

# The philosophical foundation of cultural historical theory

**Manolis Dafermos**

University of Crete


The paper was presented at the 8th ISCAR Summer University

for PhD students


Moscow, July 2019

<https://crete.academia.edu/ManolisDafermos>

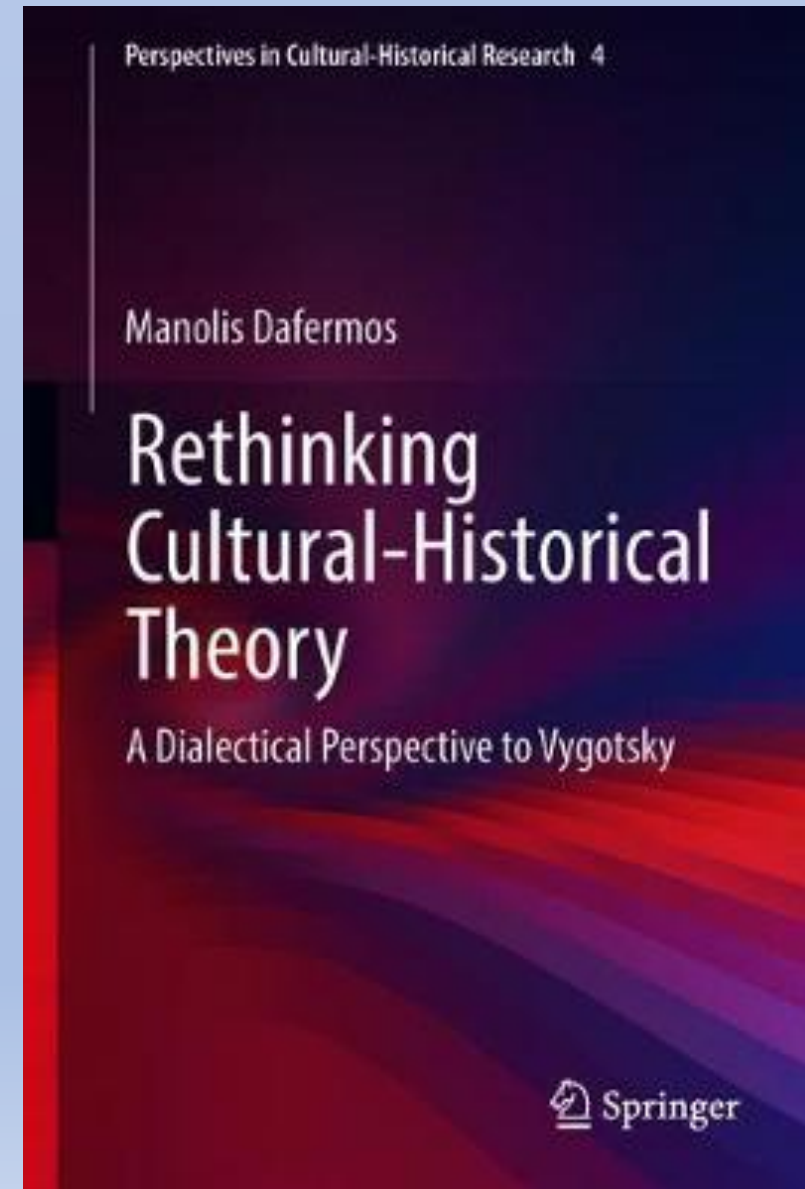
# Questions



Why it is so important to talk about philosophical foundation of Vygotsky's theory?



Why is so important examine the philosophical foundation of the psychological theories?



There is no escape  
from philosophy.

Every scientist  
takes a  
philosophical  
position.



# The historic and philosophical background

*when you can't see the forest  
for the trees*



- “I fully agree with you about the significance and educational value of **methodology** as well as **history and philosophy of science**. So many people today—and even professional scientists—seem to me like somebody who has seen **thousands of trees but has never seen a forest**. A knowledge of the **historic and philosophical background** gives that kind of independence from prejudices of his generation from which most scientists are suffering. This independence created by philosophical insight is—in my opinion—**the mark of distinction between a mere artisan or specialist and a real seeker after truth**”. (Einstein to Thornton, 7 December 1944)



# The foundations of science

## Ontology

- What is reality?
- The theory of Being

## Epistemology

- How I can know reality?
- The theory of Knowledge

## Methodology

- What method can we use to acquire knowledge?
- The path of knowledge

# Ontology

## Atomism

the world is composed of  
separate, independent  
elements

## Holism

The whole is more than  
the sum of its elements

# Epistemology

## Empiricism

knowledge comes  
primarily from sensuous  
experience

## Rationalism

Reason as the chief  
source of knowledge

# Methodology

## Induction

From specific observation  
to general principles

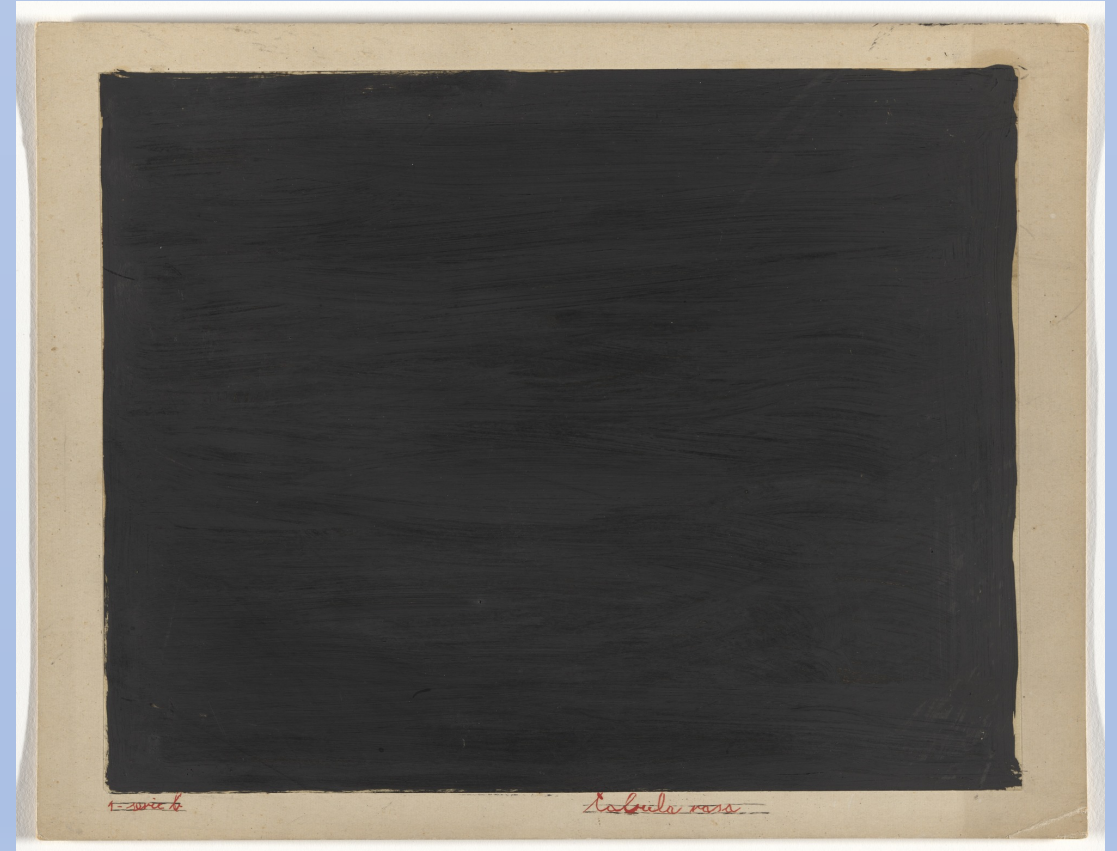
## Deduction

From the general to the  
specific

# The divorce of psychology from philosophy (Toulmin, 1985)

- “Cult of empiricism” (Toulmin, & Leary, 1985).
- John Locke’s empiricism as the foundation of the mainstream psychology

Theoretical “**tabula rasa**” (clean or black slate): all knowledge originates from experience. The rejection of the existence of certain innate ideas (inborn ideas)



# The crisis in psychology

- The discussion on the crisis in psychology. The fragmentation of psychology, the lack of a unified theoretical framework (K. Bühler, Koffka, K. Lewin, L. Vygotsky, Husserl, etc.). Various descriptions of the crisis
- “tendency of each new idea in psychology to turn into a universal law” (Vygotsky, 1997, 246)
- Psychology was at a sad pre-theoretical level (Koch, 1951, 298)
- “Nothing is more practical than a good theory” (Kurt Lewin)

# The crisis of psychology continues: On the consequences of the “cult of empiricism”:

## The expansion of empirical psychological studies the lack of a philosophical reflection

- **International psychology has been colonized by North American psychology** (Moghaddam, 1987).
- American researchers in psychology have focused too narrowly on Americans while neglecting the other 95% of the world's population (Arnett, 2008).
- Is it possible to generalize the results of these empirical studies?

- **The crisis of replication**

Only 39 of the experimental results 100 psychological experiments that had all been published in the most prestigious psychology journals could be reproduced. (Open Science Collaboration, 2015).

-----

- «The vast majority of contemporary psychological investigations write out the last decimal point with great care and precision in answer to a question that is stated fundamentally incorrectly» (Vygotsky, 1997, p.258).

- **“Something is rotten in the state of Denmark”  
(Shakespeare, Hamlet)**





# Get back to business as usual?



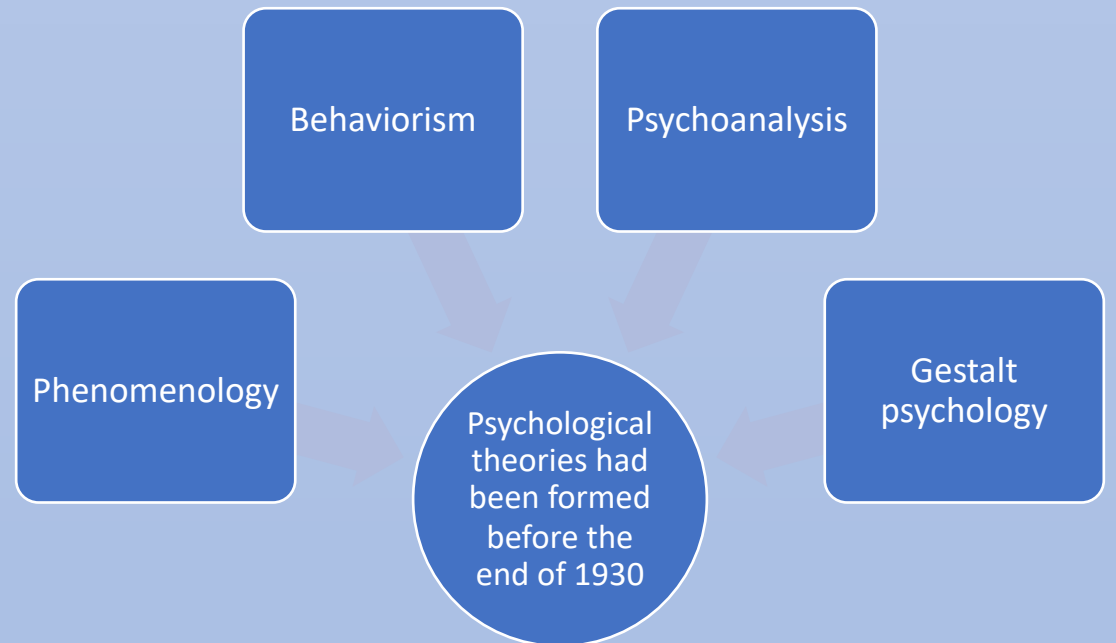
- The “ostrich algorithm” is a strategy of ignoring potential problems
- They bury their heads in the ground to avoid danger.
- The power of inertia
- -----
- “...the simple continuation of the same work, the gradual accumulation of material, are proving fruitless or even impossible. In order to go further we must choose a path” (Vygotsky 1997, p. 233).

# Vygotsky was involved in dialogue with behaviorism, psychoanalysis, Gestalt psychology

- **Behaviorism** - empiricism and pragmatism.
- British empiricism (Francis Bacon, John Locke)

Pragmatism truth, knowledge, in terms of their practical uses (William James and John Dewey, Charles Sanders Peirce).  
Pragmatism as the dominant ideology of the USA.

- **Psychoanalysis** was formed under the influence of irrational philosophy of life (Nietzsche, Schopenhauer), the tendency of destruction of Reason.
- **Gestalt psychology** is internally connected with Kant's philosophy, the idea of the existence of a-priori forms of perception. A revolt against positivism, escaping from the prison of elementalism (Kohler)
- **Phenomenology** "A similar situation is created in psychology when we reject the difference between phenomenon and being. Where being and phenomenon directly coincide science has no place, only phenomenology" (Vygotsky, 1997, p.115)



# Two types of scholars (A.Luria)

## Classical scholars

- focus on an analysis of reality into its elements and formulation of general laws.
- “the reduction of living reality with all its richness of detail to abstract schemas”
- Reductionism

## Romantic scholars

- a holistic approach to living reality.
- “to preserve the wealth of living reality, and they aspire to a science that retains this richness”
- Developmental perspective
- Vygotsky, Luria, Oliver Sacks
- “The mind of a mnemonist,”
- “The Man with a shattered world”

# Reductionism versus holism

- The epistemological and methodological stance which absolutizes the reduction of complex systems or problems to their simple components or elements.
- **Ontological** reductionism- the higher-level structures are reducible to lower-level structures (The reduction of the social to the individual, biological determining).
- **Methodological** reductionism/ main characteristics: quantification, a linear-serial way of proceeding, a deductive and analytical way of reasoning
- **Theoretical** reductionism: physicalism is based on a reduction of all sciences – including social sciences to physics (“physics envy” in psychology) (Dafermos, 2014)
- **Gestalt psychology**: the whole of perception is more than a sum of the parts
- **Vygotsky** demonstrated the limitations of the **analysis** of psychological phenomena **into separated elements** studied in isolation. In contrast to analysis by elements, Vygotsky suggested **analysis by units** which contained the basic characteristics of the whole.

# Crisis in science: Zombie science

- “Zombie science is science that **is dead** but will not lie down. It keeps twitching and lumbering around so that (from a distance, and with your eyes half-closed) zombie science looks much like real science. But in fact the zombie has no life of its own; it is animated and moved only by the incessant pumping of funds” (Charlton 2008, p.327).

Imitation of scientific activity for management, advertising, public relations. Post-truth politics

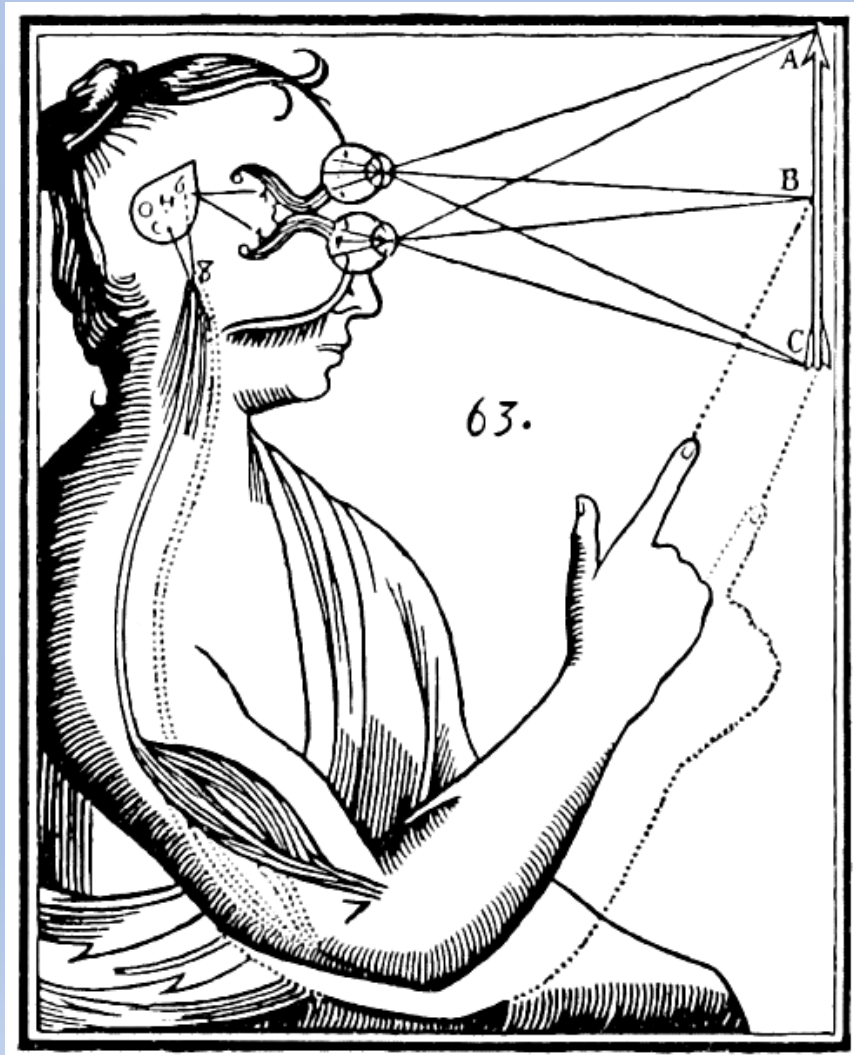
- “...current practice of **mass production of publications** is misleading and redundant, it creates research waste, **distorts science...**” (Barić, Baždarić, Glasnović and Gajović 2017, p.2).
- The **mass production** of scientific publications takes mainly the form of a **routine, repetitive activity**

# Developing a strategy to overcoming the crisis in psychology

- Rethinking **multifaceted and diverse tradition** in the history of philosophical thinking from the perspective of its relation to a concrete discipline (psychology) (Dafermos, 2018).
- Vygotsky was inspired by prominent philosophers such B.Spinoza (1632 - 1677), G.W.F.Hegel (1770 - 1831), L.Feuerbach (1804 – 1872) and K.Marx (1818- 1883). The history of philosophy and science as a **drama of ideas**.
- Vygotsky's broad philosophical background and his literary scholarship
- Reflecting psychology through the prism of humanities
- Cross-fertilization between different disciplines -Field-switchers have made significant contributions (Dafermos, 2018).



# The dramatic tension between Descartes and Spinoza: Monism versus dualism



Descartes' gap between the world of the bodies (res extensa) and the world of thinking as a spiritual, non-extended substance (res cogitans)

Spinozist monism offered an original perspective for highlighting possible ways to **overcome dualism**

# Mind body problem in times of AI and “forth industrial revolution”

## Geminoid F

Hiroshi Ishiguro, Osaka University

### AI in humanoid robots

- “machines have become more lifelike, and living organisms have been found to be more like machines. Contemporary machines are not only more complex, they are deliberately designed to operate in ways which resemble human behavior” (Skinner, 2005, p.46)



# The freedom of “human will”

- “The philosophical perspective opens before us at this point of our study. For the first time in the process of psychological studies we can resolve essentially purely philosophical problems by means of a psychological experiment and demonstrate empirically the origin of the **freedom of human will**” (Vygotzky 1997b, p.219).
- Buridan's ass
- “The ass, being hungry and finding himself at equal distances from two completely similar sheaves of hay hanging on the right and left sides, starves to death, since the effective motives are completely equal in value and opposite in direction” (Vygotzky, 1997, p.44)



# The dramatic tension between freedom and determinism

“Psychology of Art”: “My intellect has been shaped under the sign of Spinoza’s words, and it has tried **not to be astounded, not to laugh, not to cry, but to understand**” (Vygotsky 1987d, p.10). Vygotsky was inspired by **Spinoza's understanding of freedom**.

- Spinoza developed a concept of freedom as an active self-determination. Adequate knowledge through reason of the causes of human actions opens up the path toward freedom
- **human freedom is consciousness of necessity**, rather than a freedom from necessity.
- “not freedom from necessity, but freedom understood as **reorganizing necessity**” (Vygotsky 1997b, p. 217).





# How to Survive in Hostile Environment?

- “...we are in many respects at the **mercy of external causes** and are tossed about like the waves of the sea when driven by contrary winds, unsure of the outcome and of our fate”  
(Spinoza 2002a, Ethics, II, Proposition 59, Scholium).



# Vygotsky versus post-modernism

## Self-determination, self-regulation

- A man looks for help in artificially introduced auxiliary motives  
Mediating activity as a kind of creating activity (changing environment/changing the subject)  
Man as a thinking body becomes able to act reasonably

## postmodern deconstruction, fragmentation of subject





# Hegel – Vygotsky

- Hegel's "Phenomenology of Spirit"
  - the history of consciousness mainly at the level of **philogenesis**
- as a drama of the emancipation of consciousness

thinking moves from the perceptual awareness to rational understanding, from sensuous immediacy to scientific knowledge.

- The problem of **consciousness** as the core problem in Vygotsky's investigation.
- Vygotsky investigated mainly the **ontogenesis** of consciousness
- **The development of higher mental functions** was examined by Vygotsky as a **qualitative transformation** that arises as a result of **contradictions, conflicts, and crises**, rather than as a simple accumulation of quantitative changes

## The “cunning of Reason” as mediating activity



- Hegelian idea of the “cunning of Reason.” people can achieve their goals through an activity that allows the objects to act upon one another, in accordance with the laws that regulate their interaction.
- The **relationships between the subjects and objects** that are not direct, but develop through **indirect, mediating activity**.
- “Hegel used the **concept of mediation** in its most general meaning seeing in it the most characteristic property of mind. He said that the mind is as forceful as it is powerful. In general forcefulness consists in **mediating activity** that, while it **lets objects act on each other according to their nature**, and exhaust themselves in that activity, does not at the same time intervene in the process, but fulfills only its own proper role. Marx refers to this definition of the tools of work and indicates that Man ‘makes use of mechanical, chemical properties of things in order to change them into tools to act on other things according to his purpose (Vygotsky 1997b, pp. 61–62)

# The “cunning of Reason” as a transition from reaction to action

- “the great uniqueness of the will consists of man **having no power over his own behavior other than the power that things have over his behavior**. But man subjects to himself the power of things over behavior, **makes them serve his own purposes** and controls that power as he wants. He **changes the environment with his external activity** and in this way affects his own behavior, subjecting it to his own authority” (Vygotsky 1997, p.212).
- Man masters himself by using signs: “using a stick, primitive Man masters from outside, with the help of a sign, processes of his own behaviour and subordinates his actions to a goal, making external objects serve his activity—tools, soil, rice” (Vygotsky 1999, p. 64).

*kvinus* (“knots”) conventional auxiliary signs for the memory, a means of counting [Bolivia, Peru, etc.] (Luria & Vygotsky, 1992).

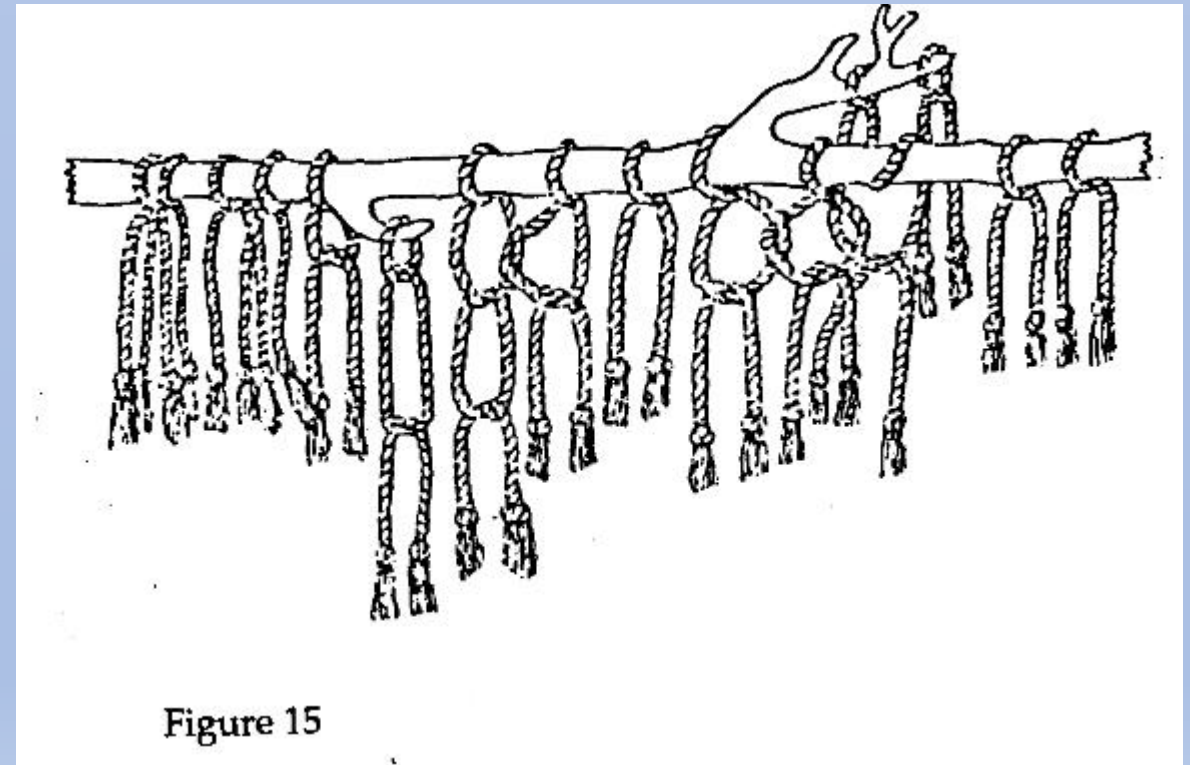
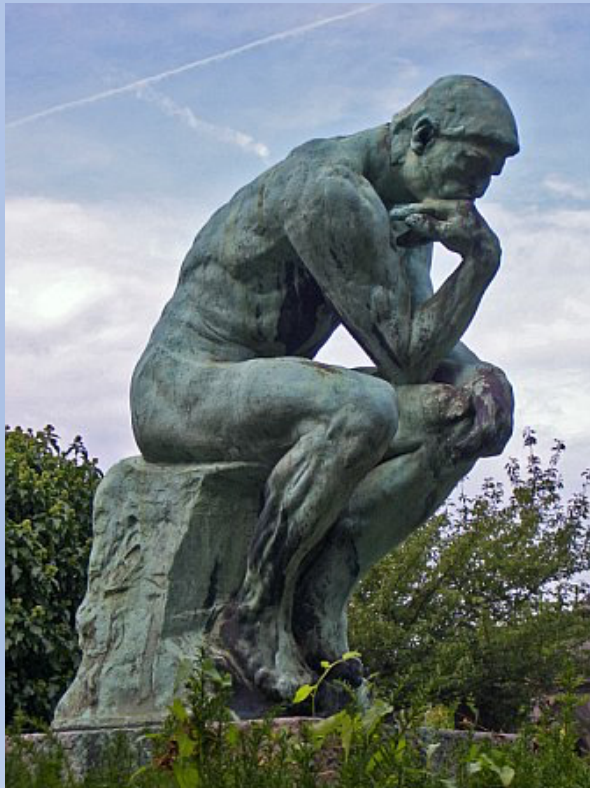


Figure 15



# The dramatic tension between the Individual and collective

**Descartes: cogito ergo sum ("I think therefore I am")**



**Hegel (PhS, 110): Spirit (Geist) as a Collective subject. Geist: "We that is I and I that is We".**

**African view of the person: "I am because we are, and since we are, therefore I am".**



# Feuerbach - Vygotsky

- in 1920s early 1930 in USSR an *intense debate on* Feuerbach's materialism
- Feuerbach's anthropological materialism emerged as an **attempt to overcome both dualism** (in all its forms) **and spiritualism**.
- **“Four hands can do more than two, but also four eyes can see more than two. And this combined power is distinguished not only in quantity but also in quality from that which is solitary. In isolation human power is limited, in combination it is infinite... all these so-called powers of the soul are powers of humanity, not of man as an individual; they are products of culture, products of human society”** (Feuerbach 2008, p.47).
- **“The true dialectic is not a monologue of the solitary thinker with himself. It is a dialogue between “I” and “you”.** (Feuerbach, 1986, p.71)



# Feuerbach challenged the dominant individualistic explanation of psychological processes

- “Community enhances the force of emotion, heightens confidence. **What we are unable to do alone we are able to do with others.** The sense of solitude is the sense of limitation: **the sense of community is the sense of freedom.** Hence it is that men, when threatened by the destructive powers of Nature, crowd together” (Feuerbach 2008, p. p.84)

**Freedom as a community act**  
(freedom with others to others)





# Dialectics

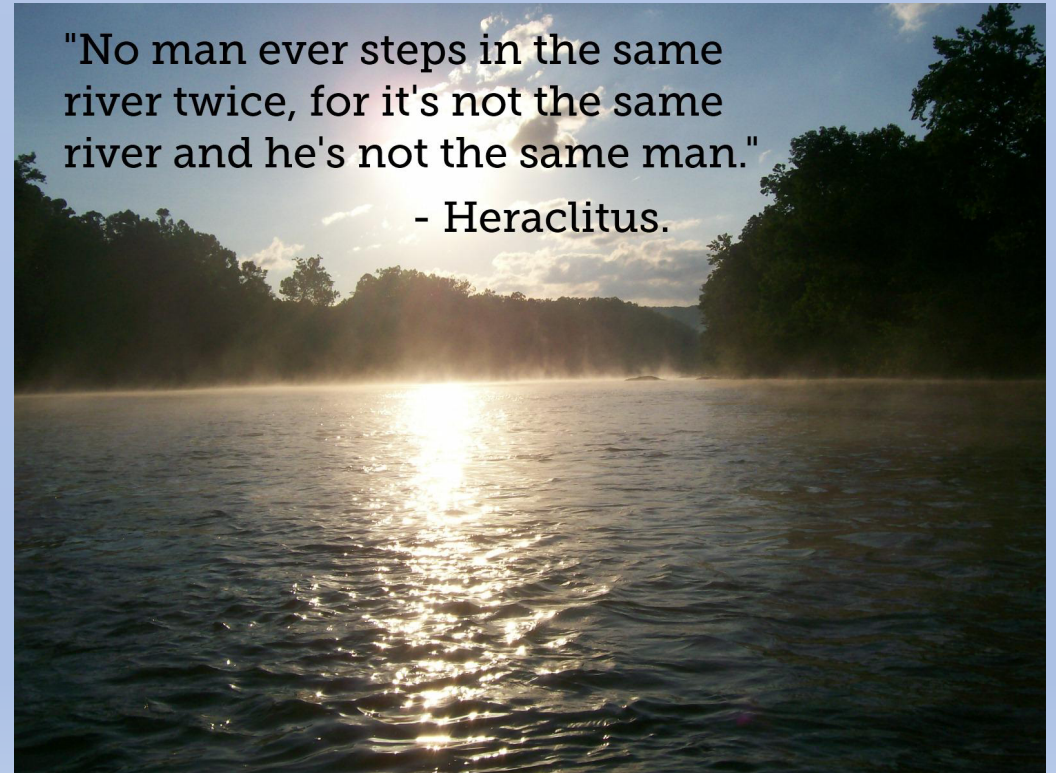
## Systematic dialectic (Marx's dialectics)

- “We are dialecticians. We do not at all think that the **developmental path** of science follows a straight line, and if it has had **zigzags, returns, and loops** we understand their historical significance and consider them to be necessary links in our chain, inevitable stages of our path...” (Vygotsky 1997, p. 336)
  - dialectics: “...to study things in their own being and movement” (Hegel, Logic, 8i).
- “dialectics is a way of thinking that brings into focus the full range of changes and interactions that occur in the world” (Ollman, 2003, p.12)
- **Dialectic as a theory of knowledge and logic.** Overcoming the gap between ontology and epistemology.
  - “Psychology is in need of its own Das Kapital” (Vygotsky 1997, p.330).

## Spontaneous dialectics

"No man ever steps in the same river twice, for it's not the same river and he's not the same man."

- Heraclitus.



# Three key methodological issues of dialectics

From the description of the external phenomena (surface) to the essence

The ascent from the abstract to the concrete.  
(Analysis in units versus analysis in elements)

The historical method. **Converting thing into process**

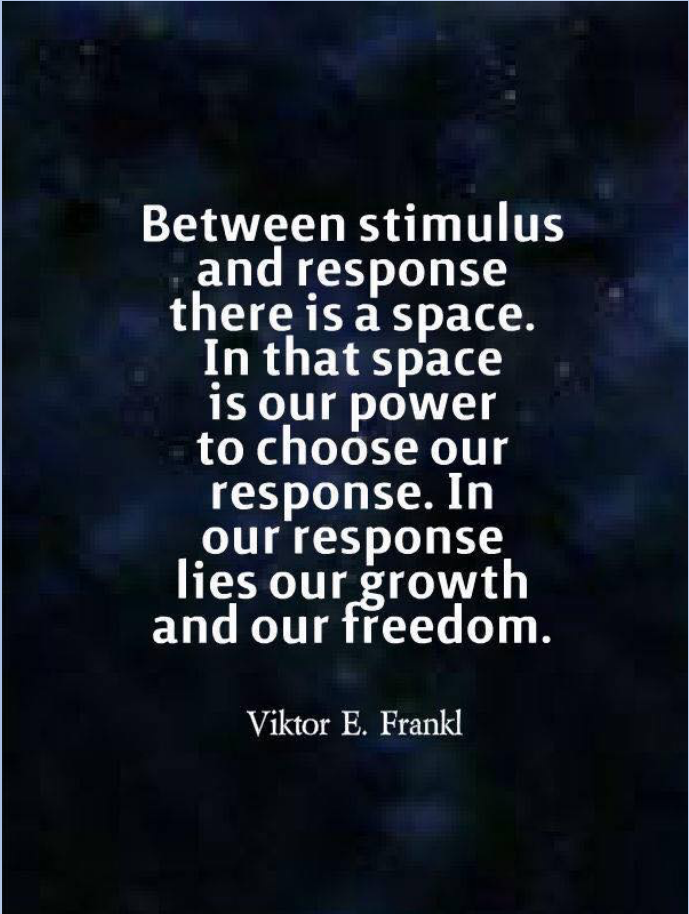
# The relation between essence and phenomenon (surface).

- Going beyond the external phenomena on the surface exploring the essential, internal relations
- Vygotsky (1997a, p. 325) referred to Marx's words that "all science would be superfluous if the outward appearance and the essence of things directly coincided" (Marx, 1894). science is possible only on the basis of the separation of knowledge from direct experience. "...psychology the need to fundamentally transcend the boundaries of immediate experience is a matter of life and death" (Vygotsky 1997, p. 274).
- whale and dolphins are mammals and not fish.



# Challenging the “postulate of immediacy”

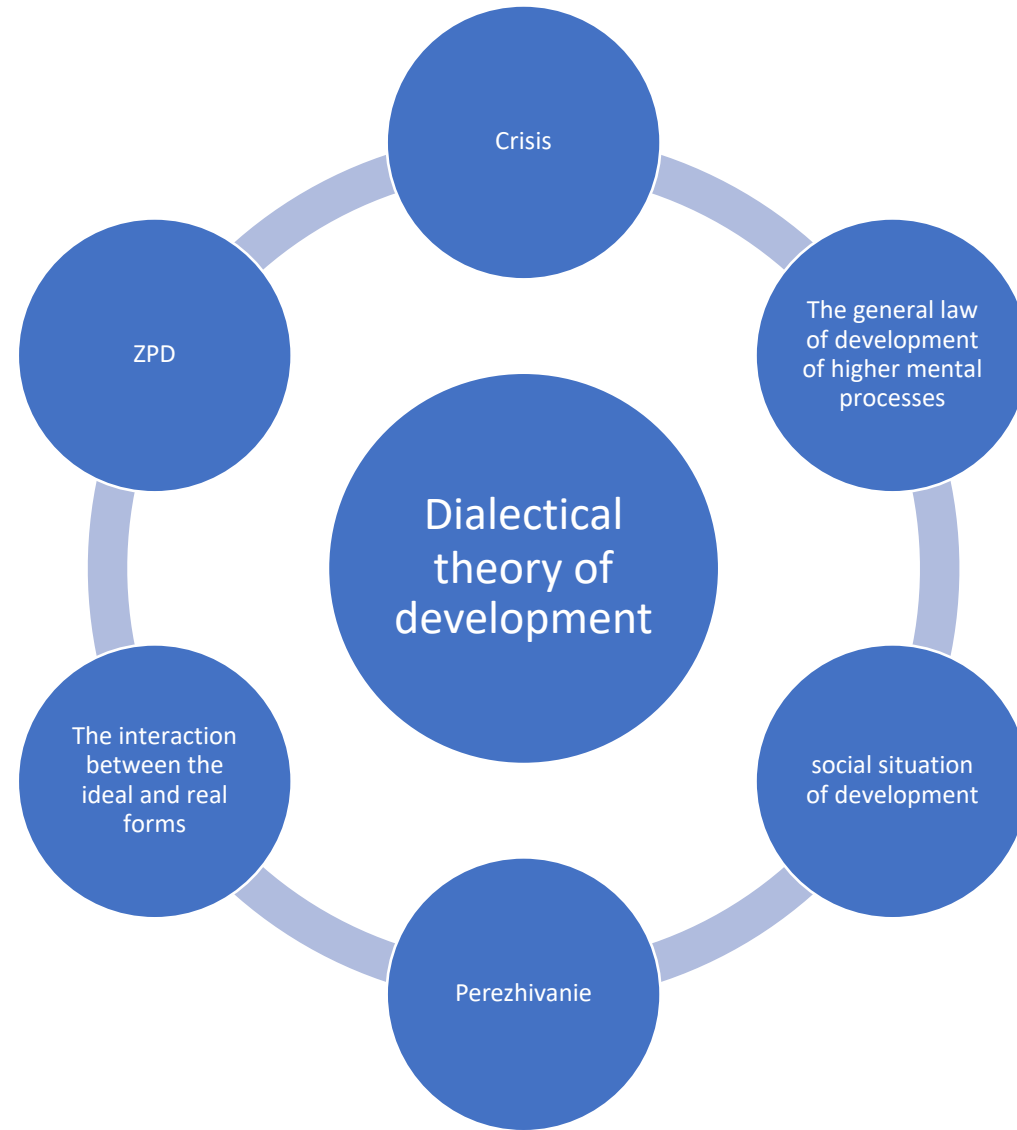
- Ptolemy's system matched to the “common sense” (the sun revolves around Earth) while the Copernican theory seems to be imperfect. A “Copernican” understanding of psychological processes (Vygotsky, Leontiev, Uznadze, etc.).
- "All that glitters is not gold» (Shakespeare, The merchant of Venice)
- Knowing a subject could not directly, immediately get to the truth. The path to truth is a **movement from immediate to mediate and vice versa**. “it is only through the mediation of an alteration that the true nature of the object comes into consciousness” (Hegel, 1991, p. 54).



Between stimulus  
and response  
there is a space.  
In that space  
is our power  
to choose our  
response. In  
our response  
lies our growth  
and our freedom.

Viktor E. Frankl

# Building a system of interconnected concepts



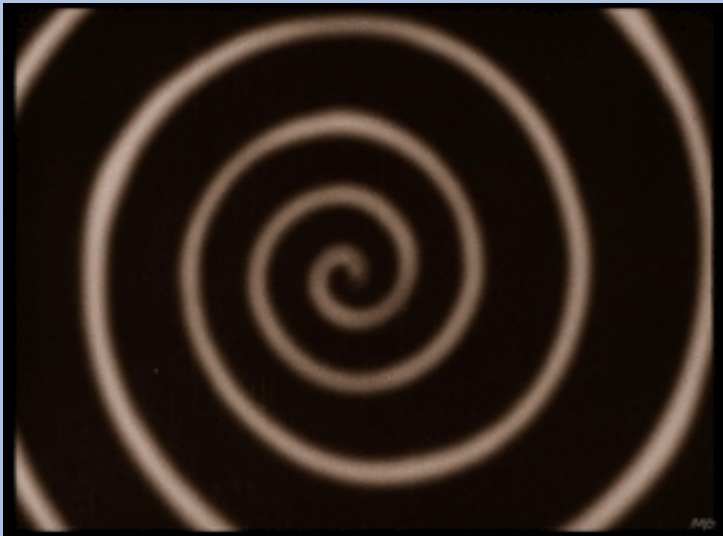


# Development: a dialectical perspective

## From Being to Becoming

- Traditional psychology is unable to deal with paradoxes, puzzles, contradictions.
- Human development as a **contradictory unity** of progression and regression, integration and disintegration, rather a linear progression or an accumulation of quantitative changes.
- «**Development ...is the struggle of opposites.** This view alone can support truly **dialectical research** on the process of children's development” (Vygotsky, 1993, p.282/83).
- Human development in terms of a drama.
- “But a positive description is possible only if we radically change our representation of child development and take into account that it is a **complex dialectical process** that is characterized by a complex periodicity, disproportion in the development of separate functions, **metamorphoses or qualitative transformation of certain forms into others**, a complex merging of the **processes of evolution and involution**, a complex crossing of external and internal factors, a complex process of overcoming difficulties and adapting.” (Vygotsky, 1997, p.98)

# Exploring historicity of human functioning



- “**To study something historically** means to study it in the process of change; that is the dialectical method’s basic demand. To encompass in research the process of a given thing’s development in all its phases and changes—**from birth to death**—fundamentally means to discover its nature, its essence, for it is **only in movement that a body shows what it is**. Thus the historical study of behavior is not an auxiliary aspect of theoretical study, but rather forms its very base” (Vygotsky 1978, pp. 64–65)
- To understand the mental function means to restore both theoretically and experimentally the **whole process** of its development in **phylo-** and **ontogenesis** (Luria and Vygotsky 1992).



# Dialectical understanding of development and creative, future oriented activity

- “A creature that is perfectly adapted to its environment, would not want anything, would not have anything to strive for, and, of course, would not be able to create anything” (Vygotsky, 2004, p.28-29).
- Vygotsky proposed the idea of creative, future oriented activity, that “...makes the human being a creature oriented toward the future, creating the future and thus altering his own present” (Vygotsky, 2004, p.9).
- Nikolai Bernstein’s (1896–1966) concept of the “model of the required future”
- *Dialectical understanding of development emphasizes human potentialities, creating the future and transforming the present forms of human being.*



# Conclusions

A multifaced philosophical tradition (Spinoza, Hegel, Feuerbach, Marx)

Rethinking a concrete discipline (psychology) from the perspective of dialectics

Focus on Self-determination & freedom

A dialectical perspective on complex **developmental process**

**Future-oriented activity** versus adaptation to Environment (or equilibrium).  
Anticipation/imagining the future and changing the present.

Thank you  
for your attention