation of development, any specific relationship between the child and the environment in each age period is identified by a basic activity that contributes to the structural reorganization of mental functions. It is not the child's many everyday activities, but rather this basic (predominant) activity that facilitates a successful transition from one period to the next by engaging the child "in actions that serve to develop the psychological functions needed for that activity" (Vygotsky, 1998, p. 198). That is why, in order for educators to determine the whole picture of the child's social life, its dynamics within a given age period, and to facilitate the child's development, a basic activity within the social situation of development must be

identified and implemented. For example, during infancy (0 – 1 year) the child's biological functions mature through an emotional interaction with caregivers as a basic (leading<sup>24</sup>) activity. In early childhood (1 – 3 years), according to Bodrova and Leong (1996), the child's sensori-motor thinking and self-concept emerge through manipulation of objects, or as Karpov (2003, 2005) puts it, with the help of object-centered joint activity with adults. The leading activity in preschool (3 – 6 years) is socio-dramatic play (Bodrova & Leong, 1996; Karpov, 2003, 2005; Kravtsova, 2006; Langford, 2005).<sup>25</sup>

To recapitulate, up to now we have discussed the essential features, notions, processes, mechanisms, and contexts of cultural development. Within the dialectical paradigm, cultural development is a dynamic result of a revolutionary process (a struggle = *bor'ba protivorechiy*) between individual and social, and within the individual. The struggle – the process of internalization (*vrashchivaniye*) – is the main mechanism of cultural development, which is mediated by cultural (psychological) tools and signs. All social relationships within the social situation of development are internalized into higher psychological functions and systems (neo-formations = *novo-obrazovaniya*), and externalized into higher forms of behaviour, i.e., behavioural mastery (automaticity). In each age period of child development (periodization), there appears to be one system (a central neoformation) – identified (triggered) by the basic (predominant, leading) activity – that facilitates a successful transition from one age period to the next and becomes particularly influential in the reconstruction of the whole personality.

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<sup>24</sup> Although the term *leading activity* was initially introduced by Vygotsky, it was not well-defined. The concept of leading activity became the cornerstone of neo-Vygotskian Activity Theory.

<sup>25</sup> Although there are some important differences between Vygotsky's findings and the findings of many neo-Vygotskians (which are also reflected in terminology discrepancies), explicating these differences goes beyond the scope of the present thesis. For more details see Koshmanova, 2007; Kozulin, 2003; Kravtsova, 2006; Van der Veer & IJzendoorn, 1985; Veresov, 2006; Yaroshevsky, 1999.

Although Vygotsky's holistic model of the child's stage-by-stage development integrates the development of motives, cognition, and the child's social development, it was not explicitly developed by Vygotsky and, unfortunately, was presented "in an abbreviated and schematic fashion, which makes it difficult to understand" (Karpov, 2005, p. 41). In addition, the "discussion of [neo] formations is scattered in Vygotsky's writings, rather than presented as a coherent theory" (Bodrova & Leong, 1996, p. 49), and thus only adds to the confusion and already existing difference between Vygotskian and neo-Vygotskian views on the child's cultural development. There are also several outstanding and unsettled issues in the ongoing debate within the neo-Vygotskian movement (Gredler & Shields, 2008; Karpov, 2003, 2005; Koshmanova, 2007; Kravtsova, 2006; Veresov, 2006),<sup>26</sup> some of which will be explicated further in this thesis.

### **Does Cultural Development Stop with Adolescence?**

The struggle of personality is not limited to the relationship between pure physiology and the environment. Although Vygotsky (1997b) stated quite clearly and frequently that the development of personality ends with the child becoming an adolescent and "this age crowns and completes the whole process of cultural development of the child" (p. 251), he also stipulated equally clearly that the development of conceptual thinking – which is internally connected to the development of personality and world view in adolescence (Vygotsky, 1998, p. 147) – is far from being complete during adolescence and even in adulthood "does not advance beyond the

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<sup>26</sup> The nature of the ongoing debate within the neo-Vygotskian movement is beyond the scope of this thesis.

level of pseudoconcepts...*Adolescence, therefore, is less a period of completion than one of crisis and transition* [italics added]" (Vygotsky, 1986, pp. 140-141). Hence, personality development, as well as the entire cultural development in general, is a life-long process which is reflected in the continual appearance of newly developed higher psychological functions and systems.

It is important to remember that although many of Vygotsky's experimental studies connected with the construction of a theory of development of higher mental functions involved children, he was not a child psychologist. The main object of his studies was the appearance of new psychological processes (neoformations) that facilitated the child's cultural development (as reflected in personality development). Elkonin (1998) confirms that "children [were] the most suitable material for creating an experimental model of development of neoformations, but not the subject of [Vygotsky's] research" (p. 297). It is no surprise Vygotsky believed that not only is there a difference between children and adults in their capabilities to develop more sophisticated emotions, but also, that there are differences among adults as well. He claimed that an adult has "a more refined emotional life<sup>27</sup> than [a child]" (Elias, 1978; cited in Van der Veer & Valsiner, 1993, p. 353) and that the level of refinement of an adult's emotional life changes constantly, as is reflected in future-oriented "very perfect human personalities with a very beautiful spiritual life" (Vygotsky, 1997a, p. 107).

It is equally important to recognize that Vygotsky equates cultural development with personality development. While the subjects of developmental psychology are widely considered to be developmental laws, mechanisms, and conditions of mental and

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<sup>27</sup> Current research in the field of emotional development in adulthood can be found in Averill (1984/1986) and about emotions as mediators in Averill (2005).



personality development, for Vygotsky, it is personality's cultural development that encompasses the appearance of new psychological functions and systems. Although the studies of neoformations are extremely important for Vygotsky, it is equally important to appreciate the significance of the cultural development of the whole personality. "To consider age level theoretically means to find such changes in the child's personality..." (Vygotsky, 1998, p. 259).

Unfortunately, much current developmental psychology does not usually explicate any particular developmental characteristics of adults, and quite often simply ignores them. According to Kravtsova (2006), modern developmental psychology does not identify "the qualitative difference between childhood and adult ontogenesis (which is something that should be done within the framework of developmental psychology)" (p. 7), and tends to be limited to child psychology. However, even within child psychology, most studies are concerned only with periodization (separate age-stages in childhood) and, unlike Vygotsky's inquiry, do not differentiate between mental and personality development.

In my interpretation, central neoformation can represent a specific mental function (but only in a certain relation to other mental functions) which serves to introduce a specific age-period. But it can also represent several mental functions working in cooperation as one unified system (e.g., worldview, wisdom). Although Vygotsky never wrote about specific neoformations that develop in adulthood (thus, it is not possible to provide any examples as to their nature), he implicitly indicated many times that cultural development does not stop with adolescence. For example, the development of personality and worldview only begins with adolescence, but does not

stop there. While adults don't develop any new lower functions (e.g., memory and perception) per se, adults' perceptions and memories develop further in a qualitatively different way. Although there is no further appearance of new lower mental functions in adulthood, the appearance of higher mental functions and systems is based solely on different arrangements, organizations, and coordination of lower functions. Newly developed "super systems" (or "system of systems" as Vygotsky referred to consciousness) which are connected to our values, beliefs, ethics, and aesthetics encompass lower functions, like memory and perception, but in a qualitatively different way.

Vygotsky stated that "the higher functions arise in no other way than on the basis of the lower...[Higher functions] are not physiological processes of a new kind, but a certain combination, a complex synthesis of the same elementary processes" (1998, p. 84). With the appearance of new higher functions, the relationship among the lower functions is changed. Such a relational change also facilitates qualitative changes in existing mental functions. For example, in regard to perception, Vygotsky asserts "At each new age level, perception changes qualitatively..." (1998, p. 85). Hence, it is my understanding that as long as there is the possibility of creating qualitatively new relationships, not only among lower functions, but also among higher functions and higher systems (and in that process facilitate qualitative changes in every mental function), there is also the possibility of the continuation of the appearance of neoformations – the appearance of new psychological processes that didn't exist before; and thus, there is the possibility for continuous cultural development of personality during the entire life-span.

However, not every feature of perception changes with time. While some features of perception change under the influence of other functions and systems – “under the influence of speech, the perception of the child undergoes a complex restructuring comparatively early” (Vygotsky, 1998, p. 89) -- other features are constant. “In general, they [some processes of perception] end before the onset of sexual maturation” (Vygotsky, 1998, p. 86). Vygotsky (1998) states:

If we turn to the perception of an adult, we will see that it represents not only a complex synthesis of present impressions and images in memory, but its basis is a complex synthesis of processes of thinking and processes of perception. (p. 88)

When perception is influenced by the development of conceptual thinking during the transitional (adolescent) period, it changes in a qualitatively different way, becoming intelligent perception. However, according to Vygotsky, since the development of conceptual thinking only begins during adolescence and quite often is not entirely complete until late adulthood, the development of intelligent perception of reality does not stop with adolescence either. Similarly, the development of worldview and personality doesn't stop with adolescence, and neither does perception of the world. Commenting on the role of concepts for intelligent perception of reality, Vygotsky (1998) quotes A. Gelb (reference not provided): “For an animal there is only what surrounds it, for man – the world” (p. 91). The world seems to provide numerous opportunities for the further cultural development of individual personality.

Personality development is a holistic process of life-long cultural development. It is a single complex system that represents the whole person (physical body, character and personality, intellect, emotions and desires, and soul). Due to its holistic, systemic, and executive nature (see a more detailed explanation in chapter 4), personality development

is considered by Vygotsky to be a process of enormous educational importance. This process of unification of all higher mental functions allows every mental function and every mental process to have the same means of development and, thus, to be manipulated using the same principle. It is the unifying ability of the culturally developed personality that allows it to become a single complex leader, a super system in the development of the child's consciousness, guiding the child in the quest towards more complete cultural development. Vygotsky (1997a) stipulated:

the formation of psychological systems coincides with the development of personality. In the highest cases of ethically very perfect human personalities with a very beautiful spiritual life we are dealing with the development of a system in which everything is connected to a single goal....A system with a single centre may develop with a maximum integrity of human behaviour. (p. 107)

Vygotsky recognized human development as being a never-ending process. When Vygotsky spoke of "the highest cases of ethically very perfect human personalities with a very beautiful spiritual life" (1997a, p. 107), he surely did not mean only adolescence. In fact, commenting on Busemann (cited in Vygotsky, 1998), Vygotsky alleged that, while many children remain at the stage of ethical obedience, "group ethics [a level of ethics that is still much lower than what Vygotsky called 'ethically very perfect human personalities']...is attained by the adolescents only at the age of seventeen, and not by all of them" (p. 175). Moreover, the appearance of such a unique system that can lead the whole of development is not given, but rather stated as a possibility. Vygotsky remarked that such a system "may develop" but in order to do so, it requires "the maximum integrity of human behaviour" (p. 107). There is, of course, the possibility for both a child and an adult to experience the development of a single super

system. Such a super system would be based on the maximum integrity of human behaviour and would reflect the highest ethical standards. It is also possible that such a system would never develop. In such cases, personality would not achieve its highest level of cultural development and could disintegrate, regressing back into previous stages of development. Or, putting it differently, development may not take place across the board in all psychological functions and in all the variety of contexts.

Vygotsky stated that even among culturally developed and well educated adults there can be found more primitive reactions due to temporary trauma (or paralysis) to the higher layers of the personality. In such cases, Vygotsky stipulated, the deeper (older and more primitive) layers of personality are taking charge of the mind and behaviour. However, such conditions are also common “in infantile personalities or in retarded, weak-nerved, weak-willed psychopaths who are suffering from alcoholic shock, cranial trauma, or hidden schizophrenia” (Vygotsky, 1993, p. 257). It seems that such personality disintegration cannot be attributed only to a lack of education.

In discussing the importance of adapting the child to the environment, Vygotsky (1997c) raised a provocative question as to whether the person is considered to be poorly educated (or perhaps mentally retarded) if he is

a revolutionary who cannot get on in any social group at all, who rises up in rebellion against society and is always in conflict with his surroundings, thus exhibiting his maladjustment – do we say that such a person is badly or incorrectly educated. (p. 205)

Indeed, it is possible to interpret some parts of human history as showing that those who at one point in time were proclaimed to be heretics or those who were diagnosed as mentally delusional, at another point in time, might be considered either normal scientists

or visionaries that were simply ahead of their time. Take, for instance, Galileo Galilei, the astronomer who upheld the Copernican heliocentric theory. Galileo was branded a heretic by the Catholic Church, and was forced to publish a recantation of his beliefs. It is also a fact of life that evil people can come from highly progressive and culturally developed societies. In fact, not only individuals but the entire society can act evilly, as was witnessed in WWII Germany. With respect to ethical behaviour, Vygotsky held that “Moral concepts and ideas vary depending upon the social environment, and what is considered bad at one time and in one place, elsewhere might be considered the greatest of all virtues” (1997c, chapter 12, para. 3). Where does this leave educators in their quest for what exactly constitutes a successful socio-cultural adaptation, education, and, thus, development?

Vygotsky believed that one of the main educational goals is to develop the child holistically, that is, morally as well as academically because the development of perception, thinking, and ethics is fused into the process of social and individual personality development. However, he expressed some doubts about a direct causal relationship between moral behaviour and moral consciousness, as he observed that knowing how to behave correctly does not necessarily lead to acting correctly. Although he admitted that consciousness plays a somewhat decisive role, the final word comes from instinctive drives of the powerful emotional personality. The ways educators can influence such instinctive (lower) layers of personality so as to facilitate moral behaviour will be discussed in later chapters, at which time the conception of cultural development will be revisited and re-evaluated.

## Concluding Remarks

A social and cultural orientation toward development, comprehended within the dialectical paradigm (where social, cultural, and historical development encompasses the individual's struggle with the demands of society), stands in opposition to the common Western notion of development as a highly individually oriented unfolding of capabilities somehow resident in the child at birth. Vygotsky's dialectical view (guided by a historical-dialectical-functional-monism) of cultural development opens possibilities for an external and internal dialogue in a specifically Russian-Spinozian way that reflects the synthesis between human emotions and intellect. The development of higher psychological functions – a process of appearance of newly developed psychological systems, which unites all the previously separated mental functions – leads the child's cultural development. While the material (the building blocks) of higher psychological functions is located in the lower functions of the individual and thus is materialistic, their construction involves the transformation of interpersonal relations with the help of psychological tools. The origins of cultural development, which are reflected in the development of higher psychological functions, "cannot be found in the mind or brain of an individual person but rather...in the social 'extracerebral' sign systems a culture provides" (Van der Veer and Valsiner, 1993, p. 222). To understand the child's cultural development is to discover how the child's external social interactions with the environment create an internal mental world reflected in personality.

According to Vygotsky (1998), the process of cultural development, like the process of mediation, proceeds in cycles. At every age stage, as the personality of the child struggles with the social environment, such activity facilitates maturation of a

leading function (neoformation). At the end of every stage, the leading function reaches its full maturation and facilitates changes in relationships among and within the previously separated functions. These processes of the developmental emergence and integration of functions lead to a more developed self-consciousness and facilitate changes in personality. Such changes in personality co-exist with further developments in consciousness. Consciousness “assesses” the dissonance between the social environment and the recently changed personality, and “resolves” it through personality struggle. In this way, the ground for the following age period is prepared by the formation of a new social condition at the end of the crisis, during which unstable neoformations are absorbed by the stable neoformations of the following age period. After this, the cycle repeats itself.

Cultural development is the child’s constant future-oriented struggle between biological formations and the social demands of the environment, the transformational results of which apply to the whole personality in the form of behavioural mastery.<sup>28</sup> The future orientation of cultural development reflects both what has already developed and what is in the process of development (maturation). The process of struggle is emotionally laden and infuses every newly developed system (higher psychological functions) with a wide spectrum of emotional content. Changes in the systems of higher psychological functions foster similar changes in individual mental functions and structures, and the relationships between and among them. These changes, in turn, influence the main system further. Holistic development is a life-long process which encompasses both moral and intellectual features, and equated by Vygotsky with

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<sup>28</sup> As was mentioned earlier, for a detailed explanation of what behavioural mastery entails see chapter 4 of the present thesis.



personality development - a leading super-system in further facilitating highly moral human development with maximum integrity.

### 3. VYGOTSKY'S WRITINGS ON EMOTION

*Affect is the alpha and omega, the first and the last link, the prologue and epilogue of all mental development*

(Vygotsky, 1998, p. 227)

#### Introductory Comments

Vygotsky did not complete his theory of emotions and his general explanation of the relationship between emotions and intellect is often understood through a “slave versus master” (respectively) metaphor. However, Vygotsky believed that emotions are the first and the last step in cultural development, and are the most suitable mediator of, and the driving force in, cultural development as a whole. Does this mean that Vygotsky’s writings reflect a hegemony of affect over cognition?

Emotion is arguably the most fascinating psychological function alluded to in Vygotsky’s writings, yet it is by far the least understood. Despite assigning great importance to the role of emotions in cultural development, Vygotsky did not subscribe to the notion that emotions rule cognition. For him, emotions must be subordinated to the intellect. In this rationalistic view, Vygotsky found support in the work of Spinoza. Vygotsky and Spinoza both believed that “when the intellect had clear and distinct knowledge of these passions, it would gradually learn to control them” (Van der Veer and Valsiner, 1993, p. 240). In his cultural-historical theory Vygotsky took Spinoza’s idea of

intellectual control over emotions a step further, by generalizing it to all other natural (primitive) functions. More specifically, Vygotsky proposed that all mental functions (e.g., memory, perception, and attention) had to be controlled by, or subordinated to, intellect. In contrast to the Darwinian notion of subordinating emotions “blindly” to “cold” reason (i.e., controlling emotions by the means of suppression), Vygotsky tried to understand emotional processes by recognizing their involvement in every aspect of human learning and development. Not only did Vygotsky use intellect to understand emotions, but he also “insisted on the importance of the emotions in guiding and informing cognition” (Bakhurst, 2007, p. 68). The better the emotions are integrated with other psychological functions, the more representative they are of these other functions, and the more effective they become in guiding cognition.<sup>29</sup>

Regrettably, in Vygotsky’s writings, emotion is not very well explained. His thinking regarding emotions during his short life (mostly in the last period between 1924 and 1934) at one point in time reflected a naturalized and biological approach (influenced by the theories of Pavlov), while at other times reflected an approach concerned primarily with culturally developed emotions. It is interesting that Yaroshevsky (cited in Van der Veer & Valsiner, 1993), in his attempt to locate Vygotsky’s writings within the larger history of social science, differentiates three levels of deterministic explanation: (a) mechanistic determinism (as partially characterized by Descartes’ writings concerning bodily reaction); (b) biological determinism (represented in Darwin’s writings); and (c) social-historical determinism (reflected in Vygotsky’s cultural-historical theory of the higher psychological processes). In their attempt to explain the fullness, richness, and

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<sup>29</sup>For Vygotsky, a mental function cannot be taken in isolation from other functions and their environment.

encompassing qualities of Vygotsky's cultural-historical theory, Van der Veer and Valsiner (1993) assert:

Accepting the social-cultural theory of mind does not imply that one dismisses the other two levels of explanation in psychology, but it does entail that they should be submitted to social-historical analysis when one is dealing with specifically human higher psychological processes. (p. 358)

There is a dialectical parallel (and a kind of similarity) between Vygotsky's socio-cultural theory which encompasses and subordinates both mechanistic and biological determinism, and Vygotsky's notion of higher mental functions which encompasses and subordinates all the lower functions. For Vygotsky, lower psychological functions do not disappear with the appearance of the higher functions; the lower functions are "permeated" by and act according to the laws of the higher functions. As was discussed in chapter 2, the Vygotskian dialectical treatment of psychological functions can explain the kind of misunderstanding of higher versus lower functions found among some non-dialectically oriented Westerners.

Unfortunately, Vygotsky's thinking regarding emotion did not progress smoothly. For example, in one of his early writings, *The Psychology of Art* (1971/1925), his description of emotions as catharsis and the notion of the "double expression of feelings"<sup>30</sup> stand much closer to his later work *On the Problem of the Psychology of the Actor's Creative Work* (1999/1932) than to his earlier work, *Educational Psychology* (1997c/1926), written just a year after the publication of *The Psychology of Art*. Also, Vygotsky's later writings do not constitute a refutation of all the previous descriptions of

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<sup>30</sup> "Double expression of feelings" is revealed in a cathartic explosion as a result of a collision between internal and external emotional reactions mediated by (contradictory) imagination (Vygotsky, 1971/1925. pp. 207-215).

emotions and their processes of development. Rather, he incorporated findings from his early work into his later writings (just like he incorporated the lower emotions into the higher processes). It can be argued that his later writings do not stand in opposition to his earlier ones, but rather complete them. Moreover, there are many unpublished (and even unavailable) Vygotsky manuscripts, the origins of which cannot always be traced accurately to specific dates (see the bibliography in Rieber, 1999; additional comments from Chaiklin, 2003; Cole, John-Steiner, Scribner, & Souberman, 1978, p.151). Hence, there is difficulty in using chronology as a direct representation of the changes in Vygotsky's thought.

In this chapter, before explaining what constitutes development of cultural emotions, the concept of emotions in general, and the way in which Vygotsky understood emotions and their purpose, in particular (together with some challenges in approaching and understanding emotions, especially, in adult development) will be discussed. Next, the notion of emotional experience (*perezhivaniye*) will be introduced as Vygotsky's last and most complete unit of analysis of cultural development. With these core ideas in place, more practical considerations concerning the cultural development of emotions will be entertained. Finally, the consequences of disintegrated and undeveloped emotions will be discussed.

### **Challenges in Approaching Emotions**

Everyone knows what emotions are until one is asked to define them. In conceptualizing emotions, one of the assumptions one has to make is that there is a difference between emotions themselves and their descriptions. Although one can

experience the former, the latter will always be an approximation of the actual experience. Since almost all emotions are expressed as some sort of behaviour, does behaviour (or behavioural reactions) become emotion and thus define it? Vygotsky states that “emotion is, in fact, a certain collection of reactions which is connected...to particular stimuli” (1997c, p. 97). Although this quotation is taken from Vygotsky’s early writings and reflects the influence of Pavlovian theories, Vygotsky’s definition of emotions in this quotation is nevertheless significant in that it begins to address the duality between the internal psychological world and the external environment. A nondialectical understanding of emotions as reactions to stimuli (whether outside, inside or perceived) might appear to create a dichotomy between at least two possible explanations and opposing views. One possible position is that since it takes stimuli to get reactions from the body (organism) to create emotions, then it is possible that there are no emotions without the presence of stimuli. However, since something in the body (organism) is capable of reacting to stimuli, it is also possible that the pre-existing “something” is what we call emotions, specifically, subconscious emotions.

Although Vygotsky was careful not to align himself with a specific tradition (Jantzen, 2002, p. 101), his understanding of emotions is not based on an “either-or” dichotomy. In fact, Vygotsky’s determination to resolve this issue of duality (i.e., either emotions as reactions to stimuli or emotions as existing bodily states or conditions that are activated by stimuli) dialectically is consistent across his earlier and later writings, and can be traced to his first monumental work, *The Psychology of Art* (1971/1925), where he invokes Zenkovskii’s notion of the “double expression of feelings” (p. 209). In his last unfinished work on emotions (1998), Vygotsky probes the validity of the James-

Lange dualistic physiological theory in consideration of the primacy of either external (physical) or internal (psychological) emotional reactions. After showing that emotions do not originate in, and are not limited to, bodily changes, Vygotsky turned to Spinoza's writings as a possible "new and better way of solving the problem of mind-body dualism" (Van der Veer & Valsiner, 1991, p. 352).

The "mind-body" was not the only problematic issue Vygotsky had to resolve. Historically speaking, ever since Aristotle's division of mental activity into cognition (thought), conation (the will), and affect (feelings), philosophers and psychologists have had a hard time putting Humpty Dumpty back together (Hobson, 2002). It is important to recognize the influence of other scientists on Vygotsky's views of emotional indivisibility. In his critical analysis of the historical development of theories of emotions (from Darwin to James – Lange), Vygotsky (1987) expressed his satisfaction with the fact that the research of Cannon finally "demonstrated the intimate connection and dependency that exists between the development of the emotions and the development of the human mind" (p. 332). On the one hand, although Vygotsky agreed with some of Freud's conclusions that emotions can only be understood within the dynamic context of human life, he criticized Freud's theories as being "past-oriented." On the other hand, Vygotsky supported Adler's belief that the very structure of the individual's character and his general view of life are both reflected in and defined by the "future-oriented" emotional experiences of the individual. He also understood Adler's future-oriented perspective as very closely related to what he himself would eventually use as a basis for his own theory of the development of personality and the worldview of the child (1997b). Vygotsky was quite clear as to the emotional nature of personality,

stating that “the concept of character encompasses the mental personality as a whole, together with its affective aspect, and it is impossible to set it apart from intellect, however one tries” (Vygotsky, 1997c, p. 300). Here, an influence from other scientists (i.e., Cannon, Freud, and Adler) can be seen in Vygotsky’s ideas about the dynamic future-oriented nature of human emotions and their indivisibility from intellect in the development of a holistic personality.

In addition to problems owing to an artificial division between emotions and cognition, and the external-internal nature of emotions, there was (and still is) another problematic issue – most researchers’ claims concerning their seeming inability to measure emotions and, thus, empirically validate them. Even today, the “orthodoxy” of positivistic research tries to arrive at objectivity through the naïve empiricism of direct observation (Fay, 1996). This group not only makes an effort to accurately see what is there, but also makes an even bigger effort *not* to see what is *not* there (Vokey, 2001). In the short story *Silver Blaze*, by Arthur Conan Doyle (2003), Sherlock Holmes solves a mysterious disappearance after noticing the “curious incident” of the dog in the night. When noticed by Watson that the dog did not bark in the night, Holmes replied that *that* was the curious incident. Vygotsky believed that a good researcher acts as a detective, who tries to piece together a “crime” that took place in the past and, like a good detective, uses both logic and intuition<sup>31</sup> as he tries to recreate past events. Vygotsky (1999) was of the same opinion as Stanislavsky, that we have no direct control over our emotions (and other mental functions and processes). In his *Educational Psychology*, Vygotsky asserts: “For the educator to exert a direct influence on the formation of character is just as

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<sup>31</sup> Recently, intuition has been accepted by the scientific community as a “true” psychological phenomenon (see Hodgkinson, Langan-Fox, & Sadler-Smith, 2008).



incongruous and ridiculous as a gardener would be who takes it into his head to promote the growth of a tree by pulling on it" (Vygotsky, 1997c, p. 319). Believing that "objectivity" is synonymous with "scientific method," Vygotsky completely rejected the idea that the objective is only that which is directly and immediately perceptible to the sense organs (Yaroshevsky, 1989), because for him cultural development is based on the process of mediation and internalization.

Recall from chapter 2, Vygotsky's notion of cultural development is non-mechanistic and emphasizes the reciprocal nature of causal relations and, further, that mediation (through cultural and psychological tools and signs) and internalization are internal and unobservable processes. Developing emotions culturally, for example, requires mediators to achieve emotional mastery. "Such a mastery of the emotions," Vygotsky states, "denotes only the subordination of feeling, in which the feelings are bound up with the other forms of behaviour and guided in the appropriated directions" (1997c, p. 109). Although here Vygotsky talks about subordination, what he really means is integration with intellectual activity; where activity is guided (motivated) by emotions. For example, intellectual feelings, such as, curiosity, interest, and wonder "in and of themselves...possess an extraordinary imperceptible physical expression, confined for the most part to slight movements of the eyes and the face" (Vygotsky, 1997c, p. 109). Even behaviour itself – something that is directly observable and manipulable – requires different means of manipulation (e.g., integration of emotions with intellectual activities) to mediate its mastery.

Vygotsky places paramount importance specifically on the culturally developed (higher) emotions. Recall that for him cultural development reflects the transformation

of socially established relationships into the individual (internal) psychological world, and the natural world into a culturally mediated world. Culturally developed emotions reflect such an encompassing metamorphosis. Vygotsky claimed that “affect is a prologue and epilogue of the entire psychological development” (1998, p. 227). Here, the prologue seems to refer to biologically raw, organic, and uncultivated emotions, with the epilogue signifying culturally mediated and developed emotions. For Vygotsky, there was always a distinction (but not necessarily a dichotomy) between lower biological and higher cultural emotions reflected in emotional experiences. “It was not sensations, representations or elementary emotions that Vygotsky regarded as the basis of psychical life but emotional experiences that were ‘kindled’ in the deep layers of personality” (Yaroshevsky, 1989, pp. 68-69).

It is no surprise that Vygotsky was an opponent to a linear mechanistic causal approach to emotions. In developing his dialectical and “genetic” approach, Vygotsky, according to Van der Veer and Valsiner (1993), again turned to Spinoza to find a monistic and causal explanation for emotions. However, since his work on emotions ends with his analysis of the mental Cartesian theatre and his discussion on Spinoza was never written, we do not know how exactly Vygotsky planned to arrive at a non-mechanistic causal explanation of emotions in his developmental approach using Spinoza’s writings. Herein, I continue to extrapolate Vygotsky’s writings on emotions and to interpret relevant neo-Vygotskian writings to uncover a non-mechanistic dialectically causal (mediational) explanation of emotions. I also attempt to shed some light on the purpose of emotions.

## The Purpose of Emotions

First and foremost, human emotions for Vygotsky are never passive and meaningless. In fact, there is always a reason why we experience any type of emotion. They are always true reactions to what we experience (see, feel, touch, smell, think and do); reactions that lead to human activity. Vygotsky believed that emotional reactions are essentially purposeful because (as he comments on and agrees with the three-dimensional theory of feelings of Wundt) “every feeling has three dimensions, and in each dimension two directions ... (1) along the axis of pleasure and displeasure; (2) along the axis of excitation and suppression; [and] (3) along the axis of stress and resolution” (1997c, p. 103). In addition, Vygotsky continued, these emotional reactions are always regulated by the very emotions that they are based on. Thus, emotions that are associated with and regulated by such emotional reactions also serve as guides saliently regulating (motivating) these reactions into behaviour – “emotions would not be needed if they were not purposeful” (Vygotsky, 1997c, p. 102).

Vygotsky’s view that emotions have considerable explanatory and motivational power is supported by much current research and theory in the field of affective psychology. De Sousa (2004) believes that all emotions carry information. They are never mere feelings and are intelligent on their own. Prinz (2004), in contrast, stipulates that “They [emotions] are not meanings, feelings, and action tendencies pasted together with mental glue. They are meaningful, feelable wholes...” (p. 245). Epstein (1994) considers any experientially derived knowledge as emotionally laden and thus not only more memorable, but also “more likely to influence behaviour than is abstract knowledge” (p. 711).

Secondly, Vygotsky pointed out that when experiencing certain types of emotions, one can also anticipate the various reactions that usually follow these emotions. Thus, the same emotions can serve human beings “as a system of anticipatory reactions that inform the organism as to the near future of his behaviour and organize the different forms of this [potential] behaviour” (1997c, p. 106). The organism uses emotions as a quick evaluating reaction to its own behaviour and as an act of interest in a reaction (1997a). Emotions bring valuable information, trigger a specific reaction, regulate and evaluate such a reaction, and leave an emotional imprint in memory. Hence, the next time around, as a specific emotion triggers an anticipatory reaction, it also, in turn, triggers, evaluates and regulates a certain behaviour. These functions make emotions one of the most vital and useful resources for human survival. Current research also supports the enormous influence that emotionally laden information has on decision making and anticipatory behaviour (Eich et al., 2000, Forgas, 1995; Reisberg, 2001).

Even though cultural development itself serves as an important basis for human survival, Vygotsky (1997c) insisted on valuing the primacy of emotions as he was convinced that their significance goes beyond their natural contribution to adaptability. He criticized the absurdity of the position of the “old” theory of emotions which held that “a step forward in the development of the human mind implies a step backward in the development of the emotions” (Vygotsky, 1987, p. 326). Proponents of the old theory argued that: (1) the human mind primarily encompasses cognitive processes, which can only be debilitated by human emotions; (2) a complete development of cognition would free the human mind from “unnecessary” emotions; and (3) the new (evolutionary) layers of the brain reflect such cognitive processes. Leontiev (1978), for example, in supporting

Vygotsky's ideas, states that the old "ideal of education [based, according to Leontiev, on Darwin's biological theory], leading to the requirement to subordinate feelings to cold reason" (5.4, para. 25) is false. In support of his criticism, Vygotsky presented enormous amounts of data from his experimental research, as well as his own psychological experiences. In so doing, he attempts to reveal the limitations and narrow-mindedness of many of the researchers of his day in their treatment of emotions. Specifically, the limitations of many of Vygotsky's contemporaries come from relying exclusively on biological analyses of emotions which document the "disappearance" of the affective areas from (evolutionary) recent brain formations. Recall that Vygotsky, in contrast, resolved the issues of dualism between biological and social mental functions by introducing the idea of mediation. (In particular, as was explained in chapter 2, emotions themselves can serve as an indispensable mediator in the cultural development of the personality.)

Vygotsky criticized both the pure biological and pure neurological analysis of emotions. Although the topic of neuropsychology is beyond the scope of the present investigation, it is useful to point out that for Vygotsky emotions represent connections between newly formed parts of the brain and older structures. Here, Vygotsky disagreed with the view of his contemporaries that emotions are only a function of older portions of the brain (e.g., the limbic system), whereas cognition is seen as a product of more recent evolutionary structures (e.g., the neocortex). Commenting on the absurdity of such an opinion concerning a seeming biological disappearance of emotions from the brain, Vygotsky (1998) contended that "affective functions disclose a direct connection both with the very old subcortical centers that develop first and are the foundation of the brain

and with the new, specifically human areas of the brain (the frontal lobes) that develop last of all” (p. 227). It is at this point, that he further argued that “affect is the alpha and omega, the first and the last link, the prologue and epilogue of all mental development” (Vygotsky, 1998, p. 227). Here, Vygotsky is trying to show that emotional reactions not only are the remnants of our animal existence from the past, but also are vital human qualities that help us to develop culturally, to become social individuals and wise human beings with heads, hands, and hearts integrated. We must account for affect in the child’s cultural development because possession of wisdom is both a cognitive and an affective matter.

In his comments regarding Descartes’ writings on the passions of the soul and the ways to attain a moral life, Vygotsky (1999) maintained that arriving at wisdom is an ultimate goal achieved by transforming emotions into a joyful source of life. However, “the path to wisdom lies through the dark and dangerous valley of the passions” (p. 174). Vygotsky (through the words of Descartes) reminds us that, although emotions are vitally important for cultural development and should serve as mediators. It is not possible (and if attempted, very dangerous) to understand and/or control them directly.

In his analysis of inner planes of verbal thought, Vygotsky (1986) stated that “Thought is not the superior authority in this process [of verbal thinking]....Behind every thought there is an affective-volitional tendency...A true and full understanding of another’s thought is possible only when we understand its affective-volitional basis” (p. 252). Hence, in order for educators to fully understand their students, they must understand their students’ emotions. Before elaborating on how educators should recognise, identify, and understand their students’ emotions so as to further mediate their

students' learning and development, in light of my interpretation of Vygotsky's ideas, let us recapitulate that emotions: (a) have considerable explanatory and motivational power; (b) make any experience more memorable; (c) influence our decision making; (d) serve as an anticipatory system; (e) disclose a direct evolutionary connection between the very old centers in the brain that develop first and the new, specifically human areas of the brain that develop last; and (f) when fused with our intellect, behaviour, and values, can lead to the development of wisdom.

### **Understanding and Identifying Emotions**

As noted previously, one of the main goals of the present investigation is to explicate Vygotsky's belief that affect is the beginning and the end of the cultural development of a person, which, in turn, represents a complete integration of all higher psychological functions, processes, and systems. To fully understand their students, educators must understand their students' emotions. In order to understand how emotions can be explained in a non-mechanistic causal way and how they must be integrated and incorporated in learning and development, it is vitally important to first be able to identify emotions.

In order to identify emotions, let us recall how Vygotsky understood the process of the cultural development of emotions. He was convinced that the system of culturally developed emotions is a dynamic product of multi-relational inter- and intra-dependency of every mental function in relation to other functions and to the external world. This means that when emotions are culturally developed, they are incorporated into every process that motivates higher behaviour and, thus, their traces may be found in every

aspect of the child's higher mental processes. Vygotsky stipulated, "we could trace the development of social and cultural needs only conditionally and briefly in studying the development of motives" (1997b, p. 243). Although social and cultural needs are driven by emotions and are emotionally laden, they are not emotions per se. However, when we study the child's motivation within the cultural-historical context, we inevitably capture the distinctive features of cultural emotions in the process of their dynamic development.

In his experimental research on the connection between the child's motor system and her emotional processes, Vygotsky supported his notion of a "reverse" (reciprocal) connection between behaviour and emotions. That is, the traces of subconscious affect and personality can be found in behavioural reactions. He stated that

the motor reaction is so merged and inseparably participates in the affective process that it can serve as a reflecting mirror in which it is possible to literally read the hidden structure of the affective process that is hidden from direct observation. (Vygotsky, 1999, p. 31)

The appreciation of such a reverse connection gives an additional, invaluable tool for educators to assess their students' emotional states and use that data to enhance their learning processes.

Vygotsky believed that it is only in the spontaneity of the child's behaviour that the traces of emotionality can be found. Thus, "When a person does not realize what he is doing and acts under the influence of an affective reaction, you may again infer his internal state and the character of his perception from his motor behaviour" (Vygotsky, 1997a, p. 93). Being consciously constructed and reflective of a function of socially meaningful mediated activity, the higher psychological processes, once developed, are not always conscious. As has been argued, cultural emotions are developed through personality and behavioural mastery, while mastery of behaviour – a result of both



internalization and externalization – reflects behavioural automaticity and spontaneity that come as a consequence “of a transformation of action that takes place as a result of its inclusion in another action and its subsequent” mastery (Leontiev, 1978, 3.5, para.18). Recall that lower functions do not disappear with the appearance of new functions. Rather, they are subordinated by new formations. Hence, the traces of both culturally developed and natural emotions can be found in spontaneous behaviour. In addition, because the cultural development of the child takes place only through the process of mediation with the help of psychological tools and signs, it is also through the use of such mediating tools and signs that the traces of culturally developed emotions can be found.

Specifically, Vygotsky (1999) pointed to the functional methodology of double stimulation<sup>32</sup> as the most suitable principle for reconstructing the developmental processes of cultural emotions. During an experiment testing the child’s ability to memorize, the child is not provided with a ready to use auxiliary symbol, but rather is asked to produce or create it – one method of active mediation.

In this way, we created conditions for reconstructing the mental process of remembering and using a certain auxiliary means. In not giving the child a ready symbol, we could trace...all the essential mechanisms of the complex symbolic activity of the child. (Vygotsky, 1999, p. 60)

Up to now, we have discussed the possibilities of studying and identifying culturally developed emotions through the traces they leave in higher mental processes, through spontaneous behavioural reactions and their motivators, and through cultural tools and signs that are used to mediate cultural-emotional development. It seems that the easiest way to find traces of culturally developed emotions is through behavioural reactions.

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<sup>32</sup> The notion of double stimulation was discussed in Chapter 2.

In fact, talking about commonality among all the forms of development of higher mental functions, Vygotsky stated that “All of these processes are processes of mastering our own reactions by different means” (1997b, p. 207). Although here Vygotsky talks specifically about behavioural reactions as he develops the concept of self-control, emotions, as we recall, are also considered by Vygotsky as reactions of the organism to either external or internal stimuli. (Here, it is worth remembering that even culturally developed emotions also prompt us to react to either external or internal stimuli. However, such reactions are manifested in a mediated behaviour.) To paraphrase Vygotsky, the process of development of every higher mental function inevitably includes mastering one’s own emotional and physical reactions. Vygotsky equated mastering reactions with controlling them and, hence, focused on the processes of self-control. Addressing the structure of higher mental functions, Vygotsky stated that “We could not describe the new significance of the whole operation any better than to say that it represents *a mastery of the behavioural process itself*” (1997b, p. 85-86). Since the mastering of the behavioural process itself is the best representative of the development of higher mental structures (including emotions), then it is in the mastery of behaviour that culturally developed emotions can be traced by students and educators alike.

However, Vygotsky was never explicit as to how exactly to identify traces of emotions in behavioural mastery and, if and when identified, which emotions (and under what conditions) can be trusted and relied on. We know that Vygotsky (1997c) asked educators to teach students to control their emotions by incorporating their emotions into every learning activity: “the essential pedagogical task is to teach the child to become ruler of his emotions, i.e., to teach him to incorporate the emotions into the general

network of behaviour, to make them intimately related to all the other reactions” (p. 108). We also know that by integrating emotions into the entire psychological framework, Vygotsky was hoping to both explain emotions themselves and facilitate the integration of other mental functions and processes by using emotions as mediators leading towards behavioural mastery. Concurring with Stanislavsky, Vygotsky invoked Spinoza’s claim that

acting in the real sense of the word implies intellectually understanding ...what we are doing. It was this idea of the growing control over the emotions by the intellect and the resulting mastering of our behaviour that was also clearly present in Vygotsky’s cultural-historical theory. (Van der Veer and Valsiner, 1993, p. 240)

What would happen if emotions are not incorporated into the learning process? Would students be left emotionless? Of course, they would not. Vygotsky knew that emotions (although not always consciously identified) are always “present” in every mental process. For him, thought does not originate out of another thought, but rather out of emotional, motivational, and volitional human tendencies (Vygotsky, 1986, p. 152). So, why would he then urge educators to incorporate their own emotions as well as their students’ in every learning activity, knowing that their emotions are already present?

A partial answer to this complex question can be found in Vygotsky (2004), *Imagination and Creativity in Childhood*, where he asserted that one of the latent and strongest influences emotions exhibit in linking together images, information, and/or events that have no other logical connection to each other, is a common emotional tone. That is, common emotional signs or marks have a strong propensity to group our impressions and images together in a completely unexpected way, even in the absence of any logical association of similarity between them. “The emotion selects separate

elements from reality and combines them in an association that is determined from within by our mood, and not from without by the logic of the images themselves” (Vygotsky, 2004, p. 18). It is no surprise that because the number of images with identical emotional imprints can be very large, educators can use the limitless influence of emotions (which glue together images, information, and/or events) to facilitate successful learning and development.

Furthermore, in my opinion, Vygotsky’s idea of incorporating students’ emotions in every learning activity in order to “control” emotions suggests a mediated way to facilitate emotional development culturally. As mentioned earlier, Vygotsky’s idea of controlling emotions implies the complete integration of emotions with other mental functions and processes. Once emotions are culturally developed, that is, when they are dynamically connected to other higher mental functions and systems (e.g., personality or behavioural mastery), and reflect social experience, they, in a sense, represent the whole person, and, in that sense, are being controlled. Such control (as reflected in behavioural mastery) is achieved by appealing to the whole personality and reflects the social origin of the child’s holistic development. Putting it differently, when the whole personality is involved in the learning activity of a student who exhibits behavioural mastery, her emotions are “controlled,” that is, they are culturally developed. It seems that emotions for Vygotsky cannot be trusted when they are taken in isolation from other mental functions and from the environment.

It is my understanding that Vygotsky believed emotions should only be relied on in their relational value to the emotions of other people. As will be discussed, it is only when the child’s emotions reflect the future (or predicted and positive, at least in most

cases) reactions of other people that he or she can truly feel good about and thus rely on his or her own emotions. For Vygotsky, culturally developed emotions (emotions that develop while they interact and synthesize broadly with other aspects of human thinking and behaviour within the cultural-historical context) bear intellectual, affective, and volitional information not only for the mere purpose of human adaptability and survival, but also for the purpose of the cultural development of the human species. For Vygotsky, culturally developed emotions are “the alpha and omega, the first and the last link, [and] the prologue and epilogue of mental development” (1998, p. 227).

To recapitulate, relying on Hegel’s dialectical philosophy, Vygotsky proposed that, although there is a distinction between higher and lower psychological functions and processes, they exist along a continuum. That is, the distinction between higher and lower mental functions within a dialectical paradigm does not assume dichotomy (in its strict sense<sup>33</sup>) between them, but rather accepts their interaction, a synthesis where higher psychological functions subordinate their lower counterparts. Vygotsky further maintained that in the process of cultural development the lower functions and processes do not disappear, but rather, merge into the fabric of the higher psychological functions and processes. However, those lower functions and processes that remain lower, behave as if under the new command of the higher functions and processes. Working with special needs children made Vygotsky aware that “they [the lower processes] are still present and will re-emerge when the higher processes, for one reason or another, are unable to function” (Van der Veer & Valsiner, 1991, p. 358). Not only did Vygotsky clearly differentiate between raw uncultivated emotions and culturally developed emotions, he also assigned a regulating power to the culturally developed emotions even

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<sup>33</sup> Higher and lower mental functions are not in opposition to each other, but rather in differentiation.

in the presence of their lower counterparts. As has been argued, it is through the development of culturally mediated emotions that, in my interpretation, Vygotsky advanced his ideas about the development of personality and the mastery of behaviour.

Specifically, in order to achieve behavioural mastery, Vygotsky would argue that there is a need for (1) new relational connections within the student's mind, for "the mind with all its subtle and complex mechanisms forms part of the general system of human behaviour" (Vygotsky, 1997a, p. 152); and (2) the forging of new relationships with others that involve one's emotional anticipatory experience in the environment (Yaroshevsky, 1989). For example, when we ask a student to exhibit different, more appropriate behaviour, we are not looking for the mere appearance of a difference in the student's actions. Such an artificial behaviour wouldn't last and the student is likely to return to his or her old "habitual" behaviour when "no one is watching." Establishing new relational (reciprocal) connections between the student's mental functions (encompassing culturally developed emotions) and facilitating the student's emotional understanding and appreciation (empathy) towards others would most likely facilitate the student's behavioural changes more permanently.

In fact, the way children interact with others is the way they "interact" with themselves. That is, all their social relationships with other people are reflected in the development of their higher mental functions and, thus, in their personality. As Vygotsky conjectured,

Essential is not that the social role can be deduced from the character, but that the social role creates a number of characterological connections. The social and social class type of the person are formed from the systems that are brought into the person from the outside. (1997a, p. 106)

It seems that it is both mastery of behaviour and personality development within a socio-cultural context that Vygotsky recommended relying on when assessing the validity of the child's emotions. It is not that Vygotsky did not trust emotions (whether higher or lower). He explicitly and consistently wrote about their purposefulness and importance in the whole process of cultural development that goes beyond mere survival and adaptation. But it is through the "lenses" of mastery of behaviour and cultural development of personality that Vygotsky assessed the value and significance of culturally developed emotions. However, given that, for Vygotsky, cultural emotions are not developed in a vacuum, but rather, within the context of the cultural-historical environment, it is essential to understand how Vygotsky interpreted the relationship between the individual and his environment.

### **Emotional Experience (Perezhivaniye)**

It is through the dynamic interaction between the developing personality and the environment that Vygotsky ascribed emotional features to the child's experience. Hence, it is no surprise that in the unity of personality and environment, what Vygotsky called *perezhivaniye*, there also exists a reflection of both the emotional and intellectual properties of human beings. Although the concept of experience is not new in the larger history of human thought, the "domain of emotional experience...had not generally been noticed prior to James but has recently [before 1930s] become the focus of experimental research" (Vygotsky, 1987, p. 327). Vygotsky's understanding of human experience highlighted the previously hidden connection between culturally developed emotions and consciousness. The clumsy translation of the word *experience* from the Russian

perezhivaniye reflects a mere approximation of the complete meaning of the original word. When translated back to Russian, the word “experience” is never translated into perezhivaniye, but rather into *opyt* – a word that does not depict emotional experience, but rather working, or employment experience.

Vygotsky suggested that experience has both biological and social roots and assigns its location somewhere between the child and his environment. He stated that “experience...is what lies between the personality and the environment, that defines the relation of the personality to the environment, [and] that shows what a given factor of the environment is for the personality” (Vygotsky, 1998, p. 294). He elaborated further that experience is what shapes the child’s development, as it represents the reciprocal influence of the environment on the child and vice versa. For Vygotsky, children change the environment in order to change their own behaviour, and in changing their own behaviour they change the environment.

Discussing the child’s crisis<sup>34</sup> at one year of age, Vygotsky placed the development of children’s consciousness as the ultimate goal of development, to which everything else (e.g., their stages of personality development, their relations with their environment, their basic activity) is closely connected. He takes Marx’s more formal description of consciousness as being related to the environment one step further, stating that “essentially, it is true that the relation of the personality to the environment characterizes in the most intimate way the structure of consciousness” (Vygotsky, 1998, p. 258).

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<sup>34</sup> Recall from chapter 2, the child’s development goes through stable age periods as well as the periods of (severe) crisis. The periods of crisis (like “revolutions”) reflect extremely abrupt, stormy, and even catastrophic changes in the child’s personality. In such critical periods, development seems to reverse and move in opposite directions.



For Vygotsky, “consciousness is the experience of experiences” (1997a, pp. 71-72) and represents the unity between affect and intellect. The fact that the concept of *perezhivaniye* is closely related to the concept of consciousness should indicate that the Vygotskian notion of *perezhivaniye* must possess both intellectual and affective properties, as does the notion of consciousness. Thus, the child’s experience is a dynamic emotional and intellectual context within which and with which the child develops. As a matter of fact, the word *perezhivaniye*, as contextualized in the Russian language, always assumes first and foremost an emotional experience. For example, in the phrase “She *perezhila* a lot” (roughly translated: “She went through a lot”), the word *perezhila*, a third-person form of *perezhivaniye*, means nothing less than the fact that the person went through many emotionally negative experiences. Notice, the question here is not whether the experiences this person had were emotional or not, or whether such emotional experiences were positive or negative. There is only one possible meaning of such a sentence in almost every possible context: the person went through a lot of troubles and as a result of experiencing trouble, that is, as a result of the negative experience (compare with Vygotsky’s concept of struggle) he/she had, the person went through a lot. However, there is one exception, which occurs when the word *perezhits* is used to identify the one who lived longer than the one who has died. For example, “*Ona perezhila svoyevo syna*” would mean “She lived longer than her son” or “Her son was survived by his mother.” Another common phrase in the Russian language is: “*Ne perezhivai!*” which is an exact equivalent of the English “Don’t worry!” Here it goes without saying that worry represents negative emotions. Relations, whether among

people around us or between a person and an environment, always encompass some sort of affect.

Hence, it is with affect that the relations of the individual personality to the environment create a unique individual experience (*perezhivaniye*), within the drama of life. Dramatic experience for Vygotsky is what connects an individual to the environment and what distinguishes his personality from others (1986a, pp. 66-67). “The psychology of personality is a dramatic psychology” (Leontiev, cited in Asmolov, 1998, p. xiii). Drama is an integral part of the individual that reflects his activity and his accomplishments. It is through participation in this social drama of life that the experience of an individual becomes his individual drama and makes him socially and culturally human (Vygotsky, 1986a, pp. 66-67).

In introducing drama as a central process of the individual struggle of personality, Vygotsky

insisted that it was necessary to turn away from echoes of the drama of life in the works of art and turn to this drama itself, which, he was convinced, was open to scientific concepts and methods that were permeated with the principle of causality. (Yaroshevsky, 1999, para.38)

It is not that Vygotsky (1971) abandoned the idea that the arts can be used as mediators for cultural and moral development. Rather, he was convinced that the fullness and richness of emotional experience can be better achieved (and scientifically investigated) through active participation in its creation (i.e., as an actor in a dramatic play, or as an experiencer of one’s own real-life dramatic experience). It seems that Vygotsky set a precedent by creating an interdisciplinary synthesis between the art of science and the science of art. Such a synthesis allows Vygotsky both: (a) to get closer to a systemic explanation of the social situation that is reflected in a dramatic script of life; and (b) to

move away from a mechanistically causal notion of the influences of the external environment on the consciousness of the individual. Just as in a dramatic play, so in real life an individual character interacts with other characters through dialogue, as she creates her own individual experience within the context of an ongoing social drama.

The child's experience is the kind of simple unit of which it is impossible to say that it is the influence of the environment on the child or a characteristic of the child himself. Experience is a unit of personality and environment as they exist in the development....Experience must be understood as the *internal* [italics added] relationship of the child as an individual to a given aspect of reality. (Vygotsky, 1984c, p. 382; also 1998, p. 294; cited in Minick, 1987, p. 32)

Vygotsky identified environmental factors (e.g., immediate family) to be of paramount importance to the development of individual personality. In fact, his research into negative influences of patients' families uncovers more than just heredity (e.g., the influence of family upbringing and levels of education in general on the patient's personality) and, in particular,

constant demands and humiliations, a disorderly family life, parental discord, arguments over the child, separation from one of the parents, difficult living conditions, [and] wounded self-esteem...This kind of complex character study of a family ought to underlie the constitutional analysis of a child's personality. (Vygotsky, 1993, p. 281-282)

From a seemingly opposite point of view, Vygotsky judges the importance of individual emotional experience that drives the child's individually distinct development even in the presence of similar family influences.

Any analysis of a difficult child shows that what is essential is not the situation in itself taken in its absolute indicators, but how the child experiences the situation. In one and the same family, in one family situation, we find different changes in development in different children because different children experience one and the same situation differently. (Vygotsky, 1998, p. 294)

Such information might be useful for educators in the potential re-establishment of a child's disintegrated<sup>35</sup> personality and emotions, as it reveals: (1) specific educational measures parents implement in their children's education, and (2) the child's specific emotionally laden individual experience as a result of the struggle between her personality (her needs and drives) and what her family environment dictates.

The child's experience is a manifestation of her environment, for it is through the child's experience that the environment guides her. Vygotsky stated that "this obliges us to make a deep internal analysis of the child's experiences, that is, to study the environment, which to a considerable degree is shifted into the child itself" (Vygotsky, in Russian, cited in Yaroshevsky, 1999, p. 97). Although the notion of experience as a "dialogue" with the environment is meant to bring the individual (physical body) closer to its consciousness and the consciousness of others, for Vygotsky, consciousness is not the only dimension of personality, no matter how dialogical and encompassing it may be. Some of the most human dimensions of personality are emotions, feelings, and desires, which determine the direction of human thought. For Vygotsky, the very nature of thought itself is in the synthesis of intellect and affect, and emotion is the driving force behind any thought. *Perezhivaniye* is Vygotsky's last unit of analysis which dynamically reflects the relationship between the individual and his/her social activity; that is, the way the individual experiences the social activity.

Vygotsky's ultimate educational goal was to develop students' emotions culturally. What exactly happens between the prologue and the epilogue; that is, how exactly do raw uncultivated emotions develop into culturally mediated emotional

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<sup>35</sup> According to Vygotsky (1993), a successful cultural development encompasses integration of all mental functions and processes with each other. Conversely, when development is not successful and takes a wrong path, the functions are disconnected (disintegrated) – what Vygotsky also calls "disontogenesis."

experiences that are embedded in personality? And, relatedly, how exactly does the external social world give rise to internal psychological experience and life? Vygotsky, unfortunately, does not provide direct answers to these questions. His contention that “it is precisely the emotional reactions [or, as reflected in some of his later writings, the mediated reactions of culturally developed emotions] that have to serve as the foundation of the educational process” (1997c, p. 107) and his assertion that “affect opens the process of the child’s mental development and construction of his personality as a whole” (1998, p. 227) are somewhat limited in their precise direction and the specific processes involved. However, he insisted on integrating emotions with every mental function, process, and environmental interaction. Hence, one can argue that achieving a conscious individual emotional experience (*perezhivaniye*) is already half of the successful developmental journey. Emotional experience is not reflected in the functions of personal psychological life, but is socially, culturally, and historically developed to help create the unifying system of beliefs, attitudes, world-views, and values expressed in the superstructure of a culture. It is, according to Vygotsky, the driving force (consciously, subconsciously, and unconsciously) behind the person’s perception, attention, memory, decision making, behavioural mastery, and overall world orientation. Hence, culturally developed emotions as reflections of emotional experience are of paramount importance to educational theories and practices.

In Vygotsky’s dramatic example, the dynamic nature of emotional experience can be seen in the paradox of double emotions, which is reflected not only in the actor’s ability to experience (or live through) his/her role both for himself or herself and for his/her character during the actor’s preparation for the role, but also during his/her

performance. Vygotsky alleged that “the experiences of the actor are not so much a feeling of ‘I’ as a feeling of ‘we’” (1999, p. 241). Achieving such a collective feeling of both self- and others-awareness is needed for an actor to maintain an emotional impact on his/her audience. However, the impact of the actor’s performance on the audience is made not only in the “here-and-now” but also in the time to come. In fact, it is the audience’s reflection of the experiences they have had in the theatre that completes their satisfaction and amplifies their projected future experiences. “In order to explain and understand experience, it is necessary to go beyond its limits; it is necessary to forget about it for a minute and move away from it” (Vygotsky, 1999, p. 243). Feeling good is the ideal result for an individual who is able to step away from his immediate struggle with social demands, reflect on his/her past experience, and contemplate (extrapolate) his/her future experiences.

Reflecting on emotional experiences is vitally important because it might lead to the following realization: no matter how hard and painful one’s past experiences might have been, one has already passed through them – one has already *perezhil* (lived through) them, survived them. Although these emotional experiences are what one remembers, it is the realization that these experiences are in the past that makes one’s emotional experiences future-oriented. “All individual psychological phenomena and processes must be understood not [only] in connection with the past, but with an orientation toward the future” (Vygotsky, 1993, p. 101). It is interesting that Vasilyuk (1984) writes in his annotation to *Psikhologia Perezhivaniya* (Psychology of *Perezhivaniye*), that in order to manage (*perezhits*) “situations of stress, frustration, inner conflict, and life crisis, quite often a painful inner work has to be done in re-establishing

inner equilibrium and reconstructing a new meaningful life” (para. 1, my translation). For him, even a painful experience in the past can be recreated as a positive, pleasurable, meaningful future-oriented experience of personality. Hence, *perezhivaniye* is a future-oriented, conscious, and individual emotional experience of past events achieved in the “here-and-now” through reflection on the individual’s struggle within himself/herself (e.g., as if struggling between the dual consciousness of self and the character he/she portrays) and with the social environment (e.g., his/her audience). Although *perezhivaniye* connotes mostly negative (painful) experience of the past, its future-orientedness provides possibilities for positive outcomes. Such positive possibilities are also reflected in Vygotsky’s optimistic views on cultural development in general.

### **When Emotions Are Not Integrated**

What happens when emotions are not developed culturally? Vygotsky and his followers provide many examples of disintegrated personality, abnormal behaviour, and related psycho-social problems arising from the absence of an established emotional communication during infancy. Vygotsky (1986) believed that language becomes an important psychological tool for reinforcing emotional communication in infancy. A successfully established emotional dialogue with the infant leads to the development of the infant’s motivations for later forms of shared activity (Leontiev, 1978). The lack of successfully established and maintained emotional communication with infants usually leads to poor developmental accomplishments (both affective and cognitive) in later life (e.g., the lack of attachment results in cognitive deprivation and disintegration) (Bodrova & Leong, 1996). However, establishing a positive emotional communication and

maintaining a healthy emotional context in general should not encompass sentimentality and exaggerated affectation.

Vygotsky did not support facilitation of the child's sentimentality, and neither did he believe in a suppression of feelings and emotions. There has to be some healthy dosage of reservation applied to the child's emotions. "The organism must ...master certain forms of inhibition, certain ways of reining in its own desires...A decisive contradiction between the environment and personality is created as a result" (Vygotsky, 1997c, p. 208). Vygotsky was convinced that the child's successful development must include a healthy dosage of a "reining in" period on her emotions and desires. It is almost as if the child needs a shot of bacteria to immunize her from the possibly devastating results of further encounters with the disease. In fact, Vygotsky contends that "it is true that vaccination means an injection of disease. In essence, however, vaccination instils superior health" (1993, p. 101).

While the successful development of emotional relationships with their caregivers allows young infants to develop their interests in the social world, a direct emotional communication with older infants may even trigger some irritation in them. A caregiver should express his/her emotions indirectly towards the older infant through mediation of a "joint object-centered activity" (Lisina, 1986, p. 53; cited in Karpov, 2003, p. 43). That is, first, if emotional communication with younger infants is not established successfully, adults cannot serve as mediators between infants and their external world. Second, once the role of an adult as a medium is "approved" by the infant, the adult's emotional support should not reflect only the adult's wishes to cuddle and caress the child, but also,



most importantly, should reflect the needs and interests of the infant to actively participate in a joint object-centered activity.

Infancy is not the only age period that requires a successfully established and maintained emotional communication (a synthesis of affect and intellect). Recall that “affect and intellect are...two mental functions, closely connected with each other and inseparable, that *appear at each age as an undifferentiated unity* [italics added]” (Vygotsky, 1998, p. 239). During the preschool period, emotions become thoughtful, that is, they integrate with thinking (Leontiev, 1978; Vygotsky, 1998). In contrast to toddlers who react emotionally to immediate situations, preschoolers and kindergarteners remember and think about emotions; that is, they use their memory to anticipate future situations emotionally.

For the 7-year old, the intellectualization of affect must be integrated within the child’s developing personality so that his consciousness develops based on the unity of intellect and affect. When the intellectualization of affect is not integrated, the emotional and intellectual spheres suffer, resulting in complications in the child’s learning abilities. Kravtsova (2006) confirms that “Children who develop trouble with the ability to rethink their own emotions, first of all, become emotionally handicapped (indifferent, cruel, lacking empathy and sympathy, etc.), and second, are centered on themselves, which leads to significant difficulties in learning” (p. 17). In another age group, 3-year old children may experience difficulties if they do not assimilate the intellectualization of perception. In addition to experiencing learning difficulties, “they do not play, but at the same time they are immersed in an imaginary world” (Kravtsova, 2006, p. 17). Their

emotional processes are disconnected from other mental functions and processes, which usually leads to personality disintegration.

Recall that Vygotsky advised educators “to teach [the child] to incorporate the emotions into the general network of behaviour, to make them intimately related to all the other reactions” (1997c, p. 108). For Vygotsky, successful cultural development represents an integration of all mental functions and processes into one unified system. However, even when the child’s emotional experience is not fully integrated, there is still a chance for the child to improve her behaviour under the assistance of an educator, so that seemingly alternative (unknown and unexpected) behaviour might trigger the right emotions and appeal<sup>36</sup> to personality. For example, a teacher asks a question and a student who usually gives wrong answers tries to create an answer to the particular question, but is not completely successful. Her answer is either incomplete or uncertain in its conclusion. The teacher can nevertheless encourage such a student by saying, for example: “I think I know what you are trying to say, which is...,” and at that point the teacher continues with the right answer. The student no doubt will be pleasantly surprised that, according to the teacher, her answer was very close to the right one or at least led in the right direction, unexpectedly. As a result, the student’s self-esteem is likely to rise, but also – what is more important – her participation in learning is assured and supported. Here, the teacher facilitates (mediates) the student’s future-oriented behaviour and thus helps the student to feel good about herself, despite being far from achieving mastery of behaviour in the “here-and-now.”

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<sup>36</sup> In the dialectical tradition of Russian culture, personality (*leachnost*) is not what a person possesses but rather what the person becomes. For example, the phrases “appeals to and/or is approved by personality” should read “appeals to and is approved by a person.” See chapter 4 for more details.

In addition, educators can motivate students by making the learning process itself more interesting, for example, by incorporating students' outside interests into the activity. According to Vygotsky,

When we consider an act of thinking concerned with the resolution of a task of vital significance to the personality, it becomes clear that the connections between realistic thinking and the emotions are often infinitely deeper, stronger, more impelling, and more significant. (1987, p. 348)

When internalized by the child, such strong connections between mastery of thinking,<sup>37</sup> personality, and interests facilitate a better integration of culturally developed emotions. Hence, it is of significant value for educators to engage their students' interests in whatever they learn, so that the cultural development of students' emotions will go hand in hand with personality development and mastery of behaviour.

It is also extremely important to recognize that, no matter how hard the teacher may try to encourage the student, in the final analysis, it is up to the student either to approve or disapprove such "invitations" to participate more often. A child with a poorly formed (disintegrated) personality (e.g., high functioning autistic children and schizophrenics) might insist on the correctness of the answer they have provided and claim not to need the teacher's "false" encouragement. Development within a dialectical paradigm,

represents the creation and re-creation of a child's personality based on the restructuring of all the adaptive functions and on the formation of new processes – overarching, substituting, equalizing – generated by the handicap, and creating new, roundabout paths for development. ... The key to originality transforms the minus of the handicap into the plus of compensation. (Vygotsky, 1993, p. 34)

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<sup>37</sup> Vygotsky considered "thinking" as a special type of behaviour; hence, mastery of thinking represents behavioural mastery.

According to Vygotsky, it is possible to strengthen the personality of the child through “mastery” of behaviour, or rather through a simple change in her behaviour (providing that such a change appeals to the child’s personality), so as to initiate a new beginning for a future-oriented synthesis of culturally developed personality and emotions to compensate for the deficiency.

However, here we must also recognize that the positive change in personality (and its development) is not an individual endeavour, but is social in its entirety. It is in the struggle with the demands of daily social life that an individual can develop his personality, as he/she tries to achieve a certain social status. For example, when a young child misbehaves, sending her to stand by herself facing the corner of the classroom (what some educators, Maxwell & Reichenbach, 2005, call “a shame corner” or “a time out”) might not necessarily be instructive. Since the child’s misbehaviour is triggered by and manifested in his social environment, it is within such a social environment (and not in isolation) that the child’s behaviour and attitudes should be improved. Vygotsky stated: “In the final analysis, what decides the fate of a personality is not the defect [or individual talent, an advantage or disadvantage] itself, but its social consequences, its socio-psychological realization” (1993, p. 36). Here, it is important to remember that social consequences are especially powerful for the person with a “defect” and/or a culturally undeveloped personality. Vygotsky speculated that an individual defect causes the sense of one’s inferiority, and leads to an evaluation of one’s social position (1993, p. 53). In the final analysis, it seems that it is the individual’s socio-psychological future-oriented realization (perhaps in the form of the person’s *perezhivaniye*) that determines exactly how his/her personality will develop and whether it will develop or deteriorate.

Vygotsky found support for this notion in the work of E. Segen (cited in Vygotsky, 1993, pp. 220-221): “Physically – he cannot; mentally – he knows not; psychologically – he does not wish to. He would be capable, and he would know, if only he wished to; but the whole misfortune lies above all in his not wishing to.” Educators must find ways to provide a caring and nurturing environment in which to facilitate the child’s positive emotional development. The goal is to produce a personality<sup>38</sup> able to express both consciously and unconsciously a willingness to repair and positively compensate for any deficits, and/or to continue developing talents, as the person strives towards further cultural development.

### **Concluding Remarks**

In Vygotsky’s words, “Behind every thought there is an affective-volitional tendency, which holds the answer to the last ‘why’ in the analysis of thinking” (1986, p. 252). The “last why” might refer to existential questions. Why and how do we think what we think? Why do we behave the way we do? Why do we develop our personality the way we do? Why do we have to develop culturally? Why do we have to have a developed consciousness? Why are we here? And most importantly, why am I here? A simple answer to most of these questions might be an emotional one: just because it feels good. Feeling good, however, also comes with a price: struggle.

I doubt if anyone considers struggling as pleasurable, and yet within a dialectical paradigm, as humans seek to maximize their experiences of pleasure and minimize their experiences of displeasure, they spend their lives struggling and thus developing.

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<sup>38</sup> See footnote 36.

Conflicting emotions, which arise from struggling in order to achieve happiness, are reflected in the law of aesthetics, described by Vygotsky (1971/1925): “*it comprises an affect that develops in two opposite directions but reaches annihilation at its point of termination*” (p. 214). There is some similarity between Vygotsky’s description of the “double expression of feelings” (p. 209) in his *The Psychology of Art* and the paradox of the actors’ emotion expressed in his *On the Problem of the Psychology of the Actor’s Creative Work* (1999/1932). This similarity goes beyond the surface of debate over whether the physical or psychic emotional reactions appear first (Vygotsky, 1971/25) and whether the actor’s emotions during his/her performance are “true” without the audience’s expectations and reactions, the actor’s reflections, and the larger socio-cultural context (Vygotsky, 1999/1932). Both (the “double expression of feelings” and the paradox of the actors’ emotion) reflect the conflict between internally and externally oriented emotions. Due to such conflict, the true value of emotions is brought by the spectator of the art and not by the art itself, and by the audience of the play and not by the actor him/herself. “The experiences of the actor are not so much a feeling of ‘I’ as a feeling of ‘we’” (Vygotsky, 1999/1932, p. 241). Individual emotions are not developed in a vacuum, but rather in a dialogue with the social, cultural, and historical context, and within the individual.

Vygotsky valued culturally developed emotions for their own sake. Why is it that for Vygotsky – a psychologist who advanced the theory of the development of higher psychological processes, who didn’t spend much time developing a theory of emotions, and who was not entirely explicit about the specific role of emotions as mediators for the

development of personality and the mastering of behaviour – these very emotions meant so much that their development should be encouraged for their own sake?

It seems to me that there is no other human mental function that receives such enthusiastic support from Vygotsky. He never suggested that mastery of behaviour be achieved for its own sake. Similarly, neither did he suggest that personality be developed for its own sake. It has been asserted that, with the help of culturally mediated emotions, mastery of behaviour can be directed towards the development of personality. Likewise, it is with the help of culturally mediated emotions that the development of personality becomes the driving force for mastery of behaviour. So, why does Vygotsky advise educators to engage their students' emotions in every step of their learning process not only to facilitate "better recall and better assimilation [of a new material], but also *as an end in itself* [italics added]" (1997c, p. 106)? I am afraid the answer is not a simple one.

First, emotions, according to Vygotsky, serve as intrinsic and vitally important motivators at every stage of the learning process (e.g., perception, attention, memory, comprehension), in the cultural development of personality and mastery of behaviour, in the formation of new systems and connecting links in and among them, and in connecting the present with the past in every stage of the child's cultural historical development and projecting it into the future. In short, emotions are the motivational source of life itself and, hence, must be developed culturally for their own sake.

Second, culturally developed emotions must be harnessed through interaction with other people. We feel good not only when we behave well towards others, but also when (or rather because) others behave well towards us. In that process of reciprocal mastery of behaviour, we develop our personalities not only because it feels good to be

culturally developed individuals, but also because it feels good when we are acknowledged and appreciated by society at large (or at least by the people whose opinions we care about) as being culturally developed individuals. Thus, we complete ourselves through others and become whole within our cultural-historical context only through culturally developed emotions. This is why it feels good!

Third, a successful emotional development (both in childhood and adulthood) depends not so much on the development of emotions per se, as on how well emotions are integrated in the entire mental structure, as they reflect new qualitatively different relationships with other functions. By the same token, such integration will facilitate not only a better identifying and understanding of emotions themselves, but also an understanding and appreciation of every mental function and process in its relation to the social environment.

Fourth, because Vygotsky operated in a dialectical paradigm within a socio-cultural-historical context, it is important to raise a caution in emphasizing hegemony of either emotions or intellect. In my opinion, because Vygotsky's views on emotions were not completely and clearly developed and expressed in his writings, his views on emotions should not necessarily be taken as dogma. For example, just because for Vygotsky emotions are the beginning and the end of cultural development and must be developed for their own sake does not necessarily mean that emotions should be in a controlling role. Similarly, just because every mental function is supposed to be "intellectualized" so as to emerge into a higher form of behaviour, does not necessarily mean that intellect should be the controlling factor. Rather, it is suggested that Vygotsky valued intellect because it can educate and lead emotional and motivational human



properties to facilitate cultural development, and he valued emotional and motivational human properties because they, in turn, can inform human intellect and inspire people to develop “ethically [into] very perfect human personalities with a very beautiful spiritual life....[and] with a maximum integrity of human behaviour” (Vygotsky, 1997a, p. 107). Hence, it is suggested that Vygotsky valued the vitality of cultural emotions for their own sake mostly because they represent the synthesis of affective and intellectual properties as a result of struggle with the social environment. That is, cultural emotions are reflections of Vygotsky’s last and most complete unit of analysis – *perezhivaniye* – a future-oriented system of systems.

## **4. TOWARDS THE TRIPARTITE MODEL: EMOTIONS, BEHAVIOURAL MASTERY, AND PERSONALITY**

*It is easier to adopt a thousand new facts in any field than to adopt a new point of view of a few already known facts.*

(Vygotsky, 1985, pp. 6-7, my translation)

### **Introductory Comments**

For Vygotsky, a successful cultural development represents the integration of all mental functions and processes into one unified system. The process of integration requires mediation. Vygotsky was interested in the non-mechanistic and reciprocal causal relationship between culturally developed emotions and mediation; that is, he was interested in what mediates development of emotions and how such development influences its mediator(s) in turn. Cultural development represents the creation and re-creation of a child's personality, a single unified system. For Vygotsky, "the emotional aspect of personality has no lesser a value than all the other aspects, and constitutes a subject and a concern of education just as much as does the mind and the will" (1997c, p. 108). Development of personality facilitates mastery of behaviour, and vice versa, both through emotions as mediators. In addition, while in the process of serving as a mediator for the development of personality and behavioural mastery, emotions are also being

developed. In other words, the objects of development (personality and behavioural mastery) become mediators to their original mediator (emotions), while the original mediator develops as a focal object. However, cultural development is not complete unless such elaborate mediational reciprocity encompasses the social environment.

The purpose of this chapter is to clarify and develop further Vygotsky's ideas about relations among emotions, behavioural mastery, and personality within a social-historical context; and to show how these ideas and relations enable a conception of a holistic cultural development. In particular, my own original research, which is grounded in my interpretation of, and extrapolation from, Vygotsky's writings on cultural development, will further elaborate the place and role of emotions and emotional development in Vygotsky's conceptions of personality (*leachnost*) and behavioural mastery within the social context, resulting in a conception of the tripartite relationship among them. Although Vygotsky never wrote explicitly about this particular tripartite model of cultural development (which is based on emotions, personality, and behavioural mastery), it is my hypothesis that Vygotsky's understanding of cultural development can be explicated more clearly and fully with such a tripartite model in place. This chapter will briefly clarify the notions of personality (*leachnost*) and behavioural mastery as related to each other and to emotions so as to support the assertion of this holistic tripartite model of cultural development.

### **Translation and Interpretation of *Leachnost***

There is a need to explicate the word *leachnost* as it has been used by Vygotsky, and compare and contrast the emotionally-mediated development of the phenomena

denoted by this concept with the connotations and denotations of the Anglo-American term “personality,” (a common English translation of *leachnost*). As we shall see, this particular translation completely disregards the dual connotation of *leachnost* in the Russian language.

Etymologically, *leachnost* has its roots in the word *leako* (*liko*), a face – something different and also something similar that we recognize in others. (As a matter of fact, the English word *likeness* has the same etymological roots as *leako*, with the actual root being *lik*). *Leachnost* (personality), in Russian, almost always refers to an individual who stands out from the crowd, but not one who stands alone. Interestingly, the English separation of cognition and emotion is not reflected in the Russian word *leachnost*, which carries as much emotional as cognitive weight. Moreover, just as the Russian word *veleachina* (roughly translated as *the great one*), which has the same root as *leachnost*, refers to someone who has achieved a great deal in both his/her professional and his/her personal life, *leachnost* also references both individual and collective achievements.

According to *The Oxford Russian-English Dictionary* (1972), the first given definition of the word *leachnost* in English is personality, while, according to the *New English-Russian Dictionary* (Gal’perin, 1977), when the word personality is translated back into the Russian word *leachnost*, there is another English word “selfhood” that is also translated into the Russian *leachnost*. In a monolingual Russian dictionary (Ozhegov, 1961), *leachnost* identifies a person who both possesses some individual characteristics and is a member of society.

Thus, in Russian language and literature, *leachnost* represents much more than its English translation of personality. According to the *Russian Encyclopaedic Dictionary* (Vvedensky, 1954), *leachnost* represents a societal human being and is a subject capable of knowing and actively transforming itself in the world by changing the world. Here, there are many similarities with Vygotsky's understanding of the cultural development of personality, specifically with his idea of internalization – in order to change oneself one must first change the world. In addition, the development of *leachnost* in Russian is also defined by concrete-historical conditions, in which *leachnost* realizes its life-long path, its partaking of socio-societal life and applied activities. As has been shown throughout this thesis, this sociogenetic perspective is also quite clearly reflected in Vygotsky's belief that the child's development is social and historical in its nature and has an emergent quality. All in all, *leachnost* in Russian is to be understood as an active agent in public life, a distinctively human being that plays an active role in its own creative emergence and renewal, and in the history of humankind.

It is no surprise that the Russian language equivalents of the concepts of personality and self are, culturally speaking, quite different from their Western counterparts. Robbins (2001) goes as far as to say that “the Russian mentality is different from that in the West” (p. 2) and this indeed might be the case as far as the relationship between cognition and emotion is concerned, at least partially. The Russian language does not have a noun that is equivalent to the English word “self,” except in combinations like myself, herself, himself, and so on. In these cases, the word consists of two parts, the pronoun, I (*ya*), followed by self (*sam* or *sama*) to identify the equivalent of the English word “self.”

However, it might seem premature to draw overly strong conclusions from these particular linguistic considerations and comparisons. Here, it is instructive to consider a few other examples. The colour blue in English is represented by two different words in Russian, *galuboy* and *seeni*, which identify two types of blue respectively, light and dark. The fact that the English language doesn't have identical words describing light and dark blue without using adjectives is insufficient to allow us to speculate that an English speaking population does not differentiate between these two colours. Likewise, there are two types of pronouns *ya sam* and *ya sama* in Russian that differentiate gender, while representing the one and only equivalent of the English double pronoun I-myself. The fact that the English language doesn't differentiate genders in using this specific pronoun-combination shouldn't lead us to conclude that an English speaking person doesn't differentiate between genders within the usage of the pronoun I.

Nonetheless, although the English pronoun I translates into the Russian *ya* (a diphthong that represents one Russian letter) directly, the Russian pronoun is not written with a capital letter. In fact, after it is used many times in a Russian conversation, it is common to hear the following comment: "*Ya* is the last letter in the [Russian] alphabet." It is considered inappropriate within Russian culture to parade one's own achievements and personal opinions too often or too much. Just as the Russian letter *ya* is positioned in the Russian alphabet, the word it represents (I-myself), has a more socially acceptable place in the cultural conversation – the last place. Here, we can see some indications of the importance of the collective and society at large (as opposed to the individual) in the cultural development of a Russian-speaking person.

In relation to the word personality, a similar indication of the importance of the collective as opposed to the individual is reflected in the notion of “the Russian soul.” The word “soul” (*dusha*) and many expressions that include it in the Russian language, historically reflect the enormous influence of the Russian Orthodox Church on Russian culture as a whole. However, the currently more accepted meaning of the word “soul” (and the words that are connected with it) is more cultural and spiritual than liturgical (unless otherwise specifically stated). Russian literature is filled with examples of the concept of the so-called “Russian soul” that identify the depth and the breadth of the Russian personality. Such a unique characteristic of the word “personality,” one that represents a wide spectrum of the historical, cultural, and inner spiritual life of a person within and of the society, doesn’t exist in the English language.

### **Vygotsky’s Interpretation of Personality**

Vygotsky (1997b) admitted there is an uncertainty in the precise meaning of personality, which led him to ascribe to it a somewhat less meaningful character than, as he put it, “the usual sense of the word” (p. 241). He explained further that the concept of personality in its wider meaning includes all the unique traits of individuality. In contrast to such a wide definition, for Vygotsky, a much “narrower” (p. 241) meaning of personality is equivalent to the entire cultural development of the child. It may seem unclear why Vygotsky would hold such an apparently unusual, perhaps even logically contradictory, view; unless one recalls that the concept of the Russian soul as a reflection of the socio-cultural-historical environment is embedded in Vygotsky’s notion of personality. Leachnost is difficult to understand if it is compared to the concept of

personality (with all its individual characteristics and traits) as understood by Western readers. However, the meaning of leachnost is much more evident if it is understood within the Russian dialectical paradigm. In the Russian language, one cannot say: She has (or possesses) a leachnost. What can be said in Russian, however, is: She is a leachnost. Hence, for Vygotsky, leachnost (personality) is not what a person possesses, but what a person becomes.

In Vygotsky's dialectical view of the origins and development of personality, the biology of humankind represents a thesis, the environment of humankind represents an anti-thesis, and the struggle between these two manifests in the development of personality, a synthesis. During the early stages of his writings that still reflect a Pavlovian influence, Vygotsky (1993) stated: "Just as biology began with *the origin of forms*, so, too, psychology should begin from *the origin of individuals*" (p. 154). Vygotsky further claimed that the synthesis of an innate individual life struggling with the environment produces a dynamically complex social superstructure of personality:

personality arises on the basis of the organism like a complex superstructure, created by the external *conditions* of an individual life....It shows that *everything* in personalities is built on an inherited, innate basis and, at the same time, that everything in them is superorganic, conditioned, that is, *social*. (Vygotsky, 1993, p. 154-155)

In relating personality to both the natural and historical development of the child within human culture, Vygotsky (1978, 1986, 1987, 1993, 1997a, b, & c; 1998) is quite clear and consistent throughout his writings that the child's personality arises within cultural development. In fact, Vygotsky's theory of child development can be regarded as "a theory of personality" (Kravtsov, 2006, para. 1). Personality can only be developed culturally through a struggle with the demands of society. The struggle of the child's



development is part of her internalization of social interactions and cultural tools. As a result of this struggle, the social world becomes the inner psychological world.

Vygotsky believed that in the process of cultural development all psychological functions are in close interaction with each other and develop through “advancing and supporting each other in every way” (1997b, p. 242). The development of personality is intricately interwoven with and through the development of all aspects of mental life. As personality develops, it brings together all mental functions “under one roof.” Not only is development of personality dependent upon the intricate interactional development of all mental functions, but also a newly developed personality guides every mental function to its further cultural development. Vygotsky (1997b) stated that the “development of one function or another is always a derivative of the development of the personality as a whole and is determined by it” (p. 243). He was convinced that in every action of the child there is a trace of the child’s personality (1997b). Because personality is a salient and complex concept and its cultural development arises as a result of integration of all mental functions and processes as the individual struggles with environment, personality cannot be understood on its own in separation from other psychological functions and in separation from the child’s behaviour within his environment.

Vygotsky (1997b) professed that the personality “encompasses unity of behaviour that is marked by the trait of mastery” (p. 242). Yet, culturally developed personality, for him, is a prerequisite to behavioural mastery. Such reciprocal statements can be interpreted as if personality development and behavioural mastery should mediate each other’s further cultural development. Here, it is useful to recall that the cultural development of the child’s emotions takes place only through the mastery of her

behaviour (Vygotsky, 1997c). Although it is clear as to how behavioural mastery (being tangible) can mediate personality development along with the development of other functions and systems, it is not as clear as to how personality can serve as a mediator. In my interpretation of Vygotsky's writings, when a higher form of behaviour (including thinking and language) "appeals to" and/or is "approved by" personality,<sup>39</sup> then, we can say that personality mediates behavioural mastery. What does behavioural mastery entail and how exactly can it mediate personality and culturally developed emotions?

### **Behavioural Mastery**

Vygotsky (1997a) understood human behaviour (just as he understood all psychological functions and processes) within a hierarchy, in which innate (direct and unmediated) reactions were foundational, with personal relational experience within the surrounding natural and social world (as reflected in mediated reactions and experiences) "added" to this foundation. Vygotsky did not believe that human behaviour is a static system of elaborated reactions, but rather, a system that constantly evolves to achieve qualitatively new and different characteristics – a totality with a dynamic nature, "a sum-total of reactions of the widest variety and complexity" (1997a, p. 157). The added level displays much greater complexity and fluidity, with new elements supplementing and replacing old ones. The new level – what Vygotsky called higher forms of behaviour – subordinates its lower counterpart (i.e., direct and unmediated reactions).

Vygotsky equated mastery of reactions with controlling them and, hence, focused on the processes of self-control. In speaking of the structure of higher mental functions,

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<sup>39</sup> Here, personality is equated with leachnost; that is, the phrase "appeals to and is approved by personality" should be read as "appeals to and is approved by a person."

Vygotsky stated that “We could not describe the new significance of the whole operation any better than to say that it represents *a mastery of the behavioural process itself*” (1997b, pp. 85-86). How do we control our reactions and master our own behaviour so as to facilitate further development of higher psychological functions and processes?

According to Vygotsky (1997b), “mastery of behaviour is a mediated process that is always accomplished through certain auxiliary stimuli” (p. 87). That is, even behaviour itself – something that is directly observable and manipulable – requires different (indirect) means of manipulation if it is to reach mastery. Hence, only through mastery of stimuli can we master behaviour. Mastery of one form of behaviour or another elevates the development and mastery of personality. When behaviour is mastered through culturally mediated stimuli, it can lead the cultural development of personality to a higher level.

For Vygotsky (1997b), mastery of behaviour represents the highest form of human willpower, where, being unsatisfied with their current behavioural condition, individuals first determine their needs for behavioural change, then create a series of artificial tools and signs to support that particular change. They then execute their plans by using those artefacts and signs as mediating (cultural and psychological) tools to master their own behaviour. All higher psychological processes (e.g., higher forms of behaviour) have a common psychological characteristic that differentiates them from the lower processes. “All of these [higher] processes,” Vygotsky (1997b) stated, “are processes of mastering our own reactions by different means” (p. 207).

Vygotsky (1978) explained that we usually master our own reactions and control our own behaviour through the process of selection, relying on either outside (i.e., a tool,

functioning as an externally oriented human influence on the object of activity) or inside (i.e., a sign and/or psychological tool, functioning as an internally oriented human influence towards mastering oneself or influencing others) stimuli (p. 55). In one of his experiments on free choice of selection, Vygotsky (1997b) complicates the child's task of making a choice "between two series of actions which include both something that the subject finds pleasant and something he finds unpleasant" (p. 207). Based on the experiment's findings, the emotionally ambivalent process of selection was resulted in a complex adjustment in the child's actions; that is, the child's initially clear motives in making a selection became more ambiguous. As a result of this conflict of motives in a complex selection, the child's behaviour is triggered by indecisiveness and becomes more complex and hindered. (Recall that emotions can mediate, facilitate, and even debilitate the development of higher psychological processes.) When there is a strong emotional dissonance in making a selection, "when the motives [are] addressed toward different aspects of the child's personality" (p. 208), the process of making selections is debilitated and the child leaves the decision making (or the making of her free choice) up to a neutral stimulus (e.g., flipping a coin) that is given the character and force of motives.

Vygotsky (1997b) further asserted that a person is like a "sheet of paper that remains in place if we pull at it with equal force on opposite sides" (p. 209). Likewise, if one's motives are in balance (i.e., not a single motive is stronger than the other), then the person will not be able to act and will be paralyzed. In distinguishing the value of motives (to which emotions are the biggest contributors), Vygotsky tried to dispel what he regarded as the myth about the importance of free will. Relying on the writings of Marx and Engels, Vygotsky alleged that the child's freedom of will is the child's

recognition of necessity. As a result of recognizing the specifics of a situation, the child controls her selected reaction by making a choice to use a neutral outside stimulus to help herself with her final choice.

However, the very process of recognizing consists specifically of the child's ability to think (i.e., focused attention, culturally developed perception, logical memory, conceptual thinking, and emotional evaluation). Thinking, in turn, is born out of emotional and volitional tendencies. The longer the child ponders a problem and/or a choice (i.e., the longer the child thinks), the more emotionally laden his or her thinking is. Hence, when the child is faced with a difficult situation and has to rely on his or her thinking to make a choice, the choosing process will be influenced by his or her emotional state which in turn gives rise to his thinking. Vygotsky advised educators "to teach [the child] to incorporate the emotions into the general network of behaviour, to make them intimately related to all the other reactions" (1997c, p. 108). The more emotions are integrated with other psychological functions, the more representative<sup>40</sup> they are of these other functions (as well as of the whole person), and (as reflected in the future-orientedness of emotional experience – *perezhivaniye*) the more effective they become in guiding cognition. Consequently, the child's mastery of her own behaviour (or control of it) will be more successful when mediated by her well-integrated emotions.<sup>41</sup>

It is through Hegel, Marx, and Engels that Vygotsky came to an understanding of self-control and freedom that is similar to the one that was developed by Spinoza –

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<sup>40</sup> For Vygotsky, any mental function cannot be taken in isolation from other functions and from their environment.

<sup>41</sup> See chapter 3 for a detail explanation as to how emotions are integrated, and the negative consequences of poor emotional integration.

freedom of will represents a crucial part of historical development and is expressed in the ability to assess the situation (i.e., the needs of nature and the necessities of one's life) in order to control it and, thus, to control one's own behaviour. Emphasizing the importance of either choosing or creating appropriate stimuli, Vygotsky (1997b) stated that "we cannot master our own behaviour [successfully] except through ... the basic law of mastering natural processes...[that is] through stimuli" (p. 210). Here, Vygotsky brings to light the paradox of will. This paradox is about the usage of intentional behaviour (action) to create an involuntarily acting mechanism, where intention is used as a typical process of controlling one's own behaviour by creating appropriate situations and connections. However, when it comes to executing such an intentional command, the action is automatic and completely independent of will (1997b). He provided the following example:

I decide to drop a letter in the mailbox and for this reason I remember an appropriate connection between the mailbox and my action. This and only this is the essence of intention. I created a certain connection that will subsequently act automatically in the manner of a natural need....Now I must go out...and the first mailbox will automatically make me carry out the whole operation of mailing the letter. (Vygotsky, 1997b, p. 211)

Here, Vygotsky argues that the paradox of will is in the fact that will is being used only at the initial stage (i.e., the recognition of necessity and intention to act upon it) and, thus, helps to create involuntary actions.

Does involuntary action (and a habitual behaviour based on it) manifest behavioural mastery for as long as the child recognizes the necessity and has a conscious intention to act at the initial stage? While differentiating between the processes of "executing an intended action that is seemingly dictated by the newly created need and a simple habit" (Vygotsky, 1997b, p. 211), Vygotsky does not explicitly speak to whether a

simple habit is or is not as desirable or as efficient in achieving behavioural mastery as an intended action. There is only an implicit trace of Vygotsky's "agreement" with the importance of habitual actions, as he supports Lewin's findings that "the great uniqueness of the will consists of man having no power over his own behaviour other than the power that things have over his behaviour" (1997b, p. 212). As shown by Stanislavsky (1954) and as reflected in Vygotsky's (1999) *On the Problem of the Psychology of the Actor's Creative Work* (1999), developing a simple habit – that is, allowing certain actions that had initially an intentional character to become automatic and thus to have eventually minimum or no control over them – is an important process towards mastery of behaviour. After all, what would it be like if we couldn't develop automaticity in our behaviour, if every action we had to perform required our conscious attention and intention? For Vygotsky, mastery of behaviour represents a culturally mediated action, where a higher form of action or a higher form of behaviour (Vygotsky, 1978, p. 55) is only initially conscious. Once such a higher behaviour is more fully internalized and becomes integrated into sequences with other actions, such mastery makes it subconscious and automatic (Leontiev, 1978, 3.5, para. 18).

Leontiev (1978), who developed cultural-historical activity theory (CHAT) (influenced by his earlier collaboration with Vygotsky), argues that only at the initial stage of attaining a specific goal is a certain action conscious. As previously noted, once a particular action is internalized and becomes part of the bigger sequence of other actions, the initially conscious action is mastered and becomes subconscious or automatic. The following example, which Leontiev provides, shows how an initially

conscious operation of shifting gears in the car is mastered through becoming part of the driving of the car.

Initially every operation, such as shifting gears, is formed as an action subordinated specifically to [a certain] goal and has its own conscious orientation. Subsequently this action is included in another action, which has a complex operational composition in the action, for example, changing the speed of the car. Now shifting gears becomes one of the methods of attaining the goal, the operation that effects the change in speed, and shifting gears now ceases to be accomplished as a specific goal-oriented process: Its goal is not isolated. For the consciousness of the driver, shifting gears in normal circumstances is as if it did not exist. (Leontiev, 1978, 3.5, para.18)

Some neo-Vygotskians, relying on Gal'perin (1969; cited in Bodrova and Leong, 1996), assert that "once the skill is internalized, it becomes automatized..." (p. 63). That is, according to them, the process of internalization already encompasses automaticity (automatization) and hence mastery. Thus, it can be argued that involuntary action, behavioural automaticity, and habitual behaviour are only desirable if they are the outcomes of conscious and intentional goal-oriented activity that leads to behavioural mastery.

We should not forget that the very process of recognizing the necessity (i.e., assessing) and making an intentional choice to act in the initial stage is based on emotional evaluation – a synthesis of emotions guiding and interpreted by thinking. The more emotions are integrated into the entire psychological framework (which includes all higher forms of behaviour), the more successful are the processes of recognizing the necessity of and making the "right" intentional choice.<sup>42</sup> Without a successful integration of emotions, the child's "will is like a foreign body with respect to integral personality; it is blind, without memory of the past or thought of the future" (Vygotsky,

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<sup>42</sup> See chapter 3 for many devastating examples of when emotions are not successfully integrated.



1997b, p. 218). The freedom of will is a product of the child's cultural and historical development.

To recapitulate, for Vygotsky, the mastery of human behaviour is the essence of cultural development as a whole (1997b), and can only be achieved through mediation by either externally or internally oriented signs and tools. Although initially reflected in a conscious and intentional goal-oriented activity, behavioural mastery in its final stage is manifested in automatization – habitual behaviour. Behavioural mastery can mediate and be mediated by the development of cultural emotions and personality. It is the mastery of one form of behaviour or another that elevates the development and mastery of personality and cultural emotions. Why is mastery of behaviour so instrumentally important to the development of emotions and personality, and, as a result, to the whole cultural development of the child? There are several possible explanations.

### **Why is Behavioural Mastery So Instrumentally Important?**

First and foremost, behavioural mastery can take place only in a social-cultural-historical environment as it represents a living process of development through conflicts and struggles “between the natural and the historical, the primitive and the cultural, the organic and the social” (Vygotsky, 1997b, p. 221), and the past and the present; that is, it is “revealed in all its real complexity, in its grandiose meaning, as the dynamic and dialectical process of a struggle between man and the world” (Vygotsky, 1997a, p. 157). Since mastery of behaviour is social in its nature and directly or indirectly related to other people, it is precisely in social interaction with other people and through other people that the development of personality becomes social and the development of emotions

becomes cultural. Vygotsky believes that social behaviour becomes individual upon being internalized. Our perception and understanding of others become the perception and understanding of ourselves; hence, we view ourselves in the same way as we view others. “The behaviour of the individual is identical to social behaviour. The higher fundamental law of behavioural psychology is that we conduct ourselves with respect to ourselves just as we conduct ourselves with respect to others” (Vygotsky, 1998, p. 171).

Once again, the following citation of Vygotsky in relating the mastery of behaviour to the development of higher mental functions is probably one of the most popular and the most cited in the vast educational, social, and psychological literature: “each higher form of behaviour enters the scene twice in its development – first as a collective form of behaviour, as an inter-psychological function, then as an intra-psychological function, as a certain way of behaving” (1997a, p. 95). Thus, in Vygotsky’s view, the social, collective, and inter-psychological origins of the mastery of behaviour also represent the social origins of the development of all higher psychological functions and systems. Internalization of social behaviour facilitates development of personality, which “is seen in all cases as a result of the development of [the child’s] collective behaviour” (Vygotsky, 1993, p. 197).

Furthermore, it is highly practical for Vygotsky to invoke behavioural mastery as the mediator for the development of the child’s personality and the cultural development of her emotions, because mastery of behaviour is tangible and indicative of other mental functions and systems. In every action of the child there is a trace of his or her personality. Personality “encompasses unity of behaviour that is marked by the trait of mastery” (Vygotsky, 1997b, p. 242) and cannot be determined on its own in separation

from other psychological functions and in separation from the child's behaviour. In addition to traces of personality, there are also traces of culturally developed emotions as motivators that can be found in the mastery of behaviour because "emotions function in the role of inner guide[s] of our behaviour" (Vygotsky, 1997c, p. 103). Unlike emotions and personality, mastery of behaviour is directly observable and manipulable. Because behavioural mastery is used as a vital mediator for the cultural development of personality and emotions, it is in behavioural mastery that the traces of cultural emotions and personality can be found.

Continuing to explore the connections between personality development, internal affective processes, and the motor system, Vygotsky (1999) conducted several experimental studies that showed the existence of enormously strong links between motor reaction and affective processes. In fact, because motor reactions were strongly infused with affective processes in one inseparable link, Vygotsky recommends "that it [the link] can serve as a reflecting mirror in which it is possible to literally read the hidden structure of the affective process that is hidden from direct observation" (1999, p. 31). The significance of the possibility of establishing objectively hidden emotional experiences has enormous implications in the field of diagnostics and in education in general, and goes beyond the significance and limitations of Luria's lie detector.<sup>43</sup>

Nonetheless, it would be uninformative to develop mastery of one's behaviour for its own purpose. Vygotsky never stated that mastery of behaviour should be achieved only for its own sake. He understood the development of the child's personality as the driving force behind mastery of behaviour. Personality development also "demands"

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<sup>43</sup> Luria, Alexander Romanovich (1902-1977) was a famous Russian neuro- and developmental psychologist, colleague and collaborator of Vygotsky, and one of the founders of cultural-historical activity theory (CHAT). He created the first lie-detector device.

socially and culturally developed emotions. The development of the child's personality loses its purpose if the child develops with disregard to other children or other persons. Vygotsky was explicit in equating the development of personality with cultural development as a whole, as based on the integration of cognitive and affective processes, expressed by a synthesis of all higher psychological functions, and reflected in mastery of behaviour. Personality development is always situated in, influenced by, and undertaken for the sake of the historically-established socio-cultural context. As was stated earlier, we (and our behaviour) are reflections of our socio-cultural-historical world.

Vygotsky (1993) criticized Freud's notion of man being "chained to his past, like a convict to his wheelbarrow," and embraced Adler's "revolutionary future-oriented perspective [that] allows us to understand the development and life of personality as an integral process which struggles forward with objective necessity toward an ultimate goal, toward a finale, projected by the demands of social existence" (p. 160). It is in such future-oriented cultural development of personality that Vygotsky finds the roots of mastery of behaviour because the child's new behaviour was once the behaviour exhibited by other people around her. Whatever was social first becomes individual later.

To summarize, one's behavioural mastery is a reflection of one's social relationships within a specific cultural-historical context. The functions of mastery of behaviour are to reinforce culturally developed emotions and desires, to facilitate (mediate) personality development, and to develop good habits by practicing appropriate behaviour. Development of habitual behaviour is of paramount educational importance because it achieves spontaneity and automaticity of culturally appropriate behaviour. Mastery of behaviour serves as an indicator of how well the process of personality is

established and how well emotions and desires are acculturated. Successful future-oriented personality development is mediated by culturally developed emotions and directly manifests itself in appropriate behavioural outcomes (be they individual, social, or career oriented). This, according to Vygotsky, is what makes mastery of behaviour so instrumentally important for the entire cultural development of the child.

### **From Moral Emotions<sup>44</sup> to Moral Behaviour**

Human emotions serve a leading role as intrinsic and vitally important motivators at every stage of the learning process (i.e., attention, perception, memory, comprehension), in the cultural development of personality and mastery of behaviour, and in the formation of new psychological systems and the connecting links in and among them. For Vygotsky, emotions are the key to the holistic development of the child's personality and her entire cultural development:

The presence of affective stimuli is an indispensable adjunct to every new stage in the development of the child from the lowest to the highest. It might be said that affect opens the process of the child's mental development and construction of his personality as a whole. (1998, p. 227)

As reflected in the future-oriented characteristics of *perezhivaniye*, it is as if emotions for Vygotsky are human glue that connects every mental function and every process of new psychological formation and development, dynamically stretching from the past to the present (and in that process changing the past) and from the present into the future of the child's development (and in this process developing a future-oriented present). But even more so (as it was shown in chapter 3), emotions are a living glue –

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<sup>44</sup> See chapter 3 for a detail explication of emotions.

breathing, feeling, thinking, assessing and evaluating, nudging us to act upon one thing and forcing us not to act upon other things, and, finally, summarizing the results of the past and projecting them into the future, while enjoying a continuing process of their own development in the here and now. In short, emotions for Vygotsky are the motivational source of life itself; for when they are integrated with other mental functions and processes, they directly facilitate unification and cultural development of personality: “*Participating in the process of mental development from the very beginning to the very end* [italics added] as an important factor, affect itself takes a complex course, changing with each new stage of constructing the personality” (1998, p. 227).

Moral emotions cannot be “moral” in their true sense unless they are developed in consonance with the environment (i.e., relationships with others and/or collective emotional experience<sup>45</sup>) and are manifested in moral behaviour. The child’s emotions are not initially in consonance with her environment. Here, according to Vygotsky, the logic of development is reflected in motivational forces that come from the pressure of individual “necessity” to acculturate to the demands of the environment. This is

the fundamental and definitive necessity of all human life – the necessity to live in a historical, social environment and to reconstruct all organic functions in agreement with the demands set forth by this environment. Only in the capacity of a defined social unit can the human organism exist and function. (Vygotsky, 1993, p. 155)

Individual struggle during such reconstruction of organic functions manifests itself in further development of cultural emotions, which in turn become more consonant with society at large and, hence, endow personality with further social, cultural, and moral development. The child can rely on her emotions when they are in relative consonance

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<sup>45</sup> See chapter 3 for what the collective emotional experience entails.

with the moral and ethical values of the environment. The moral values of others are internalized and become the moral values of the individual.

Let us consider the following hypothetical<sup>46</sup> situation: a teacher introduces the class to the concept of moral behaviour with a variety of scenarios (e.g., in *this* situation one should do *this* and not *that*, while in *that* situation one should do *that* and not *this*). At the end of the month-long unit on moral behaviour, all students receive 100% on their final written test on what they had learned in class. However, when the time comes for the students to act in real situations, many of them, for some reason, do not behave morally. Why do some students behave immorally despite having knowledge to the contrary?

Recall the argument made in chapter 2 to the effect that during the process of internalization one acquires a sense of ownership of what is being internalized and how it is internalized. For example, when I do, say, or think *this* and not *that*, it is not only because *this* is expected of me, but, most importantly, because *this* is what and how I would normally act (say, think). Because *this* reflects who I am, I feel good about *this*. Putting it differently, what appeals to my personality, appeals to me and becomes me. Such a transition from inter-mental to intra-mental is an emotionally laden personal experience manifested in the development of ownership – what Vygotsky calls internalization (ingrowing, vraschivaniye).

In a similar vein, individual moral values can lead to moral behaviour only when mediated by positive future-oriented emotions:

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<sup>46</sup> Given the well-known original studies of the “Good Samaritan” (Darley & Batson, 1973), the large number of follow-up studies in social, developmental, and educational psychology (e.g., *Journal of Moral Education, Developmental Psychology, & Psychological Review*), and many incidences of school bullying, shooting, and murder, such and similar hypothetical situations can be considered ecologically valid.

Moral behaviour will always be that which is associated with the free choice of social forms of behaviour...if a person runs away from something on the grounds that it is bad, he is acting like a slave. Only that person is free...who runs away from something because something else is better. (Vygotsky, 1997c, chap. 12, p. 7)

Here, in his *Educational Psychology*, Vygotsky emphasizes the importance of facilitating positive emotional experiences in the child's learning, so as to empower the child to further his cultural development. Vygotsky strongly believed in the significance and advantage of focusing on positive emotional experience rather than dwelling on the consequence and disadvantage of negative emotional experience. He found common ground with William James's "perfectly rigorous technique for moral education, on the basis of the principle that one must always proceed not from evil, but from good" (Vygotsky, 1997c, chap. 12, p. 7). DiPardo and Potter (2003) also support Vygotsky's notion for an emotionally positive orientation in teaching and learning,<sup>47</sup> as they affirm that "positive affect is of essence, crucial to good thinking and effective action for teachers and students alike" (p. 337). It is from positive emotional experience and moral emotions that Vygotsky insists on striving towards moral behaviour.

Although far from being naïve, Vygotsky's views on positive emotions and moral behaviour are perhaps somewhat idealistic. His future-oriented vision of positive societal outcomes is reflected in the following:

A new morality will be created once a new human society will have been created, but at that point it is likely that moral behavior will have been entirely dissolved into general forms of behavior. All of behavior in general will be moral, because there will be no basis whatsoever for any conflict between the behavior of one person and the behavior of society in general. (Vygotsky, 1997c, chap. 12, para. 12)

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<sup>47</sup> See chapter 4 for more details on teaching and learning.



Given the new social, cultural, and historical expectations set by the then young Soviet Russian country, such optimistic ways of looking at the child's educational and cultural development were quite common not only for Vygotsky, but also for the majority of educators of that post-revolutionary time.

To recapitulate, Vygotsky challenged the assumption that children will behave morally when they think and feel morally. The question is not so much how to make children *think* and *feel* morally (although these are extremely important), as how to help them *behave* morally (what constitutes a practical and applied way of morality). Vygotsky (1997c) insisted that, first and foremost, morality and “ethics must be looked upon as a certain form of social behaviour” (para. 4) that does not come from fear of moral retribution, but from moral goodness. It is the actual practicing of moral behaviour that (a) supports the persistence and longevity of moral emotions, and (b) makes the person moral. Behavioural mastery must be mediated by positive culturally developed emotions in order to appeal to the whole child (to his personality).

### **From Integration and Interdependency to Dynamic Holism**

In relating personality development to behaviour, Vygotsky emphasized that thinking (along with language, in general, and speech, in particular) is an especially complex form of behaviour (1997c), mastery of which leads directly to development of personality. Vygotsky (1987) stated that “the basic formal stages in the development of the child's personality are directly linked to the stages through which his thinking develops” (p. 324). He further claimed that (a) mastery of behaviour (in general) is an internal process of volitional action and as such is hidden in the deep layers of

personality; and (b) both development of personality and mastery of thinking are in direct relation to and dependent on each other. Vygotsky was convinced that the newly formed relation between mastery of behaviour and personality development comes as a result of the development of the child's speech. In fact, it is through speech that the child connects to others as well as to himself, as supported by Vygotsky's comment on Potebnya's formula: "speech is not only a means to understand others, but also a means to understand oneself" (1997a, p. 95).<sup>48</sup> Hence, mastering speech should facilitate personality development.

Taking the relationship between development of personality and mastery of behaviour, which includes mastery of thinking and speech, a step further, Vygotsky adds to this relation a sense of meaning, purpose, and interest. He states:

When we consider an act of thinking concerned with the resolution of a task of vital significance to the personality, it becomes clear that the connections between realistic thinking and the emotions are often infinitely deeper, stronger, more impelling, and more significant... (Vygotsky, 1987, p. 348)

For Vygotsky, not only does development of personality depend on mastery of behaviour, but also when mastery of behaviour is influenced by culturally mediated emotions, then development of personality is more successful. Vygotsky, thus, implicitly supports the tripartite nature of the development of personality, where culturally developed emotions are directly linked to mastery of behaviour. That is, the stronger the connection between mastery of behaviour and cultural emotions (i.e., when what we do matters the most to us), the more successful is the development of personality. Putting it differently, when

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<sup>48</sup> A.A. Potebnya (1835-1891) is a Russian psycho-linguist, whose ideas about unavoidable inter-dependency between thought and language influenced Vygotsky. Alexander Potebnya brilliantly demonstrated that each word already is a theory, and suggested considering language as a device for human self-understanding (Vygotsky, 1997a, 1986).

such strong connections between personality and emotions are internalized by the child, the child's externalized behaviour reaches the level of mastery.

Further implicit support for the validity of the tripartite model of development – a reciprocal dynamic development of personality, behavioural mastery, and cultural emotions – can be found in Vygotsky's statements that thinking is not based primarily on previous thinking but rather on the motivational forces of emotions and desires that make thinking purposeful. As Vygotsky states:

thinking itself arises only on an instinctive and emotional foundation and is directed precisely by the forces of the latter...In this sense, thought must always be understood as a special, newly solved problem of behaviour or orientation in new circumstances. Thinking always arises out of difficulty. Where everything flows smoothly and where there are no obstacles, ...thought does not yet have a reason to emerge. Thought arises wherever behaviour encounters a barrier. (1997c, p. 173)

The mere existence of barriers doesn't motivate positive (or, for that matter, any type of) behaviour, unless such barriers *matter* to an individual personality, which orients the results of its struggle toward future behaviour.

Personality has specific functions to perform, one of which is to "approve" all forms of behaviour of self and others (conscious and unconscious). As long as there is a change in behaviour, there is also a change in personality; that is, the change in personality is manifested in whether and how a particular change in behaviour "appeals" to personality. As long as personality develops, so does behavioural mastery. Behavioural development is manifested in its mastery. Thinking is a special type of behaviour and is related to the development of personality and emotions. Different stages in the development of thinking create different levels of personality. However, the

ultimate goal of cultural development is the development of one, and only one, personality - one integrated and unified system.

Integration of culturally mediated emotions as motivators towards behavioural mastery can facilitate development of a unified social personality. In turn, the personality also dictates whether and how to regulate mediated responses to most emotional and behavioural stimuli (internal and external). Even in his early writings, Vygotsky (1929/1986a) speculated that “it is not the relation of subcortical centers to cortical centers, but the social structure of the personality that determines which layers are to dominate” (p. 64). As a result of such regulatory power, personality seems integral not only to conduct in the “here and now” but also to the future-oriented cultural development of the child.

Since personality development is mediated by and reflects traces of culturally developed emotions, the personality is also “in charge” of interpreting emotions’ anticipatory qualities. Therefore, the child’s future behaviour, which is initially mediated by the motivational forces of cultural emotions, is guided by the child’s personality. From studies on blind patients, Vygotsky concluded that “emotions, feelings, fantasy, and other psychological processes in the blind are all subordinated to the overall tendency to compensate for blindness” (1993, p. 102). This tendency is based on the child’s personality, and its active participation in decision making that mobilizes all and any functions that are available to it, so that they can be actively used for future adaptation.

Although emotions seem to be the driving force behind everything the child feels, thinks, and does, it is the child’s personality that approves or disapproves the interpretation of these emotions, weighing their individual and social validity, and

evaluating their moral and ethical value in the child's decision making leading to further behaviour. Thus, personality occupies the role of an executive director. When, for example, the executive director (personality) "feels" strongly about something, it (the executive director) forms intentions to act accordingly. When one faculty doesn't work, it is personality that decides to substitute it with another more capable faculty. Drawing on his research with special needs children, Vygotsky concurred with Stern (cited in Vygotsky, 1993, p. 32) that

the functions of personality are not so exclusive that, given the abnormally weak development of one characteristic, the task performed by it necessarily and in all circumstances suffers. Thanks to the organic unity of personality, another faculty undertakes to accomplish the task. (1993, p. 32)

Such holistic compensation can be illustrated by a deaf and mute person who, due to his/her lost ability to speak and hear, achieves his/her task of communication with his/her hands. Such organic unity of personality (as reflected in the integration of all mental functions and processes) is further exemplified by the use of an unconventional "tacit finger-manipulation" technique<sup>49</sup> that enabled one individual, in spite of being almost totally blind and deaf, to become a mother of two, a practicing child psychologist, a philosopher, and poet (Dean & Paul, 1990).

The personality<sup>50</sup> serves as an executive director as it unites all mental structures and relates them to the environment. When the personality is faced with a decision, it relies on relationships among its affective and intellectual components, which are

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<sup>49</sup> See the video *The Butterflies of Zagorsk* produced by BBC TV: the story of the children at the deaf-blind school in Zagorsk, using Vygotsky's unconventional method of learning and development (the name of the technique is mine).

<sup>50</sup> The inner structure of personality represents a holistic future-oriented motivational system which encompasses a unity of the higher mental functions and is consciously reflected in one's behavioural mastery leading towards cultural development.

reflected in past behaviour and directed towards future-oriented mastery of behaviour. While intellectual thinking is formed and motivated by emotions and desires, emotions and desires are interpreted by the intellect. Thus, the more the personality relies on intellectual (critical) thinking, the more it is influenced by its emotions. Vygotsky's beliefs that emotions are intelligent and that thinking is derived from emotions are supported not only by his own experimental work (conducted in the late 1920s and early 1930s) but also by numerous empirical and theoretical studies of many modern researchers in the fields of emotional intelligence (Averill, 2004; Barrett & Salovey, 2002); theoretical psychology (Barbour, 1974); social psychology (Baron & Byrne, 2000); cognitive neuroscience of emotion (Damasio, 1994, 2000); and general cognitive psychology (de Sousa, 1987, 2004). Consequently, we can advance the thesis that not only does personality encompass emotions, but the future-oriented emotional experience (*perezhivaniye*) which is embedded in personality is what personality relies on in making the final decision as to what and how to perceive, identify, assess, connect with, and rely on in the execution of most conscious and unconscious activities. Behaviour, thus, serves as an explanatory indicator of (1) how well personality is developed (i.e., how strong an "executive director" personality is); and (2) how well cultural emotions and desires are integrated so as to serve as intelligent informants, partners of, and even the driving force behind personality. Mastery of behaviour reflects culturally developed personality; for "when we say that man masters his behaviour...then we are using more complex phenomena, such as personality, to explain simple things (voluntary attention or logical memory)" (Vygotsky, 1997a, p. 91).

My interpretation of Vygotsky's writings about the interconnectedness and interdependency of every mental function suggests the following: whether he is talking about the human organism with its physical and physiological functions, the human personality, or the human intellect, he is referring to one and the same complex whole system. The homogeneous system of personality "develops as a single entity...But precisely because personality represents a unit and acts as a single entity, its development involves the advances of a variety of functions which are diverse and [used to be] relatively independent of each other" (Vygotsky, 1993, pp. 39-40). Because such a holistic system "is comprised of a number of functions or elements in a complex structure and in a complex relation to each other" (Vygotsky, 1997b, p. 233), each and every part of this system reflects the whole. When we look at the behaviour of the human organism, we see traces of human personality development (which, as was shown earlier, already includes both affect and intellect). When we capture the development of human personality, we find traces of the historical development of mastery of behaviour (which also includes both affect and intellect). Finally, when we observe human intellectual properties at work, we witness the further potentiality for mastery of behaviour through mediational motivators of culturally developed emotions.

It might appear to be confusing that in this interpretation of Vygotsky's thought everything is related to, mediates, and constitutes everything else. It might seem contradictory and circular that the overall system is simultaneously homogeneous *and* comprised of distinguishable functions and/or elements. However, Vygotsky operated in a dialectical paradigm, and it is from such a dialectical position that he affirms that "the diversity of relatively developmentally independent functions and the unity of the entire

progress in personality development – not only do not contradict each other, but... reciprocally condition each other” (Vygotsky, 1993, pp. 39-40). This system (i.e., personality) is developed through – and thus reflects the interconnectedness of – each of its parts, while the development of this whole system facilitates further relational development among every component. Hence, any change in the whole system facilitates a further change in the relationships among its parts: “What [are] changed and modified are...the relationships, the links between the functions” (Vygotsky, 1997a, p. 92). Such a unified and yet diversified understanding of personality, as resulting from the integration and interdependency of mental functions during the process of cultural development, is what makes it the most suitable and dynamically encompassing system to equate with the child’s cultural development.

It is important to notice that interconnection and interdependency not only take place among mental functions, but also between the world and the individual. As the individual struggles within the social environment, he/she changes him/herself through the changes he/she makes in the world. As he/she changes him/herself, he/she changes the environment. According to Bozhovich (2004, pp. 71–88), a student and follower of Vygotsky, personality cannot become a higher psychological system unless all the developmentally acquired psychological structures are synthesized and integrated within the intellectual and affective properties of consciousness. “For this reason,” Bozhovich states, “new systemic structures characteristic of personality (e.g., moral feelings, convictions, worldviews) are composed not only of intellectual but also of affective components. These are what give these new structures their motivational force” (2004, p. 85). Such motivational and future-oriented characteristics of personality, as reflected in



mastery of behaviour, spread into their relationships with other psychological functions and systems. Consequently, it is through the changes that occur within such relationships themselves (i.e., between emotions and personality, and/or between personality and the mastery of behaviour, and/or between the person and the environment) that the development of the child's personality (and her entire cultural development) can evolve and be determined. Personality, as a result of such relational changes, evolves into a dynamic future-oriented holistic system. Valsiner and Van der Veer (1993) remind us that "it is important to bear in mind [Vygotsky's] consistent emphasis on developing psychological processes that form the holistic dynamic structure of the child's personality" (p. 39). These holistic attributes of personality (*leachnost*) are reflected in its uniquely human qualities.

Connecting the development of *leachnost* with rudimentary functions, for example, Vygotsky (1985) asserts that "the rudimentary functions do not fulfill any essential role in the behaviour of *leachnost*" (p. 60, my translation). Notice that the concept of *leachnost* is portrayed as an agent capable of behaviour. No other mental system (e.g., the world view, wisdom, integrity) is assigned such a human characteristic. We can say that a person behaves. But we cannot say that wisdom, integrity, or a world view behaves. In other words, we do not ascribe agentive human qualities to something that is not capable of acting on its own (e.g., the world view, wisdom, integrity, values), with the exception of the anthropomorphism typical of folk-tales and children stories. Yet, it is precisely such agentive qualities that are ascribed by Vygotsky to *leachnost* (personality). *Leachnost* in Vygotsky's writings is both the whole person and a psychological construct (i.e., a multi-relational future-oriented psychological system

which leads cultural development). Personality (leachnost) is not a possession of the child; personality is what (or rather who) the child becomes.

### **Concluding Remarks**

Culturally developed personality<sup>51</sup> – a dynamically unified future-oriented system of all mental functions and processes – dialectically encompasses a wide spectrum of the historical, cultural, and inner spiritual life of a person within and of the society. Although emotions seem to be the driving force behind everything the child feels, thinks, and does, it is personality that approves or disapproves (consciously and unconsciously) all forms of behaviour of self and others. Hence, behaviour has to “appeal” to personality to achieve its mastery. The process of appealing encompasses culturally developed emotions. While mastery of behaviour serves as an indicator of how well personality is established and how well emotions and desires are acculturated, it is the child’s personality that approves or disapproves the interpretation of such emotions, weighing their individual and social validity, and evaluating their moral and ethical value in the child’s decision-making leading to further behaviour. Within the dialectical paradigm of the Russian culture, the child cannot be a possessor of personality; she *becomes* a personality (leachnost).

When thinking (being a special type of behaviour) is fused with culturally developed emotions (as a result of an interest, challenge, and/or struggle), behavioural mastery (as reflected in language development) facilitates self-consciousness and understanding of self and others; which entails a better understanding of one’s own

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<sup>51</sup> Personality is equated with its intended original meaning in Russian, leachnost.

emotions and the emotions of others. When the integrated culturally developed emotions are used as mediators to motivate behavioural mastery, the culturally developed personality becomes a unified holistic system, a synthesis of affect and intellect. Such a system is a reflection of the child's "ownership" of her behaviour and can further mediate her learning<sup>52</sup> and thus cultural development. Positive future-oriented emotional experience is of paramount importance as a mediator to assist the development of individual moral values and their embodiment in moral behaviour; while practicing moral behaviour helps to sustain further the longevity of culturally developed emotions (e.g., moral emotions).

The nature of reciprocity among culturally developed emotions, behavioural mastery, and personality, on the one hand, and between individual and the world, on the other hand, is both emergent and spiral.<sup>53</sup> That is, as a result of their triadic interaction – interconnectedness and interdependency – a new, qualitatively different system emerges – a dynamic synthesis of emotions, behaviour, and personality struggling with the environment. This holistic system is not circular but spiral, and reveals a future-oriented and culturally embedded, multi-relational systemic metamorphosis. It is this metamorphosis that can mediate further the child's cultural development. Hence, the Tripartite Model of cultural development is a single, unified, future-oriented system that can be used to characterize the whole child and thus further mediate his cultural development.

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<sup>52</sup> The relationship between learning and development will be discussed in chapter 5 on ZPD.

<sup>53</sup> Vygotsky (1978) asserted that the entire cultural development is spiral: "Development...proceeds here not in a circle, but in a spiral, passing through the same point at each new revolution while advancing to a higher level" (p. 56).

## 5. APPLYING THE TRIPARTITE MODEL TO THE ZPD

*Nothing important is achieved in life without a great deal of emotion.*  
(Vygotsky, 2004, p. 55)

### Introductory Comments

Despite its popularity in the West among educators, educational psychologists, and those working in areas such as curriculum studies, language acquisition, the development of teaching and learning practices, special education, and the education of gifted students, the ZPD, according to Chaiklin (2003, p. 40), is one of the most misinterpreted and misunderstood conceptions in Western education. Some of these problems issue from difficulties in translation and interpretation between English and Russian. Other difficulties arise from the fact that Vygotsky wrote only briefly about the concept of the ZPD (i.e., chapter 6 in *Thinking and Speech*, 1986 and chapter 6 in *Problem of Age*, 1998), and never suggested any detailed methodology for studying the ZPD or employing it as an assessment technique (Kozulin & Gindis, 2007, p. 353), leaving such matters up to the creativity and imagination of his reader-educators. The purpose of this chapter is not to survey systematically contemporary discussions and debates concerning the ZPD, but to present it as an important theoretical and practical set of ideas grounded in Vygotsky's theory of cultural development.

According to Vygotsky (1978, 1986, 1998), the ZPD is designed to appeal<sup>54</sup> to the whole child, and is intimately connected with his theory of cultural development as it pertains to learning and educational practice. Since cultural development has been already explicated in chapter 2, there is a need to expound on what exactly constitutes (for Vygotsky) learning within the Russian cultural-historical-educational context. The Russian concepts of *obrazovaniye*, *obucheniye*, and *vospitaniye* will be introduced, followed by an introduction to the concept of the zone of proximal development and its related notion of imitation. Subsequently, questions will be raised as to the validity of different interpretations of the concept of the ZPD. Finally, an attempt will be made to apply the Tripartite Model of cultural development to better understand and employ the ZPD, followed by an example of its implementation in practice.

### **Obrazovaniye, Obucheniye, and Vospitaniye**

The Russian word *obrazovaniye* is usually translated into English as formation, production, and education (Wheeler, 1972). The root of the word *obrazovaniye* is *obraz*, which means shape, form, appearance, and image in English. Although the Russian language has equivalent words that represent the English “teaching” and “learning,” within the socio-historical context of Russian education, there is also a word, *obucheniye*, which represents for Vygotsky the reciprocal relationship between learning and teaching. Ozhegov (1960) elaborates that *obrazovaniye*, in addition to the equivalent of the word formation,<sup>55</sup> also represents *obucheniye* (the Russian equivalent of teaching, instruction,

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<sup>54</sup>Recall from chapter 4, behaviour must “appeal” to (that is, approved by) the whole personality (person) to reach its mastery. The word “appeal” represents a positive emotional approval.

<sup>55</sup> Recall from chapter 2, *novo-obrazovaniye* is new formation (neoformation).

and training) and *prosvescheniye* (the Russian equivalent of *enlightenment*).<sup>56</sup> Thus, the word *obrazovaniye* refers to both education generally and to more specific educational situations where teaching and learning are dynamically reciprocal. Within the dialectical paradigm, there is no teaching versus learning, but rather teaching through learning, and learning through teaching – a synthesis that inevitably leads to a higher plane of enlightenment.

There is another word, *vospitaniye*, which represents an extremely important process within Russian education. *Vospitaniye* means education, upbringing, cultivation, fostering, and, most importantly, mentoring (Alexandrova & Cheshko, 1969; Ozhegov, 1960; Wheeler, 1972). Caring and nurturing are emotionally laden features of *vospitaniye*, which is a fundamentally important part of *obucheniye* and *obrazovaniye*, reflecting a uniquely Russian approach to education (and not only within Vygotsky's time). It is because of its caring and nurturing environment that the Russian educational system has been internationally acknowledged as a producer of superb educational, cultural, and scientific achievements over the past fifty years.<sup>57</sup> Although “one of the main goals of learning is the transmission of culture from generation to generation” (Kozulin, 2003, p. 15), the ultimate educational goal within the context of *obrazovaniye* (i.e., a caring and nurturing environment) is the socio-cultural formation of the child's individual personality. In fact, development of personality as a result of transformation – through a synthesis between social and individual processes – has occupied the centre of the Russian educational system for the past century, and stands in direct opposition to the

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<sup>56</sup> See Wheeler (1972) for the Russian-English translations.

<sup>57</sup> It is beyond the scope of the present investigation to discuss all the details about the achievements of the Russian (Soviet) educational system.

North American search for an individual identity, which is somehow “hidden” inside of us and can be uncovered through acculturation.

## **Introducing ZPD**

The origin of both cultural development and learning is social. Upon internalizing<sup>58</sup> social activity, the child, most often, is the last person to become aware of newly acquired behaviour. It is only through interaction with other people (teachers, peers, parents) who provide appropriate feedback to the child, that the child becomes aware of newly internalized activity. Consciousness (and self-consciousness) develops in interaction with the world. The child’s interaction within the social environment is internalized and becomes a basis for higher psychological development, while also providing necessary feedback to the child concerning what has been internalized and externalized.

The social origins of the whole process of cultural development and its relation to educational practice can be best represented by the concept of the zone of proximal development (ZPD). Here, Vygotsky makes his most important contribution to the connection between learning and development by differentiating between them. Vygotsky (1978) maintained that, although “the developmental processes do not coincide with learning processes” (p. 90), under certain conditions the learning processes can lead the child’s natural development. While natural development is direct and unmediated, cultural development, according to Vygotsky, is always mediated. When learning is used

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<sup>58</sup>Recall, internalization (*vrashchivaniye* as ingrowing) is a revolutionary process of active, nurturing (laden with positive emotions), and meaningful transformations of external relationships into personal experiences, and of lower psychological functions into higher. The process of internalization appeals to the whole personality and is not complete without the newly internalized behaviour being externalized and developed into automaticity.

to mediate development, the child reaches a higher level of cultural development faster than without mediation. The difference between the level of development led by learning and the level of natural unmediated development (with no help from teachers or more able peers) produces the ZPD.

The ZPD, "*the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers*" (Vygotsky, 1978, p. 86), is one of the first and most popular notions from Vygotsky's writings to be appreciated by English speaking educators. The ZPD reflects Vygotsky's belief that learning can and should lead development under certain conditions. These conditions are created by educators as "specifically designed learning activities that provide a framework for guided construction [e.g., concept formation]" (Kozulin, 1998, p. 33). In particular, when the child solves a problem that is beyond her developmental capabilities with the assistance of another more capable peer or an educator, the results demonstrate the potentiality of his psychological development better than if she tries to solve the problem on her own. In other words, the assistance that the child receives with solving a problem enables educators to look into the near future of the child's mental development and uncover the potentiality of that development. Secondly, such pedagogical assistance, according to Vygotsky (1978, 1986), speeds up the process of the child's development of higher psychological functions by focusing on the functions that are about to mature. With the conception of the ZPD, educators can determine not only the mental functions of a child that have already developed, but also the functions that are still in the process of development.



Vygotsky's ZPD takes advantage of all three elements of the child's life context: social, cultural, and historical. These elements come together as a basis for the child's emerging psychological functions. "Development proceeds not toward socialization, but toward individualization of social functions (transformation of social functions into psychological functions)" (Vygotsky, 1929/1986, p. 59). Assisting the child requires social interaction, which is reflected in the child's cooperation (but goes beyond cooperation and collaboration) and represents the social aspect of the ZPD. The process of assistance is also a cultural process. It uses cultural tools, signs, and/or symbols to mediate the process of learning (Vygotsky, 1997a, pp.85-89), where the assistant quite often becomes the mediator. Such a process of assistance is driven by the educational motivation to facilitate the attainment of the highest level of the learner's academic and personal achievement and acculturation. In other words, it is educators' high expectations of learners reflected in designing and implementing specific activities that help facilitate a culturally appropriate ZPD. The processes that are awakened<sup>59</sup> by assistance within the ZPD are internalized by the child and "become part of the child's independent developmental achievement" (Vygotsky, 1978, p. 90). The ZPD is also historical, not only because all the activities within the ZPD reflect the history of human practices, but also because it is dynamic across time. While taking into consideration past and present achievements of the child (i.e., the mental processes that are already developed), the ZPD is future-oriented. It brings to light processes that are about to be developed in the very near future.

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<sup>59</sup> It is the hidden psychological processes, which are about to mature, that are triggered (awakened) by the ZPD.

## Theoretical and Practical Aspects of the ZPD

Vygotsky (1998) assigns both theoretical and practical significance to the diagnostic principles of the ZPD. Theoretically, the ZPD uncovers the social facilitation of “the internal causal-dynamic and genetic connections that determine the process...of mental development” (p. 203). That is, collaboration with other people within the social environment becomes the internalized source of the child’s higher mental processes. The optimum time and level for intervention in the child’s development is situated between lower and upper threshold (boundaries). The processes of teaching (a specific subject and/or skill) and cooperation become most efficient at this optimum time and level, which demonstrate the practical significance of the ZPD’s diagnostic utility.

It is inappropriate to direct learning towards the actual level of development of the child because all the child’s mental functions at that level have already developed. In fact, Vygotsky invoked the notion of a *sensitive period* (optimum time) that pertains to a time when the child is most receptive to a particular subject of instruction. “During this period,” Vygotsky (1986) maintained, “an influence that has little effect earlier or later may radically affect the course of development” (p. 189). For example, commenting on Montessori (cited in Vygotsky, 1986, p. 189), Vygotsky asserted that teaching a child of four-and-a-half or five years old to write allows the child to develop creative and imaginative use of “written speech” (p. 189) that can never be found in children who are taught to write when they are seven or eight years old.

A similar example, but with an opposite direction, can be found with children who are taught to speak much later than their sensitive period.

How can we explain the fact that a three-year-old child in whom we find a great maturity of attention, alertness, motor ability, and other properties that are necessary prerequisites for learning speech, acquires speech with more difficulty and with less advantage than a child of a year and a half in whom these same prerequisites are undoubtedly less mature? (Vygotsky, 1998, p. 204)

According to Vygotsky, every subject of instruction has its most sensitive period<sup>60</sup> in connection to the child's development from early childhood to adulthood. That is, there is an optimum time for teaching every subject, for acquiring every skill, and for developing every habit so as to successfully mediate the child's development. It is inappropriate to direct learning towards a level that is far beyond or far below the child's developmental capabilities. It is the immediate potentiality of the child's development toward which learning should be directed. "Therefore, the only good kind of instruction is that which marches ahead of development and leads it" (Vygotsky, 1986, p. 188).

Diagnostically speaking, the ZPD is what determines the lower and higher thresholds of the optimum time and level for teaching and learning every subject at every age period. By identifying the difference between the actual level of development (which reflects mental processes that have already been developed) and the immediate potential level of development (which reflects the mental processes that are still developing), educators can predict a normative age-level and standard of accomplishment for each subject and capability. Here, Vygotsky (1998) brings to light the obvious disadvantage and impracticality of diagnosing only the "symptoms" (as determined by IQ) rather than the actual course of the relevant developmental processes:

If a child is brought in for consultation with complaints that he is developing poorly mentally, has a poor imagination and is forgetful, if

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<sup>60</sup> Sensitive period (optimum time) refers to a hidden process of development and/or maturation of new psychological formations.

after investigation, the psychologist makes the diagnosis: the child has a low intelligence quotient and mental retardation, the psychologist also explains nothing, predicts nothing, and cannot help in any practical way, like the doctor who makes the diagnosis: the illness is a cough. (p. 205)

Unlike the symptomatic diagnostics that can identify only external traits (symptoms), the ZPD can be used as a *clinical* diagnostic tool to determine the learner's states of development. This is why ZPD is a much better indicator of the child's future intellectual development than her mental age (as calculated by IQ). In fact, as Vygotsky (1986) argues, the greater the ZPD the child has, the greater his potential learning will be.<sup>61</sup> The size of the ZPD is not the child's fixed possession and "refers to the extent to which a child can take advantage of collaboration to realize performance beyond what is specified by independent performance and relative to age norms" (Chaiklin, 2003, p. 53).

### **The Notion of Imitation**

Social interactions with adults and more competent others – all the relationships that are internalized by the child – serve as the social basis for successful learning – “*a process by which children grow into the intellectual life of those around them*” (Vygotsky, 1978, p. 88). One of the most important social interactions is imitation. Since imitation is fundamentally important to the relation between learning and development, it is informative to examine it in some detail.

The notion of imitation was not “discovered” by Vygotsky. It had been used in animal and developmental (child) psychology long before Vygotsky and was considered to play an important role in learning, but mostly in a mechanistic way (Vygotsky, 1978,

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<sup>61</sup> For a more detailed discussion of the comparison between IQ and ZPD tests in one of Vygotsky's unpublished articles that is not readily available or translated into English, see Van der Veer and Valsiner (1991, pp. 336-341).

p. 88). In contrast, Vygotsky<sup>62</sup> believed that imitation can only be achieved when it falls within the developmental capabilities of the child. He argued that no matter how many times the teacher shows the child how to solve a problem in calculus, even after imitating the mathematical progressions that were written by the teacher on the blackboard, the child would not be able to understand and solve such problems because they are beyond the child's immediate potentiality. Similarly, Vygotsky stated, "If I am not able to play chess, I will not be able to play a match even if a chess master shows me how" (1987, p. 209).

It is only when the solution is within the zone between the higher and the lower threshold of the child's development, that the demonstration the teacher provides can be imitated and understood by the child and can trigger the mental processes that are just about to be developed. In other words, the child cannot imitate what lies beyond her capability, but only "what lies within the zone of [her] intellectual potential" (Vygotsky, 1987, p. 209); which, in turn, allows the child to complete the development of psychological functions that currently are insufficient for the child's independent performance.

Vygotsky rejected the narrow view held by many of his contemporaries that imitation is just a mechanical habit formation process and/or mindless action of copying. He recognized "imitation as a substantial factor in the development of higher forms of human behaviour" (Vygotsky, 1997b, 96). Intelligent and conscious imitation, he argued, "is possible only to the extent and in those forms it is accompanied by understanding" (Vygotsky, 1997b, p. 96) achieved in the process of collaboration. Because emotions

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<sup>62</sup> Vygotsky relied on the writings of James Mark Baldwin (1894). "Imitation: A Chapter in the Natural History of Consciousness" *Mind* (London).[[www.brocku.ca/MeadProject/Baldwin/Baldwin\\_1894.html](http://www.brocku.ca/MeadProject/Baldwin/Baldwin_1894.html)]

cannot be "approached" directly, intelligent and conscious imitation can serve as an appropriate mediator to integrate emotional experience into psychological and cultural development. According to Vygotsky, the paramount importance of imitation, being a collaborative process of meaning-making, is reflected in the fact that it can mediate the development of higher psychological functions within the ZPD.

### **Interpretations or Misinterpretations?**

In this section I would like to assess several claims Chaiklin (2003) makes in regards to the ZPD. I will argue that despite the fact that (a) there are some uncertainties and discrepancies in Vygotsky's writings on the ZPD, (b) the claim that the ZPD (as interpreted by Chaiklin, 2003) addresses the whole child appears to be unsuccessful; (c) a holistic ZPD cannot be limited to school age children; (d) the ZPD can lead a complete life-long development only if it is inclusive of all individual and collective human features; and (e) the formation of particular higher psychological functions is only the beginning of the child's development.

Chaiklin (2003) argues that many Westerners fail to grasp the most important role of the ZPD, which is to determine exactly which psychological functions are about to be developed so that specific activities can be designed that promote these emerging mental functions. According to Chaiklin, the ZPD is not as much about testing and/or enhancing the learning processes, per se, as it is about facilitating the child's development. Of course, there is nothing wrong with creating activities that will facilitate better learning; neither is anything wrong with assessing the child's level of achievement so long as these

assessments, and the activities based on them, are designed to facilitate the child's further cultural development (i.e., immediate potentiality).

Although Chaiklin (2003) does not censure practitioners influenced by the popularity of the notion of the ZPD who create fascinating activities designed to improve specific skills, he is adamant in refusing to interpret such activities as belonging to the ZPD, since human development is not intended by these activities. Chaiklin seeks strongly to preserve the "authenticity" of the ZPD, believing that everyone who creates activities for purposes other than facilitating human development is either trying to sneak under the notion of the ZPD and cash in on its popularity, or simply is not aware (informed and/or educated) of the authentic function the ZPD was intended to fulfil.

Chaiklin's (2003) intentions are to put development back into the zone of proximal development, clarify its theoretical and practical origins and usage, and shed light on possible theoretical discrepancies in Vygotsky's writings and Vygotsky's own interpretive logic (pp. 56-57). Chaiklin advocates the notion of periodization<sup>63</sup> and encourages future research towards finding particular mental functions (neo-formations) required for the successful transition to subsequent age periods.

Analysing the following quotation of Vygotsky about the ZPD, I share Chaiklin's assertion that there are discrepancies in Vygotsky's writings. "We will not stop to consider determination of the zone of proximal development that applies to other aspects of the child's personality. We shall elucidate only the theoretical and practical significance of this determination" (Vygotsky, 1998, p. 203). If it is assumed that both theoretical and practical significance is all that is required to demonstrate the importance of the ZPD, then this quotation makes little or no sense. However, if it is assumed that

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<sup>63</sup> Separate age-stages in child development.

there is more to the ZPD than its theoretical and practical significance, something (a “determination of the zone of proximal development”) that is directed to other aspects of the child’s personality, then the questions are: “What are these other aspects of the child’s personality?” and “Why don’t they reflect any theoretical and/or practical significance?” Vygotsky (1998, p. 203) pointed to the incompatibility and inapplicability of using the child’s physical development to explain mental development, and vice versa. It seems that Vygotsky’s comment on “the other aspects of the child’s personality” might be partially related to physical development. However, we cannot ignore the importance that Vygotsky assigns to aesthetic and spiritual (*dushevniy*)<sup>64</sup> aspects of the development of the child’s personality. Ilyenkov (1974/1977), for example, supports Vygotsky’s notion of synthesis between the material and the spiritual: “We think that one can unite dialectics and materialism in precisely that way, and show that Logic, being dialectical, is not only the science of ‘thinking’ but also the science of development of all things, both material and ‘spiritual’” (Introduction, para. 8).

There is something more to Vygotsky’s intended notion of the ZPD (like the physical, spiritual, aesthetic, and ethical<sup>65</sup> aspects of the child’s personality) and its usage than what is made explicit in his writing. It is possible that Vygotsky was willing to articulate practical and theoretical matters related to the ZPD in the absence of precise entailments and relations to “other aspects of the child’s personality” because, although he did not have a chance to do so, he intended to provide a much more detailed account on the ZPD at a later time. Unfortunately, unless and until all the other aspects of the

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<sup>64</sup>It is interesting that the Russian equivalent of the English phrase “a mentally sick person” is “a person with a sick soul” (*dushevno bolynoy*). Here, the meaning of the word *dusha* (soul) is “squeezed” into the word *mentality* in a typically cognitive way.

<sup>65</sup> Things that go beyond the stage of “ethical obedience.”



child's personality (and whether they are specifically addressed by the ZPD) are made clear, the claim that the ZPD (as interpreted by Chaiklin, 2003) addresses the whole child would appear to be unconvincing.

Let us assume for the time being that there is no other purpose for which the ZPD was created but to facilitate the child's further development. Imagine a wheel inventor who invented wheels only for a buggy pulled by a horse, complaining about the various modern uses of wheels. It seems myopic and self-defeating to limit our technological and intellectual progress by prohibiting purposes for an invention other than those for which it originally was designed. Since Vygotsky intended, but never had a chance to, elaborate his notion of the ZPD, it is difficult to determine what his position would have been regarding contemporary attempts to extend the use and interpretation of the ZPD.

According to Chaiklin (2003), the ZPD is limited to school age children and adolescents. Vygotsky, however, presented a different view. He stated that "Adolescence ...is less a period of completion than one of crisis and transition" (Vygotsky, 1986, p. 141). For Vygotsky, development does not stop with adolescence. However, as evinced in *The Problem of Age*, Vygotsky (1998) opposed "stretching child development excessively and including in it the first twenty-five years of human life" (p. 196). Vygotsky believed that every age period (including adulthood) reflects a qualitatively different developmental stage and, hence, must be treated (studied) differently. He further asserted that the period from roughly 18 to 25 years of age is not the last period of child development, but rather the beginning of maturity.

In the general sense and according to basic patterns, the age eighteen to twenty-five years more likely makes up the initial link in the chain of mature age than the concluding link in the chain of periods of child development. It is difficult to imagine that human development *at the*

*beginning of maturity* [italics added] (age eighteen to twenty five) could be subject to patterns of child development. (Vygotsky, 1998, p. 196)

Additionally, in discussing personality development, Vygotsky (1997a) provides support for his belief that human development is a never-ending process.

The formation of psychological systems coincides with the development of personality. In the highest cases of ethically very perfect human personalities with a very beautiful spiritual life we are dealing with the development of a system in which everything is connected to a single goal....A system with a single centre may develop with a maximum integrity of human behaviour. (p. 107)

Although he never gave a detailed explication of adult development, he recognized human development as being a never-ending process. When Vygotsky talked about “the highest cases of ethically very perfect human personalities with a very beautiful spiritual life” (1997a, p. 107), he surely could not be referring only to childhood and adolescence. Veresov (2004), for example, asserts that just because Vygotsky intended the ZPD for instructional purposes to facilitate the child’s cultural development in school settings, “does not mean...that there are no ZPDs (and levels of actual and potential development) in pre-school age, or in adult[hood]” (p. 3). In fact, a complete development of such a system as wisdom – a system which would be based on the maximum integrity of human behaviour and would reflect the highest ethical standards – is likely to be found only in mature adulthood.

There is another discrepancy in Chaiklin’s (2003) interpretation of the ZPD. While he asserts that “the main features of the analysis of zone of proximal development [concern the] whole child” (p. 50), his account of the whole child does not include explicit consideration of emotion or motivation. Yet, for Vygotsky, affect is the beginning and the end of the child’s entire psychological development. Quoting Pistrak

(reference unknown), Vygotsky (2004) stated that “The convictions that we may inculcate in school through knowledge, only grow roots in the child’s psyche when these convictions are reinforced emotionally” (p. 55). When dealing with the development of the whole child, it is of paramount importance (according to Vygotsky) not to separate intellectual from emotional features of the child’s development.

Similarly, one cannot ignore the need to account for motivation within the ZPD, because it is the child’s motivation that helps the child with her development. According to Vygotsky (1926/1997c),

The ancient Greeks said that philosophy begins with wonder. Psychologically, this is true with regard to all knowledge, in the sense that every bit of new knowledge must be preceded by a certain sense of craving. A certain degree of emotional sensitivity, a degree of involvement must, of necessity, serve as the starting point of all educational efforts. (p. 107).

The child’s motivation and willingness to participate in the cooperative process of learning comes from a maturing neoformation (Vygotsky, 1998) and is what allows an educator to successfully implement the leading activity<sup>66</sup> so as to facilitate the child’s development.

Should we assume that every child will be interested in participating within the ZPD? What if the child doesn’t want to imitate, to learn, or to conform? Is making sure that the child is interested enough to participate and learn within the ZPD, a part of the ZPD? Does the ZPD encompass learners’ motivations by default? Even after the child is successfully assessed for her lower and higher thresholds within the ZPD and corresponding activities are implemented by educators, the learning process might not

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<sup>66</sup> Recall from chapter 2, leading activities are designed by educators to bring the child’s maturing psychological functions and processes to the level of complete development.

necessarily be successfully internalized by the child; thus, not allowing for her successful transition to a different developmental level. The way activities within the ZPD are implemented can either facilitate or debilitate the process of development.<sup>67</sup> It is the educator who puts “demands” upon the child in collaborative activity. These demands are important parts of the social context within which the child develops. Thus, the child’s struggle (successful learning and development) is directly related to the teacher’s demands and how exactly they are implemented.

Even though Vygotsky clearly believed in human development as never ending, he did not elaborate in detail exactly how higher psychological systems develop and, hence, what (if any) specific leading activities may be used for such possibly ageless advances in human development. Despite Chaiklin’s assurance that “Vygotsky’s concept of zone of proximal development is more precise and elaborated than its common reception or interpretation” (2003, p. 39), many questions remain unanswered. For example, what is the leading activity of wisdom?<sup>68</sup> Which functions (or psychological systems and super-systems) develop and mature, so as to direct learning toward the goal of complete maturation and development? Given Chaiklin’s interests in periodization, what exactly would the relationship be among psychological functions during the neo-formation called wisdom?

We also have to take into consideration the fact that Vygotsky did not write much about maintaining the quality of internalized behavioural mastery. For example, the fact that focused attention and logical memory are formed at a certain age does not guarantee

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<sup>67</sup> A more detailed discussion about the possible negative outcomes resulting from the establishment of an uncaring environment can be found in one of the following sections.

<sup>68</sup> A complete development of such a system as wisdom – a system which would be based on the maximum integrity of human behaviour and would reflect the highest ethical standards – is likely to be found only in mature adulthood.

that these higher mental functions will operate successfully from that point on; and neither should such a possibility deter educators from continuing to develop (re-enforce) these higher mental functions further. In fact, the formation of particular higher psychological functions is only the beginning of the child's development. Further development is achieved only when such recently developed higher functions are firmly incorporated within the habitual structure of the child's personality across the entire range of development and within various contexts. (Recall that behavioural mastery of culturally developed personality is achieved only if and when it is developed to the level of automaticity.)

To recapitulate, Chaiklin (2003) asserts that the ZPD is “not a main or central concept in Vygotsky's theory of child development. Rather its role is *to point to* [italics added] an important place and moment in the process of child development” (pp. 45-46). Being a valuable diagnostic tool, the ZPD determines which functions have already matured and developed, and which are still in the process of maturation. In the practical application of the ZPD, teachers can create facilitative conditions and activities designed to draw out the child's still-maturing mental processes and, thus, enable the child to achieve, in collaboration with a teacher or more knowledgeable peer, what she was not able to do on her own. In other words, the ZPD is not just a diagnostic tool, but also points importantly to the milieu of learning from which development proceeds. Are there any other ways (except through the ZPD) to facilitate further development of the child's maturing functions? Can a child develop without the ZPD? These questions deserve further investigation.

The main purpose of the ZPD, as argued by Chaiklin (2003), based on his interpretation of Vygotsky (1978, 1986, 1987, 1993, 1998), is to locate psychological functions in the process of maturation, so as to help children complete their functional development. The complete cultural development of adolescents and adults encompasses the further development of psychological systems (e.g., personality, concept formation, consciousness and self-consciousness, moral integrity, world view, and wisdom). These (and many other) systems must be adequately addressed within the ZPD to facilitate a complete account of cultural development. As I have argued, a holistic ZPD cannot represent only the “assessing-teaching-learning” system limited to school age children. The ZPD is a unique theoretical and practical system (the only system “appointed” by Vygotsky that we know of) that can lead a complete life-long development, but only if it is inclusive of all individual and collective human features (affective, intellectual, volitional, ethical, aesthetical, and spiritual). In the following section, I will try to show how the holistic Tripartite Model (the result of my interpretive analyses in chapters 2, 3, and 4) can be applied productively to understanding and employing the zone of proximal development in the context of cultural development.

### **Applying the Tripartite Model to the ZPD**

Vygotsky used the notion of the ZPD in the three interconnected, yet separate, contexts of (1) developmental theory (i.e., the emerging psychological functions of the child), (2) applied research (i.e., the difference between the child’s individual and aided performances), and (3) school-based concept-formation studies (i.e., the interaction between *scientific* and *everyday* concepts in school learning) (Kozulin & Gindis, 2007).

However, I will focus only on the context of developmental theory and limit my discussion of other contexts to their connection to developmental theory. How exactly does understanding the Tripartite Model help to interpret and implement the zone of proximal development so as to facilitate the holistic cultural development of the student?

To answer this question, it is useful to recall the following essential features of the Tripartite Model, with a view to attempting either to recognize or establish them in the ZPD:

1. Personality interprets, acknowledges, and approves (or disapproves) emotions and all forms of behaviour of self and others.
2. Behaviour must “appeal” to personality to achieve its mastery.
3. Behavioural mastery indicates:
  - (a) how well personality is established;
  - (b) how well emotions and desires are acculturated (integrated); and
  - (c) how strong the “ownership” of behaviour is.
4. *Perezhivaniye* mediates and motivates:
  - (a) behavioural mastery related to the process of “appealing;”
  - (b) interaction, cooperation, and collaboration with others.

Although both the Tripartite Model and the ZPD are concerned with the whole child, Vygotsky does not provide many details as to how exactly the ZPD should appeal to the whole child. Can the Tripartite Model be applied to establish and maintain the ZPD? What exactly does facilitation of holistic learning and development entail?

It has been argued that Vygotsky’s concept of the ZPD can be extended to integrate the affective dimension (DiPardo & Potter, 2003, pp. 337-339; Goldstein, 1999;

Mahn & John-Steiner, 2002; Moran & John-Steiner, 2003; Nelmes, 2003). In my opinion, however, the challenge is not so much to add another dimension to a generally accepted cognitive-socio-cultural-historical characterization of the concept of the ZPD, but rather, to recognize the fact that these very cognitive, social, cultural, and historical dimensions of the ZPD already possess affective features. In addition, the fact that the concept of the ZPD addresses the whole person in his struggle with the environment, as manifested in his cultural development, should be recognized as yet another indicator that the ZPD encompasses emotions. In fact, by combining affective and intellectual features in his notion of the ZPD (Mahn & John-Steiner, 2002), Vygotsky was consistent in his belief that emotions are the beginning and end of the entire cultural development. Vygotsky (1987, 1997a-c, 1998, 1999) passionately argued that human emotions and desires are essential and fundamental parts of a complete human being. Hence, if established correctly through the Tripartite Model and addressed to the whole child, the ZPD encompasses emotions. Since the emotional origin of cultural-historical development already has been explicated in the previous chapters, I will focus here only on the affective nature of social interactions within *obucheniye*. I also plan to discuss further the aspect of indivisibility between cognition and emotions in all higher intellectual activities as I ask whether or not there is a ZPD in an uncaring environment.

Elaborating further Vygotsky's understanding of the affective nature of *obucheniye*, Mahn and John-Steiner (2002) acknowledge that Vygotsky was always a strong opponent of a separation of intellectual and affective aspects of human life, particularly within *obucheniye*. Being a relational system (a system that represents relationships among teachers and learners), the ZPD creates its own fluid and ever-



evolving dynamics -- “a dynamic meaningful system that constitutes *a unity of affective and intellectual processes*” (Vygotsky, 1987, p. 50).

Social relationships within the educational context (i.e., the child’s struggle with her environment) always encompass emotions. Talking about the role of contradiction in the experience of the child within social interactions as a basis for the development of higher mental functions, Veresov (2004) acknowledges emotions as an important aspect of all developmental change:

This dramatic collision, mentally and emotionally experiencing contradiction is the form in which the relation between the child and the social surrounding (social situation of development) exists. This is why this relation represents the initial moment for all dynamic changes that occur in development during the given period. (p. 4)

Veresov further explains that not every social relation and/or situation can facilitate cultural development. In order for internalization to take place, the social relations must be “emotionally colored and [represent] collision, the contradiction between the two people...Being emotionally and mentally experienced as social drama (on the social plane), it [the emotionally laden relationship] later becomes the individual intrapsychological category” (p. 6).

Hence, what was socially experienced in collaboration within the ZPD becomes individual and manifests itself in behavioural mastery. The dynamics of collaboration within the group are reflected in the individual members of that group, and vice versa. It is important to emphasize that learning activities are “deliberately constructed on the basis of collaborative learning” (Kozulin, 1998, p. 162). Mastery of learning activities is equated with mastery of environment, which, in turn, leads to mastery of one’s own behaviour. That is, whatever was experienced by the group is later experienced by the

individual. In the words of Vygotsky: “What the child can do in cooperation today, he[she] can do alone tomorrow” (1986, p. 188).

All intellectual, affective, and motivational features that are activated within the ZPD grow as functions of the audience that experiences them.

Shame experienced in front of a crowd of thousands is thousands of times more powerful than shame experienced in front of a single person. The same may be said of the emotion of satisfaction, which directs all our reactions to an ultimate goal, and which grows and increases in magnitude the larger is the group in whose channel it travels. (Vygotsky, 1997c, p. 192)

Of course, the amplification or reduction of the experience of shame or satisfaction will also depend on the importance attributed to the particular audience by the one experiencing shame and/or satisfaction. Many performers, for example, report that they experience much stronger anxiety when asked to perform in front of an individual or small group of people well known to them than in front of a large group of strangers. Since the emotions of an individual are a function of the audience, (e.g., the teachers and peers within the learner’s ZPD), it is vitally important to establish an encouraging and trusting emotional environment from the outset. Vygotsky stated: “Through others, we become ourselves” (Vygotsky, 1998, p. 170). A nurturing collaborative and cooperative process established by educators within an emotionally safe ZPD, is internalized by the individual and becomes part of his internal world.

Just as we can establish and maintain successful and productive relationships with others, so can we establish and maintain a successful dynamic interactive process within the ZPD. It is the positive relationship between the child and the environment (a teacher or an able peer) that determines the degree to which (1) the ZPD is successfully established and maintained, and (2) these relationships are internalized. For Vygotsky,

the question is not how one child or another behaves in a group, but rather “how...the group create[s] mental functions in one child or another...Functions initially are formed in the group in the form of relations of the children, and then they become mental functions of the individual” (Vygotsky, 1997b, p. 107).

Emotions are the basis for any human relationship. The child’s relationship with a teacher and/or an able peer reflects her feeling safe to reveal freely what she doesn’t know and/or doesn’t understand, her trust towards her educator (or facilitator), and her interest in the subject and the methods of its acquisition. These relationships must first and foremost entail a basic human respect for another human being (especially the child), as well as care and concern for the child’s education, welfare, and overall development. Thus, the dynamic process of establishing and maintaining the ZPD is successful only when emotionally positive reciprocal relationships between the learner and the instructor allow for the participants’ constant negotiation of the subject of inquiry and the way it is presented and acquired.

The value of the concept of the zpd is that it enables us to adopt both of these perspectives [the individual participants acting with mediational means and the social practices in which they and the mediational means are embedded] simultaneously....On the one hand, the reciprocity with which the participants adjust their manner of participation to take account of each other’s current levels of knowledge and skill in carrying out the activity and, on the other, the transformation that takes place, in the process, in their individual potential for participation. (Wells, 1999, p. 322)

Harnessing and facilitating positive emotions are extremely valuable in the child’s development and, hence, in education. One does not require a vivid imagination to recognize that a growing child usually experiences much rejection and a sense of inferiority just by comparing himself to any adult. Vygotsky (1993) reminds us that

by nature, a child always appears inferior or “unfinished” in a society of adults; from the beginning, his very position gives grounds for the development of feelings of inferiority, insecurity, and embarrassment. For years on end, a child remains unfit for independent existence. (p. 160)

If we imagine an adult going through such a negative experience for as long as a normal child does, in the best case scenario such an adult would most likely develop low self-esteem, and in the worst would end up with a disintegrated personality.<sup>69</sup> Such outcomes could result for every single child if it were not for the caring and nurturing provided by parents, caregivers, educators, and society at large. Of course, there are too many cases of neglected and/or abused children, cases that remind us of the devastating consequences that can occur in the absence of such care and nurturing. It is only in an emotionally positive environment that the child is capable of compensating for her inadequacy compared with adults and developing within her societal culture. Vygotsky submitted that “in his [the child’s] inadequacy and childhood awkwardness lie the seeds of his development [during which] an animal organism becomes a human personality. *The societal mastery of this natural process is called education*” (1993, p. 160). It is only through the internalization of cultural tools (e.g., works of art, music, literature, etc.), during the child’s interaction with his environment, that she can arrive at an understanding of the world around her and, thus, at an understanding of herself. The child only can achieve the heights of educational and cultural development when the child’s personality is “strong enough” to recognize, approve, and internalize positive relationships with others; which demands that all psychological functions and processes are well integrated within a unified, dynamically holistic, and future-oriented system.

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<sup>69</sup> See chapter 4 for an explanation of what a disintegrated personality entails.

## **Is There a ZPD in an Uncaring Environment?**

Unfortunately, quite often children learn the “right things,” but for some reason, when they are required to use such knowledge, they don’t always use it in the intended way. Why not? What are the possible motivations (or lack thereof) that might lead to this result? We can all relate to Tutu’s (2004, April 20) realistic evaluation of possibly negative educational outcomes: “education produced brilliant scientists who have used their knowledge for evil.” Although it is possible to acquire new information and new types of behaviour even in “an uncaring environment,” Vygotsky believed that without being fully internalized<sup>70</sup> such new information and behaviour will not have a positive manifestation. In unsupportive conditions, the child most likely will not “feel right” about using information and/or exhibiting behavioural actions that were not internalized. The child develops higher mental functions through internalization, which is only possible when the environment is nurturing and caring.<sup>71</sup> When we ask a student to exhibit different, more appropriate behaviour, we are not looking for the mere appearance of a difference in the student’s actions. Such an artificial behaviour is unlikely to last and the student will be prone to return to the old “habitual” behaviour when “no one is watching.”

Once again, the way the child interacts with others is the way the child “interacts” with herself. All her social relationships with other people are reflected in the development of her higher mental functions and, thus, in her personality. Trying to operationalize the concept of the ZPD,

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<sup>70</sup> See one of the previous footnotes on internalization.

<sup>71</sup> Recall from chapter 2, internalization, which occurs under less optimal conditions, does not lead to cultural development, but rather, to disintegration. Hence, while the process of acquisition or appropriation takes place, such a process cannot be called internalization.

Vygotsky proposed two...psychological techniques...which he called the psychotechnique of thinking and the psychotechnique of feelings. The first of these techniques refers to the ambit we consider today as related to knowledge; the second, to the ambit of moral and social action. Only the combination of the two in educational contexts will give rise to a fully developed human being. (del Rio & Alvarez, 2007, p. 302)

Only a caring and nurturing environment within the ZPD can mediate (facilitate) the child's cultural development. In short, the ZPD appeals to the whole personality of the child as it facilitates the development of higher forms of behaviour through culturally developed emotions within the socio-historical context.

There has been an enormous proliferation of articles, research papers and conference presentations about the ZPD as related to the teaching and learning of mathematics, science, computer science and technology, languages, and so on, many of which emphasize the extended version of the ZPD that reflects human emotions and desires. One might speculate that the popularity of an extended version of the ZPD, especially among teachers of exact sciences (Bellamy, Gore, & Sturgis, 2005; DiPardo & Potter, 2003; Giest & Lompscher, 2003; Jaques, Bocca, & Vicari, 2003; Taber, 2007; Zuckerman, 2003), would suggest that there is a need (perhaps now more than ever) for acknowledgment and recognition of the fact that human emotions are a vital part of human development. It is as if the higher the level of intellectual activity, the higher the level required of culturally developed emotions to make such activity successful. In the following section, an attempt will be made to provide some basis for this assertion.

Bozhovich (2004) affirms that higher culturally developed emotions (e.g., emotional experiences – *perezhivaniya*), being the motivational force behind the child's cultural development, provide a crucial element in making most intellectual activities successful: "New systemic structures characteristic of personality (e.g., moral feelings,

convictions, worldviews) are composed not only of intellectual but also of affective components. These are what give these new structures their motivational force” (p. 85). Similarly, commenting on the reciprocity between the development of cultural emotions and conceptual thinking, Bakhurst (2007) finds support in “Vygotsky’s affirmation that the development of conceptual thinking positively influences both the cognitive and affective domains” (p. 69).

There is also an enormous amount of data coming from current research<sup>72</sup> that offers substantial support for the assertion that “higher cognition requires the guidance provided by affective processing” (Forgas, 2001, p. 48; 2005). For example, recent evidence from neurological studies of brain-damaged patients provides strong convergent “evidence for the inseparable relation between emotion and other aspects of cognition. Our everyday experience also clearly shows that affect influences essentially all other aspects of cognitive functioning, including memory, attention, and decision making” (Adolphs & Damasio, 2001, p. 44; cited in Forgas, 2005, p. 5). A number of theories as well as numerous empirical studies suggest that as cognitive strategies that drive behaviour become more complex and elaborate, the influence of associated affective states also increases (Damasio, 2000; LeDoux, 1996). In addition, there is strong support from studies of emotional intelligence asserting that “emotional competencies...are claimed to be positively related to academic achievement and productive experience in the world...In fact, processes we had considered as purely cognitive or intellectual are basically phenomena in which the cognitive and emotional aspects work synergistically” (Matthews, Zeidner, & Roberts, 2003, p. 444). It now is possible to state that the higher

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<sup>72</sup> See the previous chapters for a more detailed explanation of this statement.

intellectual activities not only incorporate higher emotional experiences (i.e., culturally developed emotions) but quite often rely on them.<sup>73</sup>

From a somewhat different perspective, when talking about preschool children, Berejkovskaya (2006) asserts that adults must pay very close attention to attitudes expressed towards the child's undesirable behaviour. An adult's attitudes can inadvertently reinforce negative behaviour. Quite often, when adults focus their attention and the attention of other children on the unappealing behaviours of the preschooler, their positive or negative emotional reactions can strengthen the very undesirable behaviour the preschooler needs to avoid. Berejkovskaya asserts that a possible negative consequence, such as reinforcing the child's undesirable behaviour, can stem from an emotionally laden instructional interaction within a child's zone of proximal development (p. 48). Berejkovskaya recognizes the paramount importance of emotional interactions with educators even in the presence of possible negative outcomes. Although she believes that (a) children can appropriate and/or reinforce negative knowledge and forms of behaviour as a result of an emotionally laden instructional interaction within the ZPD; she also acknowledges the fact that (b) when the knowledge (or a skill) children internalize is not emotionally reinforced by their own practical experience and the teacher's support, it might be "quickly lost when new subjects are taken up" (p. 52). It is, however, my belief that the possible negative outcomes Berejkovskaya mentions can be avoided if an emotionally positive atmosphere of openness and meaningful interaction within the ZPD is established and maintained from the outset. In fact, DiPardo and Potter (2003) also support Vygotsky's plea for an emotionally positive orientation in teaching

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<sup>73</sup> Recall, higher psychological functions (e.g., culturally developed emotions) are well integrated within the entire psychological framework.



and learning, as they affirm that “positive affect is of [the] essence, crucial to good thinking and effective action for teachers and students alike” (p. 337). Thus, in my opinion, the very purpose of establishing and maintaining the ZPD correctly (i.e., with positive affect) is to avoid just such possible pitfalls, as mentioned by Berejkovskaya (2006).

To recapitulate, cultural development is manifested in the development of higher psychological functions and systems. From within the dialectical paradigm, what is important to Vygotsky is not how the child behaves in a group, but rather how the group creates higher psychological functions and systems in the child. Learning can and should lead the child’s development when certain conditions are met. Within the context of the ZPD, development is the product of the child’s internalization of her interaction with her teachers and peers. When the relationships established by the teacher and peers fit coherently with (i.e., appeal to) the whole personality of the child, these positive relationships are also transferred (externalized) into behavioural mastery mediated by future-oriented positive emotional experience. The higher the level of intellectual activity that takes place, the higher the level of culturally developed emotions required to make such activity successful. Educators can take into consideration the child’s prior emotional and intellectual knowledge and experience, connect newly learned with previously learned material, and better facilitate its internalization. All the learning processes experienced and products created within the affectively established and maintained ZPD are more easily accepted (internalized) by the child’s whole personality. Not only will the child better internalize the content being taught, but she also is more likely to externalize this content in the form of behavioural mastery if and when required.

## **Practical Implications of the ZPD**

Let us consider the practical applications of the ZPD using the following example from an adult ESL class (Levykh, unpublished). In covering a theme “At the Doctor’s Office,” a group of adult lower intermediate ESL students was given new vocabulary about the most common types of disease, the names of doctors-specialists, and basic conversational tools to use at a doctor’s appointment. The material included conversations, stories, articles from local newspapers, and a booklet of local governmental guidelines on medical services. The students had previously been introduced to jazz chants, the notions of rhythm and rhyme, and sound-alike words. The students were asked individually, as part of their homework, and later in class in groups of two or three, to provide sound-alike words and rhymes for most of the new vocabulary. Then, with the help of the teacher, they started to discuss the appropriateness of combining certain rhymes with certain situations. If a specific situation required a word combination that the students had not developed, the teacher would try to supply one or would offer an initial conversational phrase or rhyming medical vocabulary and prompt the students to complete the phrase. The appropriateness of using humour was also discussed and was implemented with the help of the teacher. Sometimes the teacher would present a similar situation from a different jazz chant and/or a song so that the students could use them as more suitable examples. By the 5<sup>th</sup> class session, developing rhymes for these medical terms and situations at the doctor’s office was the only topic that these students were discussing in class, during the break, and (according to their families and friends) at home. The following week, the students in collaboration with each other and with the guidance of their teacher, were able to create a complete jazz

chant, which was put to music and recorded by the students (see Appendix). From that point on, the jazz chant became the first and last classroom activity, and the favourite topic of discussion. Even after the students went on to study the next topic in their curriculum, “At the Supermarket,” one could still hear some students singing the jazz chant “At the Doctor’s Office” in the hallways during breaks.

Such collaborative activity is the core of the affective establishment and maintenance of the ZPD, because it can (a) create a caring, nurturing, and safe environment where students feel comfortable expressing their individual cultural and social concerns, yet deal with them through mediation via the communicative nature of creating lyrics and music; (b) trigger prior affective and intellectual knowledge and experience; (c) cement and perfect students’ knowledge of new vocabulary and grammar while focusing on the interaction and negotiation of the usage of their ideas; (d) enhance the students’ pronunciation (e.g., rhythm and intonation) in the target language and, thus, communicative skills; (e) solidify synthesis among listening comprehension, speaking, reading, and writing skills; (f) facilitate memorization of whole chunks of authentic and idiomatic discourse; (g) transfer newly acquired information from working memory to long-term memory; (h) facilitate a positive learning experience and appreciation for the subject being taught (whether ESL or any other subject); and (i) explore socio-cultural aspects of the target language (e.g., rules of conversational turn-taking).

The process of establishing the affective zone of proximal development begins long before a specific topic or theme is introduced in class, in the form of warm-up and preparatory activities. Warm-up activities can be mediated by music and can include jazz-chants and songs. Unfortunately, Vygotsky did not write much about music. In his

*Imagination and Creativity in Childhood* (one of the very few places in his writings where he briefly mentions that music can facilitate a more meaningful experiential learning), Vygotsky (2004) asserted:

Frequently, a simple combination of external impressions, such as a musical composition, induces a whole complex world of experiences and feelings in a person listening to the music. This expansion and deepening of feelings, their creative restructuring, constitutes the psychological basis for the art of music. (p. 20)

The unifying effect of music can extend across time, nations, races and individuals, and trigger affective forces that facilitate acquisition of new information and aesthetic development (Murphy, 1992; Richard-Amato, 1996). From Lozanov's Suggestopedia (1978), through Gordon's Musical Intelligence (1986), to Campbell's Mozart Effect (1991), music has been used in the classroom to reduce debilitating anxiety (i.e., high levels of unmanageable and overwhelming emotions) and inhibition, and create a positive learning atmosphere. Mahn and John-Steiner (2002) confirm that "because negative affective factors such as fear or anxiety are present, the zone in which effective teaching/learning occurs is diminished" (Emotions and Learning, para. 5). After the warm-up activity, the *Find Someone Who*<sup>74</sup> (Pitton, 1988) can be used as a preparatory activity to promote the students' social interaction by allowing them to share their prior emotional and intellectual knowledge and experience in a safe and supporting environment.

Making curriculum material and its delivery in class more interesting should promote learners' emotional development and facilitate better learning. Moreover, the

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<sup>74</sup> Students mingle among each other asking, for example, "Do you like...knitting, cooking, reading, etc.?" After filling up their individual hand-outs with the names and answers, the students inform the rest of the class, for example, by answering the question: "Who likes reading?" "Alex likes reading, but Erica does not."

educational advantage of facilitating appropriate culturally developed emotions during the process of *obucheniye* is not limited to students. Relating Vygotsky's understanding of the importance of the collective to education, we can see that a successful teacher-student relationship, which serves as a solid platform for successful learning, begins when teachers exhibit a sense of emotional openness, especially at the initial stage of teaching. Such openness facilitates a sense of wonder among students, stimulates their imagination, and enhances the process of learning. In Vygotsky's words, "Psychologists have demanded of the teacher educational inspiration, and it is this which defined in their eyes the personality of the teacher" (1997c, p. 341). As culturally developed emotions are internalized, they play a key role in shaping motivation and thought (1987). Therefore, "it [only] makes sense to attend closely to the affective aspects of teachers' workplace[s], and to the ways that emotions inform what are commonly seen as the purely academic aspects of their labours" (diPardo & Potter, 2003, p. 323).

Being future-oriented, the ZPD appeals to the whole personality and builds upon students' previous affective and intellectual knowledge and experience, and teachers' positive emotional openness, as it establishes creative teaching-learning environments in the here-and-now that promote mutual respect and trust, so as to facilitate creative risk-taking behaviour and acceptance of constructive criticism. According to Vygotsky (2004), "feeling as well as thought drives human creativity" (p. 21). Students are inspired by the teacher's trust and creativity, as they create the target discourse (jazz chant) through the secondary discourse (their discussion and debate in English about the appropriateness of their chosen rhyming phrases and idiomatic expressions). Both students and teachers are part of this collaborative educational process, within which

students internalize the newly acquired knowledge and communicate (externalize) it to others in a safe emotionally supportive environment. Students can internalize whatever was experienced by the group (i.e., all the successfully developed emotional relationships with their peers and teachers) and “approve” their peers and teachers as “trusted” mediators to facilitate the students’ language acquisition. As the students externalize their newly acquired knowledge and/or behaviour with confidence and mastery, they mediate their own cultural development.

Once the affective ZPD is established and teachers and peers are approved as trusted mediators, even the mere (or perceived) presence of a teacher (or a peer) can mediate the internalization of new information, facilitate the development of culturally new concepts, and assist with the students’ creation and re-creation of new discourse. In such a nurturing environment, it can be relatively easy for students to practice the new vocabulary, the right questions and correct answers, and even pay attention to their pronunciation without worrying about making mistakes. However, merely repeating newly acquired information in the “right” place and at the “right” time (what resembles a direct stimuli–response approach) is only the initial stage of the ESL learning process. It is the students’ ability to effectively communicate, creating new, meaningful and spontaneous discourse in unfamiliar contexts, which is the ultimate educational goal. Once the students have sufficient practice using what they memorized, they are encouraged to extrapolate what they have acquired to a new context. Thus, a safe and nurturing environment established within the ZPD (i.e., emotionally consonant relationships between the teacher and students that appeal to learners’ personalities) can be generalized to real life situations, facilitating students’ abilities for spontaneous and

meaningful communication (i.e., an externalized behavioural mastery). In addition to all the above mentioned activities, there are other activities<sup>75</sup> that can be used by educators to steer the students' ZPD toward confidence with, and mastery of the newly acquired material – what students can do, feel, and be today in collaboration with others, they can do, feel, and be tomorrow on their own.

Learning within an affectively established and maintained ZPD can lead cultural development. According to Vygotsky, all new psychological functions, processes, and systems (neoformations) represent qualitatively different relationships with other functions, processes, and systems. Reflecting the central line of development, a new psychological formation should represent a specific age-period and lead the entire cultural development further. What new psychological formations can be found among newly arrived immigrants and ESL students? When adult ESL students merely learn new labels and translations, they are not developing any new psychological functions. Even when ESL students develop new concepts (cultural, social, or any other), their conceptual thinking is presumed already to have developed. Hence, when these students acquire new concepts, the process of concept development is not new to them, and thus cannot be called a neoformation.

It is not the age periodization that dictates a new psychological formation, but rather, the appearance of a new formation in the child allows for a specific period to be identified. Vygotsky (1998, p. 196) specifically opposed stretching the child's development into adolescence and adulthood; that is, applying the same rules of periodization to adults. He asserted that a new psychological formation was represented by new relationships among other functions, processes, and systems (Vygotsky, 1999, p.

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<sup>75</sup> See Lems (1996), McCarthy (1985), and Richard-Amato (1996) for appropriate ESL activities.

92). Hence, our future task is to find the new psychological relationship that occurs in ESL students and immigrants.

### **Concluding Remarks**

Vygotsky considered education to be the driving force behind the cultural development of the child because, for him, *obucheniye* leads development. “Education always denotes a change. If nothing changes, then nothing has been taught” (Vygotsky, 1997c, p. 104). The ZPD serves as an indicator and a facilitator of learning and cultural development. Vygotsky was convinced that it is the role of educators to transform their students (no matter how lazy, uncultured, uneducated, untalented, misbehaved, and unwilling to learn they might be) into culturally developed personalities that will lead exemplary lives and be useful, productive, and instrumental in the further development of the society at large. The following proclamation lies at the centre of all of his beliefs and truly represents him as a psychologist, educator and, most of all, as a passionate and caring human being: “People with great passions, people who accomplish great deeds, people who possess strong feelings, even people with great minds and a strong personality, rarely come out of good little boys and girls” (Vygotsky, 1997c, p. 1). Unlike many mainstream North American educators who believe that learning lags behind the development of the child, Vygotsky believes that learning can and should lead the development of the child.

The establishment of the zone of proximal development during the processes of *obucheniye* and *vospitaniye* (i.e., learning and teaching within the caring and nurturing context of interaction and collaboration) is a complex dynamic process that can lead the



child's development. The complexity of the ZPD can be found not only in its constitutive parts (the participants, their interaction and collaboration, the type of tools, and the type of mediation used), but, most importantly, in its immediate cultural-historical context. As such, according to Vygotsky, the ZPD has an enormous influence on its parts and on the relationships among and within those parts, as well as the larger relationship between the child and the environment. Establishing and maintaining the ZPD effectively not only facilitates a successful learning process but also mediates students' cultural development.

Finally, cultural development is always triggered, accompanied, and permeated by emotional development. Vygotsky (1997c) was adamant in his belief that "the emotions have to be considered as a system of anticipatory reactions that inform the organism as to the near future of his behaviour and organize the different forms of this behaviour" (p. 106). For the teacher, therefore, the emotions become an extraordinarily valuable educational tool.

No form of behaviour is so vigorous as when it is associated with an emotion...No moral sermon educates like a real pain, like a real feeling, and in this sense, the apparatus of the emotions seems like an expressly adapted and subtle tool by means of which behaviour may be influenced effortlessly. (Vygotsky, 1997c, p. 106)

It is precisely through the mediation of culturally developed emotions as motivators that the zone of proximal development can be established and maintained so that the development of the child's higher mental functions and systems will succeed and lead to cultural development as a whole.

Despite Vygotsky's affirmation that "No moral sermon educates like a real pain" (1997c, p. 104), it is the child's positive educational experience (both in school and at

home) that better facilitates the future-oriented cultural development of his personality through internalization of cultural tools.

See to it now, I beg you, that you make freemen of your pupils by habituating them to act, whenever possible, under the notion of a good. Get them habitually to tell the truth, not so much through showing them the wickedness of lying as by arousing their enthusiasm for honour and veracity. (Vygotsky, 1997c, chap. 12, p. 7)

It is only the child's future-oriented personality (leachnost, which is developed through positive emotional experiences, which in turn leads to behavioural mastery) that motivates the child to understand others and, hence, to understand herself. As a result of such a reciprocal understanding, the child will most likely develop awareness of and appreciation of others' emotional experiences as well as her own. Understanding others at the emotional level is vitally important for the child to understand others at the intellectual level -- "A true and full understanding of another's thought is possible only when we understand its affective-volitional basis" (Vygotsky, 1986, p. 252). Teachers must exhibit a sense of emotional openness especially at the initial stage of instruction to enable students to understand the intellectual part of the lesson through understanding its affective and volitional roots. When the Tripartite Model is applied successfully to establishing and maintaining the holistic zone of proximal development (which, in turn, presupposes an appeal to the whole personality manifested in behavioural mastery), the ZPD will encompass a positive emotional experience, appeal to the whole person (child and/or adult), facilitate successful learning and, thus, further cultural development.

## 6. CONCLUSIONS AND EVALUATION

### Summation

The social roots of cultural development within the dialectical paradigm (where social, cultural, and historical development encompasses the individual's struggle with the demands of society) stand in opposition to the common Western notion of development as a more individually oriented unfolding of capabilities somehow resident in the child at birth. Vygotsky's dialectical view (guided by a historical-dialectical-functional-monism) of cultural development opens possibilities for an external and internal dialogue in a specifically Russian-Spinozian way that reflects the synthesis between human emotions and intellect. The development of higher psychological functions – i.e., the appearance of newly developed psychological systems, which unite all previously separated mental functions – leads the child's cultural development. While the building blocks of higher psychological functions are the lower functions of the individual and thus are materialistic, the construction of higher psychological functions involves the transformation of interpersonal relations with the help of psychological tools.

The process of cultural development proceeds in cycles. At every age, as the personality of the child struggles with the social environment, such activity facilitates maturation of a leading function (neofunction). At the end of every stage, the leading

function reaches its full maturation and facilitates changes in relationships among and within all functions. These processes lead to a more developed self-consciousness and facilitate changes in personality. Such changes in personality co-exist with further developments in consciousness. Consciousness “assesses” the dissonance between the social environment and the recently changed personality, and “resolves” it through personality struggle. In this way, the ground for the following age period is prepared by the formation of a new social condition through the resolution of each crisis, during which unstable neoformations are absorbed by the stable neoformations of the following age period. After this, the cycle repeats itself.

Although Vygotsky claims that consciousness plays a decisive role, the personality struggle involved in resolving developmental dissonances in the cultural development of the individual always involves the instinctive drives of the powerful emotional personality (leachnost). To understand the child’s cultural development is to discover how the child’s external social interactions with the environment create an internal mental world reflected in personality. Cultural development is the child’s constant future-oriented struggle between its biological formations and the social demands of the environment, the transformational results of which apply to the whole personality in the form of behavioural mastery. The future orientation of cultural development reflects both what has already developed and what is in the process of development (maturation and learning). The process of struggle is emotionally laden and, hence, infuses every newly developed system (higher mental functions and their interaction among each other) with a wide spectrum of emotional content. Changes in the newly formed psychological systems foster similar changes in individual mental

functions, and the relationships between and among them.<sup>76</sup> These changes, in turn, influence the main system further. Development is a holistic, life-long process which encompasses both moral and intellectual features; a process that can manifest itself in the appearance of a leading super-system (e.g., personality, wisdom) in further facilitating highly moral human development with maximum integrity. The quality of the relationships among higher mental functions and systems (that is, how well the mental functions are integrated) can be used as a new parameter and/or marker to identify new psychological formations (*novo-obrazovaniya*) in adult development.

Affect is the beginning and the end of the entire cultural development. Emotions for Vygotsky are the human glue that connects every mental function and every process of new psychological formation and development, dynamically stretching from the past to the present (and in that process changing the past) and from the present into the future of the child's development (and in this process developing a future-oriented present). But even more so, emotions are a living glue – breathing, feeling, thinking, assessing, and evaluating, nudging us to act upon one thing and forcing us not to act upon other things, and, finally, integrating the results of the past and projecting them into the future, while enjoying a never-ending process of their own development in the here and now. In short, emotions for Vygotsky are the motivational source of life itself and, hence, must be developed culturally for their own sake.

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<sup>76</sup> Unfortunately, Vygotsky was not clear as to the exact definition of psychological systems. At one point, Vygotsky (1997a) asserted that a psychological system may represent a relationship between functions, a neoformation, “giving it all the content that is usually attached to this, unfortunately, too broad concept” (p. 92). At another point, Vygotsky (1999) “arbitrarily call[s] these psychological systems, these units of a higher order that replace the homogeneous, single, elementary functions, the *higher mental functions*” because these “new psychological systems... unite in complex cooperation a number of separate elementary functions” (p. 61). It is also interesting that, for Vygotsky (1997b), personality (*leachnost*) is not a function but a system, or a super-system, which is connected to our values, beliefs, ethics, and aesthetics; whereas, consciousness is a system of systems.

A successful emotional development (both in childhood and adulthood) depends not so much on the development of emotions per se, as on how well emotions are integrated into the entire mental structure, as they reflect new, qualitatively different relationships with other functions and systems. It is suggested that Vygotsky valued intellect because it can educate and lead emotional and motivational processes in the facilitation of cultural development. He valued emotional and motivational processes because they, in turn, can inform the human intellect and inspire people to develop ethically as optimal human personalities. Cultural emotions are a manifestation of Vygotsky's last and most complete unit of analysis – *perezhivaniye* – a future-oriented system of systems.

In the present investigation, I clarified and developed further Vygotsky's ideas about the relations among emotions, behavioural mastery, and personality within a social-historical context; and showed how these ideas and relations enable a conception of a holistic cultural development. In particular, my own original research, which is grounded in my interpretation of, and extrapolation from, Vygotsky's writings on cultural development, further elaborated the place and role of emotions and emotional development in Vygotsky's conceptions of personality (*leachnost*) and behavioural mastery within the social context, resulting in a conception of the tripartite relationship among them.

The basic mechanism of the Tripartite Model is reciprocal mediation. Development of *leachnost* facilitates mastery of behaviour, and vice versa, both through emotions as mediators. Further, while in the process of serving as a mediator for the development of *leachnost* and behavioural mastery, emotions are also being developed.

In other words, the objects of development (personality and behavioural mastery) become mediators to their original mediator (emotions), while the original mediator develops as a focal object. In the dialectical tradition of Russian culture, personality (*leachnost*) is not what a person possesses but rather what the person becomes.

The following are essential features of the Tripartite Model:

1. Personality interprets, acknowledges, and approves (or disapproves) emotions and all forms of behaviour of self and others.
2. Behaviour must “appeal” to personality to achieve its mastery.
3. Behavioural mastery indicates:
  - (a) how well personality is established;
  - (b) how well emotions and desires are acculturated (integrated); and
  - (c) how strong the “ownership” of behaviour is.
4. *Perezhivaniye* mediates and motivates:
  - (a) behavioural mastery in relation to the process of “appealing;”
  - (b) interaction, cooperation, and collaboration with others.

Vygotsky considered education to be the driving force behind the cultural development of the child because, for him, *obucheniye* leads development. Establishing and maintaining the ZPD effectively during the processes of *obucheniye* (reciprocal relationship between learning and teaching) and *vospitaniye* (education, cultivation, fostering, and mentoring) not only facilitates a successful learning process but also mediates students’ cultural development.

Relying on the holistic conception of the Tripartite Model, I addressed the issue of moral behaviour: Why do some students behave immorally despite having knowledge to

the contrary? Internalization is a process of acquiring a sense of ownership of what is being internalized and how it is internalized. We acquire a sense of ownership by making whatever we do, say, and feel, appeal to our leachnost. What appeals to my personality, appeals to me and becomes me. However, the assumption that children behave morally only as a result of thinking and feeling morally is wrong. Although positive future-oriented emotional experience is of paramount importance as a mediator in assisting the development of individual moral values and their embodiment in moral behaviour, it is the actual practicing of moral behaviour that (a) supports the persistence and longevity of moral emotions, and (b) makes the person moral.

Finally, cultural development is always triggered, accompanied, and permeated by emotional development. It is precisely through the mediation of culturally developed emotions as motivators that the zone of proximal development can be established and maintained so that the development of the child's higher mental functions and systems will succeed and lead to cultural development as a whole. When the Tripartite Model is applied successfully to establishing and maintaining the holistic zone of proximal development (which, in turn, presupposes an appeal to the whole personality manifested in behavioural mastery), the ZPD will encompass a positive emotional experience, appeal to the whole person (the child and/or adult), facilitate successful learning and, thus, further cultural development.

### **The Strengths of My Investigation**

How is my work original and distinct from what has already been done?



(1) Vygotsky's work has had tremendous impact on educational psychology and educational theory. Nonetheless, in many contemporary educational and psychological interpretations and applications of Vygotsky's work, the significance of the affective component is often underestimated or ignored. This underdeveloped and misinterpreted aspect of Vygotsky's ideas that I have investigated herein is of paramount importance to educators and educational psychologists; and, hence, deserves considerable attention in revival and elaboration.

(2) There is a gap between the typical Western treatment of emotions as grounded in the exclusively personal experience of individuals and Vygotsky's approach, which recognizes emotional development in the context of historically and culturally established practices. Such collective practices emphasize both self-control and self-expression for the benefit of societies as well as individuals. My thesis represents an extension to the Western understanding of Vygotsky's work. In particular, I conducted original interpretive research on the place and role of emotions and emotional development in Vygotsky's conceptions of personality (*leachnost*) and behavioural mastery within the social-educational context.

(3) Vygotsky never wrote explicitly about the particular Tripartite Model of cultural development, based on human emotions, that is central to this project. Nonetheless, it is my hypothesis that Vygotsky's theory of cultural development can be explicated more fully with such a Tripartite Model in place.

(4) In addition, I demonstrated the utility of my hypothesis of the Tripartite Model by arguing that the zone of proximal development can facilitate learning and development if, and only if, the ZPD is understood and employed in the context of a

holistic conception of cultural development as reflected in the Tripartite Model. Much current research on the ZPD emphasizes the extended version that reflects human emotions and desires (Goldstein, 1999; Mahn & John-Steiner, 2002; Nelmes, 2003). I attempted to show that (a) the challenge is not so much to add another dimension to a more accepted cognitive-socio-cultural-historical characterization of the concept of the ZPD, but to recognize the fact that, according to Vygotsky, these very cognitive, social, cultural, and historical dimensions of the ZPD already possess affective features; and, thus, (b) when, and only when, these affective features are addressed with the help of the Tripartite Model, the zone of proximal development will be successfully established and maintained so as most effectively and humanely to facilitate learning and development.

(5) I discussed the indivisibility between cognition and emotions in all higher intellectual activities and I provided support for the assertion that there is no ZPD in an uncaring environment.

(6) Based on the writings of Vygotsky, his followers, and current researchers in the fields of educational, cognitive, socio-cultural, theoretical psychology, emotional intelligence, and neuro-science, I supported the assertion that the higher intellectual activities not only incorporate higher emotional experiences (i.e., culturally developed emotions) but quite often rely on them.

(7) Upon re-evaluation of exactly what a neo-formation entails in adulthood (which was not a part of Vygotsky's investigation), my analysis and critique of the notion of periodization revealed that (a) the quality of the relationships among higher mental functions and systems can be used as a new parameter and/or marker to identify new psychological formations in adult development; and (b) well-integrated emotions can

serve as a more global informant with respect to such new developmental parameters and/or markers.

(8) Based on my interpretive analysis, I argued that the formation of higher psychological functions is only the beginning of the child's development. Further development is achieved only when such recently developed higher functions are firmly incorporated within the habitual structure of the child's personality across the entire range of development, within various contexts, and to the level of automaticity (behavioural mastery).

(9) I first noted Vygotsky's distinction between cultural development and disintegration (disontogenesis, roughly equivalent to "defective" or "distorted development"). I then questioned whether any process of transformation from social to individual under less desirable conditions (i.e., not leading to cultural development) should be called internalization. Based on these considerations, I proposed to use the word *internalization* only when the emotionally laden transformation involved is successful, and hence leads to cultural development.

(10) In contrast to many writings pertaining to Vygotsky's cultural historical theory and its application, I uncovered the emotional origin (and/or content) of many ideas, concepts, and terms in Vygotsky's writings, such as, internalization (*vrashchvaniye*), struggle (*bor'ba protivorechiy*), cultural development, neo-formation (*novo-obrazovaniye*), personality (*leachnost*), zone of proximal development, and emotional experience (*perezhivaniye*). Considering that, for Vygotsky, human emotions and desires represent the alpha and omega of the entire cultural development, I argued that it would be difficult (if not impossible) to assume that Vygotsky considered cultural

development as a mere collection of emotionless contradictions and negations in the “pure” spirit of Hegelian dialectics. Also, based on the etymological roots and synonyms (as well as the general denotation) of the word “struggle,” I affirmed that struggle first and foremost denotes negative emotional experience.

(11) Based on my own experience (working as an ESL teacher of adult immigrants and as a lyricist) and musical expertise, I described an originally created jazz chant “At the Doctor’s Office” and thoroughly elaborated my own process of creating this and similar jazz chants (involving language and music), using my holistic Tripartite Model within the ZPD in an adult ESL class.

### **The Weaknesses, Limitations, and Issues for Future Research**

Unfortunately, Vygotsky never wrote about specific neoformations that develop in adulthood. Modern developmental psychology also does not typically identify any qualitative differences between childhood and adult ontogenesis, and tends to be limited to child and adolescent psychology. Thus, it was not possible to provide many extant examples of the nature of cultural development in adulthood.

Of equal or greater importance to the topics of this thesis, Vygotsky never completed his theory of emotions. He was never explicit as to how to identify traces of emotions in behavioural mastery and personality, and, if and when identified, which emotions and under what conditions can be trusted and relied on. He never explained very well how exactly emotions can be used to mediate cultural development. His own thinking regarding emotion did not progress smoothly. Hence, there was difficulty in

using the chronology of his writings as a direct representation of changes in Vygotsky's thought.

Vygotsky's ultimate educational goal was to develop students' emotions culturally. What exactly happens between the prologue and the epilogue of development -- that is, exactly how do raw uncultivated emotions develop into culturally mediated emotional experiences that are embedded in personality? And, relatedly, how exactly does the external social world give rise to internal psychological experience and life? Vygotsky, unfortunately, does not provide direct answers to these important questions. His contention that "it is precisely the emotional reactions [or, as reflected in some of his later writings, the mediated reactions of culturally developed emotions] that have to serve as the foundation of the educational process" (1997c, p. 107) and his assertion that "affect opens the process of the child's mental development and construction of his personality as a whole" (1998, p. 227) are somewhat limited in their precise direction and the specific processes involved.

Finally, despite its popularity, the ZPD is one of the most misinterpreted and misunderstood conceptions in Western education. Some of these problems issue from difficulties in translation and interpretation between English and Russian. Other difficulties arise from the fact that Vygotsky wrote only briefly about the ZPD, and never suggested any detailed methodology for studying the ZPD or employing it as an assessment technique, leaving such matters up to the creativity and imagination of his reader-educators.

With the foregoing limitations and challenges in mind, the following questions deserve further investigation:

1. Are there any other ways (except through the ZPD) to facilitate further cultural development of the child's maturing functions?
2. Can a child develop without the ZPD?
3. According to Vygotsky (1998), motivation to learn comes from a maturing neoformation. What motivates adults to learn? What kind of new psychological systems (in addition to wisdom, world-view, and leachnost) can and/or should be developed in adulthood?
4. What specific basic (leading) activities can be implemented to develop such new psychological systems in adulthood?
5. Vygotsky was trying to use psychology to explain (as opposed to describe) the social origins of mental life. Can his cultural-historical theory be used to go beyond explanation to prediction and prescription?

## APPENDIX: “AT THE DOCTOR’S OFFICE”

Have you seen my little sister,  
Who complained about her blister?  
Yes, I have. But now she’s cautious,  
‘Cause she feels a little nauseous.

I have visited my brother,  
Who felt pain in his gallbladder.  
So, I gave him some suggestions:  
See an internist, ask some questions.

My son woke up with a sore throat,  
Because he was walking without his coat.  
And now, believe me, it gives me no pleasure  
To learn about my high blood pressure.

A friend of mine who had a headache  
Because she drank a lot of wine,  
Mistook her headache for her backache,  
And to her bed she was confined.

I said to my dentist: Would you please  
Give me the mirror to see my teeth.

The mirror was broken and I got a bruise  
So I couldn’t go on my cruise.

To be healthy by definition  
Keep your body in good condition.  
You would need no dietician,  
Said my dear paediatrician.

I came to see the doctor who’s insane  
Because I had some problems with my brain.  
He gave me anaesthesia, I complained.  
But later on I felt there was no pain.

My doctor’s a psychiatrist.  
His patients have no clue  
Why this prestigious scientist  
Quite often feels so blue.

Positive thinking is part of our fitness.  
The mind is a weapon against any illness.  
Less complaining and more laughter  
Keeps us healthy ever after.

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## BIBLIOGRAPHY

- Asmolov, A. (1998). *Vygotsky today: On the verge of non-classical psychology*. Commack, NY: Nova Science Publishers, Inc.
- Averill, J. R. (1984). The acquisition of emotions during adulthood. In C. Z. Malatesta & C. Izard (Eds.), *Affective processes in adult development* (pp. 23-43). Beverly Hills: Sage. Reprinted in: R. Harré (Ed.) (1986), *The social construction of emotions* (pp. 98-118). Oxford: Basil Blackwell.
- Averill, J. R. (2004). A tale of two snarks: Emotional intelligence and emotional creativity compared. *Psychological Inquiry*, 15, 228-233.
- Averill, J. R. (2005). Emotions as mediators and as products of creative activity. In J. Kaufman & J. Baer (Eds.), *Creativity across domains: Faces of the muse*. (pp. 225-243). Mahwah, NJ: Erlbaum.
- Bakhurst, D. (2007). Vygotsky's demons. In H. Daniels, M. Cole, & J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 50-76). NY, NY: Cambridge University Press.
- Barbour, I. (1974). *Myths, models, and paradigms: The nature of scientific and religious language*. London: SCM Press.
- Baron, R.A. & Byrne, D. (2000). *Social psychology* (9th ed.). Needham Heights, Mass.: A Pearson Education Company.
- Barrett, L.F. & Salovey, P. (2002). *The wisdom in feeling: Psychological processes in emotional intelligence*. NY, NY: The Guilford Press.
- Bein, E.S., Vlasova, T.A., Levina, R.E., Morozova, N.G., & Shif, Zh.I. (1993). Afterword. In R.W. Reiber & A.S. Carton (Eds.), *The collected works of L.S. Vygotsky*. Vol. 2. *The fundamentals of defectology: Abnormal psychology and learning defectology* (pp. 302-314). (J.E. Knox & C.B. Stevens, Trans.). New York: Plenum Press.
- Bellamy, A., Gore, D., and Sturgis, J. (2005). Examining the relevance of emotional intelligence within educational programs for the gifted and talented. *Electronic Journal of Research in Educational Psychology*. No. 6(3), pp. 53-78. [[www.investigacion-psicopedagogica.org/revista/articulos/6/english/Art](http://www.investigacion-psicopedagogica.org/revista/articulos/6/english/Art)]
- Berejkovskaya, E.L. (2006). Potential negative consequences of education based on the principle of the zone of proximal development. *Journal of Russian and East European Psychology*, vol. 44, no. 6, pp. 37-53.



- Bodrova, E. & Leong, D.J. (1996). *Tools of the mind: The Vygotskian approach to early childhood education*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc.
- Bozhovich, L.I. (2004). Developmental Phases of Personality Formation in Childhood (III). *Journal of Russian and East European Psychology*, 42(4), pp. 71–88.
- Brown, H.D. (1994). *Teaching by principles: An interactive approach to language pedagogy*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Brown, H.D. (2000). *Principles of language learning and teaching*. (4th Ed) White Plains, N.Y.: Addison Wesley Longman, Inc.
- Brown, H.D. (2002). *Strategies for success: A practical guide to learning English*. Longman.
- Campbell, D.G. (2001). *The Mozart effect: Tapping the power of music to heal the body, strengthen the mind, and unlock the creative spirit*. NY, NY: HarperCollins Publishers Inc.
- Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In Kozulin, A., Gindis, B., Ageyev, V.S., & Miller, S.M. (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 39-64). Cambridge University Press.
- Cole, M. (1996). *Cultural psychology: A one and future discipline*. Cambridge, MA: The Belknap Press of Harvard University Press.
- Cole, M. (2005). Putting culture in the middle. In H. Daniels (Ed.), *An Introduction to Vygotsky* (pp. 199-226). (2nd ed.) London: Routledge.
- Cole, M. & Gajdamaschko, N. (2007). Vygotsky and culture. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 193-211). NY, NY: Cambridge University Press.
- Damasio, A.R. (1994). *Descartes' error: Emotion, reason and the human brain*. New York: G.P. Putnam's Sons.
- Damasio, A.R. (2000). A second chance of emotion. In Lane, R.D., & Nadel, L. (Eds.), *Cognitive neuroscience of emotion*. NY, NY: Oxford University Press.
- Daniels, H. (Ed.) (2005). *An Introduction to Vygotsky*. (2nd ed.) London: Routledge.
- Daniels, H. (2007). Pedagogy. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 307-331). NY, NY: Cambridge University Press.
- Daniels, H., Cole, M. & Wertsch, J.V. (Eds.), (2007). *The Cambridge companion to Vygotsky*. NY, NY: Cambridge University Press.
- Darley, J. M., and Batson, C.D. (1973). From Jerusalem to Jericho: A study of situational and dispositional variables in helping behaviour. *JPSP*, 27, pp. 100-108.

- Dean, M. (Writer) & Paul, A. (Director). (1990, August 27). *Transformers*, Episode #1: The butterflies of Zagorsk. BBC TV.
- del Rio, P. & Alvarez, A. (2007). Inside and outside the Zone of Proximal Development. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 276-303). NY, NY: Cambridge University Press.
- de Sousa, R. (1987). *The Rationality of Emotion*. Cambridge, MA: MIT Press.
- de Sousa, R. (2004). Emotions: What I know, what I'd like to think I know, and what I'd like to think. In R.C. Solomon (Ed.), *Thinking about feeling: Contemporary philosophers on emotions* (pp. 61-75). Oxford, NY: Oxford University Press.
- DiPardo, A. & Potter C. (2003). Beyond cognition: A Vygotskian perspective on emotionality and teachers' professional lives. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 317-345). Cambridge University Press.
- Elkonin, D.B. (1998). Epilogue. In R.W. Reiber (Ed.), *The collected works of L.S. Vygotsky. Vol. 5. Child psychology*. (M.J. Hall, Trans.). New York: Plenum Press.
- Emerson, C. (1996). The outer word and inner speech: Bakhtin, Vygotsky, and the internalization of language. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 123-142). London: Routledge.
- Engestrom, Y. (2007). Putting Vygotsky to work: The Change Laboratory as an application of double stimulation. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 363-382). NY, NY: Cambridge University Press.
- Fulani, L. (2000). Race, identity and epistemology. In L. Holzman and J. Moss (Eds.), *Postmodern psychologies, societal practice and political life* (pp.151-264). New York: Routledge.
- FreeDictionary.com. <http://sb.thefreedictionary.com/?Word=prosody&mode=>
- Funk & Wagnalls Standard College Dictionary. (1982). (Canadian Edition) Vancouver, Canada: Fitzhenry & Whiteside Ltd.
- Gajdamaschko, N. (2006). Vygotsky on imagination development. *Educational Perspectives*, 39(2), pp. 34-40.
- Gal'perin, I.P. (Ed.) (1977). *New English-Russian dictionary* (2<sup>nd</sup> ed.). Moscow: Russian Language Publishers.
- Giest, H. and Lompscher, J. (2003). Formation of learning activity and theoretical thinking in science teaching. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 267-288). Cambridge University Press.

- Glick, J. (2004). Introduction to The history of the development of higher mental functions. In R.W. Rieber and D.K. Robinson (Eds.), *The essential Vygotsky* (345-357). New York: Kluwer Academic/Plenum Publishers.
- Goldstein, L.S. (1999). The relational zone: The role of caring relationships in the co-construction of mind. *American Educational Research Journal*, Vol. 36(3), pp. 647-673.
- Gonzalez-Rey, F. (2002). L.S. Vygotsky and the question of personality in the cultural-historical approach. In D. Robbins & A. Stetsenko (Eds.), *Voices within Vygotsky's non-classical psychology: Past, present, future* (pp. 129-142). New York: Nova Science. Retrieved October 3, 2006, from <http://lchc.ucsd.edu/MCA/Paper/index.html>
- Gordon, E.E. (1986). *Designing objective research in music education: Fundamental considerations*. Chicago, IL: G.I.A. Publications.
- Gredler, M.E., & Shields, C.C. (2008). *Vygotsky's legacy: A foundation for research and practice*. NY, NY: The Guilford Press.
- Hegel, G.W. F. (1998). *Phenomenology of Spirit*. (Translated by A. V. Miller). Motilal Banarsidass Publ.  
[[http://books.google.ca/books?as\\_auth=Georg+Wilhelm+Friedrich+Hegel](http://books.google.ca/books?as_auth=Georg+Wilhelm+Friedrich+Hegel)]
- Hodgkinson, G.P., Langan-Fox, J. and Sadler-Smith, E. (2008). Intuition: A fundamental bridging construct in the behavioural sciences. *British Journal of Psychology*, 99, 1-27.
- Holland, D. & Lachicotte, W. Jr. (2007). Vygotsky, Mead, and the new sociocultural studies of identity. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 101-135). NY, NY: Cambridge University Press.
- Ilyenkov, Ev. (1977). *Dialectical logic: From the history of dialectics*. (A. Blunden, Trans.). Progress Publishers. (Original published in Russian 1974). <http://www.marxists.org/archive/ilyenkov/works/essays/index.htm>[[evans-experientialism.freewebspace.com/ilyenkov01.htm](http://evans-experientialism.freewebspace.com/ilyenkov01.htm)]
- Jantzen, W. (2002). The Spinozist programme for psychology: An attempt to reconstruct Vygotsky's methodology of psychological materialism in view of his theories of emotions. In D. Robbins and A. Stetsenko (Eds.), *Voices Within Vygotsky's Non-Classical Psychology: Past, Present, Future* (pp. 101-112). New York: Nova Science.
- Jaques, P.A., Bocca, E., and Vicari, R.M. (2003). Considering student's emotions in computational educational systems. In: Simpósio Brasileiro de Informática na Educação, 2003, Rio de Janeiro. Anais do Simpósio Brasileiro de Informática na Educação. Rio de Janeiro: UFRJ, 2003. p. 543-552.

- Karpov, Y.V. (2003). Development through the lifespan: A neo-Vygotskian approach. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 138-155). Cambridge University Press.
- Karpov, Y.V. (2005). *The neo-Vygotskian approach to child development*. Cambridge University Press.
- Koshmanova, T.S. (2007). Visions and implementation of Cultural-Historical Theory. *Journal of Russian and East European Psychology*, vol. 45(2), pp. 61–95.
- Kotik-Friedgut, B. and Friedgut, T.H. (2008). A man of his country and his time: Jewish influences on Lev Semionovich Vygotsky's world view. *History of Psychology*, vol. 11(1), 15-39.
- Kozulin, A. (1986). Introduction. In L.S. Vygotsky, *Thought and language*. Cambridge, Mass, M.I.T. Press.
- Kozulin, A. (1990). *Vygotsky's psychology: A biography of ideas*. Cambridge, MA: Harvard University Press.
- Kozulin, A. (1996). The concept of activity in Soviet psychology: Vygotsky, his disciples and critics. In H. Daniels (Ed.). *An Introduction to Vygotsky* (pp. 99-122). London: Routledge.
- Kozulin, A. (1998). *Psychological tools: A sociocultural approach to education*. London, England: Harvard University Press.
- Kozulin, A. (1999). *Vygotsky's psychology: A biography of ideas* (paperback ed.). Cambridge, MA: Harvard University Press.
- Kozulin, A. (2003). Psychological tools and mediated learning. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 15-38). Cambridge University Press.
- Kozulin, A. & Gindis, B. (2007). Sociocultural theory and education of children with special needs: From defectology to remedial pedagogy. In H. Daniels, M. Cole, and J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 332-362). NY, NY: Cambridge University Press.
- Kravtsov, G.G. (2006). The problem of personality in the context of cultural-historical psychology. *The Problem of Development*, 1. [<http://vygotsky.mgppu.ru/1223>]
- Kravtsova, E.E. (2006). The Concept of Age-Specific New Psychological Formations in Contemporary Developmental Psychology. *Journal of Russian and East European Psychology*, vol. 44, no. 6, pp. 6–18.
- Lantoff, J.P. (2003). Intrapersonal communication and internalization in the second language classroom. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 349-370). Cambridge University Press.

- Lave, J. and Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press.
- Lems, K. (1996). *For a song: Music across the ESL curriculum*. Paper presented at the annual convention of Teachers of English to Speakers of Other Languages, Chicago. (ED No. 396 524)
- Leontiev, A.N. (1932). The development of voluntary attention in the child. *Journal of Genetic Psychology*, 40, pp. 52-81.
- Leontiev, A.N. (1978). *Activity, consciousness, and personality*. Englewood Cliffs, NJ: Prentice-Hall. (Retrieved on February 24, 2000, from <http://lchc.ucsd.edu/MCA/Paper/index.html>)
- Leontiev, A.N. (1979). The problem of activity in psychology. In J.V. Wertsch (Ed.), *The concept of activity in Soviet psychology* (pp. 37-71). Armonk, NY: Sharpe. [http://www.comnet.ca/~pballan/Leontiev\(1979\).html](http://www.comnet.ca/~pballan/Leontiev(1979).html)
- Leontiev, A.N. (1997). On Vygotsky's creative development [1]. In R.W. Reiber and J. Wollock (Eds.), *The Collected Works of L.S. Vygotsky. Volume 3, Problems of the Theory and History of Psychology* (pp. 9-32). New York: Premium Pres.
- Leontiev, A.A. (2005). Предисловие. [Introduction]. In L.S. Vygotsky (2005). *Орудие и знак в развитии ребенка* (pp. 4-10). [Tool and sign in child development]. Moskva: Smysl, Eksmo. (Original Russian published in 1930) [[yanko.lib.ru/books/psycho/vugotskiy-psc\\_razv\\_chel\\_9orudie\\_i\\_znak\\_v\\_razviti\\_rebenka.pdf](http://yanko.lib.ru/books/psycho/vugotskiy-psc_razv_chel_9orudie_i_znak_v_razviti_rebenka.pdf)]
- Liu, C.H. and Matthews, R. (2005). Vygotsky's philosophy: Constructivism and its criticism examined. *International Education Journal*, 6(3), 386-399. [[ehlt.flinders.edu.au/education/iej/articles/v6n3/liu/paper.pdf](http://ehlt.flinders.edu.au/education/iej/articles/v6n3/liu/paper.pdf)]
- Lozanov, G. (1978). *Suggestology and outlines of suggestopedy*. New York: Gordon and Breach.
- Luria, A.R. (1987). Afterword. In L.S. Vygotsky; *The collected works of L.S. Vygotsky. Vol. 1. Problems of general psychology* (pp. 359-374). (R. Reiber & A. Carton, Eds.), (N. Minick Trans.). New York: Plenum Press.
- Mahn, H. & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: Sociocultural perspectives on the future of education*. Oxford (UK): Malden. [<http://people.ucsc.edu/~gwells/CHATbook/Ch4.MahnJSteiner.html>]
- Marx, K. (1844). *On The Jewish Question*. [<http://www.marxists.org/archive/marx/works/1844/jewish-question/index.htm>]
- Marx, K. and Engels, F. (1848). *The Communist Manifesto*. Toronto, Ontario: Penguin Books Canada Ltd. [<http://books.google.com/books?id=yhOOvF61XKgC&>]

printsec=copyright&dq=marx+and+struggle]

- Matthews, G., Zeidner, M., & Roberts, R.D. (2003). Emotional intelligence: Science and myth. MIT Press.
- McCarthy, W. (1985). Promoting language development through music. *Academic Therapy*, 21(2), 237-242.
- Meshcheryakov, B.G. (2007). Terminology in L.S. Vygotsky's writings. In H. Daniels, M. Cole, & J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 155-177). NY, NY: Cambridge University Press.
- Merriam-Webster OnLine <http://www.m-w.com/cgi-bin/dictionary?book=Dictionary&va=struggle>
- Minick, N. (1987). The development of Vygotsky's thought: An introduction. In R. W. Rieber & A. S. Carton (Eds.), *The collected works of L. S. Vygotsky Vol. 1: Problems of general psychology* (pp. 17-36). New York: Plenum.
- Moll, L.C. (Ed.) (1990). Vygotsky and education: Instructional implications and applications of sociohistorical psychology. NY, NY: Cambridge University Press.
- Moran, S. & John-Steiner, V. (2003). Creativity in the Making: Vygotsky's Contemporary Contribution to the Dialectic of Creativity & Development. Counterpoint Series. Oxford University Press.
- Nelmes, P. (2003). Developing a conceptual framework for the role of the emotions in the language of teaching and learning. Forthcoming in Proceedings of CERME-3; February 28 - March 3, 2003, Bellaria, Italy.
- Oxford Dictionary Online [[http://www.askoxford.com/results/?view=dev\\_dict&field=12668446=schizophrenia&branch=13842570&textsearchtype=exact&sortorder=score%2Cname](http://www.askoxford.com/results/?view=dev_dict&field=12668446=schizophrenia&branch=13842570&textsearchtype=exact&sortorder=score%2Cname)] [http://www.askoxford.com/concise\\_oed/struggle?view=uk](http://www.askoxford.com/concise_oed/struggle?view=uk)
- Ozhegov, S.I. (Ed.) (1961). Slovar Russkogo Yazyka. Moscow: State Publishers of Foreign and National Dictionaries. (Russian Dictionary)
- Penuel, W.R. and Wertsch, J.V. (1995) Vygotsky and identity formation: A sociocultural approach. *Educational Psychologist*, 30(2), pp. 83-92.
- Pitton, C.R. (1988). Find out: An interaction book for adults who are learning to speak English. Vancouver, BC: Canada Language Centre Publications.
- Prikhozhan, A.M. & Tolstykh, N.N. (2004). "Interesting Psychology" L.S. Vygotsky and L.I. Bozhovich. *Journal of Russian and East European Psychology*, vol. 42, no. 4, pp. 7-19.
- Ratner, C., (2003-4). Child psychology: Vygotsky's conception of psychological development, contemporary uses of Vygotsky's approach, criticism of some neo-Vygotskians. Retrieved on August 10, 2005, from [<http://www.humboldt1.com/~cr2/vygdev.htm>]

- Richard-Amato, P.A. (1996). *Making it happen: Interaction in the second language classroom: From theory to practice*. (2<sup>nd</sup> ed.), White Plains, NY: Addison-Wesley Publishing Group.
- Robbins, D. (2004). Guest Editor's Introduction. *Journal of Russian and East European Psychology*, 42(4), pp. 3–6.
- Robbins, D. (2001). *Vygotsky's psychology-philosophy: A metaphor for language theory and learning*. NY, NY: Kluwer Academic/Plenum Publishers.
- Rogoff, B. (1995). Observing sociocultural activity on three planes: Participatory appropriation, guided participation, and apprenticeship. In J.V. Wertsch, P. del Rio, and A. Alvarez (Eds.), *Sociocultural studies of mind* (pp. 139-164). New York: Cambridge.
- Schiedel, D. and Marcia, J. (1985). Ego integrity, intimacy, sex role orientation, and gender. *Developmental Psychology*, 21, pp. 149-160.
- Schmittau, J. (2003). Cultural-historical theory and mathematics education. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 225-245). Cambridge University Press.
- Scribner, S. (1985). *Vygotsky's uses of history*. (Ch. 5). Retrieved on June 3, 2005, from ([lhc.ucsd.edu/MCA/Paper/Engestrom/expanding/Ch.%205.doc](http://lhc.ucsd.edu/MCA/Paper/Engestrom/expanding/Ch.%205.doc))
- Stanislavsky, K.S. (1954). *Sobraniye sochineniy*. [The collected works of K.S. Stanislavsky in 8 volumes], Vol. 1. *Moya Zhizn v iskusstve* [My life in art]. Moskva: Iskusstvo. [Moscow: Art State Publishing.]
- Stetsenko, A (2004) Introduction to "Tool and Sign in the Development of the Child", in Vygotsky, Rieber, Robinson, & Bruner (Eds.), *The Essential Vygotsky* (pp. 501-12). New York: Kluwer Academic/Plenum Publishers. *Scientific Legacy*.
- Taber, K. S. (Ed.), (2007). *Science education for gifted learners*. Routledge.
- The Free Dictionary on Line <http://www.thefreedictionary.com/culture>
- Tomasello, M., Carpenter, M., & Liszkowski, U. (2007). A new look at infant pointing. *Child Development*, 78(3), 705-722.
- Tudge, J. & Scrimsher, S. (2003). Lev S. Vygotsky on education: A cultural-historical, interpersonal and individual approach to development. In B.J. Zimmerman and D.H. Schunk (Eds.), *Educational psychology: A century of contributions*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Tutu, D. (2004, April 20). *Education of Mind, Education of Heart*. UBC presentation at the conference, Vancouver, B.C. [[educ.ubc.ca/news/archive/may\\_04.html](http://educ.ubc.ca/news/archive/may_04.html)]
- Valsiner, J. & Van der Veer, R. (1993). The encoding of distance: The concept of the

- zone of proximal development and its interpretations. In R.R. Cocking and K.A. Renninger (Eds.), *The development and meaning of psychological distance* (pp. 35-62). New Jersey: Hillsdale.
- Valsiner, J. & Van der Veer, R. (2005). On the social nature of human cognition: An analysis of the shared intellectual roots of George Hebert Mead and Lev Vygotsky. In H. Daniels (Ed.), *An introduction to Vygotsky* (2<sup>nd</sup> ed.) (pp. 81-100). NY, NY: Routledge.
- Van der Veer, R., & Valsiner, J. (1993). *Understanding Vygotsky: A quest for synthesis*. Cambridge, MA: Basil Blackwell, Inc.
- Van der Veer, R., & Valsiner, J. (1994). *The Vygotsky reader*. Malden, MA: Blackwell Publishers, Inc.
- Van der Veer, R. & van IJzendoorn, M.H. (1985). Vygotsky's theory of the higher psychological processes: Some criticism. *Human Development*, 28; pp. 1-9. [https://openaccess.leidenuniv.nl/retrieve/2059/168\\_043.pdf](https://openaccess.leidenuniv.nl/retrieve/2059/168_043.pdf).
- Vasilyuk, F.E. (1984). *Psikhologiya perezhivaniya*. Moscow State University Publishing. [<http://www.psylib.ukrweb.net/books/vasif01/txt00.htm>]
- Veresov, N. (2004). Zone of proximal development (ZPD): The hidden dimension? *Published at: Ostern, A. & Heila-Ylikallio, R. (Eds.). (2004). Sprak som kultur – brytningar I tid och rum. [Language as culture – tensions in time and space]. Vol. 1, pp. 13-30, Vasa.*
- Veresov, N. (2006). Leading activity in developmental psychology: Concept and principle. *Journal of Russian and East European Psychology*, vol. 44, no. 5, pp. 7–25.
- Vvedensky, B.A. (Ed.), (1954). *Russian Encyclopedic Dictionary*. Moscow, USSR: Large Soviet Encyclopedia. (Entsiklopedicheskii Slovar)
- Vygotsky's Archive (<http://marxists.org/archive/vygotsky/index.htm>)
- Vygotsky, L.S. (1930). *Orudiye i znak v razvitii rebyonka*. [Tool and Sign in Child Development.] Private Archives of L.S. Vygotsky. Manuscript.
- Vygotsky, L.S. (1956). *Izbrannye psikhologicheskie issledovaniya*. [Selected psychological investigations]. Moscow, Nauka.
- Vygotsky, L.S. (1971). *The psychology of art*. Cambridge: The MIT Press. (Original published in Russian 1925). Retrieved on September 30, 2005, from <http://marxists.org/archive/vygotsky/works/1925/index.htm>
- Vygotsky, L.S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Vygotsky, L.S. (1985). *Istoriya razvitiya vysshykh psikhicheskikh funktsiy*. [The history



of the development of higher mental functions.] Moskva: Pedagogika.

- Vygotsky, L.S. (1986). *Thought and language*, (A. Kazulin, Trans.). Cambridge, Mass, M.I.T. Press. (Original Russian work published 1934)
- Vygotsky, L.S. (1986a). [Concrete human psychology: Unpublished manuscript]. *Soviet Psychology* 27 (2), 523-577. (Original Russian work published 1929) [<http://lchc.ucsd.edu/MCA/Paper/index.html>]
- Vygotsky, L. (1987). The collected works of L.S. Vygotsky. Vol. 1. *Problems of general psychology*. (R. Reiber & A. Carton, Eds.), (N. Minick, Trans.). New York: Plenum Press.
- Vygotsky, L. (1993). The collected works of L.S. Vygotsky. Vol. 2. *The fundamentals of defectology: Abnormal psychology and learning defectology*. (R.W. Reiber & A.S. Carton, Eds.), (J.E. Knox & C.B. Stevens, Trans.). New York: Plenum Press.
- Vygotsky, L.S. (1994). Thought in schizophrenia. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 313-326). Oxford, England: Blackwell. (Original Russian work published 1934).
- Vygotsky, L.S. (1994). The problem of the environment. In R. van der Veer & J. Valsiner (Eds.), *The Vygotsky reader* (pp. 338-354). Oxford, England: Blackwell. (Original Russian work published 1935).
- Vygotsky, L. (1997a). The Collected Works of L.S. Vygotsky. Volume 3, *Problems of the theory and history of psychology*. New York: Premium Pres.
- Vygotsky, L.S. (1997a). Vol. 3; Chapter 15; *The historical meaning of the crisis in psychology: A methodological investigation*. [[marxists.org/archive/vygotsky/works/crisis/psycr05.htm](http://marxists.org/archive/vygotsky/works/crisis/psycr05.htm)]
- Vygotsky, L. (1997b). The collected works of L.S. Vygotsky. Vol. 4. *The history of the development of higher mental functions* (R.W. Rieber, M.J. Hall, & J. Glick, Eds.). New York: Plenum Press.
- Vygotsky, L.S. (1997c). *Educational Psychology*. Boca Raton, FL: St Lucie Press. Original published in Russian 1926. Retrieved on May 17, 2005, from <http://marxists.org/archive/vygotsky/works/1926/educational-psychology/index.htm>
- Vygotsky, L. (1998). The collected works of L.S. Vygotsky. Vol. 5. *Child psychology*. (R.W. Reiber, Ed.), (M.J. Hall, Trans.). New York: Plenum Press.
- Vygotsky, L. (1999). The collected works of L.S. Vygotsky. Vol. 6. *Scientific legacy*. (R.W. Reiber, Ed.), (M.J. Hall, Trans.). New York: Plenum Press.

- Vygotsky, L.S. (1999). On the problem of the psychology of the actor's creative work. In R.W. Reiber (Ed.), *The collected works of L.S. Vygotsky*. Vol. 6, *Scientific legacy* (pp. 237-244). (M.J. Hall, Trans.). New York: Plenum Press. (Original published in Russian 1932 <http://www.marxists.org/archive/vygotsky/works/1932/actors-creativity.htm>)
- Vygotsky, L.S. (2004). Imagination and creativity in childhood. *Journal of Russian and East European Psychology*. Vol. 42(1), 7-97.
- Vygotsky, L.S. (2005). Орудие и знак в развитии ребенка. [Tool and sign in child development]. Moskva: Smysl, Eksmo. (Original Russian published in 1930) [[yanko.lib.ru/books/psycho/vugotskiy-psc\\_razv\\_chel-9orudie\\_i\\_znak\\_v\\_razvitii\\_rebenka.pdf](http://yanko.lib.ru/books/psycho/vugotskiy-psc_razv_chel-9orudie_i_znak_v_razvitii_rebenka.pdf)]
- Wells, G. (1999). *Dialogic inquiry: Towards a sociocultural practice and theory of education* (pp. 313-334). New York: Cambridge University Press.
- Wertsch, J.V. (1985). *Vygotsky and the social formation of mind*. Cambridge, Massachusetts: Harvard University Press.
- Wertsch, J.V. (Ed.), (1985). *Culture, communication, and cognition: Vygotskian perspectives*. Cambridge University Press.
- Wertsch, J.V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.
- Wertsch, J.V. (1998). *Mind as action*. Oxford University Press.
- Wertsch, J.V. & Tulviste, P. (2005). L.S. Vygotsky and contemporary developmental psychology. In H. Daniels (Ed.), *An introduction to Vygotsky* (pp. 59-80). (2nd ed.) London: Routledge.
- Wheeler, M. (Ed.) (1972). *The Oxford Russian-English dictionary*. Oxford University Press.
- XMCA On-Line Discussions. <http://lhc.ucsd.edu/mca/Mail/>
- XMCA Research Paper Archive. <http://lhc.ucsd.edu/MCA/Paper/index.html>
- Yaroshevsky, M. (1989). *Lev Vygotsky*. (S.Syrovatkin, Trans.) Moscow: Progress Publishers.
- Yaroshevsky (Iaroshevskii), M.G. (1999). Experience and the drama of the development of personality: Vygotskii's last word. *Russian Social Science Review*, 40(2), pp. 87-101. (M. Vale, Trans.) (Original Russian published 1993) [Also in *Russian Studies in Philosophy*, 36(1), 1997, pp. 70 – 83]
- Yaroshevsky, M. & Gurgenzidze, G.S. (1997). Epilogue. In *The Collected Works of L.S. Vygotsky*. Vol. 3, *Problems of the Theory and History of Psychology*. (R.W. Rieber & J. Wollock, Eds.) (R. van der Veer, Trans.). New York: Premium Pres.

- Zinchenko, V.P. (2007). Thought and word: The approaches of L.S. Vygotsky and G.G. Shpet. In H. Daniels, M. Cole, & J.V. Wertsch (Eds.), *The Cambridge companion to Vygotsky* (pp. 212-245). NY, NY: Cambridge University Press.
- Zuckerman, G. (2003). The learning activity in the first year of schooling: The developmental path toward reflection. In A. Kozulin, B. Gindis, V.S. Ageyev, & S.M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 177-199). Cambridge University Press.