

A true understanding of humankind and its origin requires an understanding of the dialectics of continuity and discontinuity. Whereas in classical thinking a choice between continuity and discontinuity seemed necessary, it is the great merit of dialectical materialistic thinking to honour the unbroken continuity of evolution and still not lose the ongoing creation of qualitatively new forms of life. While Watson and his school following Darwin "recognizes no dividing line between man and brute"<sup>1</sup>, Vygotsky and his school adhering to the same materialist ideal were able to feature the human being as a unique creation.

The image of humankind rising out of the animal world to a qualitatively new form of existence due to use of wits, hands and tools followed by growing social cooperation, speech, consciousness and culture is the recognized view today and amply corroborated at fossil and archeological sites by paleoanthropological science. Still it is the claim of this paper that the decisive link in this anthropogenesis has been missed, or at least not explicitly recognized. That the very essence of humankind remains obscure, which affects the generality of activity theory. In an argumentary outline based upon the concepts of activity theory the paper will try to make the problem stand out and point to a solution.

#### Instrumental Psychology

As is well known, activity theory is the work of Leontyev based upon the program and insights of Vygotsky. Vygotsky's program was to base a scientific psychology upon the philosophical foundations of Marxism, which itself could be called a synthesis of British and French materialism on the one hand and German classical

<sup>1</sup> Watson, J.B.: *An Introduction to Comparative Psychology*, USA 1914, p. 1.

<sup>2</sup> Leontiev, A.N.: The problem of activity in the history of Soviet Psychology, *Soviet Psychology*, 1989, vol. 27, no.1, p. 24.

## A Missing Link In AT?

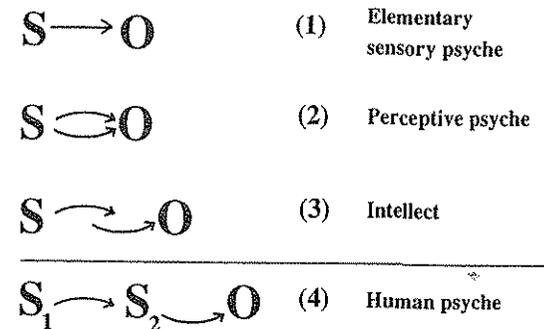
Niels Engelsted

idealism on the other. The image of mankind as the product of objective conditions and at the same time as the subject and producer of these conditions thus emerged, which constitutes a major breakthrough in our understanding.

Man as producer was not an entirely new concept. Rather it was the cherished image of the materialism of the Enlightenment and goes back to materialistic Greek philosophy. Rising industrialism, however, gave special emphasis to man's mastery of nature, a conquest hailed in almost martial terms from Descartes to Hegel. This emphasis is also found in the writings of Engels and in the works of Marx who defines labour as a subject-object relation between man and nature mediated by tools.

It is upon this anthropology that Vygotsky built his program, inspired, no

Diagram 1



doubt, by the forceful industrial build up of young Soviet Russia. In a talk about the historical beginnings of activity theory, Leontyev in 1976 gave the following recollection: "I can remember, it was in early 1925 that Lev Seminovich (Vygotsky) shared with some of his colleagues his paradigm for the restructuring of psychology – or more accurately, the further restructuring of psychology into a Marxist psychology. For many years I kept this paradigm, sketched on a piece of paper by Vygotsky as he explained his idea. The diagram contained circles (...) with important words in them: *man, tool, object of labour, product*.(...) The use of tools, the mediation of behaviour by a tool, was the primary premise upon which further development of the investigations by Vygotsky and his colleagues and pupils was based. In other words, a movement emerged that within a short time was dubbed "instrumental psychology."<sup>2</sup>

#### The Evolution of Activity according to Leontyev

We recognize this *instrumental* psychology in the evolutionary stages of activity, which Leontyev describes in

the work *Problems in the Development of Mind*<sup>3</sup>. He is dealing with the evolution of subject-object relations, that is the relation between organism and environment, and that which develops is the way the relation is mediated.

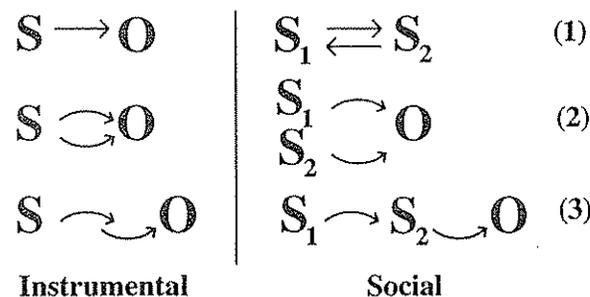
In the first diagram I have tried to present the stages in the evolution of activity as described by Leontyev. From 1 to 3 they are: Simple sensuous activity, perceptual activity and intellectual activity. We see that it is the mediating arrow – the instrumental side of the activity – which develops. The one-arrow mediation of stage 1 is followed by the double-arrow of stage 2, here expressing the existence of alternative ways of realising the activity, which Leontyev calls operations. The third stage, then, is the combination of operations one after another into a single activity.

We will not discuss this system, but it expresses a simple beauty, which can hardly be wrong. Most likely these are the basic stages in the development of instrumental activity.

They constitute, however, only the natural basis upon which the specific quality of the human being arises, which is Leontyev's aim. That which is specifically human develops on top of this. What is it?

Trying to answer this question, stage 3 – the intellectual activity, made necessary by Wolfgang Köhler's clever

Diagram 2



chimpanzees – must have represented a slight embarrassment. Had not the combination of insight and tool-use been considered the hall-mark of man in the classical story? Yes, but now chimpanzees all over were found to have the capacity to make tools, not only sticks but a variety of tools, and with every indication of insight. The dividing line between ape and human simply seemed to evaporate.

Man, however, has another distinguishing mark in addition to insight and tool-use. He is a social animal, as recognized in the materialistic legend of man from Democritus, Epicurus and Lucretius to Rousseau. These legends are all two stage stories. First intelligence and tool-use, then social living. Marx and Engels share this view. In the *Capital* Marx cites both Benjamin Franklin's definition of man as a tool-making animal and the definition of Aristotle, whereby man is a zoon politicon, a societal animal. In the article from 1876 on *The Role of Labour in the Transition from Ape to Man* Engels carefully follows the classical two-step formula: Tool and intellect and its subsequent socialising.

The socialising of the ape is precisely the solution Leontyev favours, as can be seen from the fourth – human – stage in his evolution of activity as pictured in diagram 1.

What the diagram shows us is social cooperation. Two individuals are necessary in the realisation of one activi-

ty, the first preparing the ground for the second in a division of labour. In Leontyev's example it is the beater who sets up the game for the hunter<sup>4</sup>.

In Leontyev's terminology this new social activity meant the birth of a new unit of analysis: the act, having to do with the separation of goal and motive.

**Social Parallels**

The importance of these concepts is not to be denied, but has Leontyev in his fourth stage really hit upon the specific human quality?

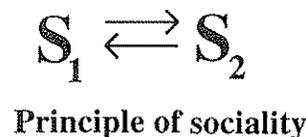
From the diagram it is easy to see, that the structure of the fourth stage is the same as the structure of the third. The difference being only that it is social, that is, a social variant of intellectual activity.

If the third stage of activity exists in a social form, however, one immediately thinks that the second and the first stages have social variants also.

And they do as shown in diagram 2. If stage 3 gives rise to social cooperation, involving a division of labour, stage 2 gives rise to social association, where individuals perform the same task but in unison. Stage 1 then exemplifies the most simple form of social activity.

Here the second subject is the object of the first subject, which likewise is the object of the second subject. Both parties simultaneously reach their objective through the other. Like two hands washing each other. Sexual intercourse, which we find in the most primitive

Diagram 3



fauna, is a good example of this first instance of social relationship.

If we, as I do, accept the German psychologist Klaus Holzkamp's insight, that the first instance also constitutes the general category<sup>5</sup>, then we have the general principle of sociality expressed here.

We thus see that a social relationship is fundamentally a reciprocal relationship, bringing both sides some advantage. And this reciprocity is easily recognisable in all higher social forms. Friendship, justice, trade and social contracts are founded on this basis.

In my eyes, it adds to the beauty of Leontyev's system that it can also encompass the basic levels of social relationships. But where does it leave the uniqueness of the human being?

One should expect to find the social forms of activity at the same phylogenetic level as the individual forms, described by Leontyev. And so we do. The entire animal world is social according to the level of activity. At the intellectual stage of the higher apes, for instance, social cooperation is well documented. The socialising of intellectual activity therefore does not bring mankind out of the animal world.

**An Insufficient Solution**

This throws us back to start. Chimpanzees use insight, make tools and have social cooperation. And so we are robbed of the specifics upon which our cherished definition of the human being was based.

If neither side contains the specific human quality, perhaps the combination does? This is Vygotsky's solution, saying that the human quality emerged, when practical activity and social communication intersected. This, however, seems more like a construction than the simple and radical answer we should expect to the riddle of mankind. The human quality does seem to emerge in this way in the ontogenesis of the child, as shown by Vygotsky in his famous studies, but

this is most likely a result and not the cause of human living.

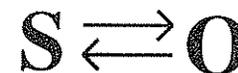
If Vygotsky's construction is unsatisfactory, it does however point to the general problem. The problem of the human being's extraordinary ability most certainly has to do with the relationship between subject-object relations and subject-subject relations. The question is only how?

Leontyev's solution – to socialise the instrumental relation – follows with slightly different emphasis Vygotsky, but seems insufficient, since the instrumental relations already are socialised throughout the animal world.

It is therefore impossible to find the secret of humankind within his system, as we have drawn it. The system cannot point to a fundamental difference between the human being and the chimpanzee.

Is something left out in Leontyev's system? No, in principle the system is complete. It contains the basic instru-

Diagram 4



mental relations and their social variants.

**The Vital Dimension**

This means that the difference between humans and animals should be sought elsewhere, outside the dimensions of Leontyev's system. So, there must be another dimension.

If we look again at the subject-object relation of activity, we see in diagram 4 that it actually contains two arrows. The arrow from subject to object, indicating the way the subject approaches

Diagram 5



and deals with the object. And the arrow from the object to the subject, indicating in what way the object serves the subject.

The fox catches the chicken, and the chicken fills the stomach of the fox. This exemplifies the most basic living relation, the relation of self-preservation.

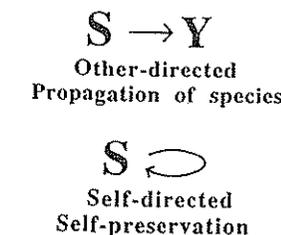
The chicken, however, does not always end up in the stomach of the fox. It often ends up in the stomach of the fox-cub.

This relation looks very different, as drawn in diagram 5 where Y stands for the young, but actually it is not the least less fundamental for living organisms than self-preservation. The propagation of species would be impossible without this relation.

The dominant thinking of centuries has accustomed us to the belief that any behaviour ultimately has some selfish purpose that is to the gain of the acting subject.

The diagram shows us that this is not so. In the case of caring for the young,

Diagram 6

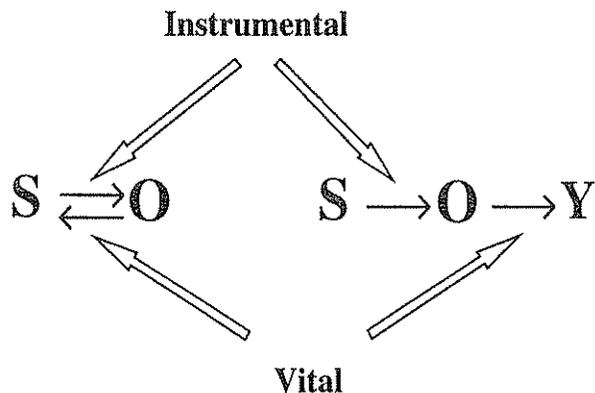


<sup>5</sup> Braun, K.H., W. Hollitscher, K. Holzkamp & K. Wetzels: *Karl Marx und die Wissenschaft vom Individuum*, Marburg 1983, p. 134.

<sup>3</sup> Leontyev, A.N.: *Problems in the Development of Mind*, Moscow 1981

<sup>4</sup> Leontyev, A.N.: *Op. Cit.*, p. 210.

Diagram 7



it is the young that gains from the acting subject and not the subject itself.<sup>6</sup> Had living organisms not this ability of other-directed activity, besides the ability of self-directed activity or self-preservation, life as we know it would not be. The two relations of diagram 6 are of equal and fundamental importance in the phenomenon of life.

Dealing with the subject-object arrow only, Leontyev does not distinguish the two very different cases. The instrumental relation, how the fox catches the chicken, is the same in both cases as shown in diagram 7. If we look at the second arrow, which we could call the vital relation, the two cases are, however, very different. Here we have a dimension not identified by Leontyev.

My claim is that the fundamental secret of the human quality should be sought in connection with the vital relation, and not the instrumental relation. The undeniably unique human development of the instrumental relation is the result of a transformation of the vital relation.

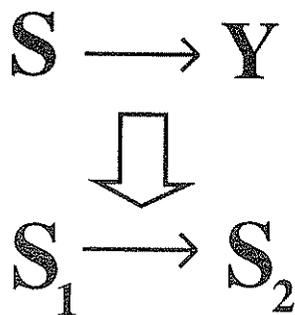
In the animal world the recipients of the basically unselfish or other-directed activity are very narrowly defined. It is almost always offspring, or in some cases, individuals taking care of offspring. The whole thing having to do with the propagation of the species.

This means that it is a behavioural parallel to the genetic transmission. The logic of the much debated sociobiology explaining this other-directed or altruistic behaviour in terms of genetic linkage ties in here.

My proposition now is, that it is the opening or the generalisation of the receiving end of this relation, which marks the emergence of human existence. The genetic linkage is broken, and anybody can take the place of "offspring" at the receiving end.

S arrow Y of the animal world is transformed into the S arrow S of the human world as illustrated in diagram 8.

Diagram 8



This new relation is the *societal* relation, which is without precedent in the animal world.

**The Societal Relation**

The societal relation is still a species-propagating relation, though a very particular one, since the human species reproduces itself and its specific characters through this relation. The mediation of specific characters, lifted out of the physiological and genetic bonds of the animal world and taking the forms of material and ideal tools, are thus exosomatic rather than endosomatic. Or cultural rather than natural, which dramatically changes the rate and level of development, and puts the instrumental changes on a uniquely *human* footing. One generation receives from the former the human qualifications in form of tools, institutions and language-born knowledge, which it uses and passes it on to the next generation with additions and innovations. The Irish social philosopher Edmund Burke expressed this by saying: Society is a partnership "between those who are living, those who are dead, and those who are to be born."<sup>7</sup>

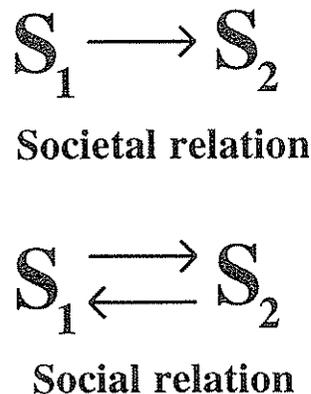
This is beautifully thought, even so it contains a gross error. You cannot have a partnership between the dead and the living nor with those not yet born, since you can have no reciprocity. Burke is confusing the social and the societal relation.

It is imperative to distinguish the social and the societal relation. They have completely different structures, as seen in diagram 9. The social relation is symmetrical and based upon the principle of reciprocity. The societal relation is non-symmetrical and non-reciprocal. It therefore breaks in two different efforts as shown in diagram 10:

<sup>6</sup> The creed of universal hedonism can only be upheld if one fails to make the important distinction between individual gain and feelings of success and failure. That success of parental care makes the parent feel good, does not make the activity selfish or self-directed.

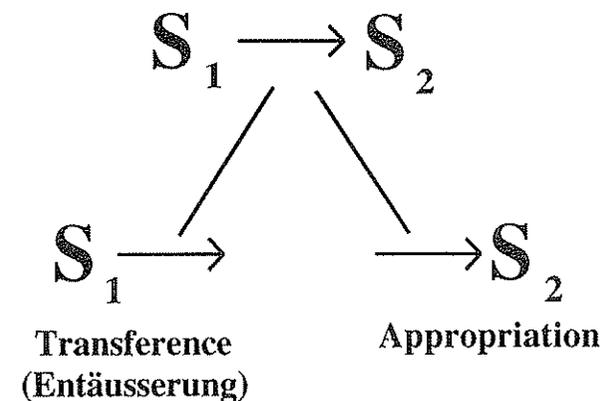
<sup>7</sup> Burke, E.: *Reflections on the Revolution in France* (1790), Great Britain 1976, p. 194.

Diagram 9



The effort of the first subject, which I – lacking a better word – have called transference, the German word would be Entäußerung. And the effort of the second subject, which is called appropriation. It is this interconnected relation of transference and appropriation, which determines our human life. Not only does it bridge generations in the historical reproduction of society. It bridges human beings all over in the every day reproduction of human life. Looked upon from a more macroscopic level the relation is the thread from which the economy is weaved.

Diagram 10



The societal relation, however, is first and foremost an individual activity, and we all partake in it. Every one of us at the receiving end, since we all fundamentally reproduce our life through the efforts of others, whom we very seldomly know. And most of us at the giving end, also, through our work, our family obligations and otherwise.

**Three Domains**

Together with the social relation, which, of course, also dominates our existence all through life, the relations of appropriation and transference constitute three different psychological domains, giving rise to different aspects of personality and motives.

Naturally these differences have not remained unrecognized in human thinking. Quite on the contrary. As an indication only let me mention that the philosopher Kant's distinction between the hypothetical imperative and the categorical imperative, in my opinion, very clearly expresses the structure of the social and the societal relation respectively, as drawn in diagram 9. They are two different structures of motivation, which we could term conscientiousness and responsibility, which Kant has presented in terms of morals.

Likewise we find in the studies called life history psychology the three relations appearing in a sequential order of dominance. First the appropriation of the young child, school being the very institution of appropriation, then the social identification of young people and finally the other-directedness of the adult. The generativity of Erik Erikson is precisely the latter. Victor Frankl talks about the need of meaning felt at the brink of adulthood. A need which can only be realised through other-directedness.

Meaning (Bedeutung) in my opinion basically means this, the objective significance you have for others through your other-directed societal activity. Society and human life is based upon this, and every person needs to have this significance. Alienation is to be robbed of it.

I think all this is rather evident, even in a brief outline. In our understanding the vital societal relation therefore should carry no less theoretical weight than the equally obvious instrumental relations of insight and tools. At this watershed of civilisation one could even argue, that this relation, which embodies the fundamental human responsibility for the future, in our theoretical thinking should take precedence over the engineering feats of instrumental activity. It might also serve to bridge the gap between the theoretical stringent activity theory and the loose but important insights of humanistic psychology.

**How did it Come About?**

To turn the proposed view into a truly theoretical concept, one still needs to answer how the transformation in diagram 8 is supposed to have happened. An educated guess respecting the facts of paleoanthropology can be offered. The full argument requires a concrete and detailed scenario<sup>8</sup> beyond the confines of this paper. I shall only give this hint.

<sup>8</sup> The full argument is presented in N. Engelsted: *The Leap from Animal to Man* (in Danish), Copenhagen 1984, and further elaborated and corrected in N. Engelsted: *The General Foundations of Personality* (in Danish), volume 2, Copenhagen 1989

in males and females of the Australopithecines, later growing into hunting and gathering, prepared the ground for the transformation. The young male was supported by his mother until able to fend for himself in the male way. The crucial point in the scenario transpired when a male – after having reached maturity – due to hardship demanded and received at least parttime female support as if he was offspring. This violated age old principles of biology and instinctive identification. For the hominids to pull this off, display of puerile behaviour from the supported male was necessary, including as mandatory the suppression of any sexual activity on his part in the female group in which he was fed. From this separation of feeding and fornication developed in due turn the universal sexual taboos and the principle of exogamy. Despite all efforts to hush it up, an unnatural thing, however, had happened, and this strained to a breaking point the instinctive identification between provider and recipient carried by the animal sign-system. Containing the contradiction of simultaneous

identity and non-identity, the perception and signal-system of the hominids transformed into completely new forms of mental reflection and communication, i.e. consciousness and human language, which share the power of reaching beyond the immediacy of the subject.

In this way the societal relation of transference and appropriation might have been born, and with the accompanying embryonic consciousness and language the hominids would rapidly have been brought out of the animal world into an artificial human world.

Originally tied to the relation between mother and son, the new relation almost immediately would have shifted to sister and brother. Later again in a restructuring of maternal clans into paternal due to big game hunting at the time of *Homo erectus* the relation shifted to wife and husband, where any genetic justification disappeared completely. Finally, at the advent of civil society, in the terminology of Morgan, the last pretense of a biological basis was lifted from the societal relation, the bond of female

and male<sup>9</sup>, and anybody could occupy both poles of the relation.

This hypothetical anthropogenesis is as likely as any of the current alternatives. To transgress the bounds of wild conjecture, it does, however, require a long and detailed narrative drawing upon results from many fields and sciences. Here it only serves to show that the claim for the primacy of the societal relation can be backed up by possible anthropogenetic scenarios.

*Nils Engelsted*  
*Psykologisk Laboratorium*  
*Universit t of Copenhagen*  
*Njalsgade 90*  
*Dk-2300 S*

<sup>9</sup> Which does not mean that the greater part of labour and caretaking is not still performed by females.