Introducing cultural historical theory: main concepts and principles of genetic research methodology

Nikolai Veresov, Kajaani University Consortium, Finland nikolai.veressov@oulu.fi

Important information!!!

Please, do not waste time by copying this presentation slides, copy-past is impossible from the wall.

Power-point is available at:

http://nveresov.narod.ru/Presentation.ppt



Main concepts: what the cultural-historical theory is about?

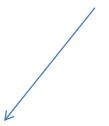


Genetic research methodology: what does it mean to do experimental study according to cultural-historical theory?

Higher mental functions of the human being

Who introduced this subject-matter to scientific psychology?

Mental functions



Lower mental functions

Wundt Vygotsky Higher (specifically human) mental functions

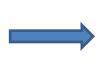
The matured higher mental functions ("flowers of development") are closed for direct investigation and this circumstance requires different (genetic) approach.

Even more, when functions become ingrown, i.e., when they "move within", an extremely complex transformation of all of a function's structure takes place, and their entire construction becomes indiscernible. Galperin describes this so, that when the functions are developed they 'recede into the depths' and are covered by phenomena of a completely different appearance, structure, and nature" (Galperin, 1966, p. 26). In this sense traditional classical quantitative methods are not valid and must be replaced by qualitative ones.

The subject matter of cultural-historical theory is about higher mental functions.

BUT:

The subject matter is the PROCESS OF DEVELOPMENT of higher mental functions



"To understand the mental function means to restore both theoretically and experimentally the whole process of its development in phylo- and ontogenesis" (Vygotsky & Luria, 1992). The one-sidedness and erroneousness of **the traditional view** (emphasis mine – NV) ...on higher mental functions consist primarily and mainly in an inability to look at these facts as facts of historical **development**, in the one-sided consideration of them as natural processes and formations, in merging and not distinguishing the natural and the cultural, the essential and the historical, the biological and the social in the mental **development**...; in short – in an incorrect basic understanding of the nature of the phenomena being studied...

Putting it more simply, with this state of the matter, the very process of development of complex and higher forms of behaviour remained unexplained and unrealised methodologically (*Vygotsky*, 1997, p.2)

Cultural-historical theory is the theory of development of higher mental functions.

Every concept within the theory refers and explains certain aspect of the process of development.

This explains their role, place and their interrelations within the theory

But:

what is development? what is mental development?

Development **is not** just a simple change Development **is not** an organic growth

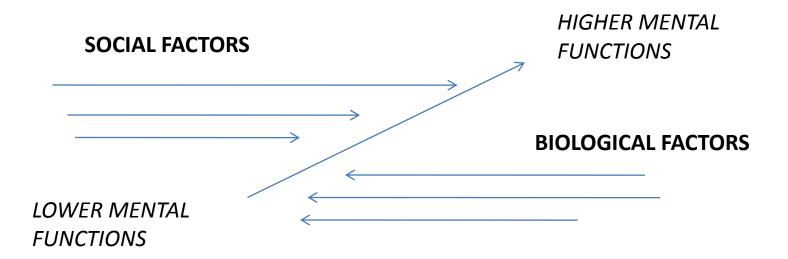
Developmental **is** a complex process of qualitative reorganisation of certain system:

- Sources
- Moving forces
- Main directions
- Specific features
- Results
- Law (laws)

Main concepts of CHT are related and reflect theoretically these aspects of development

Methodological significance of lower/higher functions distinction in CHAT

- 1. Discovers the sources of development of higher mental functions
- 2. Discovers development as qualitative reorganisation



The social environment is the source for the appearance of all specific human properties of the personality gradually acquired by the child or the source of social development of the child...

Vygotsky, L.S. (1998). Collected works, Vol. 5, Plenum Press, p.203

Not the factor, but the source of development

The transition from the biological to the social path of development is the central link in the process of development, a cardinal turning point in the history of the child's behavior.

Vygotsky, L. S. (1998). Collected works, Vol. 6, Plenum, p.20.

"Higher mental functions are not built on top of elementary processes, like some kind of second storey, but are new psychological systems comprising a complex nexus of elementary functions that, as part of a **new system**, being themselves to act in accordance **with new laws**"

Vygotsky, L.S. (1984). Sobraniye sochinenii, Vol. 6, p.58

Development as qualitative change (reorganisation of the system)

Interaction of ideal and real forms

The social environment is the source for the appearance of all specific human properties of the personality gradually acquired by the child or the source of social development of the child which is **concluded in the process of actual interaction of "ideal" and present forms.**

Vygotsky, L.S. (1998). Collected works, Vol. 5, Plenum Press, p.203

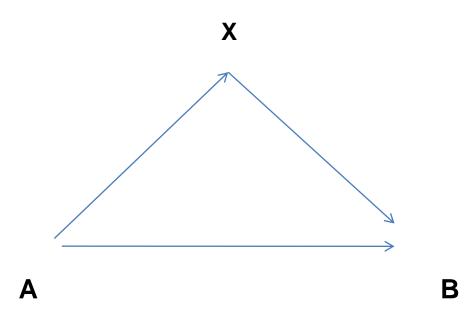
We have a child who has only just begun to speak and he pronounces single words... The child speaks in one word phrases, but his mother talks to him in language which is already grammatically and syntactically formed and which has a large vocabulary, even though it is being toned down for the child's benefit. All the same, she speaks using the fully perfected form of speech. Let us agree to call this developed form, which is supposed to make its appearance at the end of the child's development, the final or ideal form - ideal in the sense that it acts as a model for that which should be achieved at the end of the developmental period; and final in the sense that it represents what the child is supposed to attain at the end of his development. And let us call the child's form of speech the primary or rudimentary form.

The Vygotsky reader, 1994, p. 347-348

In none of the types of development known to me does it ever happen that at the moment when the initial form is taking shape . . . the higher, ideal form, which appears at the end of development, should already be present and that it should interact directly with the first steps taken by the child along the path of development of this initial or primary form. Here lies the greatest peculiarity of child development in contrast to other types of development.

Vygotsky, L.S.(2001). Osnovy pedologii. Stenogrammy lektsii p. 112–13.

Mediation



Mediation from the developmental perspective: three points

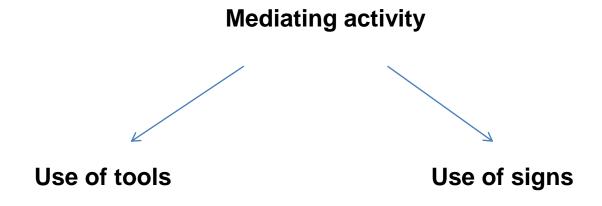
- 1. Two streams
- 2. Mediating activity vs. mediated activity
 - 3. Product vs. process

First point: two streams

The concept "development of higher mental functions" and the subject of our research encompass two groups of phenomena that seem, at first glance, to be completely unrelated, but in fact represent two basic branches, two streams of development of higher forms of behaviour inseparably connected, but never merging into one. These are, first, the processes of mastering external materials of cultural development and thinking: language, writing, arithmetic, drawing; second, the processes of development of special higher mental functions not delimited and not determined with any degree of precision and in traditional psychology termed voluntary attention, logical memory, formation of concepts, etc. Both this taken together also form that which we conditionally...call the process of development of higher forms of the child's behaviour

Vygotsky, L.S. (1997) Collected Works, Vol. 4, p.14)

Second point:



Mediating! Not mediated!

Our diagram presents both types of devices as *diverging* lines of mediating activity. A more substantial difference of the sign from the tool and the basis for the real divergence of the two lines is the different purpose of the one and the other. The tool serves for conveying man's activity to the object of his activity, it is directed outward, it must result in one change or another in the object, it is the means for man's external activity directed toward subjugating nature. The sign changes nothing in the object of the psychological operation, it is a means of psychological action on behaviour, one's own or another's, a means of internal activity directed toward mastering man himself; the sign is directed inward. These activities are so different that even the nature of the devices used cannot be one and the same in both cases Vygotsky, 1997, Vol. 4, p.62

Third point: product vs. process

The sign arises as a result of a complex process of development - in the full sense of the word. At the beginning of the process there is a transitional mixed form that combines in itself the natural and the cultural in the behavior of the child *Vygotsky, L.S.* (1997). The Collected Works, Vol. 6, p. 9

We need to concentrate not on the product of development but on the very process by which higher forms are established....

Vygotsky, 1978, pp. 64–65

"The sign as a tool reorganizes the whole structure of psychological functions. It forms a structural centre, which determines the composition of the functions and the relative importance of each separate process. The inclusion in any process of a sign remodels the whole structure of psychological operations, just as the inclusion of a tool reorganizes the whole structure of a work process"

Vygotsky, 1929, 421.

Results of development:

qualitative changes = reorganisation of the system

By age-related new formations we must understand that new type of construction of the personality and of its activity and those psychic and social changes that first arise at a given age level and that in the main determine the consciousness of the child.

Vygotsky, L.S. (1984). Collected Works (Russian Edition), vol. 4, p. 248.

General genetic law of cultural development

"...any function in the child's cultural development appears on stage twice, that is, on two planes. It firstly appears on the social plane and then on a psychological plane. Firstly it appears among people as an inter-psychological category, and then within the child as an intra-psychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts and the development of volition."

(Vygotsky, 1983, p.145.)

In "Mind in society" (1978) the formulation of the general genetic law is given in the following way:

"...every function in the child's...development appears twice: first, on the social level, and later, on the individual level; first between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts.

(Vygotsky, 1978, p. 57)

According to Vygotsky, the function does not and cannot appear in the social relations.

"...every higher mental function, before becoming internal mental function was external because it was social before it became an internal, strictly mental function; it was formerly a social relation of two people". (Vygotsky, 1997, p. 105).

Social relation is not the "area", not the field, and not the "level" where mental function appears- the social relation itself becomes human individual function – herein lays the answer.

Yet, if every higher mental function was a social relation between two or more people, does it mean that every social relation can become a mental function?

It should be a special kind of relation. The name of this type of relation is.....

CATEGORY,

WHICH IS

THE DRAMATICAL COLLISION BETWEEN TWO PEOPLE

From here comes, that one of the central principles of our work is experimental unfolding of higher mental process into the drama, which happened between the people.

Vygotsky, 1983, p.145.

Mental developmental **is** a complex process of qualitative reorganisation of psychological systems:

- Sources
- Moving forces
- Main directions
- Specific features
- Results
- Law (laws)

Genetic research methodology: what does it mean to do experimental study according to cultural-historical theory framework?

The genetic-experimental method of study of the development of higher mental functions introduced by cultural-historical theory (Vygotsky) differs from "classical" psychological experiments.

"The method we use may be called experimental-genetical method in the sense that it artificially elicits and creates a genetic process of mental development ..."

Vygotsky, 1997, p. 68

1. The principle of buds of development

Child development is not a linear, homogenous process. Simultaneously, there are different levels of development of different functions in the child. At each age there are functions which are already matured (developed) and there are functions that are in a process of maturation. So there are "functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed the "buds" or "flowers" of development rather than the "fruits" of development" (Vygotsky, 1982, Vol. 2, p. 226).

The principle of "buds of development" means that at the beginning, the experimental study should be detecting the function (or functions) which are in their "bud" (embryonic) stages, and not already developed.

2. The principle of category (collision, dramatic event)

The principle of category follows from the general law of cultural development of higher mental functions.

This means that "...every higher mental function, before becoming internal mental function was external because it was social before it became an internal, strictly mental function; it was formerly a social relation of two people". (Vygotsky, 1997, p 105).

3. The principle of interaction of real (natural) and ideal (cultural) forms

The principle of category means that the experiment should begin with the category (dramatic event, collision) the child should experience. This collision should be artificially created. The dramatic event is the form in which the higher mental function appears before it becomes an internal higher mental function. The experiencing (perezhivaniye) of the child is a kind of indicator of the level of child's emotional involvement into this dramatic collision.

3. The principle of interaction of real (natural) and ideal (cultural) forms

There is no development if there is no interaction between the ideal and real forms.

The principle of interaction of real (natural) and ideal (cultural) forms means that in the course of experimental study both forms should be detected. It also means that the higher "ideal form" must be presented from the beginning of the experiment. And, finally, tools and means of interaction between these forms should be specially created and involved in the experimental procedure.

4. The principle of developmental tools

The principle of developmental tools means that during the experiment, cultural tools should not be given to the child directly; they have to be discovered (found) by the child (in cooperation with an adult or more competent peer). The experimenter should have a set of tools that the child is able to find and master in the course of experimental study.

5. The principle of sustainable qualitative changes as an outcome of the experiment

Neo-formations are not just new functions that appeared as the results or outcomes of development. They are, rather, a new type of construction and organisation of the psychological system as a new nexus of elementary and higher functions.

The principle of sustainable qualitative changes means that the results of the experimental study must be not simply statistically valid changes, but a new quality of the structure and the construction of child's consciousness as a result of its re-organization. These new qualitative levels of organization should be experimentally detected and described.

Mental developmental is a complex process of qualitative reorganisation of psychological systems:

- •Sources
- •Moving forces
- •Main directions
- •Specific features
- •Results

Law (laws)

Research methodology