

## VIII. THE ACTIVITY THEORY APPROACH

In this chapter I will be drawing on an approach to cognitive psychology that was born in Russia but now has adherents around the globe. It is known as activity theory. I have two main objectives. The first is to gain more insight into how the OW works, and through that route to contribute to enhancing organizational learning generally. The second is to show how the activity theory approach has enhanced my concept of unbounded organization.

### Silos and Bridges

I label this first section of this eighth chapter with the metaphor “silos and bridges” to suggest that in a small way I am contributing to building “bridges” between bodies of knowledge that have been unfortunately separated in separate “silos.” One is the “silo” of management science. The other is the “silo” of activity theory psychology. Actually there are two sorts of bridges between silos in question. One sort of bridge is between two sets of theories of psychology and education, one set developed in the former Soviet Union and the other developed mainly in the United States. Here bridges have already been built in recent years by scholars like James V. Wertsch, Alex Kazulin, Jerome Bruner, and Michael and Sheila Cole. Here I only applaud and perhaps add a few planks to the existing bridges. But I think I am among the pioneers regarding a second sort of bridge: one connecting activity theory with organizational development.<sup>1</sup>

Bridging epistemological divides is in the spirit of my variant of the grounded theory process described in the previous chapter. As I have looked for the theoretical insights that explain or help to interpret working practice, I have found myself coursing across different disciplines. In seeking to understand OW practice and organizational development, I have been led towards theory that I might not otherwise have encountered. And I have been led to what I am calling an unbounded viewpoint. Contrasting activity theory with Lewinian social psychology allows me to make more explicit some features of the unbounded viewpoint I have been talking about.

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<sup>1</sup> Within management studies as a whole there is a considerable school of thought applying cognitive psychology including activity theory to the organization of work. See Joseph Porac and Mary Ann Glynn’s review of Cognition and Communication at Work edited by Yrjo Engestrom and David Middleton. Academy of Management Review. Vol. 24 (1999) pp. 582-585.

Going beyond the sort of social psychology represented by Lewin, and adding to the organizational learning trends in management science, I arrive at a wider more comprehensive and more useful theory. In an important sense all of the approaches summarized in the previous chapter that make organizations more effective through Organizational Learning can be accommodated within the epistemological framework of Activity Theory and *then there is a surplus left over*. In other words with an unbounded activity theory approach we can do everything we can do with the findings and insights of Chris Argyris, systems theory, total quality management, business excellence, management as design, and in general mainstream up to date management thinking *and then we can do more*.

This is not just an academic point. It is underpinning for unbounded organization as an approach at the level of general social-systems organization and management. I think of the following reflections on activity theory as contributing to widening the lens, to expanding the viewpoint, to opening the mind. I connect different viewpoints by showing that they fit in a wider synthesis. On a practical level I seek to promote the cooperation that can solve social and ecological problems that otherwise cannot be solved by encouraging enterprises to align themselves with the societal enterprise, and to do so with a deepened ethical commitment and an intellectually powerful capacity to “think outside the box.”

These are bold claims. Activity theory will help me to show that they are not exaggerated or off-the-wall, but simple logical consequences of reasonable premises.

One might ask why, if unbounded organization is a simple and logical consequence of reasonable premises, it takes an African who has spent his life working as a social entrepreneur and manager of social development organizations to articulate it. Why is it not a concept already obvious to everybody? One reason for delay in appreciating the Moraisian ideas I and others have been working with for several decades has been no doubt a certain prejudice against any theory couched in Marxist terms. The same explanation can be given with important qualifications for some of the delays in the reception of the ideas in Russian psychology to be discussed in this chapter. The scientific ideological divide (which was related to the bitter political divide that separated Marxists from Anti-Marxists) caused affine sets of ideas whose interaction and dialogue might have been fruitful to operate in parallel lines for more than half of the 20<sup>th</sup> century. For several decades they seldom related. When they did relate it was

usually to caricature the other.<sup>2</sup> And in the case of Russian psychology there has been an additional reason for delay, which is that for three decades the seminal ideas of Lev Vygotsky were banned as counter-revolutionary in the Soviet Union itself. Even after the ban was lifted they tended to be viewed with disfavour. For both these reasons even at this post Cold War late date, and in spite of progress in recent decades, mutual understanding is still retarded. However, I do not want to attribute to politics all of the answer to the question, “Why are these simple and reasonable concepts not already obvious to everybody?” Even without McCarthyists and Stalinists to intimidate the free exchange of scientific ideas, the academic establishments of the world’s universities are notorious for reluctance to cross disciplinary boundaries. They are notorious for establishing “silos” that are the private preserves of specialists who talk only to each other, whoever may wield political power. I have been seeking intellectual respectability for my own transdisciplinary approach by borrowing from Barry Glaser and Anselm Strauss the methodological principle that it is legitimate to let my theoretical conclusions grow out of my experience in fieldwork and practice on the ground. I take this principle as encouragement to bring in other people’s theories from diverse disciplines when for one reason or another I encounter them, and when I find them useful.<sup>3</sup>

It should be stated at the outset that I will be mining extensive “canons” or bodies of theory and even genres of writing. I will make my own use of vast bodies of scholarship. There is obvious peril here. Brisk and apparently “skimpy” treatments of difficult concepts can suggest neglect for the nuances of theory. They may seem to reduce complex ideas into basic formulations. I shall seek to address this by going into depth at points where it is necessary for my purposes to show the relevance of particular insights, but otherwise going rather quickly over the terrain. At any rate I commend to other scholars an exhaustive exploration of my theoretical sources. This chapter seeks to connect activity theory to my social development concerns. It does not pretend to give an exhaustive account of activity theory or to contribute anything new to that field.

### De Morais and the Strengthening of Dialogue

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<sup>2</sup> Stephen Toulmin in a review of Lev Vygotsky’s Thought and Language in the New York Review of Books, September 28, 1978, pp. 51-57, traces the history of the isolation of Soviet and western psychology during much of the twentieth century.

<sup>3</sup> It perhaps bears briefly repeating here some points already discussed. I do not claim to have followed scrupulously Glaser and Strauss’s method. Nor do I claim that they would endorse the use I make of it. Nor do I seek to defend their method against objections brought by critics.

I have come to think that in order to quicken social development, and in order to move toward overall society-wide unbounded organization, we need to strengthen the dialogue between mainstream (mainly USA) social psychology and management theory, and the activity theory that has its roots in Russian social psychology. This means that we have to understand how the cognitive science now worldwide but with roots in that other tradition is informing and can further inform applied psychology, and through applied psychology the world scene.

I take de Morais' voice to be a distinctive voice with something new to contribute to many dialogues. These would include the dialogues I have been involved in for several decades among development practitioners schooled in the discourses of the Aid Chain.<sup>4</sup> His explicit grounding in Marxism, notwithstanding the early embrace of his method by United Nations agencies and by the liberalizing government of Mario Soares in Portugal, is a drawback in some ways but an asset in others. His perspective is valuable simply because for many it is new. It is especially valuable for linking psychological concepts that have emerged within different socio-cultural milieus, languages and historical periods. His Marxist roots provide a guarantee that social psychology and cognitive psychology will be from the beginning scientifically understood in historical context. The Lewinian tradition that has been so influential "in the other silo" has been, as we have seen, explicitly and deliberately anti-historical.

### The Parts of this Chapter

This chapter is divided into two parts. The first part outlines an activity theory perspective on how we learn. It is about the science of learning or *cognition theory*. More specifically it is about the relationship between learning and organization. Although the Soviet psychologist Alexei N. Leont'ev (1903-1979) was the source explicitly acknowledged by the young de Morais, the tradition in which both (de Morais and Leont'ev) worked is best introduced by examining the work of Lev Vygotsky (1896-1934).<sup>5</sup> Vygotsky has made a dramatic impact on Anglophone cognitive science and

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<sup>4</sup> In a section exploring why "a method that has shown such excellent results has not spread more widely", Sobrado in the Carmen and Sobrado volume p. 21 points to a number of inhibitory factors, not least the "conceptual mode and language, a throwback to the 1950s, in which the Theory of Organization is couched" and points out that though de Morais's discourse is ideologically unorthodox from a purist Marxist-Leninist perspective "this mere association was enough to brand him and his ideas as instruments of the 'Evil Empire'".

<sup>5</sup> Scholars differ on whether activity theory properly so called began only after Vygotsky's death in the work of A.N. Leont'ev, or whether its later development depended so much on Vygotsky's work that it can be regarded as beginning with him even though he did not use the term. I take the latter view, treating Vygotsky as first generation activity theory, Leont'ev as second generation, and Engestrom as third generation. This issue is clouded by the fact that Vygotsky's works were banned in the Soviet Union from

cultural studies since the late 1970s, when his Mind in Society was translated into English. His “socio-cultural approach” to education has won many adherents and has come to be seen as a distinctive “model.” But there has not hitherto been attention to the implications of Vygotskian thought for management and organization theory. This first part of the chapter is mainly about Vygotsky, treating him as the first generation of activity theory, with some discussion at the beginning and at the end to other versions of activity theory. It was one of the other versions, the school led by the A.N. Leont’ev, that flourished and became orthodox in the Soviet Union after Vygotsky’s untimely death and that was cited by de Morais as a source of his own ideas.

The second part of the chapter considers the “third generation” work of the Finnish psychologist now based in San Diego, California Yrjö Engeström (1948- ). We will come to see that Engeström’s approach provides a theoretical underpinning for the OW. Indeed it offers the means to advance a general overall approach to social change and social development.<sup>6</sup>

### De Morais’ Use of Activity Theory: Objectivised Activity

The major theoretical influence acknowledged by de Morais, apart from that of Marx, is the work of A.N. Leont’ev,<sup>7</sup> and specifically his concept of “objectivised activity” (Here I adopt Ivan Labra’s rendition of the original Russian *dyatel’nost*).<sup>8</sup>

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1925 to 1956, and therefore the scholars who scientifically stood on his shoulders needed to disassociate themselves from him for their own personal safety. During much of this period “activity theory” led by A.N. Leont’ev was officially approved, while Vygotsky was officially disapproved.

<sup>6</sup> In using the term *underpinning* at this point it is necessary to make a disclaimer: I am not trying to suggest that the three generations of activity theory were apprehended *in toto* by de Morais or other practitioners of the method that carries his name – as if there was a foundation in theory that was then built upon with practice – but rather that this body of theory explains the method and that this theoretical coherence in turn allows for a honing of the method, and its translation into other applications.

<sup>7</sup> Leont’ev, Alexei N. Activity, Consciousness and Personality (translated by M. Hall). Englewood Cliffs NJ: Prentice-Hall, 1978; by the same author Problems of the Development of Mind. Moscow: Progress Publishers, 1981. This senior Alexei N. Leont’ev (1903-1979) is to be distinguished from his son Alexei A. Leont’ev (1936- 2004), a specialist in the psychology of language teaching, psycholinguistics and the psychology of communication. In both cases the name is sometimes spelled Leontiev. See also the contributions of Miguel Sobrado, Clodomir de Morais, and the Labras to the often cited 2000 Carmen and Sobrado volume; and Ivan Labra, Psicología Social: Responsabilidad y Necesidad. Santiago de Chile: Ediciones LOM, 1992. p. 49. (There is an unpublished English translation by M. Cloete, Social Psychology in Large Groups, 1999.) . Sobrado (ibid) makes the point that although Leont’ev’s concept of objective activity is one of the epistemological foundations of de Morais’ theory, it was only incorporated after a little while and “came to replace the rather imprecise and *ad hoc* conceptualisations he had soldiered on with until then”.

To understand the idea of objectivised activity we may start with an illustration: A prisoner in a large room, with no other object but a ball, starts to play with it, kicking it against the walls, inventing games, developing over a period of weeks a remarkable facility and a pattern of daily exercise with the ball. Moving to another illustration: a vehicle arrives in a rural village and parks underneath a tree; a man gets out and calls with a loud hailer to people to come to the training course; when a crowd assembles and asks what the training is about he points to the vehicle, “this is what we have, and it’s at your disposal, what do you want to learn with it?” A few days later the driving school is in full swing, managed by villagers. Two weeks later the conversation turns to other possible enterprises that can be started in the village.<sup>9</sup> In both of these illustrations we can see that the existence of the object (the ball, the car) “suggests” activity to the subject (the prisoner/the villagers). In the words of Leont’ev, “the need learns to know itself; it becomes a motive.”<sup>10</sup> He explains that as the subjects enter into contact with the object (ball, vehicle) its representation (in the mind) and a reflection on its properties and use-potential becomes the motive for activity. The process of the activity changes the object, (the vehicle may get a ruined gearbox, the ball may go flat from repeated use). It also changes the subject (there is relief from boredom and a sense of achievement for the prisoner, confidence in seeking a new job or starting new enterprises for the villagers).

Ivan Labra<sup>11</sup> explains objectivised activity with the powerful and vivid image of a sculptor who transforms a piece of wood into a statue; calling forth an initial mental image from a piece of wood, while taking account of its own qualities and potential. As the “objectivised image” appears he adjusts and adapts his mental image and this in turn affects his sculpting and the object of his work. There is “a circular, dialectical process, in which it is impossible to separate any of the components from any other”. Labra points out with regard to the activity of the sculptor that “we can identify three components for the purposes of analysis but which in reality are inseparable: the purpose of the activity; the

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<sup>8</sup> *Dyatel’nost* has also been translated as “objective activity” by de Moraes and by several scholars. Leont’ev explains *dyatel’nost* in Chapter Three of his Activity, Consciousness and Personality cited above.

<sup>9</sup> The prisoner and ball illustration is made up here, the car and villagers illustration is an anecdote told about de Moraes in the early days of development of his method.

<sup>10</sup> Leont’ev, Alexei N. Activity, Consciousness and Personality (translated by M. Hall). Englewood Cliffs NJ: Prentice-Hall, 1978. p. 116.

<sup>11</sup> Ivan Labra, Psicología Social: Responsabilidad y Necesidad. Santiago de Chile: Ediciones LOM, 1992. p. 53.

processes in the activity; and the psychic reflex or mental image of the activity”<sup>12</sup>. We see in Labra’s sculptor example that the process of purposeful activity in turn influences the subject.

A.N. Leont’ev’s son A.A. Leont’ev extends the point Ivan Labra makes with the sculptor example when he writes “...not only does consciousness, in man as a biological genus and in each [person] as an individual, emerge thanks to activity, but consciousness in turn mediates activity and controls it... Things are not merely bearers of objective distinctive features or properties; nor are they merely the *object* and *product* of man’s activity. At the same time they set that activity in motion (they act as its *motive*) and represent for man objects of relationships. They have, as psychologists say, a *personalized* meaning for him.”<sup>13</sup> (Italics in the original).

This understanding of “objectivised activity” was at the kernel of de Morais’ original design for the OW. From this concept flows the recognition that to change the mind-set of individuals, we need to start with *changes to their activity* – and/or to the object that “suggests” their activity. From a pedagogical perspective the choice of “object” is crucial. To ensure that a social scale of activity was engendered de Morais made the requirement that “common pool resources” be put at the disposal of participants viz. the “means of production shared in common... which requires that production processes be regulated (co-ordinated), independent from the whims of various collaborators”<sup>14</sup> Labra and Labra have taken the further step of defining “development” itself as a transformation of activity.<sup>15</sup>

### Introducing Lev Vygotsky (1896-1934)

“Vygotsky... was on his way to a psychology where consciousness is seen as psychic organization, historically realized through activity based on a dialectics between instruction and development. He understood instruction

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<sup>12</sup> Ibid.

<sup>13</sup> A.A. Leont’ev, Psychology and the Language Learning Process. Oxford: Pergamon Press, 1981. p. 6.

<sup>14</sup> Clodomir de Morais in his contribution to the 2000 Carmen and Sobrado volume. p. :26.

<sup>15</sup> The same insight informs Labra and Labra’s concept of development: “Development is the process of transformation of the activity of the individual, made on a social scale, to upgrade the individual him/herself, the product of their work, the means of production and production techniques, and as a consequence, to improve the quality of life” From a handout provided to participants at the Development Resources Centre Seminar on the OW, Johannesburg, February 1997.

as any directive which elicits new activity, and development as the reorganization of consciousness through this activity”<sup>16</sup> --Erik Axel

But rather than discussing A. N. Leont’ev’s work in isolation, I will spend most of the first part of this chapter looking at the work of Lev Semyonovich Vygotsky, the seminal thinker under whose intellectual leadership Leont’ev was trained, and whose work he carried on after his mentor’s premature death.<sup>17</sup> An emphasis on Vygotsky helps me to continue fleshing out the theoretical dimensions of the OW. Vygotsky also provides fundamental insights for my enlargements of OW principles and for defending the bold claim that all of the approaches briefly summarized in the previous chapter about Organizational Learning can be accommodated within the epistemological framework of Activity Theory and there is a surplus left over.

Let me spend a few moments sketching some parts of Vygotsky’s life. A Russian Jew who read widely – in five languages and in the fields of linguistics, social science, philosophy and the arts – Vygotsky was truly eclectic in drawing on opinions from different philosophical systems and paradigms, including western sources.<sup>18</sup> His eclecticism and broad philosophical interests were hardly in pace with the dominant Pavlovian school of his time, or with others intent on constructing a “Soviet School.” Jerome Bruner remarked: “I surmise that... his vigorous espousal of the place of consciousness in mental life made him suspect to the increasingly rigid Stalinist ideologues who overlooked matters psychological”<sup>19</sup> Alex Kozulin confirms what Bruner surmised: “In a field dominated by reflexologists and ‘Marxist psychologists’ he emerged as a defender of the category of consciousness and as a perceptive analyst of the crisis in contemporary psychology”<sup>20</sup>

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<sup>16</sup> Erik Axel, “One Developmental Line in European Activity Theories,” in Michael Cole, Yrjö Engeström and Olga Vasquez (eds.) Mind, Culture and Activity. Cambridge: Cambridge University Press, 1997. p. 131..

<sup>17</sup> Here I am taking sides in a scholarly dispute, favouring the view that Vygotsky was the hidden pioneer behind A.N. Leontev’s work even when Vygotsky’s work was banned and Leontev was winning the Lenin Prize for Science and figuring as the head of the activity theory school of psychology. I am treating Vygotsky as first generation activity theory, Leont’ev as second, and Engestrom as third. Leont’ev himself, writing in 1978, 23 years after the ban on Vygotsky’s works was lifted, is quite clear that activity theory was started by Vygotsky. See Leont’ev’s Activity, Consciousness and Personality cited above, first published in Russian in 1978.

<sup>18</sup> Alex Kozulin, Vygotsky’s Psychology. London: Harvester Wheatsheaf, 1990. p. 2.

<sup>19</sup> Jerome Bruner, “Prologue to Vygotsky,” Collected Works of L.S. Vygotsky. Vol. I (Robert Rieber y Aaron Carton eds.) New York: Plenum, 1987. p. 2.

<sup>20</sup> Kozulin op. cit 1990. p 7..

Vygotsky's work was suppressed in the Soviet Union from 1925 when he reached the peak of his short working life (which ended in 1934 before he died of TB at age 38). Nevertheless, it circulated underground from hand to hand and "affected an entire generation of psychologists".<sup>21</sup> It was only published in Russia in the 1950s, and translated into English (a little later than his close collaborators Luria and A.N.Leont'ev) for the first time in the 1960s.

### Vygotsky and Piaget

Vygotsky's writings – on language, art, drama, philosophy, pedagogy and psychology<sup>22</sup> – engage with a wide array of contemporaries across a range of disciplines, including western theorists like Piaget, Freud and Kurt Lewin, but these people remained wholly unaware of his contributions! "And yet he did participate – invisible and unheard – in those important debates."<sup>23</sup>

One major theoretical opponent, Jean Piaget, did belatedly comment on Vygotsky's work, although not until almost 30 years after his death when the publication of Thought and Language (1962) made some of his work available in English. Piaget immediately paid attention to the compelling ideas in this text, penning his Reply to Lev Vygotsky (published in the same year 1962) within a few months. Notwithstanding his defence of his own views at that time, the elderly Piaget later acknowledged (in 1972) a point inconsistent with his own earlier work and in line with Vygotsky's theoretical stance: namely: that acquisition of formal operations<sup>24</sup> is context specific.<sup>25</sup> Thus Piaget implicitly accepted a point at the heart of Vygotsky's theory, at the heart of activity theory, and at the heart of this book: the role of culture in individual development, the intellectual superiority of an unbounded approach to

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<sup>21</sup> Attributed to A.R. Luria by Bruner op cit. p. 2..

<sup>22</sup> See R.A. Wilson and F.C. Keil (eds.) The MIT Encyclopedia of the Cognitive Sciences.. Cambridge: MIT Press, 1999. p. 878.

<sup>23</sup> Kozulin op. cit. 1990. p. 4.

<sup>24</sup> Piaget had explained formal operations briefly as follows: "Growing out of a child's developmental history, formal operations become established at about the age of 12-15 years. Reflected in his ability to reason hypothetically and independently on concrete states of affairs, these structures may be represented by reference to combinatorial systems and to 4-groups. The essence of the logic of cultured adults and the basis for elementary scientific thought are thereby provided." Jean Piaget, "Intellectual Evolution from Adolescence to Adulthood," Human Development Vol. 15 (1972) pp. 1-12. p. 1.

<sup>25</sup> Michael and Sheila Cole, The Development of Children. New York: Worth, 2001. p. 657.

the unscientific and unrealistic character of a psychology that omits culture and history. Piaget thus modified his earlier epigenetic theory that found the bases of psychology largely in biology (the field in which he was initially trained) with a consequent tendency to omit culture and history.<sup>26</sup>

The debate between Piaget and Vygotsky and the fascinating new insights thrown up by it intrigued only a very narrow audience of developmental psychologists. The 1978 translation of Vygotsky's Mind in Society brought much wider notice. It was with this book that Vygotsky's thinking and propositions really captured attention across a number of disciplines and "spawned a generation."<sup>27</sup>

### Word Meaning as Unit of Analysis

A core innovation by Vygotsky was to argue that units of analysis in psychological theory must be defined such that they are at one and the same time units of mind and units of social interaction.<sup>28</sup> Unlike the positivists and the Pavlovians, Vygotsky proposed that "word meanings" are the proper units of analysis for this research. Meaning, unclear as its nature may be, is a matter of convention, not a matter of associating a sound with an experience. "Word meaning" is at one and the same time a unit of abstraction and thinking

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<sup>26</sup> Piaget borrowed the term "epigenetic" from biology, wanting to show that there was no entirely preformed inherited structure of "mind" or mental operations, but that structure emerges from the interaction between the organism and its environment. However Piaget maintained that all people followed a set sequence of development. Ageliki Nicolopoulou in "The invention of writing and numerical concepts" in M. Cole et al. (1999:214) uses Damerow's examination of the cultural evolution from proto-arithmetic to the number concept to comprehensively rebut Piaget's assertion around sequencing in development epigenesis. Cole et al op. cit 1997. p 207; Cole and Cole op. cit 2001. p 75.

<sup>27</sup> Joseph Glick, "Prologue" in Collected Works of L.S. Vygotsky. New York: Plenum Press, 1997. pp. i-xxxvi. p. viii. Glick suggests that the increased fascination with Vygotsky's ideas arises from the beginning of disenchantment with the Piagetian treatment of structure, and his neglect of cultural context. I would also speculate that the resonance of some of Vygotsky's thinking with the work of Noam Chomsky, who at precisely this time was at the centre of a "linguistic revolution", might also have contributed to the intense interest in Vygotsky's work. F. Newman and L. Holzman Lev Vygotsky, Revolutionary Scientist. London: Routledge, 1993. p. 8, point out that the rediscovery of Vygotsky coincided with a weariness with logical positivism, and the push for a "socially relevant psychology" where the individual was not the unit of study and which took account of issues such as racism and poverty. They also point to the influence of Wittgenstein's contributions around speech and meaning.

<sup>28</sup> Norris Minick, "The early history of the Vygotskian school: the relationship between mind and activity," in Cole, Engeström, and Vasquez (eds) op. cit. 1997. pp. 117-197.p. 122.

(i.e. a unit of mind) and a unit of communication or social interaction (i.e. a unit of behaviour)”<sup>29</sup>

What could be more reasonable? And yet what could be so profound? The methodological choice to focus on word meaning was the symptom and symbol, the tip of the iceberg to speak, of an approach to scientific psychology that led to Vygotsky’s works being prohibited under Stalin. It later inspired what I am proposing to call an “unbounded” approach to psychology. I am proposing to use it to underpin an unbounded approach to organization and management. Since the meanings of words are products of culture and history, Vygotsky’s methodological option pioneers a cultural and historical psychology.<sup>30</sup> His selection of word meaning as the preferred unit of analysis prepared the way for later activity theorists who focussed on human activity as the fundamental unit of analysis.<sup>31</sup> These two related forms of dependence of psychology on context (the historical/cultural context and the action context) help me to explain what I mean when I make the bold claim that all of the approaches mentioned in the previous chapter about Organizational Learning can be accommodated within the epistemological framework of Activity Theory and that there is a surplus left over.

#### De Morais and Vygotsky

Before finishing my explanation of why a Vygotskian cultural/historical supports my claim that an unbounded approach includes whatever a bounded approach includes and then more, let me go back for a moment to de Morais. One could say that for de Morais the artisan, the worker, the half-worker, and the lumpen have different psychologies. Their different activities lead to different ideologies. De Morais makes clear in his Notes to a Theory of Organization that all four ideologies are products of a history that has produced a culture where, among other things, the market value of labour is not derived from its use value but from its exchange value; in other words from its character as abstract labour.

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<sup>29</sup> (ibid.). At the end of his short career Vygotsky emphasized that word meaning must be studied in connection with the function of the word in communication. Minick 1997 op. cit. p. 126.

<sup>30</sup> See Woff-Michael Roth and Yew-Jin Lee, “Vygotsky’s Neglected Legacy”: Cultural-historical Activity Theory.” Review of Educational Research. Vol. 77 (2007) pp. 186-232; Michael Cole, Cultural Psychology: a Once and Future Discipline. Cambridge MA: Harvard University Press, 1996.

<sup>31</sup> “...activity theorists are concerned with upholding human activity –the historical results of the division of labor—as the fundamental unit of analysis, which had partially existed in the work of Vygotsky...” Minick 1997 op cit. p. 189.

For Vygotsky and the tradition he pioneered in a given culture there are word meanings characteristic of that culture. Its word meanings are different to some degree from those found in other cultures. Beyond that in many other ways psychological phenomena are context-dependent. – as the bad habits of the artisan are context-dependent for de Morais. (The existence of characteristic bad habits depends on the characteristic activity of the artisan, which in turn depends on historical and cultural context.) The psychology of one context is not the psychology of another context.

### The Wider Epistemology of an Unbounded Approach

Thus to claim as I do that the research done by Chris Argyris or Kurt Lewin, for example, can be accommodated within the epistemological framework of Activity Theory is not to say that Vygotsky, the two Leont'evs (father and son), A.R. Luria and the other greats of activity theory down to Yrjö Engeström in the present day actually did all the same studies Argyris and Lewin did and achieved all the same results. It is to say that Argyris' and Lewin's studies and all the studies done in the historical-institutional context of the twentieth century USA fit into the epistemological framework of Activity Theory. They fit as studies done in a certain context. But for a cultural/historical Activity Theory there is more left over; to begin with all the other cultural contexts.<sup>32</sup> Vygotsky went further still. As James Wertsch points out, while developmental psychology in the west has tended to be about ontogenesis, for Vygotsky developmental psychology is also about phylogenesis and history. How we humans branched off from our primate relatives, and how the division of labour changed history, are for Vygotsky just as much part of developmental psychology as what contemporary children do in kindergartens. . He was interested in primate behaviour and in how historically developed conceptual systems are reflected in language.

As I have suggested in the course of criticizing Kurt Lewin's work, there are historical reasons why much of mainstream psychology has tended to be ahistorical. In doing so it has underestimated the roles historically created instruments play in the formation of the self. But let us not identify Vygotsky with the opposite trap of treating the individual

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<sup>32</sup> One might add also the claim that an activity theory approach illumines work done in the same context, twentieth century USA, with greater awareness of the historical character of that context.

as a passive product of social forces.<sup>33</sup> On the contrary Vygotsky was if not a constructivist at least a precursor of constructivism.<sup>34</sup> Far from implying that higher mental functioning is a direct copy of socially organized processes Vygotsky speaks against such a view when he makes his point that “man himself determines his behaviour with the help of an artificially created stimulus means.”<sup>35</sup>

### A Reply to a Possible Objection

One might agree with my claim that compared to Lewin the Vygotskian tradition is an unbounded psychology supportive of an unbounded concept of management. One might agree that my viewpoint as I have just explained it by referring to how Vygotsky “opened up” psychology is perfectly reasonable. One might agree that my claim is not exaggerated or off-the-wall, but nevertheless object that there is nothing new about it, since psychologists do cross-cultural studies all the time, trying to find out whether theories developed in one culture hold up in another culture.<sup>36</sup> Nor is it unknown for psychologists to compare human behaviour to the behaviour of other animals.<sup>37</sup> In reply I would say that I am not trying to be original. I am recommending unbounded organization. In doing so I am explaining how I was led to that concept and to several dimensions of it during my career as a social entrepreneur and manager of social development projects in southern Africa, often engaging in the practice of organization workshops, and often participating in organizational development seminars. The OWs had roots in Activity Theory and therefore in a tradition that Vygotsky pioneered. The seminars were heavily (albeit

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<sup>33</sup> Margaret Archer carefully sorts out the related errors of excessive individualism and excessive social determinism in her Being Human: the problem of agency. Cambridge UK: Cambridge University Press, 2000

<sup>34</sup> Constructivism is a loosely grouped set of theories of learning that have in common the idea that knowledge is constructed by the knower based on mental activity. It can hardly be doubted that if Vygotsky was not a constructivist (some scholars say he was) he was at least a precursor. See the discussion of Vygotsky and education below and Michael and Sheila Cole, Development of Children New York: Worth, 2001, for support for the claim that Vygotsky was at least a precursor of constructivism.

<sup>35</sup> Vygotsky cited by Norris Minick in his introductory chapter to volume one of The Collected Works of L.S. Vygotsky. New York: Plenum, 1991. pp. 17-34. p. 22..

<sup>36</sup> One might cite for example the numerous studies testing whether Lawrence Kohlberg’s stages of moral development, or Jean Piaget’s stages of cognitive development, apply in cultures different from those where they were initially observed.

<sup>37</sup> Jean Piaget for example in his studies of children’s play made use of the idea of *Funktionslust* developed by Karl von Groos in his zoological studies of the play of young animals.

sometimes indirectly) influenced by Kurt Lewin. Although my personal history may tend to explain why I have developed my ideas in dialogue with some authors and not with others, surely nevertheless my ideas are important if true. They are not less true or less important because someone else thought of similar ideas first, or because someone else arrived at similar ideas via a different itinerary of life experiences and theoretical readings.

### Language and Social Mediation

As a general overview of Vygotsky's thought James Wertsch identifies three key themes as the core of Vygotsky's theoretical position: (a) a reliance on genetic, that is developmental, method, (b) the claim that higher mental functions in the individual have their origins in social processes; and (c) the claim that mental processes can be understood only as *mediated* (note the word) by signs and tools. The decisive factor of human development, Vygotsky argued, is the mediated form of human interaction with the environment (e.g. the use of tools) and with oneself (e.g. the use of signs as organizers of one's own mental processes).<sup>38</sup>

Bearing in mind the overall framework suggested by Wertsch, I will emphasize now his third point, that mental processes can be understood only as *mediated* by signs and tools. Vygotsky's concept of *social mediation* has helped me enormously in thinking about OW and unbounded organization.

One way to approach the concept of mediation is to say that a necessary consequence of Vygotsky's choice of word meaning as the unit of analysis for research was an abiding fascination with language, which led to seeing language as while not the only form of *social mediation* certainly a central one for Vygotsky and for us.

“Vygotsky focused on the eternal problems of language, thought and development and attempted to find their projections on the plane of psychological

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<sup>38</sup> James V. Wertsch, Vygotsky and the Social Formation of Mind. Cambridge MA: Harvard University Press, 1985. pp. 14-15.

enquiry.”<sup>39</sup> His second “move” (after a first move choosing word meaning as his preferred unit of analysis) was to suggest that any genetic analysis in psychology must start with the analysis of word meanings in connection with the development of social interaction. “Just as the physical or technical tool evolves in connection with the systems of productive activity it mediates, Vygotsky argued that psychological tools develop in connection with the development of social interaction.”<sup>40</sup> Notice that word meaning is now reframed as a “psychological tool.” And notice that the tools are used by the groups children are born into. Learning evolved in the human species as a social process in which the young and the newcomers gradually learned a group’s tools, that is to say its words and its technologies, by participating in the group’s activities. Human learning supposes a specific social nature and a process by which children grow into the intellectual life of those around them.

Thus Vygotsky arrived at a broad notion of *mediation*.<sup>41</sup> One speaks of the *mediation* of a relationship, for example the relationship between a learner and an object (say a secondary school student and a frog) by other entities, the *mediating* entities. The *mediation* is done by all the artefacts that embody the history of human ingenuity and creativity (including the laboratory instruments the student uses to dissect the frog and the science of biology the student uses to understand the frog). In many ways *society mediates* between subject and object. Further as will be noticed in the following paragraph the subject/object and individual/society dichotomies themselves come up for critique and reconsideration.

One associates particularly with Vygotsky the idea of a “complex, mediated act.”<sup>42</sup> This idea is commonly expressed as a triad of subject, object and mediating artefact. In other

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<sup>39</sup> Alex Kozulin. *Vygotsky’s Psychology*. London: Harvester Wheatsheaf, 1990. p. 4.. That thought begins in social interaction is an ancient idea. In the New Testament the Greek word *dialogismos* (a root of the English “dialogue”) translates as “thoughts.” John H. Dobson, *Learn New Testament Greek*. Swinden UK: Bible Society, 1988. p. 31. Plato wrote that thought is the conversation of the soul with itself. See generally Julian Jaynes, *The Origin of Consciousness in the Breakdown of the Bicameral Mind*. Boston: Houghton-Mifflin, 1976.

<sup>40</sup> Kozulin, *ibid.*.

<sup>41</sup> Vygotsky acknowledges that he adopted the word “mediation” from the German philosopher G.W.F. Hegel.

<sup>42</sup> Lev S. Vygotsky, *Mind in Society: the Development of Higher Psychological Processes*. Cambridge MA: Harvard University Press, 1978. p. 40.

words Vygotsky saw behaviour as mediated through signs (like those in the biology textbook, and those in the teacher's instructions) and other cultural artefacts (like the laboratory equipment). This insertion of the mediating cultural artefact/ tool represented a quantum leap in the science of psychology. In Engeström's words, "the basic unit of analysis now overcame the split between the Cartesian individual and the untouchable societal structure."<sup>43</sup> The individual now needed to be understood in relation to her/his cultural means, and "the society could no longer be understood without the agency of individuals who use and produce artefacts... objects became cultural entities and the object-orientedness of action became the key to understanding human psyche."<sup>44</sup>

With the concept of social mediation, Vygotsky made seminal contributions both around both the relation between word meanings and concepts and around the role of language in self-regulation. In doing so he developed an activity-oriented conception of speech. He viewed speech as a particular kind of activity.<sup>45</sup> Vygotsky went on from this point to show that higher mental processes are mediated by socio-culturally evolved tools and signs.<sup>46</sup> This "semiotic mediation" or "mediation by signs" included maps, charts and mathematical formulae. "Semiotic mediation" was especially about the role of human language in activity and in higher mental processes. Vygotsky was able to use the idea of semiotic mediation to relate intermental functioning (communication and interaction between

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<sup>43</sup> Yrjö Engeström, "Learning by Expanding: Ten Years After," Introduction to the German Edition Lernen durch Expansion. (translated by Falk Seeger). Marburg: BdWi Verlag, 1999. p. 2.

<sup>44</sup> Ibid..

<sup>45</sup> See James V. Wertsch, "From Social Interaction to Higher Psychological Processes: a clarification and application of Vygotsky's theory," Human Development Vol.22 (1979) pp. 1-22. Some years later, and without recourse to Vygotsky's writings, Wittgenstein argued in a similar vein, suggesting that to understand an expression depends on understanding how it fits into the flow of activity in which interlocutors are engaged. The term 'language game' is meant to bring into prominence that speech functions as an aspect or part of a social activity. "Language games" are defined and discussed in the opening pages of Ludwig Wittgenstein, Philosophical Investigations. Oxford: Blackwell, 1956. Building on Wittgenstein John Searle later developed the idea of speech as an activity. John Searle, Speech Acts.: an essay in the philosophy of language. Cambridge: Cambridge University Press, 1969.

<sup>46</sup> Lev. S.Vygotsky, "The Genesis of Higher Mental Functions," in J.V. Wertsch (ed.) The Concept of Activity in Soviet Psychology. Armonk NY: M.E. Sharpe, 1981. Pp. 144-188.

one person and another or others) to intramental functioning (Plato's "the conversation of the soul with itself").<sup>47</sup>

### Psychology and Ethics

Vygotsky's work using the idea of semiotic mediation to relate intermental functioning to intramental functioning, while viewing speech as a particular kind of activity, helps me to build up the intellectual dimension of unbounded organization, while it also helps me to clarify the nurturant dimension. To bring that dimension into focus let us step again into our time machine to pay another visit *to the interior of the café in Times Square Yeoville where Odo, a young development anthropologist researcher is interviewing m'Keneke, a struggle veteran and prominent civil society intellectual. It is 2033. The two are reflecting on the remarkable improvements that occurred in South Africa in the previous decades.*

Odo: So you are saying that it is not that people developed a new theory that then shaped their approach to organization, but that new approaches to organization emerged organically and gave a glimpse of what was possible?

m' Keneke: Exactly. As i said, people don't shift their organizational paradigm overnight. Your psychological reflection is influenced very much by your activity. When a different way of working provides gives a theoretical insight that's when the "Aha!" comes. ... it's in the practice that people come to recognize the possibilities for change.

*The background music swells suddenly in volume and across the room people are on their feet and dancing. M' Keneke and Odo find themselves in a group getting down to the beat and sharing smiles. As the song subsides, they sit down again, now joined by Alara, poet, pool maestro, and renowned dancer.*

m'Keneke: Ola Alara! We were just talking about the changes that happened in the third decade of democracy, gathering steam around 2013-2015, and I was just going to give my

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<sup>47</sup> Vygotsky connects the intermental with speech that functions to mediate social behaviour, and the intramental with speech that functions to mediate the behaviour of the individual as Minick explains in his introductory chapter to Vygotsky's work op. cit. 1991..

views on what happened in business. But I remember that you performed some powerful poetry around that time that had a big impact, partly because you were so young. Do you mind sharing some of that stuff with Odo?

Alara: (smiling) Eish! Yeah when I look back on my teenage years it always feels like the time when I saw things clearest. I guess we were just lucky to be the ones living the big shift.

Odo; By the big shift do you mean the thing that m’Keneke was just telling me about –the way we started to discover unbounded organization?

Alara: Well, that’s one of the outcomes of the shift. I reckon that the big change came from addressing the poverty of the spirit that was around at the turn of the century.

Odo: Poverty of the spirit?

Alara: Yes man! This thing kind of started at the top of society, and became infectious at other levels – sometimes as would-be “uppers” copied that behaviour, and sometimes as those at society’s base reacted in anger or out of a sense of alienation.

Odo: Whoa! Back up! First of all, what do you mean the “top of society” kind of started a “poverty of the spirit”? And what do you mean by it exactly?

m’Keneke: Let me come in for a moment, and I must say it’s good that Alara brings in this issue. After 1994 “Old Money” --the accumulated wealth from more than a hundred years of mining, industrialisation and ‘modernisation’ of southern Africa moved steadily out of the continent to invest in “offshore markets” The biggest corporations moved their base out of the country, listing on the London Stock Exchange. Graduates and other skilled people looked for jobs in the “hard currency zones” of the international economy. Together these three moves created a kind of extractive vortex through the first decade of democracy that continued or even accelerated the 500 year-old pattern of extraction from Africa.

Odo: Yes, this is well-documented now. But how does this link with what Alara is talking about?

Alara: Well the “uppers” –and others, even my generation—started to focus on an abstract global landscape rather than the immediate task of dealing with the issues in their locality.

m’Keneke: Yeah this strengthened a belief that it was natural to remain aloof from social issues inside South Africa. And there was no daily experience that helped people encounter each other across social divides, because the spatial separations between social classes that derived initially from apartheid planning meant that most professionals –especially the white folks—never came into daily contact with those experiencing material hardship.

Odo: Okay, so what about the *spiritual* poverty stuff?

Alara: Well, there’s a funny dynamic: when you behave as if you don’t have any responsibility to your fellow citizens, but you “know” deep down that you should be doing something to help things get better, then you get into some weird mind games. You start to blame those people who face problems, or argue that there is not really a problem, or else blame the Government for the problem. Above all you refuse to accept that you need to shift radically your lifestyle and behaviour, because you fear that the “pay-back” that will be demanded once you accept your role is too huge to agree to.

But since you are denying your own humanity by doing all this you only survive by reducing (or making more abstract) your “commitment space;” you get into a cycle where you are less and less generous in the everyday, more and more afraid to engage with others—especially those different from you! This is what I mean by poverty of the spirit. It’s not pretty, but I saw a lot of it in my early teens. Some people drew strength from bluster and blame and arrogance, stoked by complaints about falling standards, corruption and poor governance. They justified their failure to become active members of society by portraying it as somehow not worthy of them.

Odo: Yeah, I can imagine that, and it reminds me of a novel describing the Zimbabwean whites in the 1980s: carrying on with their colonial lifestyles and ignoring the need to provide space for those excluded from an economic stake, and resisting the embrace of African cultures and spirituality. We of course know where that led.

At this point let us return from 2033 to the present, and then continue backward in time to 1969 when Clodomir de Moraes' friend Paulo Freire was writing The Pedagogy of the Oppressed. Freire was then living amid the turmoil around the struggle for land reform in Chile. In the first paragraph of that book Freire wrote some lines that underline Alara's point in the preceding dialogue that we can avoid our social responsibility only at the cost of denying our common humanity. Freire wrote: "While the problem of humanization has always, from an axiological<sup>48</sup> point of view, been humankind's central problem, it now takes on the character of an inescapable concern. Concern for humanization leads at once to the recognition of dehumanization, not only as an ontological possibility, but as an historical reality. And as an individual perceives the extent of dehumanization, he or she may ask if humanization is a viable possibility. Within history, in concrete objective contexts, both humanization and dehumanization are possibilities for a person as an uncompleted being conscious of their incompleteness."<sup>49</sup> Using Freire's word, I propose to interpret both the OW process and its extension as unbounded organization as humanisation.<sup>50</sup>

#### Vygotsky's Contribution to Humanisation

How does Vygotsky help? He helps by building a humanistic science. A hard humanistic science. With Vygotsky one does not have to choose between hard science and humanism. Vygotsky's work on word meaning and the social mediation of the higher mental processes leads directly to the relationship between the social activity of speech and its function in self-regulation. Intrapersonal communication, talking to the self, allows the internalization of cultural values. The decisive factor of human development, Vygotsky argued, is the mediated form of human interaction with the environment (e.g. the use of tools) and with oneself (e.g. the use of signs as organizers of one's own mental processes). Thus in Vygotsky's work realism and ethics come together, not in an ethnocentric sectarian way, but in a way that recognizes a species-wide capacity for self-regulation. It is a way that recognizes the necessary role of culture

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<sup>48</sup> Here Freire prefers the unusual philosophical word "axiological" to the more common word "ethical," perhaps because "ethics" classically defined as "the science of human action" has become a word weakened by overuse.

<sup>49</sup> Paulo Freire, The Pedagogy of the Oppressed. New York: Continuum, 2005. (1<sup>st</sup> Portuguese edition 1970) p 43. This is the first paragraph of the book following a Foreword, an Introduction, and a Preface. Thereafter Freire writes several pages more on humanization as the central problem of our times.

<sup>50</sup> In so doing I echo de Moraes, who saw his own work as in harmony with the philosophy of his friend Freire. See on this point Jacinta Correia's contributions to the Carmen and Sobrado volume,

in mediating between subjective consciousness and physical reality. It recognizes the historical construction of norms and institutions. In the terms of the quotation from Gramsci at the beginning of the previous chapter, Vygotsky contributes to the scientific basis from which we can launch our projections of what human nature can become.

I am far from claiming that Vygotsky has been the only contributor to a science of human moral development. I am glad he is not the only one, for the fact that he is one among many shows that there really is such a science. It tends to show that it is a science that really does have an object, namely human moral development.<sup>51</sup> There really is a human capacity to be self-governing and responsible; and there really is, as Alara implied, a consequent tendency to dissimulate when we know deep down that we are being aimless and indifferent.

### The Zone of Proximal Development

The assertion that mental functioning is shaped by its historical, cultural and institutional context runs through Vygotsky's writings. As Alex Kozulin records, Vygotsky was deeply interested in the role of the social environment, including tools and cultural objects, and particularly people, as agents in developing thinking. He argued that higher mental functions appear first in the social or 'intermental' plane and only later on the 'intramental', individual plane.<sup>52</sup> Vygotsky wrote: "Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition... It goes without saying that internalization transforms the process itself and

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<sup>51</sup> John Rawls in his A Theory of Justice reviews work by Jean Piaget, Sigmund Freud, and other psychologists to argue that if a just society could be created it would be stable because there are human motivations that would support it. John Rawls, A Theory of Justice. Cambridge MA: Belknap Press, 1973. The psychology of moral development and its application to moral education has become a booming academic field with its own professional associations, journals, websites, pedagogical methods, graduate programs, and schools of thought. If a general conclusion can be drawn from its vast literature it is that morals and ethics influence human conduct. If it were not so, there would not be an enormous scientific literature studying how they do it.

<sup>52</sup> Alex Kozulin, Vygotsky's Psychology. London: Harvester Wheatsheaf, 1990.

changes its structures and functions. Social relations or relations among people genetically underlie all higher functions and their relationships.”<sup>53</sup> On this view much social science, most explicitly that espousing methodological individualism, has been seeing the world through reversed lenses. It has been seeing the individual as the unit from which society is built, when in fact the other way about is closer to the truth. For Vygotsky, “It is in social interaction, in behaviour that is being carried out by more than one individual, that signs first function as psychological tools in behaviour. The individual participates in social activity mediated by speech, by psychological tools that others use to influence his behaviour and that he uses to influence the behaviour of others.”<sup>54</sup>

These insights about the nature of intermental functioning and its role in shaping intramental processes led Vygotsky to posit a “Zone of Proximal Development.” Part of the meaning of this concept is that at any given point in their development learners can do things with the help of others (intermentally) that they cannot yet do alone (intramentally). Experimental observation buttressed this concept. He defined the zone of proximal development (ZOPD) as “the distance between the actual development 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*,”<sup>55</sup> (italics for my emphasis). Here is our link to methods for adult learning, and here too the key to acceleration of organizational literacy in the OW. As mentioned in earlier chapters much of the spadework that goes into “scoping” to prepare for an OW consists in finding work tasks that will lend themselves to learning organization. Part of scoping is a search for tasks that will be close enough to the participants’ present understanding and skills to be accessible, and will be within the zone of what they will be able to do in the environment the OW will provide. Once the workshop starts, an alert development practitioner in the facilitators’ enterprise of the OW works with the ZOPD notion constantly.

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<sup>53</sup> Lev. S.Vygotsky, “The Genesis of Higher Mental Functions,” in J.V. Wertsch (ed.) The Concept of Activity in Soviet Psychology. Armonk NY: M.E. Sharpe, 1981. Pp. 144-188. p. 163.

<sup>54</sup> Norris Minick in his introductory chapter to volume one of The Collected Works of L.S. Vygotsky. New York: Plenum, 1991. pp. 17-34. p. 21. Elsewhere Vygotsky wrote, “Only viewing individual speech as part of dialogue, of cooperation and social interaction, can provide the key to understanding its changes.” Translated from the Russian and quoted in Minick 1991, p. 27.

<sup>55</sup> Lev S. Vygotsky, Mind in Society: The Development of Higher Psychological Processes Cambridge MA: Harvard University Press, 1978. p. 86.

“Listening” to the participants’ enterprise also involves constant attention to what is being understood and worked with, and a consequent adjustment of the theoretical scaffolding set into place by the practitioner. I suggest that a core capability for any development practitioner is a strong working concept of the zone of proximal development.

Vygotsky argued that, “what children can do with the assistance of others is even more indicative of their mental development than what they can do alone.”<sup>56</sup> In expanding on these ideas he then suggested that, “...the zone of proximal development embodies a concept of readiness to learn that emphasizes upper levels of competence. These upper boundaries are not immutable, however. They constantly change with the learner’s increasing independent competence. What a child can perform today with assistance she will be able to perform tomorrow independently, thus preparing her entry into a new and more demanding collaboration. These functions could be called ‘buds’, rather than the fruits of development. The actual developmental level characterizes mental development retrospectively, while the zone of proximal development characterizes mental development prospectively.”<sup>57</sup>

### Practical Applications of the Zone of Proximal Development

At one level, these are common sense insights. It is common sense that our prisoner with the ball gets into things a lot quicker and learns tricks and variations when there is another person to play with, especially if that person is a skilled ball player. The ZOPD is no big deal then when we are looking at this kind of “simple” operation and interaction, and where the Object so obviously engages the subject in activity. But these insights become intriguing when considering more abstract learning (where concept can be tool-and-result), or learning about complex organization (especially where is a multiplicity of voices, or where the object is a problem that may be inadequately perceived). It is no accident that Vygotsky was eagerly seized upon by educationists. The concept of the zone of proximal development entered mainstream discourse quickly – and with surprisingly little “baggage” from

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<sup>56</sup> Id. p. 85..

<sup>57</sup> Id. pp. 86-7.

association with the Russian school of cognitive psychology. I think the rapid and wide diffusion of the concept of ZOPD occurred because of its immediate utility to the educator. It suggests a strategy for facilitating learning that certainly goes beyond the sharing of knowledge by the teacher. It also goes beyond the notions of participatory process in Popular Education that hold that the facilitator needs merely to design a process that brings out people's existing knowledge.

In a more general vein, and at a more considered pace of explication of Vygotskian pedagogy, consider a development practitioner seeking to foster learning within an area of own expertise by "participants"/learners. If we see the practitioner as functioning in the participants' zone of proximal development<sup>58</sup> then s/he must seek to stretch what the learners can do with a little assistance. As the learners advance so too must the level of collaboration demanded of the practitioner shift. The practitioner seeks to shape joint experiences in such a way that the learners are drawn into taking more and more responsibility for their joint work i.e. joint work with the practitioner. And this active responsibility means that the learners are approaching it *with interest*, with cognitive intent, with the disposition to learn.

This interaction carefully facilitated by practitioners skilled in identifying and exploiting zones of proximal development accomplishes a transition from "other-regulation" to self-regulation. (humanisation!). At first the learners have little motivation or responsibility to achieve the task. At best they understand that the practitioner's suggestions or aids or "scaffolding"<sup>59</sup> are connected to the task in some way. At a later stage the learners function "within the other-regulation language game"<sup>60</sup> where they can make all inferences needed to interpret the practitioner's directives. But already self-regulation is starting to account for much of their performance. Finally the learners take over complete responsibility for the problem-solving effort. In short there is first a recognition by the learners that different "degrees" of comprehension and ability are possible (which is a step in the development of metacognition), and then individuals learn to "regulate" their behaviours,

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<sup>58</sup> John D. Bransford with Ann L. Brown and Rodney R. Cocking (eds.) How People Learn: Brain, Mind, Experience and School. Washington DC: National Academy Press, 2008. p. 108.

<sup>59</sup> A term originally used by Vygotsky but now common in cognitive science.

<sup>60</sup> See James V. Wertsch, "From Social Interaction to Higher Psychological Processes: a clarification and application of Vygotsky's theory," Human Development Vol.22 (1979) pp. 1-22 p.19.

so there can be self-monitoring and control of their own performance. In fact to the degree that learners collectively become nimble within the ZOPD, a *collective zone of proximal development* is created. In this collective ZOPD the practitioners also become learners exploring unknown depths of potential in collaboration with “participants”.

### Interpsychological Functioning

Now we can see something that is strikingly different from writing on organizational learning up to now: the idea of “interpsychological functioning.” We can see it because we have been prepared for it by concepts like “semiotic mediation” and “zone of proximal development.”

“Interpsychological functioning” moves us a step further in our understanding of organizational learning, because it brings an awareness of “collective learning.” It brings forward the insight *that two or three people (or more) may be involved at one time in the learning process*. This is an advance on those who acknowledge only *individual learning*, and then go on to think in terms of individuals when they shape their organizations’ policies and strategy. The existence of interpsychological functioning confirms Johnson and Thomas’<sup>61</sup> suggestion that both individual and organizational learning occur together through “learning interactions.” It acknowledges in cognitive theory what is, upon reflection, a matter of common sense: Organizational groups can learn as one and simultaneously around matters of organizational functioning. Thinking in terms of interpsychological functioning is certainly most obvious and straightforward way to think about what happens in an OW as the participants learn to reorganize their enterprises. One would have to go through considerable contortions to describe an OW in a way that would comply with individualistic epistemological principles.

Once we accept that groups can learn together on a small scale, it is rather easier to approach overall-systems level concepts such as *societal learning*.

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<sup>61</sup> Hazel Johnson and Alan Thomas, “Professional Outcomes as a Measure of Educational Effectiveness,” paper presented to the UKFIET Oxford International Conference on Education and Development, 2003. p. 10.

There are immediate qualifications to record. First, individuals' memories of process may veer in radically different directions. The recognition of the diversity of individual recollection of collective learning experiences may be part of what has prevented classical cognitive scientists from working easily with an assumption of poly-centred learning. Second, the "learning" of the group may be seriously flawed. It may not be learning in a positive sense at all, but collective blundering.<sup>62</sup> Third, the fact that each individual seeks a shared way to communicate *in company with peers* means that there can easily be a "lowest common denominator" effect with social learning. One might suspect that social learning simply retards what individuals would learn alone. Notwithstanding these reservations, the recognition that two or more people can simultaneously learn together is a crucial contribution. It grows out of the cultural/historical activity approach pioneered by Lev Vygotsky.

#### Vygotskian thought-action applied to education

The three broad "themes" identified by Wertsch in the work of Vygotsky<sup>63</sup> can be and have been applied to education, viz. (1) a developmental method in understanding mental functioning; (2) the claim that higher mental functioning has its origins in social processes and retains a "quasi-social" nature; and (3) the argument that higher mental processes are mediated by socio-culturally evolved tools and signs, including language – or "text", as suggested by Wertsch.<sup>64</sup> These three themes may at first appear esoteric. However they are intensely practical. For the moment I will show their practicality by considering Table 5 below drawn from Wilhelm et al.<sup>65</sup> I use the table to show that Vygotsky's thinking has already enjoyed wide practical application, although it has yet to be applied

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<sup>62</sup> Bill Cooke records dramatic examples in his fluent and illuminating discussion of "Risky Shift", The Abilene Paradox and Group Think. Bill Cooke, "The Social Psychological Limits of Participation?" IDPM Paper #53. Manchester: IDPM, 1999.

<sup>63</sup> R.A. Wilson and F.C. Keil (eds) The MIT Encyclopedia of the Cognitive Sciences. Cambridge MA. 1999, pp. 878-879.

<sup>64</sup> Wertsch suggests that it is useful to extend the analogy of mediational means from tool to "tool kit", so that "instead of viewing mediational means as ironclad determiners of [psychological] processes, they are seen as providing a set of options that at least in principle allow some choice and some possibility of emancipation from established patterns" (ibid). He suggests that an "optimistic" view of culture is linked to the degree of conscious choice of mediational means by individuals and groups, and a pessimistic view sees it as constraining us in fixed, deterministic ways. James V. Wertsch, "Collective Memory: Issues from a Sociohistorical Perspective," in Michael Cole et al (eds) Mind, Culture and Activity. Cambridge: Cambridge University Press, 1997. Pp. 226-232.

<sup>65</sup> J. T. Wilhelm et al, Strategic Reading: Guiding Students to Lifelong Literacy. New Hampshire: Heinemann, Reed Elsevier, 2001.

(as I am applying it) to the sciences of organization and management. These scholars in the field of educational psychology, who are concerned with strategies for literacy amongst school-going children. show how Vygotsky's insights are already being applied to facilitating learning.

**Table 5. Models of teaching and learning (from Wilhelm, Baker and Dube, 2001)**

	One-Sided Models		Sociocultural Model
	Curriculum-centred	Student-Centred	Teaching/learning Centred
<b>Historical Roots</b>	Skinner, Pavlov, Thorndike	Piaget, Chomsky, Geselle, Rousseau	Vygotsky, Rogoff, Bruner, Hillocks, Dewey: <i>Child and Curriculum Experience and Education</i>
<b>Theoretical Orientation</b>	Behaviourism	Progressivism Cognitivism	Coconstructivism Socioculturalism
<b>How learning occurs</b>	Transmission of knowledge: Teaching is telling	Acquisition of knowledge	Transformation of participation
<b>Implications for instruction</b>	Both teacher and student are passive; curriculum determines the sequence of timing of instruction.	Students have biological limits that affect when and how they can learn; teachers must not “push” students beyond the limits. Knowledge is a “natural” product of development.	All knowledge is socially and culturally constructed. What and how the student learns depends on what opportunities the teacher/parent provides. Learning is not “natural” but depends on interactions with more expert others.
<b>Student’s role</b>	“Empty vessel”	Active constructor	Collaborative participant
<b>Teacher’s role</b>	Transmit the curriculum	Create the environment in which individual learner can develop in set stages – implies single and natural course	Observe learners closely, as individuals and groups. Scaffold learning within the zone of proximal development, match individual and collective curricula to learners’ needs. Create inquiry environment.
<b>Dominant instructional activities</b>	Teacher lectures; students memorise material for tests	Student-selected reading, student-selected projects, discovery learning	Teacher-guided participation in both small- and large-group work; recording and analysing individual student progress; explicit assistance to reach higher levels of competence
<b>Who is responsible if student does not progress?</b>	The student: He can’t keep up with the curriculum sequence and pace of lessons or meet the demands of prescriptive school program.	The student: He has a “developmental delay”, a disability, or is not “ready” for the school’s program. Often, family or social conditions are at fault.	The more capable others: They have not observed the learner closely, problem-solved the learner’s difficulty, matched instruction to the learner, made “informed” decisions, or helped the learner “get ready”.

In this table Wilhelm et al class Piaget among the “one-sided” educators while Vygotsky is classed as “sociocultural.” The separation between Piaget and Vygotsky they make <sup>66</sup> reflects an apparently subtle differentiator between these two eminent thinkers that inspires vastly dissimilar pedagogies. While Piaget holds that development change processes are universal to the species (with marginal differentiation in terms of environmental and motivational circumstances), in Vygotskian thinking culture is part of the mix.

In the text accompanying the table, Wilhelm et al. suggest that, “The place where instruction and learning *can* take place is the zone of proximal development (ZOPD). Learning occurs in this cognitive region, which lies just beyond what the child can do alone. Anything that the child can learn with the assistance and support of a teacher, peers, and the instructional environment is said to lie within the ZOPD. *A child's new capacities can only be developed in the ZOPD through collaboration in actual, concrete, situated activities with an adult or more capable peer.* With enough assisted practice, the child internalizes the strategies and language for completing this task, which then becomes part of the child's psychology and personal problem-solving repertoire. When this is achieved, the strategy then enters the student's zone of actual development, because she is now able to successfully complete the task alone and without help and to apply this knowledge to new situations she may encounter.” <sup>67</sup> Later they point out that, “The Vygotskian-inspired, sociocultural-based, learning-centred model is so radically different from the two most dominant models of teaching and learning (teacher-centred and student-centred) that most people have never considered it.” <sup>68</sup>

Cole and Cole in their book Development of Children<sup>69</sup> spell out a little differently the practical meaning of a Vygotskian cultural approach. They define culture as “*designs for living that are based on the accumulated knowledge of a people, encoded in their language, and embodied in the physical artefacts, beliefs, values, customs and activities that have been passed down from one generation to the next*”

<sup>70</sup> Blending Piaget and Vygotsky, Cole and Cole think of development as co-constructed by children

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<sup>66</sup> Wilhelm et al in this table go further in distinguishing Piaget from Vygotsky than Cole and Cole do in their Development of Children New York: Worth, 2001, p. 36. Cole and Cole group both Piaget and Vygotsky as constructivists i.e. they each believe that children play an active role in shaping their own development, constructing successively higher levels of knowledge by striving to master their environments.

<sup>67</sup> Wilhelm et al op. cit. p:9, my italics added

<sup>68</sup> Wilhelm et al op. cit. p. 11.

<sup>69</sup> New York: Worth, 2001.

<sup>70</sup> Cole and Cole op. cit. p. 11.

who actively strive to make sense of their worlds and care-takers who (among other things) pass on culture to the young. I would suggest that there are parallels between children and their teachers co-constructing learning, the participants' enterprise and the facilitators' enterprise co-creating organizational literacy, and all of us together co-reconstructing social reality.

. I would argue further that these examples from child development complement my use of Vygotskian thought in explaining what makes the OW such a powerful learning occasion. They demonstrate the usefulness of Vygotskian thought as it has been appropriated by educationists<sup>71</sup> and augur well for its future appropriation by managers. They illuminate some aspects of OW looking at behaviour-change from the rather different angle of schoolteachers whose business is to help children learn, detouring into the field of education to show that the OW tradition is not alone in drawing on concepts like objectivised activity and zone of proximal development. But perhaps the most important lesson to learn from contemporary practice and thinking in the field of education is that they bring fully into view the centrality of *activity* in any discussion about cognitive functioning.

#### Activity Theory after Vygotsky (Except Engestrom, who is Treated Separately Below)

I have been treating Vygotsky himself as the first generation of activity theory. According to a common nomenclature I have not been employing, however, activity theory as such did not commence until several years after Vygotsky's death. According to some scholars activity theory (i.e. what I am calling second generation activity theory) began in the late 1930s when a group of former students of Vygotsky, including A.N. Leont'ev (Leont'ev senior, the psychologist who directly influenced de Morais) moved from Moscow to Kharkov in an attempt to establish there a centre for developmental psychology.

In the Kharkov group, and later back in Moscow, one who especially expanded the teacher's ideas was the same A.N. Leont'ev, a collaborator who lived on for 45 years after his mentor Vygotsky's death, until 1979. From inquiries weighted towards individual action,

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<sup>71</sup> Reijo Miettinen, steeped in activity theory, goes further than these educationists in suggesting that expanding the limits of learning requires new kinds of 'objects' than the school text, such as societal activities, and "knowledge in use", and "a corresponding collective subject, a network of learning." "Transcending Traditional School Learning," in Yrjo Engestrom et al (eds), Perspectives on Activity Theory. Cambridge UK: Cambridge University Press: 1999 pp. 325-344. p.. 342.

Leont'ev moved out to focus on "activity systems." He analysed collective activity as in his example of the "primeval collective hunt."<sup>72</sup> For Leont'ev the primeval collective hunt is similar to the modern assembly line in the respect that the activity is not performed by an individual but by a social organization. But as Minick<sup>73</sup> has argued, it is already possible to see a shift in Vygotsky's own thinking from an early focus on social interaction between individuals as "the locus of mind"<sup>74</sup> to later including the entire socio-cultural context, or activity, of which the interaction is a part, in this 'locus.' Seeing the entire socio-cultural context, the entire activity, in which mental interaction functions, as Vygotsky began to do and as Leont'ev continued and expanded, is indispensable to understanding how an Organization Workshop works. OW is all about semiotically-mediated activities through which the participants learn how to manage themselves and the organizations they create to perform tasks that require a complex division of labour.

Notwithstanding various delays in its full appreciation, Vygotsky's work initiated a period of new explorations in the psychology of cognitive behaviour that continues to the present day. Many "streams" of activity theory arose. I will comment on them in two sections; one citing attempts to define the core they all have in common, marking them all as genuine branches branching from the trunk of the tree that Vygotsky and Leont'ev planted; a second indicating some of the breadth and variety of different versions and applications.

### The Core of Activity Theory

An initial focus of these new streams of research became the complex interactions between the individual subject and her/his community. Common to the various "streams" into which activity theory research subdivided is the idea that psychological characteristics develop in connection with the systems of social actions and activities that constitute the individual's life. This is the basic explanatory framework of

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<sup>72</sup> Leont'ev 1981 op. cit. 210 –213. As noted above, Leont'ev at least in the period after the ban on Vygotsky's work was lifted, explicitly recognized Vygotsky as the founder of activity theory.

<sup>73</sup> Norris Minick, op. cit. "The early history of the Vygotskian school: the relationship between mind and activity," in Michael Cole, Yrjo Engestrom and Olga Vasquez (eds) Mind, Culture and Activity. Cambridge: Cambridge University Press, 1997, pp. 117-127.

<sup>74</sup> This phrase is from Cole et al op. cit. 1997. p. 9.

activity theory.<sup>75</sup> As Leont'ev wrote, "In all of its distinctness, the activity of the human individual represents a system included in the system of relationships of society. Outside these relationships human activity simply does not exist."<sup>76</sup>

Erik Axel explained the difference between activity theory and "other" theories<sup>77</sup> as follows: "...activity theory is fundamentally reversed compared to other explanations of the social creation of the mind. In other theories the social creation of the mind is often taken to mean that general abilities of the brain are realized through social interaction. Social interaction is a mere trigger, which starts up the general ability to perceive, remember and think. These mental abilities are characterized by certain properties – like their structure, form, and abstract process. They are taken to be independent of concrete socio-historical forms of interaction, and common to all humanity. One could characterize this approach as an existentialistic functionalism in which form takes precedence over content... Activity theory reverses the relation between form and content. Fundamentally this reversal is seen in the reinterpretation of the concept of human nature, which takes on the meaning of human potentials. The unique, historical content and organization of this consciousness is seen as a result of this human being realizing its human nature on the basis of earlier human experience as accumulated in society. You can then state that human beings perceive, think, and remember, but these are open-ended statements about human potentials. The real concrete organization of these functions and ultimately of consciousness can only be determined by identifying the life histories of these human beings in particular socio-cultural forms of living. One could characterize this approach as a functional materialism, in which content takes precedence over form."<sup>78</sup>

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<sup>75</sup> Minick op. cit. 1997. p. 124.

<sup>76</sup> A.N. Leont'ev, Activity, Consciousness and Personality. Englewood Cliffs NJ: Prentice-Hall, 2000. (first Russian edition 1978) Section 3.2.

<sup>77</sup> Erik Axel, "One Developmental Line in European Activity Theories," in Michael Cole, Yrjo Engestrom and Olga Vasquez (eds) Mind, Culture and Activity. Cambridge: Cambridge University Press, 1997. pp. 128-146 Axel's topic does not include American contributions such as those of G.H. Mead (1836-1931) whom some have regarded as similar to Vygotsky in seeing individual minds both as the products and as the creators of social interaction. See George H. Mead, Mind, Self and Society. Chicago: University of Chicago Press, 1954.

<sup>78</sup> Axel op. cit. 1997. p. 133.

Axel's account of the distinctive characteristics of the activity theory approach can be further clarified by citing Alexei N. Leont'ev's definition of the key word "activity." In dealing with this key word we deal also with a key principle of activity theory, namely the "hierarchical structure of activity". Alexei Leont'ev saw activity as a *collective, systemic formation that has a complex mediational structure*. Activities are not short-lived events, but systems that produce events and actions. Activities evolve over lengthy periods of time – during periods of time when activity-systems constantly reconstruct themselves through actions and discourse – and activities are organised in such a way that "subject and object are mediated by artefacts, including symbols and representations of various kinds"<sup>79</sup>

The implicit hierarchy is thus: at the top of the hierarchy (systemic and mediated) *activity*; which is made up of specific *actions* that constitute this activity over time; each of which in turn is made up of a number of discrete *operations* or tasks.

Activity might be a common pursuit of a number of people while a division of labour ensures that each of them is responsible for different actions that constitute the activity. As Leont'ev illustrates in respect of the collective hunt, "the beater's *activity* is the hunt. And the frightening of the game his *action*."

The reader will recognize in Leont'ev's definition of "activity" themes taken from several "silos" that lead by different paths to unbounded organization. Leont'ev's "activities" that are not short-lived events but last over a long period of time are similar to a key aspect of de Morais's "enterprises." (Remember that de Morais gave the Spanish conquest of most of what is now Latin America as an example of an "enterprise.") Leontev's nesting of "actions" in hierarchies, where "actions" are composed of "operations" and in turn contribute to "activities" echoes systems theory. Indeed Leont'ev uses a typical systems theory term when he chooses "operations," to designate the discrete tasks that the system

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<sup>79</sup> See Cole et al op cit. 1997 p 4 and Alexei N. Leont'ev, Activity, Consciousness and Personality. Englewood Cliffs NJ: Prentice-Hall, 1978; and by the same author Problems of the Development of Mind. Moscow: Progress Publishers, 1981.

organises to perform a function. (Wholes and goals!) The division of labour is central for Leont'ev as it was for Clodomir de Morais when he was writing theoretical Notes to accompany workshops designed to facilitate a transition from the artisan to the worker ideology. The division of labour made important for psychology by Leont'ev (and previously by Vygotsky, and subsequently as we shall see by Engeström) was a fundamental premise for de Morais' conclusion that there is necessarily a general theory of management applicable to any complex enterprise, for there must always be analysis, planning, distribution of tasks, and control.

Activity Theory suggests that the way to change society is to change activities. Do different things with different people. It supports a series of methodologies that make unbounded organization more than a goal. Enhanced with methodologies for getting from where we are (in an unsustainable world) to where we need to be (in a world socially and ecologically sustainable) unbounded organization becomes both a proposal about where we should be going and a strategy for getting there. The strategy asks, "What activities should we do?" and "With which large groups?" Yrjo Engestrom, whose work will be discussed in greater detail in the next part of this chapter, describes the possibilities for social change opened up by activity theory in terms of "expansive transformation": "An expansive transformation is accomplished when the object and the motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of activity. A full cycle of expansive transformation may be understood as a collective journey through the *zone of proximal development* of the activity."<sup>80</sup>

### Varieties of Activity Theory

An activity theory approach has been used in designing exhibits in museums.<sup>81</sup> It has been used in corporate settings.<sup>82</sup> It has been applied to the treatment of emotionally

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<sup>80</sup> Yrjo Engestrom, "Can People Learn to Master their Future?" Journal of the Learning Sciences. Vol. 9 (2000) pp. 525-534. P. 526.

<sup>81</sup> Laura Martin and Richard Toon, Balancing Act: Activity Theory Applications to Exhibit Designs. Journal of Museum Education. Vol. 28 (2003) pp. 14-19.

<sup>82</sup> Betty Colish and Anoush Margaryan, Applying Activity Theory to Computer-Supported Learning and Work-Based Activities in Corporate Settings. Educational Technology Research and Development. Vol. 52 (2004) pp. 38-52.

disturbed adolescents.<sup>83</sup> It has been applied to working with information technology.<sup>84</sup> It has been applied to “activity systems” including the ground crew and flight crew of a regional airline, telephone sales offices, and the control room of the London Underground.<sup>85</sup> There seems to be no end to its practical applications.

Theoretical discussions have also proliferated. James Wertsch has argued that “mediated action” in “context” is the appropriate unit for psychological analysis.<sup>86</sup> Jean Lave and others working around “situated cognition” have taken the units of analysis to be practice, community of practice, and participation.<sup>87</sup> Other scholars analyse “the relationships between the individual’s psychological development and the development of social systems.”<sup>88</sup> In Axel’s formulation, there is a twin task: on the one hand to “develop a basic notion of human potentials, which in social history are able to realize the observed, multiple specific organizations of consciousness under particular conditions” and on the other hand, to understand “how individual consciousness is organized through specific and particular activity.”<sup>89</sup> Yrjö Engeström has suggested, “the third generation of activity theory (after Vygotsky’s foundational work around ‘higher psychological functions’ in the individual [first generation], and Leont’ev’s extension of these insights to collective

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<sup>83</sup> Harry Daniels and Ted Cole, “The Development of Provision for Young People with Emotional and Behavioural Difficulties: an Activity Theory Approach,” *Oxford Review of Education*. Vol. 28 (2002) pp. 311-329.

<sup>84</sup> Clay Spinuzzi, “Accessibility Scans and Institutional Activity: an Activity Theory Analysis.” *College English*. Vol. 70 (2007) pp. 189-201.

<sup>85</sup> Yrjö Engeström and David Middleton (eds.) *Cognition and Communication at Work*. New York: Cambridge University Press, 1998.

<sup>86</sup> Wertsch (1979, 1981, 1997, 1998) James Wertsch and Michael Cole have been drawn on extensively in this text. A collection of seminal papers from the Laboratory of Human Cognition edited by Cole, Engeström and Vasquez (1997) is a fair sampler of the far-ranging and wonderfully variegated discourse that has grown in merely a quarter of a century since 1978, and so too the contributions to the volume edited by Engeström, Miettinen and Punamäki (1999b). Engeström (1999a) in referring to the diversity of applications of activity theory, draws on examples from a burgeoning Finnish school.

<sup>87</sup> Jean Lave, *Cognition in Practice: mind, mathematics and culture in everyday life*. Cambridge: Cambridge University Press, 1988.

<sup>88</sup> See Minick op. cit. 1997 p. 125.

<sup>89</sup> See Minick op. cit. 1997 p. 135.

activity systems [second generation]) needs to develop conceptual tools to understand dialogue, multiple perspectives and voices, and *networks of interacting activity systems*.”<sup>90</sup>

### Criticisms of Activity Theory

Activity theory has been the target of academic criticism. It is said that it is not, properly speaking, a scientific theory at all, since it does not lend itself to empirical tests that might falsify hypotheses derived from it. In reply Kaptelinen and Nardi have argued that while it may not be a “theory” in a narrow sense<sup>91</sup> of the term it is nevertheless a set of basic principles that constitute a general conceptual system.<sup>92</sup> Activity theorists have been accused of underestimating the achievements of other schools of psychological thought and of exaggerating the originality of their own.<sup>93</sup>

Whatever may be the eventual outcomes of academic controversies concerning its current applications and versions, my appreciation of activity theory (and of any psychology,

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<sup>90</sup> Engestrom op. cit 1999. Learning by Expanding: Ten Years After. p 2 (italics added).

<sup>91</sup> Thomas and James make the helpful remark that “theory” can be regarded broadly speaking as (a) patterning, or (b) explanation and prediction. In the former looser sense it is about bringing ideas together. In the latter sense it is expected to conform to positivist and functionalist expectations about explanation. Kaptelinen and Nardi can be read as saying that if activity theory is not theory in the latter sense, it is at least theory in the former sense. See G.Thomas and T. James, “Reinventing Grounded Theory,” British Educational Research Journal. Vol. 32 (2006) pp. 767-795. p. 772.

<sup>92</sup> Victor Kaptelinin and Bonnie A. Nardi, “Activity Theory: Basic Concepts and Applications,” CH197 Electronic Publications, accessed at [www.acm.org/sigchi/chi97/proceedings/tutorial/bn.htm](http://www.acm.org/sigchi/chi97/proceedings/tutorial/bn.htm) on 7th October 2004. . Kaptelinen and Nardi point out that activity theory is not a "theory" in the strict interpretation of the term but a set of basic principles that constitute a general conceptual system. These basic principles include (1) the hierarchical nature of activity, (2) object-orientedness, (3) internalization/externalization, (4) tool mediation and (5) development. In an earlier piece of writing the human-computer interaction specialist and anthropologist Bonnie A. Nardi provides an extremely lucid description: “Activity theory is a powerful and clarifying descriptive tool rather than a strongly predictive theory. The object of activity theory is to understand the unity of consciousness and activity. Activity theory incorporates strong notions of intentionality, history, mediation, collaboration and development in constructing consciousness. Activity theorists argue that consciousness is not a set of discrete disembodied cognitive acts (decision making, classification, remembering...) and certainly it is not the brain; rather consciousness is located in everyday practice: you are what you do. And what you do is firmly and inextricably embedded in the social matrix of which every person is an organic part. This social matrix is composed of people and artefacts. Artefacts may be physical tools or sign systems such as human language. Understanding the interpenetration of the individual, other people and artefacts in everyday activity is the challenge activity theory has set for itself.” Bonnie A. Nardi, Context and Consciousness: Activity Theory and Human-Computer Interaction. Cambridge MA: MIT Press, 1996. p. 1.

<sup>93</sup> Jeremy Roschelle, “Activity Theory: a Foundation for Designing Learning Technology?.” The Journal of the Learning Sciences. Vol. 7 (1998) pp. 241-255. See also Bonnie Nardi’s answer to Roschelle’s criticisms of activity theory in The Journal of the Learning Sciences. Vol. 7 (1988) pp. 257-261.

social science, or philosophy that respects the human qualities of human beings<sup>94</sup>) accords with a central practical principle of OW and of unbounded organization: the principle of autonomy. I do not draw from the fact that we are all one species on one planet enmeshed in one global economic system the conclusion that we need one central authority to direct our lives and solve our problems for us. “Unbounded organization” is instead a proposal for *the alignment of autonomous actors*. It is a cultural philosophy that calls for inter-sectoral collaboration among self-regulating individuals and enterprises.

From Vygotsky to now the activity theory tradition has emphasized the process of formation of consciousness in the “autonomous individual” -- the specific human development that contributes to social development.<sup>95</sup> It has maintained that the unfolding of this individuality occurs through social activity (under conditions that imply motives and goals). In some ways A.N.Leont’ev went further than Vygotsky in looking at the development of autonomy, since Vygotsky’s experimental observation focused on specific activity (e.g. writing) and how this developed a particular organization of consciousness, while Leont’ev realized that it was necessary to identify the particular “knots” or unities of activities, constituting an “ensemble” within the individual’s “personalities” (in plural, i.e. “bundles” of activity-imagery). The contribution from the “Vygotskian School” is not so much to discover what is on reflection a matter of common sense, namely that our cultural context influences powerfully our inner development. Rather it is to locate in *activity* the means by which individual subjects undergo transformation, within a system of social relations. Critical psychology was able to build on Leont’ev’s work, looking at the

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<sup>94</sup> An example of research working in a completely different research tradition, and yet coming to similar humanistic conclusions, Manganyi, writing from a completely different psychological tradition and perspective, and out of empirical observation from clinical practice notes that “changes in patterns of expression of psychopathology appear to be related to changes in society and its primary and secondary institutions.” In a chapter called “Emerging Neurotic ‘Metaphors’ and the Possibility of a Therapeutic Culture” Manganyi suggests that symptom neuroses and character disorders are “prototypes of distinctive “neurotic” disorders characteristic of two historical and cultural eras.” In this light he asks whether patients are “telling us something about changes in social structure and concomitant changes in the character of neuroses in particular.” In considering what is needed for the development of a “therapeutic culture” (i.e. one in which psychotherapy and related treatment modalities are taken for granted) in the Apartheid South Africa from which he was writing, Manganyi suggests that this would require formation of “generalists to work at the grassroots levels and specialists to help the elite with their character disorders.” N. Chabani Manganyi, Looking Through the Keyhole: Dissenting Essays on the Black Experience. Johannesburg: Ravan Press, 1981. p. 92, p. 102.

<sup>95</sup> Axel op. cit in the 1997 Cole, Engestrom and Vasquez collection: p. 134.

“reflective distance to the social conditions”<sup>96</sup> for each individual, recognizing that each human being is a source of cognition, emotion, conscious relation and action. These are the central characteristics of *subjectivity*. Recognition of subjectivity combined with an exploration of *inter-subjectivity*, as different individuals relate to each other; and the concept of *action potency*, speaking to the *relationship between individual participation in the social process depending on the organization of society and the way the individual relates to her/his social position and life situation* leads to the scientific valuing and understanding of **human freedom or agency**.<sup>97</sup>

### Engeström’s Third Generation Contributions: a Conception of Activity Systems

The Finnish scholar Yrjö Engeström has, since his seminal presentation in 1987,<sup>98</sup> become known as one of the key researchers in the field of activity theory. His concept of “expansive learning” is similar to my concept of “unbounded organization.” It is similar in the respect that in both cases it is a matter of making what was formerly impossible possible using activity-centred methodologies. It is similar in the respect that in both cases it is a matter of “acting outside the box” and “thinking outside the box” -- escaping the limits of presently dominant historically created institutions to create historically possible and more functional institutions. Engeström to the best of my knowledge does not know anything about organization workshops. If he had known of them he could have used them as examples. Engeström’s findings and concepts add considerable detail to our store of knowledge about how to facilitate the social change that will get our human family from where we are to where we need to be.

### The Activity Triangle

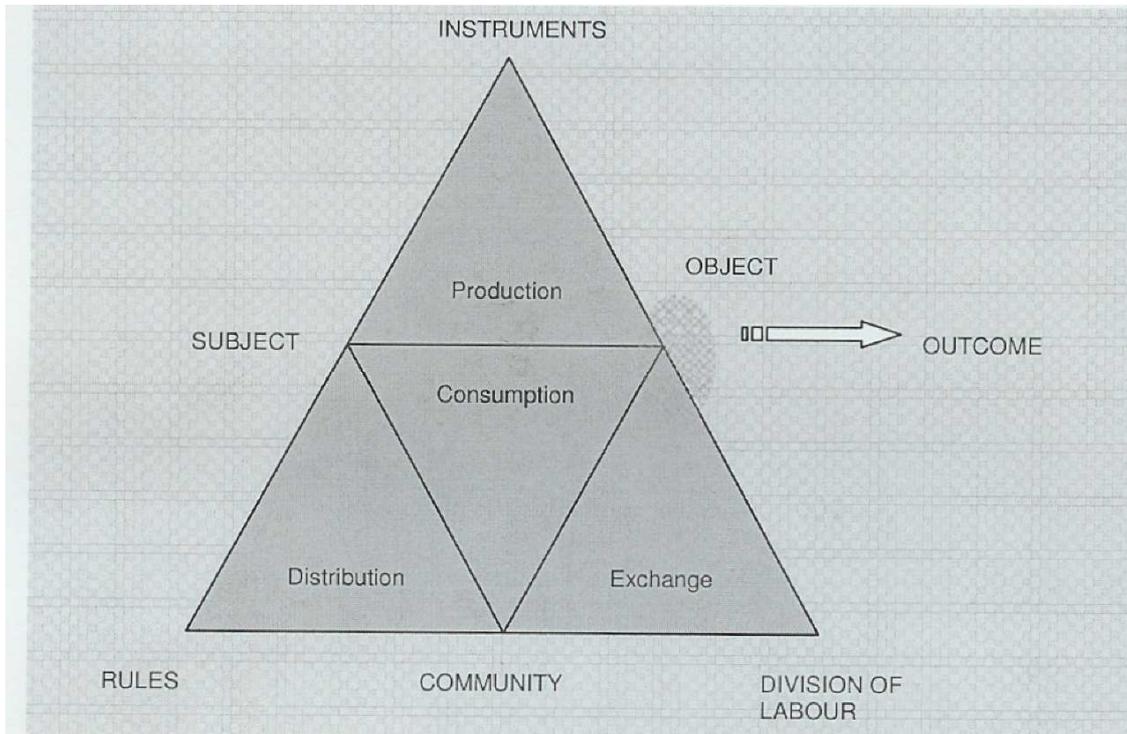
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<sup>96</sup> Axel Id. p. 142.

<sup>97</sup> (op.cit: 140 – 146) Once again we may recall the remarks about de Morais’ description of the behaviour patterns in “social strata” which can be misread as social determinism unless leavened by an appreciation of agency. I have suggested also that Bourdieu’s notion of the *habitus* is a leavening mechanism.

<sup>98</sup> Yrjö Engeström, Learnang by Expanding: an activity-theoretical approach to developmental research. Helsinki: Orienta-Konsultit, 1987

. Engeström devised an “Activity Triangle” (Figure 5.1) which represents a simple “complete” depiction of human work activity, and which seeks to provide a starting point for analyzing such activity.



**Figure 2 Engeström’s Activity Triangle <sup>99</sup>**

This triangle reflects the first of Engeström’s central claims, which follows directly from Vygotsky and Leont’ev’s insights but which also aligns these with systems thinking. The central claim is that “the object-oriented and artefact-mediated collective *activity system* is the prime unit of analysis in cultural-historical studies of human conduct.” <sup>100</sup> The triangle is an attempt to depict schematically and generally the artefact-mediated collective activity system that we all are part of in cultures that historically have been constituted as ours is by

<sup>99</sup> From Engestrom, op. cit. 1987 Learning by Expanding ... p. 37

<sup>100</sup> Engestrom op.cit. 1999, Learning by Expanding Ten Years After ... p. 2

rules and a division of labour organising production, consumption, distribution, and exchange.

In Engeström's Triangle the *Subject* is seen as the individual or group whose purposeful activity is being looked at. The *Object* is the focus of the activity. The object is that which suggests or motivates activity (our prisoner's ball, or the raw material for an undivided production process in the OW). It is the problem to be addressed or even a vision of achievement (this is common to most strategic planning processes). The *Community* consists of many individuals and groups/sub-groups who share a similar general object and *who construct themselves as distinct from other communities*. *Instruments* are the "mediational means." They are the language and tools and signs and symbols – and of course also physical instruments, techniques and cognitive artefacts. *The Division of Labour* refers to the vertical or horizontal division of tasks within the community --more on this in a moment. Again we may recall the process of organizational learning within the OW. The participant enterprise seeks to find the optimal division of labour and organizing rules for the enterprise, drawing on the Theory of Organization presented in the lectures. By *Rules* is meant the prevailing regulations (explicit and implicit). The rules are the norms and conventions that guide and constrain actions within the activity system.<sup>101</sup>

Although it is not necessary to go into any detail in analyzing the flow within the triangle around the inter-relationship of production, distribution, exchange and consumption; any time spent looking at this representation of an activity system reveals that it is exceptionally robust and versatile as an analytic device. Notice, for example, the "top" triangle in the pyramid (Instruments). This could be seen as representing Vygotsky's original conception of mediated activity in an individual. Similarly, we might look at two other aspects of development organization – *governance* and *social role agreements/linkages* – as roughly concerned with the same issues as those set out at other two corners of the full Activity Triangle: Rules and Division of Labour.)

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<sup>101</sup> Engeström op. cit 1987 *passim*; see also <http://www.edu.helsinki.fi/activity/6b0.htm>; and Chris Burman, Learning, Praxis and Social Change. Unpublished Ph.D. thesis, University of the North, South Africa, 2004. p. 162.

Another way to look at Engeström's activity triangle is to see it as a way of describing how human agency (agency being composed of the individual subjects, the wider community and the imagination/goal that compels or inspires them) engages with and is influenced by structural forces at a moment in history. The rules (the structures) govern the way a society organizes the division of labour. They govern the concepts and tools it uses in economic and cultural production and reproduction.

### Third Generation Activity Theory: Central Activity and Neighbouring Activities

Engeström goes on from the starting point of the “central activity” (production-consumption-distribution-exchange) represented by the triangle above. Going on, we can think of *neighbouring activities*. The neighbouring activities are related to or shape each of the elements shown in the triangle. There are neighbouring activities that produce the key instruments/tools for the central activity, *instrument-producing activities*. There are neighbouring activities around educating, training or schooling the subjects of the central activity, the *subject producing activities*. There are neighbouring activities around legislation and regulation, *rule producing activities*. There are neighbouring activities where the immediate objects and outcomes of the central activity are embedded, *object-producing activities*). One such activity is of course strategic planning.

These *neighbouring activities* can be analyzed in their own right. They all have potential to influence the central activity system. Similarly the central activity influences the form and content of the neighbouring activities.<sup>102</sup> In other words, in the first case mentioned, the *instrument* can become the object in a “smaller” activity triangle; (a triangle representing the making of instruments) or the *rule* becomes the object (of a triangle representing the making of rules); or the *subject* and so on.

### Third Generation Activity Theory: Primary and Secondary Contradictions

A second central claim of Engeström is that “historically evolving inner contradictions are the chief sources of movement and change in activity systems.”<sup>103</sup> “New

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<sup>102</sup> Burman op. cit. 2004 p.176; Engeström op. cit..1987.

<sup>103</sup> Engestrom op. cit. 1999, p. 2.

qualitative stages and forms of activity emerge as solutions to the contradictions of the preceding stage or form. This in turn takes place in the form of invisible breakthroughs.”<sup>104</sup> He identifies four forms of contradiction. The *primary contradiction* he identifies within the triangle (in common with de Morais in his Notes Toward a Theory of Organization) is that between use value and exchange value (produced by concrete labour and abstract labour respectively). It makes sense to call this a “contradiction” because the ultimate point and purpose of producing things is use, and yet the immediate dynamic driving production is making commodities for sale, that is to say for exchange. It often results that the useful is not produced; the useless is produced, those who need things for use do not have them, and so on.

Secondary contradictions, Engeström suggests, arise between different parts of the triangle, as when “a stiff hierarchical division of labour lags behind and prevents the possibilities opened up by advanced instruments.”<sup>105</sup> We have been seeing secondary contradictions for the past several decades. The computerizing of work and the “knowledge society” constantly augment the possibilities for highly efficient production opened up by advanced instruments. Nevertheless, the full potential for humanity is not utilized. Millions remain in or fall into unemployment and poverty.<sup>106</sup> We see secondary contradictions too in the OW, for it is precisely the contradiction between the possibilities for enhanced production given the availability of the means of production and clarity about income earning work, on the one hand, and the inadequate or inappropriate organizational forms, on the other hand, that is the spur for changes to the participants’ enterprise.

### Tertiary Contradictions

It is perhaps Engeström’s *tertiary* contradictions that are most interesting for the development practitioner. In order to first explain his notion of tertiary contradiction we

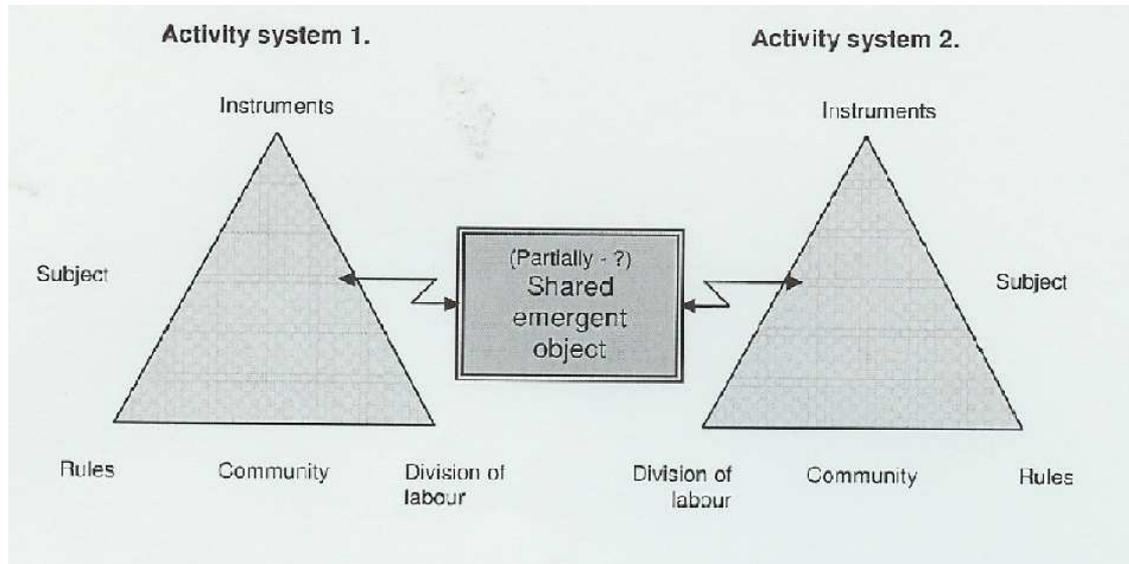
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<sup>104</sup>Engeström op. cit. 1987 p 46..

<sup>105</sup> Engeström op. cit 1987 p.44.

<sup>106</sup> Engeström wrote an essay review of The End of Work by Jeremy Rifkin, One World, Ready or Not: the Manic Logic of Global Capitalism by William Greider, and When Work Disappears by William Wilson. He suggests that these pessimistic books end where they should begin, namely at the point where means of social transformation are proposed and assessed; and he further suggests that his concept of “expansive learning” is such a means of social transformation. Yrjo Engeström, “Can People Learn to Master their Future?” Journal of the Learning Sciences. Vol. 9 (2000) pp. 525-534

introduce another diagram, Figure 3, which represents Engeström's conception of development interventions (or indeed any effort to introduce new ideas or proposals).



**A representation of the normative scheme (Engeström 2001: 154; Burman 2004: 207)**

Engeström suggests, “The tertiary contradiction appears when the representatives of culture (e.g. teachers) [or development practitioners] introduce the object and motive of a culturally more advanced form of the central activity into the dominant form of the central activity. For example the primary school pupil goes to school in order to play with his mates (the dominant motive), but the parents and teacher try to make him study seriously (the culturally more advanced motive). The culturally more advanced object and motive may also be actively sought by the subjects of the central activity themselves.”<sup>107</sup>

In summary the tertiary contradiction is between the object/motive of the dominant form of the central activity and the object/motive of a culturally more advanced form of the central activity. However “the object is to be understood as a project under construction, moving from potential raw material to a meaningful shape and to a result or

<sup>107</sup> Yrjo Engestrom, Learning by Expanding: an activity-theoretical approach to developmental research. Helsinki: Orienta-Konsultit, 1987. p.43. I omit discussion of Engestrom's *quaternary* contradictions.

an outcome. In this sense, the object determines the horizon of possible goals and actions. But it is truly a horizon: As soon as an intermediate goal is reached, the object escapes and must be reconstructed by means of new intermediate goals and action.”<sup>108</sup>

It could be suggested that the lectures on the Theory of Organization during the OW provide just such a “culturally more advanced motive” for participants. Although some of them might have come to learn a practical skill such as bricklaying; they steadily become immersed in the project of running a successful enterprise.

We might suggest that whereas several intervention processes (e.g. a Freirean literacy group) are able to reveal the primary and secondary contradictions within activity, the development practitioner might be more interested in potential tertiary contradictions. Practitioners are concerned with “culturally advanced motives.” They are implicitly or explicitly interested in activities connected with purposeful organization. They seek organizational awareness.

### Kenneth Burke’s Dramatistic Activity Theory of Language

Kenneth Burke (1897 – 1993) was a major American literary theorist. Although he developed his activity theory of language independently of the tradition stemming from Vygotsky,<sup>109</sup> I and others have found that his ideas blend nicely with that tradition.<sup>110</sup> Burke wrote that he called his theories “dramatistic” because “...they viewed language primarily as a mode of *action*...”<sup>111</sup> “and that he “...treats language and thought primarily as modes of action.”<sup>112</sup>

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<sup>108</sup> Yrjo Engestrom, “Innovative Learning in Work Teams: analyzing cycles of knowledge creation in practice,” in Yrjo Engestrom, Reijo Miettinen and Raija-Leena Punamaki (eds.) Perspectives on Activity Theory. Cambridge UK: Cambridge University Press, 1999. pp. 377-404. p. 381.

<sup>109</sup> Among the sources important for Burke were Aristotle, medieval Latin grammar, Shakespeare, and George Herbert Mead’s The Philosophy of the Act. Chicago: University of Chicago Press, 1938.

<sup>110</sup> James Wertsch, for example, turns to Burke to elaborate the Vygotskian concept of mediated activity in his major book Mind as Action. New York: Oxford University Press, 1998.

<sup>111</sup> Kenneth Burke, “Questions and Answers about the Pentad,” College Composition and Communication. Vol. 29 (1978) pp. 330-335. p. 330.

<sup>112</sup> Kenneth Burke, A Grammar of Motives. Berkeley: University of California Press, 1969. p. xxii. See also Kenneth Burke, Language as Symbolic Action. Los Angeles: University of California Press, 1966.

Burke's most famous contribution is his "pentad," a method for examining why humans do what they do proposed in his most famous book A Grammar of Motives. The method consists of five key terms, each of which lends itself to asking key questions:

Act : What happened? What is the action? What is going on?

Scene: Where is the act happening? When? What is the background situation?

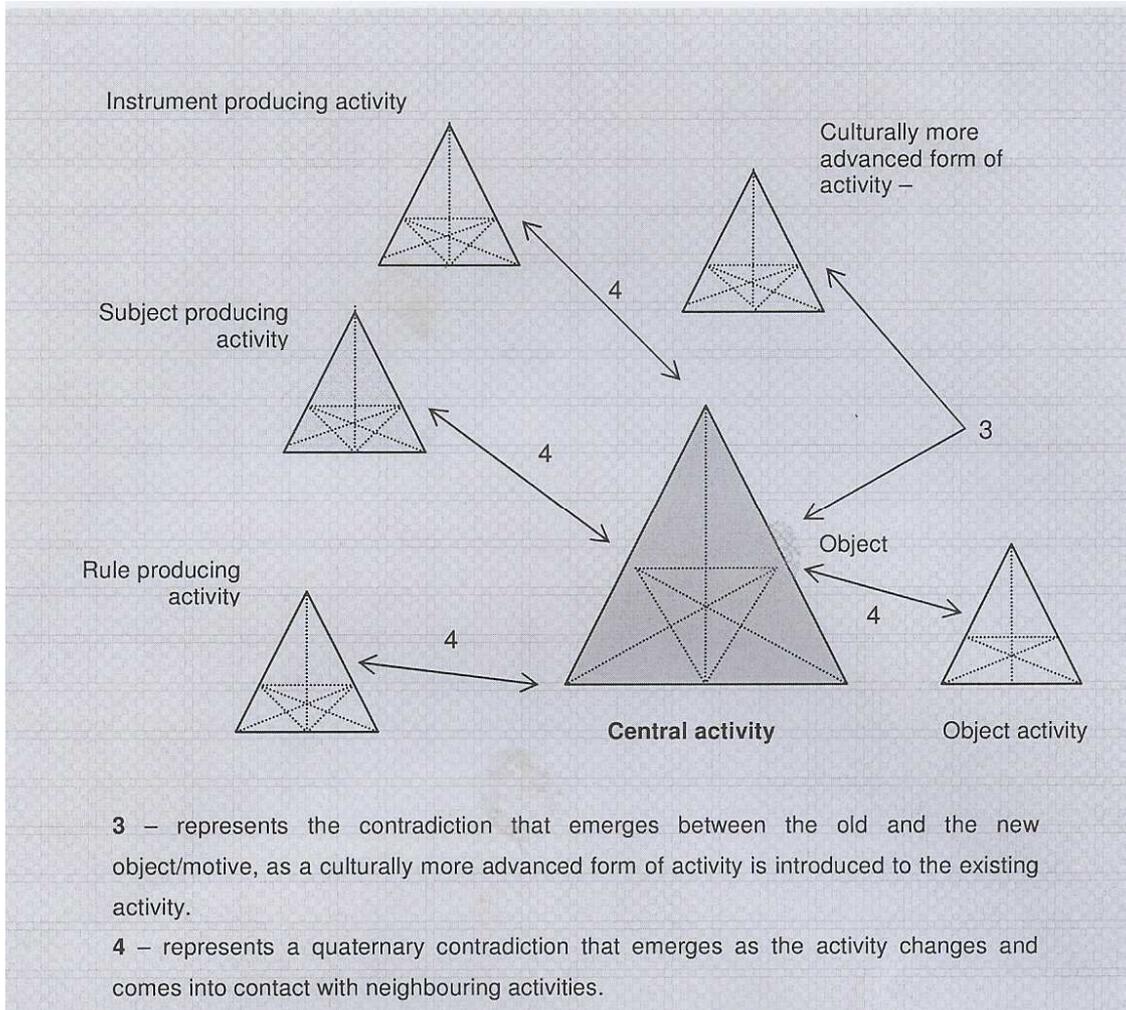
Agent: Who is involved in the action? What are their roles?

Agency: How do the agents act? By what means do they act?

Purpose: Why do the agents act? What do they want?

In the next chapter there will be an opportunity to illustrate some applications of the ideas in this chapter. The next chapter will give some examples –all of them more or less imperfect—of unbounded organization in practice.

**Figure 4 New contradictions emerge when “a culturally more advanced activity” is introduced <sup>113</sup>**



### Third Generation Activity Theory: Forging New Patterns of Activity

<sup>113</sup> (Engeström 1987: 44)

Conceiving a shift in the object/motive as being the principal driver of change is the basis of most objectives-oriented planning processes. They most assuredly seek a description of the “culturally more advanced motive” or vision/development objective. One weakness of this process is that it may tend merely to project a version of the current activity into the future. Another weakness, on the other hand, is to project so different a version of future that an ordinary bounded organization is unable to contemplate moving toward it.

Engeström suggests a somewhat different approach to change. On his view, human learning begins through learning *actions* and *operations* within a particular activity system. It is possible to forge new patterns of activity through a different application of these actions. He advances a conception of *learning activity*, which is the production of societally new activity structures out of actions manifesting the inner contradictions of the preceding form of the activity in question. “Learning activity is *mastery of expansion from actions to a new activity*. While traditional school-going is essentially a subject-producing activity, and traditional science is essentially an instrument-producing activity, learning activity is an *activity-producing activity*”<sup>114</sup>

### Third Generation Activity Theory: A Dialogic Conception

Let’s be clear: this apparently simple activity triangle should not be misconstrued as seeking to represent perfectly consistent mono-thought systems. Activity systems contain a variety of different viewpoints (or voices) and layers of historically accumulated artefacts, rules, and patterns of division of labour. The multi-layered and multi-voiced nature of activity systems means that there can be conflict and difference within them. If these contradictions are to be used as the engine of change and development then a first step is recognizing this multiplicity. This recognition in turn has mammoth implications for development planning. It suggests methods that involve multi-stakeholder consultation and accountability. It suggests hearing different voices spoken in different “languages” and embedded in different “language-games.”

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<sup>114</sup> (Engeström 1987: 70, italics in original).

Engeström and his colleagues' developmental work research is then a methodology for applying activity theory systemically to enhance societal learning. It is an application of a theory of expansive learning that "emerges as practitioners struggle through developmental transformations in their activity systems, moving across collective zones of proximal development."<sup>115</sup> This theory of expansive learning takes account of cross-cultural "collisions," the interplay of different activity systems, networks of multiple activities, and the multiplicity of viewpoints and approaches within any given activity system. "An activity system is by definition a multi-voiced formation. An expansive cycle is re-orchestration of those voices, of the different viewpoints and approaches of the different participants. Historicity in this perspective means identifying the past cycles of the activity system. The re-orchestration of the multiple voices is dramatically facilitated when the *different voices are seen against their historical background*, as layers in a pool of complementary competencies within the activity system."<sup>116</sup>

### Summary of this Chapter

In this Chapter I have linked several fields of knowledge, and I have followed out in some detail the tradition in psychology that was fundamental for Clodomir de Moraes when he developed the methodology of the organization workshop. I have gone back in time to Vygotsky, who laid the basis for the work of Leont'ev whose work was so fundamental for de Moraes. I have also gone forward in time from Leont'ev tracing activity theory down to the third generation contributions of Yrjö Engeström. All of these contributions to an activity-theoretical approach to cognitive science can be regarded as steps in the same direction. At every step the taken-for-granted diminishes while the horizon of possibilities expands.

Vygotsky reframes knowledge as social and therefore as historically variable from culture to culture. All of activity theory frames knowledge in practice, and therefore in concrete historical realities that now are as they now are, but which do not

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<sup>115</sup> (Engeström 1999a: 2).

<sup>116</sup> (Engeström 1991:15, italics for emphasis).

necessarily have to continue in the future being as they now are. The concluding paragraphs of this chapter focus on the third generation activity theory of Yrjö Engeström for whom human learning begins through learning *actions* and *operations* within a particular activity system, and for whom it is possible to forge new patterns of activity through a different application of these actions. Engeström's work can be read as psychology for social change or perhaps as a sociological organization theory for social change, for it is precisely the tendency of the activity theory approach to break down the distinction between psychology and sociology.

Taken together, the theoretical pursuits of this chapter serve to bring into outline the contours of an alternative unbounded paradigm of management science and development praxis. A new question thus gets thrown up by this research – a new “object”/motivation appears – which of course will not be answered in a book but in real life: What would happen if we really took organizational learning and activity theory seriously, understanding moreover that true social development involves *unbounded organization*, where there is purposeful activity and collaboration across disciplinary and organizational boundaries in pursuance of societal change?



