## Vygotsky and Activity Theory<sup>\*</sup> The Object in Leontyev, Engeström and Vygotsky

**Abstract**: The concept of 'object of activity' in the theories of A. N. Leontyev and Y. Engeström are compared with equivalent concepts in L. S. Vygotsky, Marx and Hegel. 'Object' is given quite different meanings in the work of Leontyev and Engeström, and is not made explicit in Vygotsky's theories. And yet these authors constitute important sources for Activity Theory. Given the important role that the concept of 'object' plays in Activity Theory, these differences need to be made explicit and resolved. The comparison undertaken leads to a suggestion for the revision of the concept of 'object' in Activity Theory in which the object of activity is taken as a concept immanent in the activity itself.

I want to return to some old questions – the questions of units of analysis and of the object of activity, questions which are vital to the theoretical coherence of Cultural-Historical Activity Theory and which were intensively discussed in the 1980s (Meshcheryakov 1979; Wertsch 1985; Davydov & Radzikovskii 1985; Zinchenko 1985; Kozulin 1986; Engeström 1987, chapter 2). In 2005, a special issue of *Mind, Culture, and Activity* was devoted to the question of object of activity, entitled "Perspectives on the Object of Activity" and included contributions from a number of authoritative figures.

I am going to look at the unit of analysis for activity and how it is conceived by Vygotsky, Leontyev and Engeström. "But wait," you say, "Vygotsky did not have a scientific concept of activity, let alone a unit of analysis for activity!" (Yasnitsky, 2009, c.f. Davydov & Radzikovskii 1985, p. 52). Bear with me a minute. Activity theorists, whether using the concepts of Leontyev or Engeström, agree that an activity is defined by its object (Leontyev, 1978; CAT&DWR), which is the source of the motivation for a person's actions, and which therefore allows the researcher to make sense of the person's actions by making the motivations behind a person's actions available for observation. Vygotsky also had a view on the motivation underlying a person's actions and how it could be made sense of. So let us look again at the concept of the object of activity, and include Vygotsky in this review. It was Vygotsky, after all, who defined the first, "main" unit of activity – the artefact-mediated action (Leontyev, 2009, p. 189; Zinchenko 1985, p. 103), of which 'word meaning' is a special case.

# **Object of Activity**

'Object' is a very polysemous word, both in common speech and in philosophical writing, and this polysemy is very longstanding and has been carried over from German philosophy to Activity Theory.

In both Russian (the source of Activity Theory) and German (the philosophical roots of key concepts of Activity Theory) there are two words translated into English as 'object': in German *Gegenstand* and *Objekt*, and in Russian respectively *predmet* and *objekt*. But

<sup>&</sup>lt;sup>\*</sup> This is not an introductory text. Also, an improved presentation of the ideas in this paper has been provided in "<u>The Concept of Object</u>."

the availability of two words has not lessened the problem of polysemy and Russian and German are hardly better off than English.

In common German speech and in philosophical writing as late as Kant *Gegenstand* and *Objekt* could be used more or less interchangeably. Differences in usage began with Hegel and entered the Marxist tradition and thereby Activity Theory.

## Etymology

Following Michael Inwood (1992, pp, 203ff), *Das Objekt* is derived from the Latin *objectum*, 'something thrown before or against', first used by Duns Scotus in the 13th century where 'subject' had the meaning of the 'subject matter of discourse' and 'object' was what was thrown against it, i.e., what was said of the subject. In the 17th century, the meaning of subject and object underwent an inversion and Christian Wolff gave *objekt* the meaning of something thrown before or over against the *mind* (now, since Descartes, = the 'subject'), i.e., the object of knowledge but also of striving, of desire and of action. The object does not *have to* be a real or material thing, though Kant also used it in that narrower sense, and in common speech it means just that. But *objekt* is taken to be an 'objective' situation, though imagined or perceived and given meaning by the mind.

The native German word *Gegenwurf* – 'what is thrown against' – was synonymous with *Objekt*; but from the 17th century *Gegenstand* – 'what stands against' – displaced *Gegenwurf* in everyday speech and in philosophical writing, including that of Kant.

It was Hegel who introduced differences in meaning between Gegenstand and Objekt.

# The Object in Hegel

Whilst in ordinary German speech, the two words remained synonymous, Hegel made *Gegenstand* an object of knowledge, of consciousness and intention, and thus a *psychological* concept. *Objekt*, on the other hand, was a real object, independent of the subject, but nevertheless the object of a subject, taken to be a complex system of activities and relations, somewhat consonant with the modern concept of "The Other." *Objekt* is not a psychological concept as such for Hegel, but in his *Logic* the *Subjekt-Objekt* relation is central to concept formation in the phase of ascent from abstract to concrete. The *Objekt* is not an individual person or thing. Both the subject and the *Objekt* of the subject are independent cognizing, practical subjects (i.e., formations of consciousness, or what Marx called *social* formations), and the development of each involves a mutual interpenetration and transformation.

For Hegel, the *Objekt* refers to the *other* subject, generally the dominant subject in the community, and how it construes the world, with its language, activities and artefacts. In this context, the *Subjekt* is some individual, social movement or concept which likewise construes the world in its own way.

For example, in the relation between the Women's Liberation Movement and the patriarchal society it seeks to transform, the Women's Liberation Movement is taken as *Subjekt* and the society as *Objekt*; in the relation between sociology and a social formation a sociologist is studying, sociology is the *Subjekt* and the social formation (perhaps one in which the participants study sociology) is the *Objekt*.

Thus the problem or task to which a *Subjekt* addresses itself, its *Gegenstand*, is construed in a certain way, and differently by the *Objekt*. *Subjekt* and *Objekt* may enter

into relations with one another, which generally culminate in a modification of the *Objekt* in which the *Subjekt* is modified but also, the subject modifies the community by means of its incorporation – the *Subjekt-Objekt* or what Hegel called the *Idee*.

In the example above concerning sociology, sociology could treat the social formation under study as a *Gegenstand* by 'objectifying' it, but the problem with this is immediately obvious if we imagined that the 'object' under study is the Women's Liberation Movement – the 'object' has its own point of view and the relation is actually symmetrical.

## The Object for Marx

Marx (1845) said in *Theses on Feuerbach* # 1 (1845):

"The main defect of all hitherto-existing materialism ... is that the object [*der Gegenstand*], actuality, sensuousness, are conceived only in the form of object [*des Objekts*], or of contemplation, but not as human sensuous activity [*Tätigkeit*], practice, not subjectively. Hence it happened that the active side, in opposition to materialism, was developed by idealism"

Marx used *Objekt* in the sense of an objective thing, and he was calling instead for a resurrection of Hegel's *active*, critical conception of the *Objekt*, as activity (*Tätigkeit*) or practice, rather than either Hegelian thought-objects (*Gedankenobjekten*) or Feuerbachian objects of passive contemplation. It is this activity-theoretical meaning of *Gegenstand* (Russian: *predmet*) which was taken up by A. N. Leontyev in the founding of Activity Theory.

To underline the problems which may be introduced by translation, in the standard English translation of *Das Kapital*, "*Arbeitsgegenstand*" (the raw material which the worker labours upon) is translated not as the "object of labour" but as the "subject of labour."

### A. N. Leontyev's use of *Predmet* and *Obyekt*

In his later work, *Activity Consciousness and Personality*, Leontyev specifically assigned distinct meanings to *Gegenstand/predmet* on one hand, and *Objekt/obyekt* on the other, in order to clarify the meaning of the 'object of activity' (*predmet*). As Kaptelinin (2005) explained:

"*Objekt*, denoting the objective, material reality in general (as "things having an existence"), was used to describe a pole of the "subject-object" opposition, through which opposition the notion of activity as a process of mutual transformations between subject and object was defined (Leontyev, 1978, p. 50).

"The term *predmet* was used consistently with the previous analysis (Leontyev, 2009), that is, to denote [the] objective orientation of [the] activity. The crucial role of the object (*predmet*) of activity was emphasized by Leontyev by repeatedly referring to activity as "object-related" activity (*predmetnaja dejatelnost*)."

This distinction which Leontyev specified between *predmet* and *obyekt* translates easily into German, but is lost when both words are translated into English as 'object' which combines all of these meanings. The English-speaking reader determines from the context whether *predmet* is meant: 'the object of activity' – the imagined and desired

objective product or outcome, or *obyekt* is meant: the objective existence of something independently of the subject as one pole of the subject-object relation. Thus both *predmet* and *obyekt* refer to the object of activity, albeit with different senses, although this is not the case with Hegel.

### The Object of Activity for A. N. Leontyev

'Object' is a very basic concept of Activity Theory as elaborated by Leontyev, in one sense more basic than 'activity' itself, because it is the object which summons the activity into being and defines it.

"A basic or, as is sometimes said, a constituting characteristic of activity is its object-relatedness. Properly, the concept of its object (*predmet*) is already implicitly contained in the very concept of activity. The expression "objectless activity" is devoid of any meaning. An activity may seem objectless, but scientific investigation of activity necessarily requires discovering its object. Thus, the object of an activity is two-fold: first, in its independent existence as subordinating to itself and transforming the activity of the subject; second, as an image of the object, as a product of its property of psychological reflection that is realized as an activity of the subject and cannot exist otherwise" (2009, p. 86).

So there is a sense in which it could be said that Leontyev did not so much found a theory of activity as a theory of the *needs and their objects*:

"Only as a result of [a need] 'meeting' with an object that answers it does it first become capable of directing and regulating activity. ..., 'filling' it with content derived from the surrounding world. This is what brings need to a truly psychological level. ... Thus needs direct activity on the part of the subject, but they are capable of fulfilling this function only under conditions that they are objects" (1978, p. 88-89).

A person needs food, for example, but it is only when they meet an object – perhaps an expensive delicacy in a shop window or ingredients in their own kitchen – that the person is stimulated into action, either purchasing or cooking as the case may be. The point remains, of course, to show precisely how it is "*the alteration of nature* by men, not solely nature as such" (Engels, 1883) that is, *object-oriented activity*, "which is the most essential and immediate basis of human thought."

In the first quoted paragraph, Leontyev also highlights that the object of activity is both an objective situation, which can exist only by force of material interactions outside the consciousness of the subject, and a subjective representation of that situation, which is the sense it has for the subject. So just as action and activity are both equally subjective and objective, so also both subjective and objective are united in this concept of the object of activity.

This view, in which subject and object are mutually constituted, has its roots in Hegel's concept of *Objekt*. It also carries the meaning of *Gegenstand* as the intentional object, or goal to which the subject is striving and which provides the motive for activity. So the object is not just something contemplated or cognised, but is equally tied up with all the emotions associated with striving – suffering, hope, pain, desire, and so on, as well as will, attention, and so on.

For the psychologist, the object of activity is the ultimate reason explaining an activity, and the source of the motivation underlying it. Discovering this motive is what interests Leontyev as a psychologist. Although Leontyev seems to *identify* object and motive, the relation between object and motive is that motive answers the question: "What is it about the object which makes it desirable?" in itself, or as a step towards a more distant object. "What is problematic for the subject which would be resolved by the object? What is the *personal sense* of the object, its significance for the subject?"

#### 'Meaning' in Activity Theory

Before my critique of subject and object in Leontyev's theory can be made clear, I need to explain what I mean by 'meaning'. I do not take 'meaning' to be an attribute of a semiotic artefact such as a spoken word, though it is undeniable that meaning relies on and incorporates the sound-form. I take 'meaning' to be an *action*, and in doing so I follow Vygotsky, in particular, his presentation of the concept of 'word meaning' throughout Chapter 1 of *Thinking and Speech*. Consider the following excerpts:

"From a psychological perspective, word meaning is first and foremost a generalization ... a verbal act of thought; ... Social interaction presupposes generalization and the development of verbal meaning; ... it may be appropriate to view word meaning not only as a unity of thinking and speech but as a unity of generalization and social interaction, a unity of thinking and communication." (Vygotsky, 1934, p. 47, 48, 49; italics in original)

Here Vygotsky clearly takes word meaning to be in each instance a unit of an activity – thinking, speaking, communicating, generalizing, interacting – and consequently as an action. The physical properties of a word as given for example in a dictionary, are universal (N.B. universal, not objective), but its significance for both speaker and listener depends on the particular context in which the word is spoken and heard. The universal properties of a word can be reproduced and recognised by machines as well as people, and are presupposed in thinking and communication. However, a theory of psychology is concerned primarily with word meanings as human actions, which therefore do not have a 'supra-individual' or 'non-psychological' existence.

Consequently, in what is to follow I do not use the word 'meaning' in the same sense given to it by Leontyev, which as will be seen, I regard as incoherent.

### Subjective/Objective and the Subject-Object relation

Leontyev referred to the subject's 'personal sense' of an object (*Objekt*) as opposed to its 'objective meaning':

"... everyone who studied some time ago knows very well the significance of examination marks and the results that followed them. Nonetheless, for the consciousness of each individual the mark may have an essentially different meaning: let us say, as a step (or obstacle) on the way toward the chosen profession, or as a means of winning approval in the eyes of those around him, or perhaps in some other way. It is this circumstance that makes it necessary for psychology to distinguish the recognized objective significance from its significance for the subject. In order to avoid duplication of terms I prefer to speak in the latter case about the personal sense" (1978, p. 129).

This encompasses the well-known relativity of perception – that a field looks differently in the eyes of a farmer than it does through the eyes of a painter or a property developer. The premise is that there is *one* sense of the object which is the *objective meaning*, whilst all *other* interpretations are taken to be a personal sense of the object which reflects a personal, usually *unacknowledged*, motive. This interpretation is hardly tenable today's multicultural societies in which it is widely acknowledged that different communities and groups ascribe to situations quite different, equally valid, culturally constructed meanings.

For Leontyev:

"As distinct from meaning, personal sense, like the sensory fabric of consciousness, does not have its own 'supra-individual', 'non-psychological' existence" (1978, p. 135).

In other words, meaning *does* have a 'supra-individual', 'non-psychological' existence. But this dichotomy, I suggest, relies on an individual/societal dichotomy which is also unsustainable but is indispensable for Leontyev's theory. 'Society' is not an integral entity in which there exist 'non-psychological', 'objective meanings'. All meanings are contested and ambiguous, but this diversity is a product of cultural, gender and other differences in social position, not of *individual* differences. I am not denying individual differences, but following Hegel, individuals' relation to universals must be seen as mediated by a diversity of social practices and institutions, rather than in terms of a subjective/objective opposition.

The so-called *objective meaning* is in fact itself the view of a *subject* in Hegel's sense, namely the *Objekt*, and it is subject to transformation by the subject. Subject and Object meet on equal terms, and it is mistaken to cast this relation as a subjective, personal sense versus an objective meaning that "everyone knows very well." (2009, p. 129) The Object in this Hegelian sense is itself a unity of diverse significations. "Objective" for Hegel is only what is in and for itself and surpasses *all* attempts by a subject to alter it. This category is rare in the human as opposed to the natural sciences.

In appropriating Hegel's subject-object relation Leontyev elides the distinction between what "everyone knows" and what is truly objective. In our times, exam marks are powerful symbols, but their significance is highly differentiated according to the social position of the student. Individual differences in the significance of an exam mark exist side by side with cultural and historical differences in relation to the institutions producing and using these marks (or not).

I think it is a mistake to try to introduce the Hegelian subject-object relation into the initial conception that an individual subject makes of an object. Hegel himself introduces the *Objekt* only after the formation of a concept of the object (*Gegenstand*), and the *Subjekt-Objekt* relation concerns the transformation that the concept undergoes in the course of its realization, becoming an adequate concept only with the eventual merging of the *Subjekt* and *Objekt* formations. Nonetheless, this does not negate the concept of 'personal sense' of an situation or word – "the aggregate of all the psychological facts that arise in our consciousness as a result of" it (Vygotsky 1934, p. 275–6) or "its significance for the subject" (1978, p. 129).

## Personal Sense and Object-Concept

So it is in terms of the (psychological) *personal sense* as opposed to the "supraindividual, non-psychological" *meaning* that Leontyev (1978, p. 135) frames how a subject's need meets its object. But the subjective vs. objective contrast is not the appropriate terms in which to understand the development of an individual consciousness within a complex social formation.

Couldn't we ask instead "What concept does the subject have of the object?" This approach will allow us to utilise studies of concept formation and may give us a more nuanced rendering of the subject-object relation. Doesn't the formation of a concept of the object mean that the "subject 'evaluates' the life significance of objective circumstances" (Leontyev, 1978, p. 133) and directs their activity accordingly? Certainly "concept" implies more than "evaluation," but a different concept of something brings with it a difference in evaluation. Undoubtedly evaluating and motivating action implicates "psychological facts," as opposed to a "supra-individual" meaning, but we do not have to resort to this dichotomy. Let us call the concept of an object - be it the personal sense of the object for a subject or the some 'supraindividual' sense of it - the object-concept. Undoubtedly there can be many different concepts of one and the same situation, even while the relevant symbols and instruments are universal within a given community. However, the individual actions and the particular forms of activity directed at the object are not universal. A concept is only completely specified by the unity of the materiality of the artefact or word itself, the individual actions directed at the situation and the particular collaborative activities (whether real or imaginary) by means of which these individual actions acquire meaning. This is how Hegel understood concepts, and is the conception which underlies the famous Subjekt-Objekt relation.

# The Object of Activity for Yrjö Engeström

For Engeström, the object of activity is defined as follows:

"The subject refers to the individual or sub-group whose agency is chosen as the point of view in the analysis. The object refers to the 'raw material' or 'problem space' at which the activity is directed and which is molded and transformed into outcomes" (CAT&DWR 2003)

So this is a very specific concept of object, more restricted in scope than *Gegenstand*. As we shall see, it is quite different from Leontyev's *predmet*, though close to Marx's *Arbeitsgegenstand*.

Engeström developed his version of Activity Theory with his seminal book, *Learning by Expanding* (1987), in which he began from the triangle which Vygotsky used to represent mediated action, taken to schematically represent the Hegelian subject-object relation (*Subjekt-Objekt*), and introduced further levels of mediation so as to bring into the model, *in addition to subject and object*, the broader community, the division of labour, norms and instruments. (In Hegel's conception, these 'new' elements are subsumed within both subject and object and the object is always another subject not a 'problem space'.) As a result of the activity, the object is changed, and this changed object is called the 'outcome'. In Leontyev's terminology, it would be the *outcome* which is the object of activity, except of course, that for Engeström the outcome is objective, and may not be at all what motivated the subject, what the subject imagined.

For Engeström, the outcome is the change effected in the object, whilst the subject is deemed to remain unaffected. For psychology, however, it is precisely the changes in the subject flowing from participation in the activity which is the focus of interest.

The domain in which this conception is generally applied is organisational change, that is, the organisation to be changed is the focus of activity, the *Gegenstand*, and is objective; it is a given task. The object of a blacksmith's activity is a piece of iron, the object of a teacher's activity is a class of students. The outcome is what results from this activity. Engeström says that preliminary phenomenological work is required (1987, chapter 5), that is, enquiry into the consciousness of the subject, but once the researcher is oriented, the research proceeds entirely on the basis of *actions* rather than intentions, desires, suffering, hope, etc. The revelation of contradictions in the relations between the various elements of the model are the key methodological principle.

Both Leontyev's and Engeström's conceptions of the object of activity have been subject to criticism, Leontyev's mainly for being too subjective, Engeström's mainly for being too objective (e.g. Nissen, p. 376–7). But when Leontyev's system is extended to analyse societal issues it falls into a naïve objectivism, with social projects governed by "objective motives" – more likely motives determined by the Central Committee (c.f. Nissen, p. 378). Engeström's system of activity, on the other hand, in which the object changes into the outcome whilst the subject itself remains unchanged, fails in the psychological domain. Further, despite the fact that Engström and his associates have applied his theory to problems involving the interaction between activity systems, Engeström's model does not seem well-adapted to representing the situation where competing conceptions and motives are at work (see Engeström, R. et al, 2014). Although rooted in the idea of contradictions at work within the 'activity system', 'outcomes' are limited to the unproblematic intended outcome, and the unintended outcomes.

Engeström's work (1999, 2012) on 'interactive design', which brings 'germ-cells' to centre-stage rather than the activity system, does represent a break however. Here the approach is built around a given task or problem to be resolved and concepts of the object-outcome which emerge in the form of a germ-cell. However, the theory is still undeveloped. The 'epistemic actions' sketched in 1999 (pp. 383-4) were still much the same in 2012 (p. 289). These steps are problematic, however. For instance, the process by means of which the germ-cell – the 'simplified model of a new idea' – is first determined, is under-specified:

- 1. "The first action is that of questioning, criticizing, or rejecting some aspects of the accepted practice and existing wisdom. ...
- 2. "The second action is that of analyzing the situation. Analysis involves mental, discursive or practical transformation of the situation in order to find out origins and explanatory mechanisms.
- 3. "The third action is that of modeling a new explanatory relationship in some publicly observable and transmittable medium. This means constructing an explicit, simplified model of the new idea, a germ cell, that explains the problematic situation and offers a perspective for resolving and transforming it."

And yet there is no treatment of misconception, or the process of revision or concretisation of the germ-cell, and the role of objectification is overlooked.

1. "The fourth action is that of examining the model, running, operating, and experimenting on it in order to fully grasp its dynamics, potentials, and limitations.

- 2. "The fifth action is that of implementing the model, concretizing it by means of practical applications, enrichments, and conceptual extensions.
- 3. "The sixth and seventh actions are those of reflecting on and evaluating the process and consolidating its outcomes into a new stable form of practice."

This conceptual approach overlays the 'activity system' with its contradictions at various levels. All too often descriptions of this germ-cell or unit of analysis sound like instructions for packing a suitcase for a long journey: list all the things you're going to need, and pack something for each requirement, then tick all the boxes. No simple concept of the overall problem is formed. The germ-cell is, in a sense, only the germ-cell of a conceptual approach to understanding activity. How the abstract concept of the task is arrived at and how it is concretised need to be theorised as well. Vygotsky, however, made considerable progress in that task.

Further development of the germ-cell approach could recover a conception of the object of activity which is closer to what I believe Vygotsky prefigured.

Let us step backwards now to see the sense in which Vygotsky's ideas, as found in *Thinking and Speech*, contribute to activity theory and suggest solutions to problems within existing varieties of Activity Theory.

# The Object for L. S. Vygotsky

How do we see Vygotsky making sense of a subject's actions in *Thinking and Speech*? He posits that the subject's actions are motivated and directed by the *concepts* he/she forms of a task. This is implicit in the design of the experiment in concept formation:

"the path through which the task is resolved in the experiment corresponds with the actual process of concept formation" (Vygotsky, 1934, p. 128).

The object-concept has the same force for Vygotsky as the personal sense of the object which provides the ultimate motivation of actions has for Leontyev. Vygotsky observes the subject's artefact-mediated actions, such as word meanings, and reconstructs from them a concept. A concept is not in itself observable; it has to be imputed from numerous actions taken to be directed by the same motivation, and this is what Vygotsky is doing throughout the described experiments.

Let us grant that 'an activity' came to be taken as a unit of activity only after Vygotsky's death and Vygotsky never used 'activity' in this precise sense. The contention of this paper is that 'concept' played the same role in Vygotsky's psychology that the unit 'activity' played in Leontyev's activity theory. It is also the contention that this is turns out to be a more robust approach to revealing the cultural and societal basis of a person's actions and the 'really effective' motives for their actions than the supposition of an activity, a.k.a. motive, lying behind the action, and fully utilises the resources of Hegel's *Subjekt-Objekt* relation and our knowledge of concept-formation. Most importantly, rather than being guided by an already-existing motive, the concept *develops* in the course of the activity. And it is this developmental approach which is the hallmark of Vygotsky's experimental-genetic method.

An activity is characterised for Vygotsky, not so much by the object (task) presented to the subject, but rather by the *concept* which the subject forms of the object by means of the available signs and consequently the *means* of addressing the problem. That is, one

and the same problem may stimulate quite different activities as the means of resolving one and the same problem. Vygotsky criticised Rimat and Ach on this score:

"They have emphasized that the concept is formed only with the emergence of a need that can be satisfied in the concept, only in the process of some meaningful goal-oriented activity directed on the attainment of a particular goal or the on resolution of a definite task. ... they have failed to reveal the actual genetic, functional, and structural nature of this process. ... In essence, they are reduced to the assertion that the goal itself creates the corresponding goal-oriented [*osmyslyennoyi*] activity through a determining tendency. They are reduced to the assertion that the solution is contained in the task itself" (Vygotsky, 1934, p. 127).

Leontyev showed how one and the same action may be in response to different motives, implicit in the 'personal sense' of the object, and Vygotsky showed how one and the same object can be pursued, not only with different concepts, and consequently different *activities*, but also how the subject's concept of the object *develops*. Further, in *The Problem of Age*, he shows how the social situation which is the object for the subject is transformed only through the child's activity in collaboration with those around her/him. That is, Vygotsky criticises the conception that the goal or task itself *creates* the activity, from the standpoint of a developing subject-object relation.

It might be objected that concepts are to do with cognition, not motivation. But this was not Vygotsky's view. Introducing his study of concept formation he says:

"There exists a dynamic meaningful system that constitutes *a unity of affective and intellectual* processes. Every idea contains some remnant of the individual's affective relationship to that aspect of reality which it represents. In this way, analysis into units makes it possible to see the relationship between the individual's needs or inclinations and his thinking. It also allows us to see the opposite relationship, the relationship that links his thought to the dynamics of behaviour, to the concrete activity of the personality" (1934, p. 50–51).

"Every idea" implies "every concept." This was how Hegel saw concepts as well; as *forms of activity*, units of activity in fact, although expressed in somewhat mystified terms in his *Logic*, as thought-forms. The connection between the concept and the task or problem for which the concept arises is a genetic one; it is manifested in the ontogenetic and cultural development of the concept but is not necessarily immediately present in consciousness. The actions and word meanings by means of which a concept is referenced are *operations* (in Leontyev's sense), and are context-dependent, unconscious and partial, never manifesting the full range of the concept.

Let us take the leap of placing the various forms of activity that Vygotsky studied under the heading of 'concept formation', instead, under the heading of 'activity formation'. In each of his experiments, the researcher sets the subject some task, such that the subject must form of an adequate concept of the task in order to resolve it and is offered semiotic devices to assist him or her. The subject carries out various artefact-mediated actions, and the concept of his/her activity develops in the course of the activity. As the subject discovers mistakes, the concept is modified, and a new concept formed. The subject's concept of the object (task) is immanent in these actions and is manifest in the subject's solution. In Engeström's terms, the subject has carried out a process of 'interactive design'. Vygotsky manifests these processes for observation using laboratory experiments, but the depth of the subject-object dialectic contained in this conception of activity only comes into view when the development of actual concepts 'in the wild' is considered. That is, when actual words from the adult language rather than nonsense words guide the activity and the concepts concerned are not sorting coloured blocks but

"In contrast to the maturation of instincts or innate tendencies, the motive force that determines the beginning of this process and sets in action the maturational mechanism of behavior impelling it forward along the path of further development is located not inside but outside the adolescent. The tasks that are posed for the maturing adolescent by the social environment – tasks that are associated with his entry into the cultural, professional, and social life of the adult world – are an essential functional factor in the formation of concepts. Repeatedly, this factor points to the mutually conditioned nature, the organic integration, and the internal unity of content and form in the development of thinking." (Vygotsky, 1934, p. 132)

So, in the actual life of a subject, tasks are posed by the social environment itself, and the words which act as signs for concepts of these tasks are provided by the same social environment. The laboratory experiments substitute artificial words and tasks for what are in general cultural-historical products. So even though Vygotsky's interest is as a psychologist, his approach is fully applicable to the solution of problems arising on the plane of the broader social and political life. Hegel thought that concepts are units of what he called a 'formation of consciousness' – what Marx called a 'social formation'. Vygotsky evidently agreed.

Let us take one of Leontyev's (1978, p. 167) examples: "an unexpected meeting with a bear usually evokes fright, but if a special motive obtains, for example in a situation of hunting, the meeting may evoke joy." But rather than changing the context and task and making the subject a bear-hunter, let us keep constant the context of an unexpected encounter and bear as a danger which needs to be averted. A number of different actions are still possible – flight, climbing a tree, making a menacing gesture or shooting the bear, for example. These different possible actions flow from the different concepts the subject has of the bear, conditioned by the available means - the technical and psychological tools. These are not instances of 'personal sense' because 'personal sense' is something unique to the subject but here the subject's motive is universal – to escape the danger posed by the bear; and nor does the subject have a personal sense of the bear opposed to an 'objective meaning' - the subject's action simply depends on the subjective and objective means available. This is no small issue. The problem of one and the same threat being conceptualized in opposing ways by different sections of the same community is a problem besetting all countries and it hardly helps to use 'objective meaning' as opposed to 'personal and unacknowledged motives' to characterize these conflicts.

Leontyev suggested that activities are units of social life but it could be argued what this amounted to is that *motives* (needs which have met an object) are in fact the units of social life, each motive calling into being corresponding activities. Furthermore, it seems to have been assumed that how the object (or task) was conceptualised was unproblematic, that only the *value* attached to the object was operative. But quite different activities would arise according to how a given task or problem was

conceptualized. By (effectively) taking concepts instead of motives as the 'molar' unit of social life, Vygotsky would seem to have a more robust and nuanced analysis of activity.

Furthermore, Vygotsky showed in great detail how a subject's developing concept of the task may be studied, how the concept of the object is immanent in the activity itself, and how the adults around a child modify their behaviour according to the development of the child's concept of themselves: that is, activity as a dialectical unity of subject and object. Although Vygotsky formulated his study as one of investigating concept formation, his approach was to observe actions manifested *in the solution of given tasks*. That is, he studied activity, but under a different name.

Does this make Vygotsky an Activity Theorist? If we define 'activity theory' as the theory initiated by A. N. Leontyev and continued by others following him, then self-evidently he was not. But isn't the decisive question: did Vygotsky have a conception of a unit of activity? which is to say: did Vygotsky have a conception of the object of activity, different from the immediate goals of actions? Clearly he did, and *in this sense*, as well as for having discovered the main unit of activity, the artefact-mediated action, Vygotsky could be counted as an activity theorist.

Vygotsky's study of artificial concepts and the development of scientific concepts at school is not to be understood just in terms of his interest in children and science. Vygotsky's genetic-experimental method obliged him to seek out situations where he could study concepts in the process of formation and development. The object of his research always remained a *general psychology* (Vygotsky, 1927, p. 328), including the problems which arise on the plane of broader social and political life.

Taken as an activity theory then, in which both the mediating artefacts and the tasks themselves are provided by the community, Vygotsky's theory turns out to be a *genuine* activity theory inasmuch as concept of the object is not something given and *outside* the activity, calling it into life, but rather is *immanent in the activity itself*. This means that it can be seen that rather than the activity simply bringing about a change in the object, in the form of an outcome, the subject themself is changed in the very process of realising the object. Unlike Engeström's theory, Vygotsky's theory encapsulates a genuine unity of subject and object, in which subject and object mutually construct one another.

### Conclusion

Vygotsky should be recognised as the precursor if not the founder of Activity Theory, not just because of his discovery of the artefact-mediated action as the main unit of activity, but because his concept of artefact-mediated action allowed him to develop a conception of activity in which the object-concept is *immanent* in each activity. Rather than the unit of activity being an object-oriented activity, drawing on Vygotsky, it would be a 'concept-oriented activity'. As I have argued (Blunden 2009), this unit could be called a 'project'.

The three approaches to understanding the motivation of activity: concept (Vygotsky), motive (Leontyev) and contradictions (Engeström) share a great deal in common, but it seems to me that may prove fruitful to revisit existing work with Activity Theory with a view to incorporating Vygotsky's idea of activities being characterised by concepts.

#### References

Blunden, A, (2009). An Interdisciplinary Concept of Activity, Outlines vol. 11(1).

- Center for Activity Theory and Developmental Work Research (2003), *What are CHAT & DWR*. <u>http://www.edu.helsinki.fi/activity/pages/chatanddwr/</u>
- Davydov, V. V. & Radzikovskii, L. A. (1985) 'Vygotsky's theory and the activity-oriented approach in psychology', in *Culture Communication and Cognition. Vygotskian Perspectives*, Ed. Wertsch, J. V., pp. 35–65, Cambridge: Cambridge University Press.
- Engels, F. (1883). *Dialectics of Nature*, chapter 7, http://www.marxists.org/archive/marx/works/1883/don/ch07c.htm
- Engeström, R., Batane, T., Hakkarainen, K., Newnham, D. S., Nleya, P., Senteni, A. & Sinko, M. (2014), Reflections on Change Laboratory: Toward a Dynamic Interplay of Global and Local Forces in Designing Change in Education, *Mind, Culture and Activity*, 21(2).
- Engeström, Y. (1987). Learning by Expanding. An Activity-Theoretical Approach to Developmental Research. Chapter 2. http://lchc.ucsd.edu/mca/Paper/Engestrom/expanding/ch2.htm
- Engeström, Y. (1987). *Learning by Expanding. An Activity-Theoretical Approach to Developmental Research.* Chapter 5. Towards an Expansive Methodology http://lchc.ucsd.edu/mca/Paper/Engestrom/expanding/ch5.htm
- Engeström, Y. (1999) Innovative learning in work teams: analysing cycles of knowledge creation in practice, in: Y. Engeström et al (Eds.) *Perspectives on Activity Theory*, (Cambridge, Cambridge University Press), 377-406.
- Engeström, Y., Nummijoki, J. & Sannino, A. (2012), "Embodied Germ Cell at Work: Building an Expansive Concept of Physical Mobility in Home Care," *Mind Culture and Activity*, 19(3), Philadelphia, PA: Taylor & Francis.
- Inwood, M. (1992). A Hegel Dictionary. Salisbury, UK: Blackwell Publishers.
- Kaptelinin, V. (2005). The Object of Activity: Making Sense of the Sense-Maker, *Mind*, *Culture, and Activity 12*(1), pp. 4–18. <u>http://lchc.ucsd.edu/MCA/Journal/pdfs/12-1-kaptelinin.pdf</u>
- Kozulin, A., (1986) 'The Concept of Activity in Soviet Psychology: Vygotsky, his disciples and Critics', *American Psychologist*, 41, pp. 264–274.
- Leontyev, A. N. (1978). Activity Consciousness and Personality. <u>http://www.marxists.org/archive/leontev/works/1978/index.htm</u>, in Russian <u>http://www.marxists.org/russkij/leontiev/1975/dyeatyelnost/index.htm</u>, and in German<u>http://www.marxists.org/deutsch/archiv/leontjew/1974/anl1982-deutsch-1.pdf</u>
- Leontyev, A. N. (2009). *The Development of Mind*, Erythros Press and Media. <u>http://www.marxists.org/admin/books/activity-theory/leontyev/development-mind.pdf</u>
- Marx, K. (1845). *Theses on Feuerbach*. <u>http://www.marxists.org/archive/marx/works/1845/theses/index.htm</u>, in German <u>http://www.marxists.org/deutsch/archiv/marx-engels/1845/thesen/thesfeue-or.htm</u>
- Marx, K. (1867). *Capital*, vol. 1, ch. 7 <u>http://www.marxists.org/archive/marx/works/1867-</u> <u>c1/ch07.htm#S1</u>, in German <u>http://www.mlwerke.de/me/me23/me23\_192.htm#Kap\_5\_1</u>
- Meshcheryakov, A., Awakening to Life. (1979/2009), Pacifica Ca.: Marxists Internet Archive
  - Publications.
- Nissen, M. Activity Theory: Legacies, Standpoints, and Hopes: A discussion of Andy Blunden's An Interdisciplinary Theory of Activity, *Mind, Culture and Activity, 18*, pp. 374-384. <u>http://lchc.ucsd.edu/MCA/Journal/pdfs/18-4-nissen.pdf</u>
- Roth, W-M. and Lee, Y.-J., (2007) 'Vygotsky's Neglected Legacy': Cultural-Historical Activity Theory', *Review of Educational Research*, June 2007, 77-2, AERA, pp. 186–231.

- Vygotsky, L. S. (1934). An Experimental Study of Concept Development, Chapter 5 of *Thinking and Speech*, in *LSVCW*, v. 1, pp. 121–166 http://www.marxists.org/archive/vygotsky/works/words/ch05.htm
- Vygotsky, L. S., (1927/1997) 'The Historical Meaning of the Crisis in Psychology: A Methodological Investigation', *Collected Works*, Volume 3, New York: Plenum Press, p. 233–343. <u>https://www.marxists.org/archive/vygotsky/works/crisis/index.htm</u>
- Wertsch, J. V., (1985) *Vygotsky and the Social Formation of Mind*, Cambridge, MA: Harvard University Press.
- Yasnitsky, A. (2009). The Vygotsky Circle during the decade 1931-1941: Toward an Integrative Science of Mind, Brain and Education. PhD Thesis, University of Ontario, <u>https://tspace.library.utoronto.ca/bitstream/1807/19140/1/Yasnitsky\_Anton\_200911\_Ph</u> <u>D\_thesis.pdf</u>
- Zinchenko, V.P. (1985) 'Vygotsky's ideas about units for the analysis of mind', in *Culture, communication, and cognition: Vygotskian perspectives*, J. V. Wertsch (ed.), Cambridge: Cambridge University Press, pp. 94–118.