

# 170 years since the birth of Ivan Pavlov.

## Traditions and innovations in Cognitive Behavioral Therapy

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“Each one of us is alone in the world. He is shut in a tower of brass, and can communicate with his fellows only by signs, and the signs have no common value, so that their sense is vague and uncertain. We seek pitifully to convey to others the treasures of our heart, but they have not the power to accept them, and so we go lonely, side by side but not together, unable to know our fellows and unknown by them. We are like people living in a country whose language they know so little that, with all manner of beautiful and profound things to say, they are condemned to the banalities of the conversation manual. Their brain is seething with ideas, and they can only tell you that the umbrella of the gardener's aunt is in the house.”

— W. Somerset Maugham, *The Moon and Sixpence*

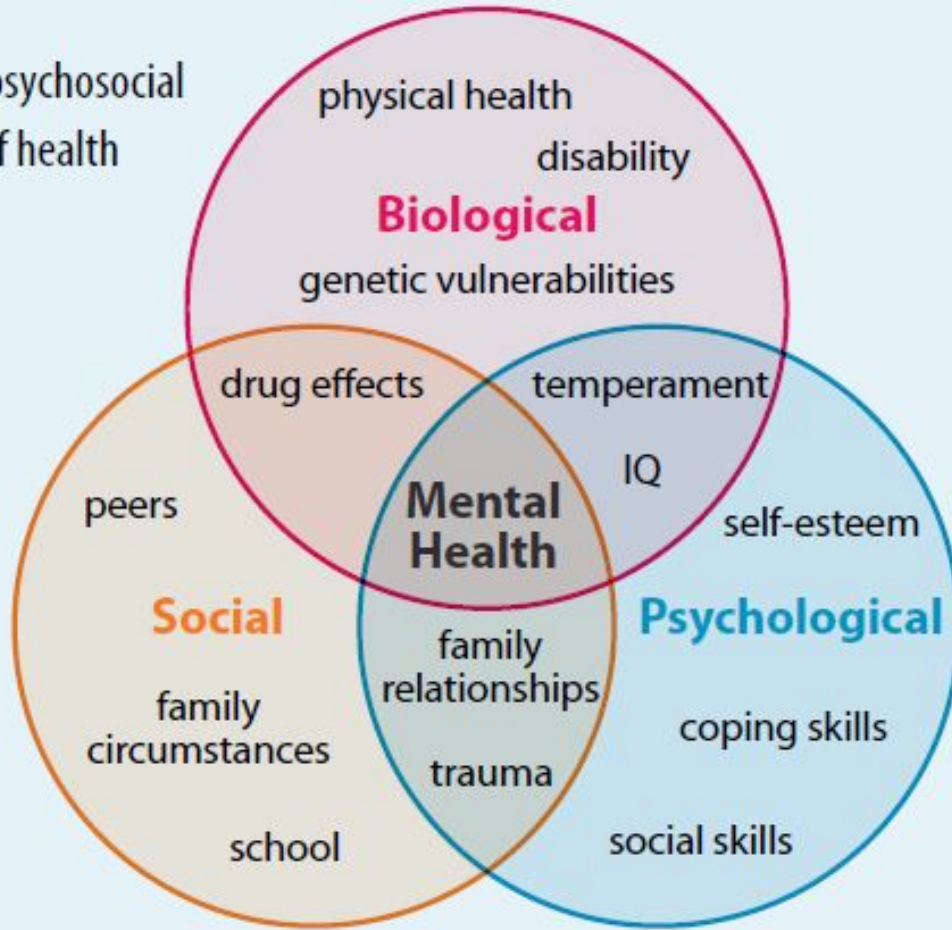


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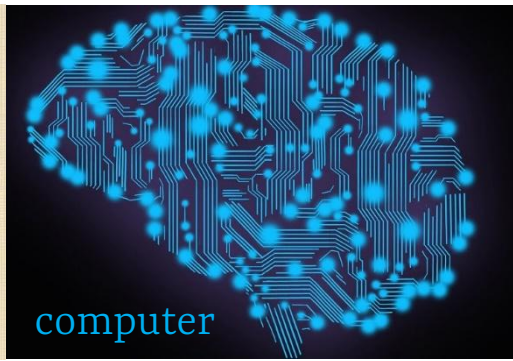
# The biopsychosocial model of health



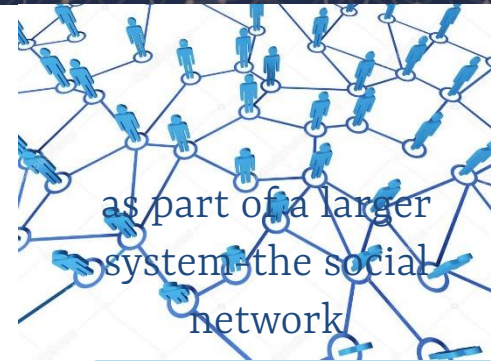
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## 3 metaphors of the human psyche and himself as a phenomenon



- The mind–body problem in philosophy examines the relationship between mind and matter, and in particular the relationship between consciousness and the brain.
- A variety of approaches have been proposed. Most are either dualist or monist. Dualism maintains a rigid distinction between the realms of mind and matter. Monism maintains that there is only one kind of stuff, and that mind and matter are both aspects of it.



# René Descartes

The problem was addressed by pre-Aristotelian philosophers, and was famously addressed by René Descartes in the 17th century, resulting in Cartesian dualism. Descartes believed that humans only, and not other animals have this non-physical mind.

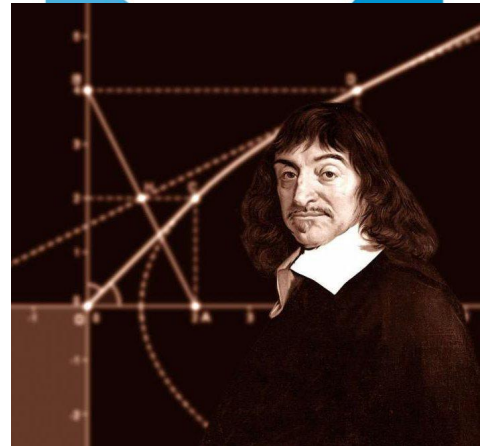
## Cogito, ergo sum

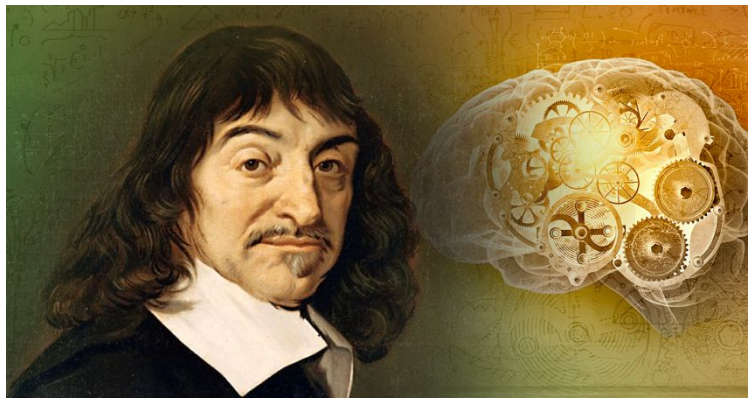
*usually translated into English as "I think, therefore I am"*

As Descartes explained, "we cannot doubt of our existence while we doubt..." A fuller version, articulated by Antoine Léonard Thomas, aptly captures Descartes's intent: *dubito, ergo cogito, ergo sum* ("I doubt, therefore I think, therefore I am")



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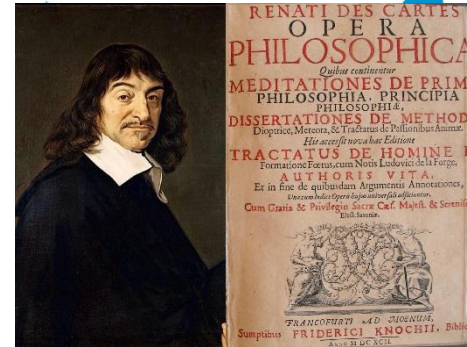


The greatest discovery of Descartes, which became fundamental for subsequent psychology, can be considered the concept of reflex and the principle of reflex. The pattern of the reflex was as follows. Descartes presented the model of the organism as a working mechanism. With this understanding, the living body no longer requires the intervention of the soul; the functions of the "body machine", which include "perception, the imprinting of ideas, the retention of ideas in memory, internal aspirations... are performed in this machine as the movements of a clock."



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# Ivan Pavlov

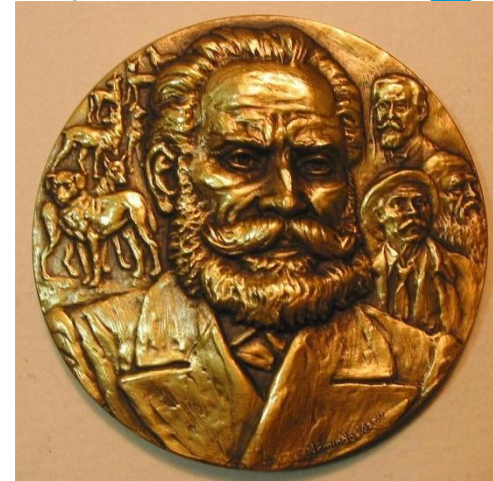
Pavlov was a Russian physiologist known primarily for his work in classical conditioning.

This year we are celebrate the 170th anniversary of academician Ivan Pavlov (26 September [O.S. 14 September] 1849 – 27 February 1936) and the centenary of the Clinic of neuroses in St. Petersburg bearing his name.

In 1904, the Nobel prize for Physiology or Medicine for the study of the functions of the main digestive glands was awarded to I. P. Pavlov. He becoming the first Russian Nobel laureate.



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1849 – 1936





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**I. P. Pavlov**  
**CONDITIONED**  
**REFLEXES**



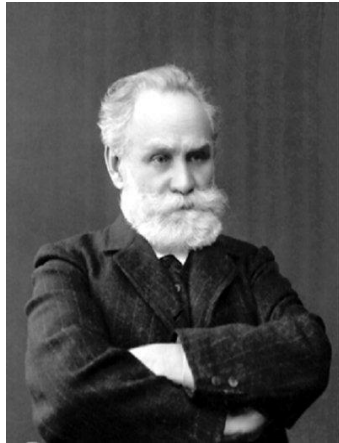
# Behavioral psychology



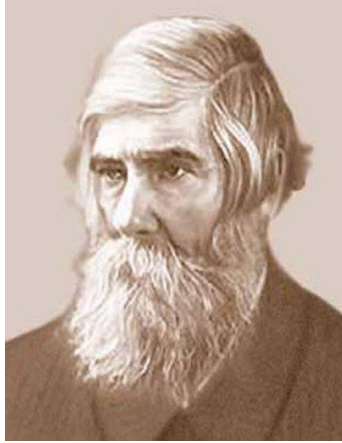
Rene Descartes (1596-1650)



Ivan Mikhailovich  
Sechenov (1829-1905)



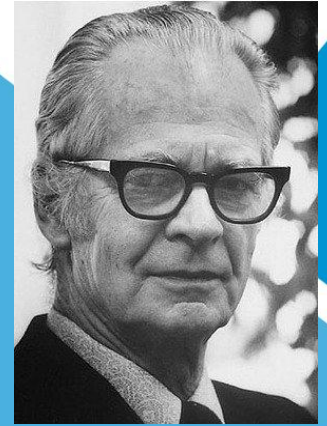
Ivan Petrovich  
Pavlov (1849-1936)



Vladimir Mikhailovich  
Bekhterev (1857-1927)



John Broadus Watson  
(1878-1958)

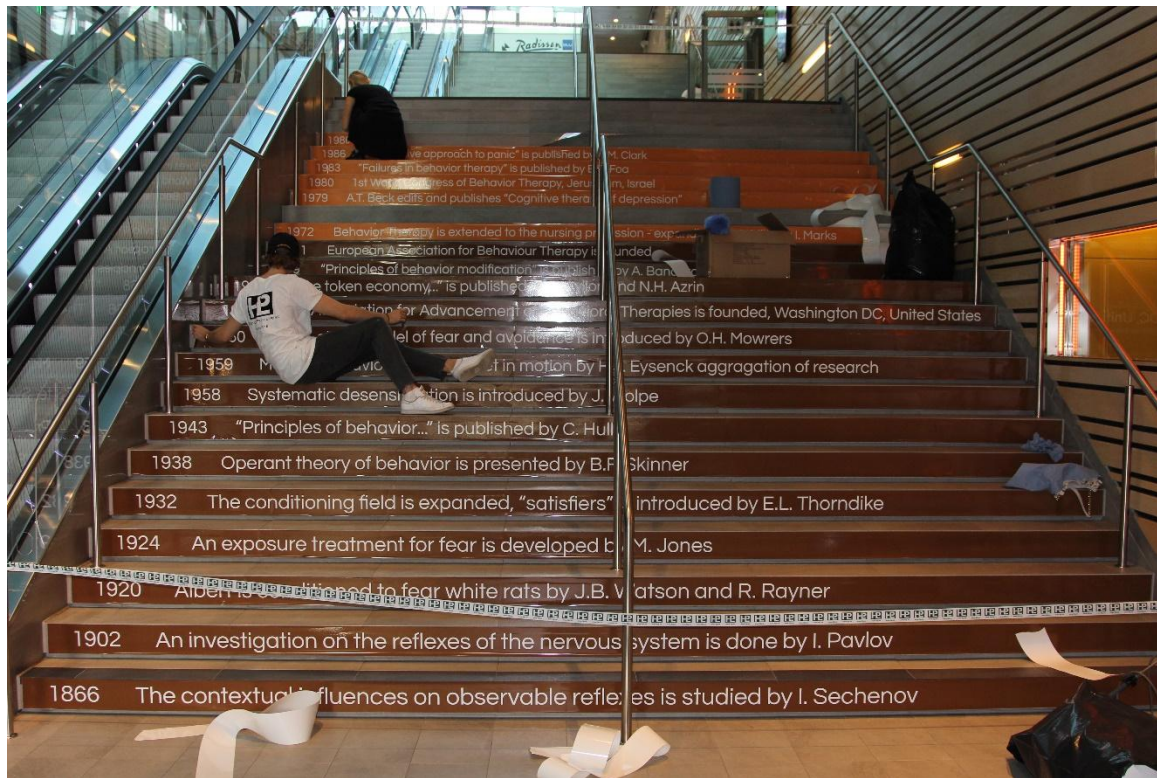


Burrhus Frederic  
Skinner (1904-1990)



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# The timeline of the development of the CBT at the Congress, EABCT in Stockholm - 2016 (the first stage of I. M. Sechenov and I. P. Pavlov)



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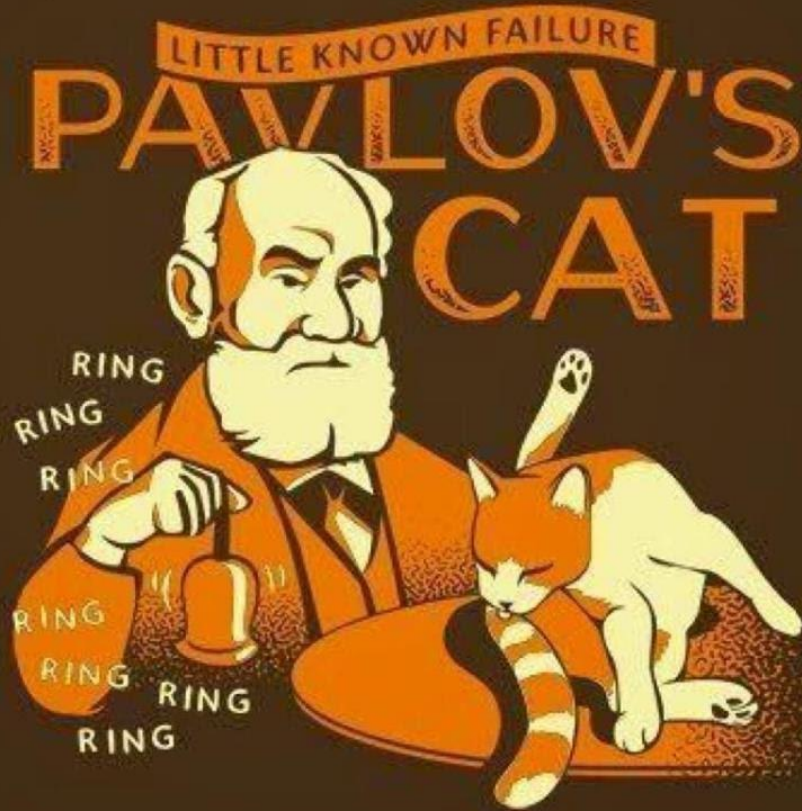
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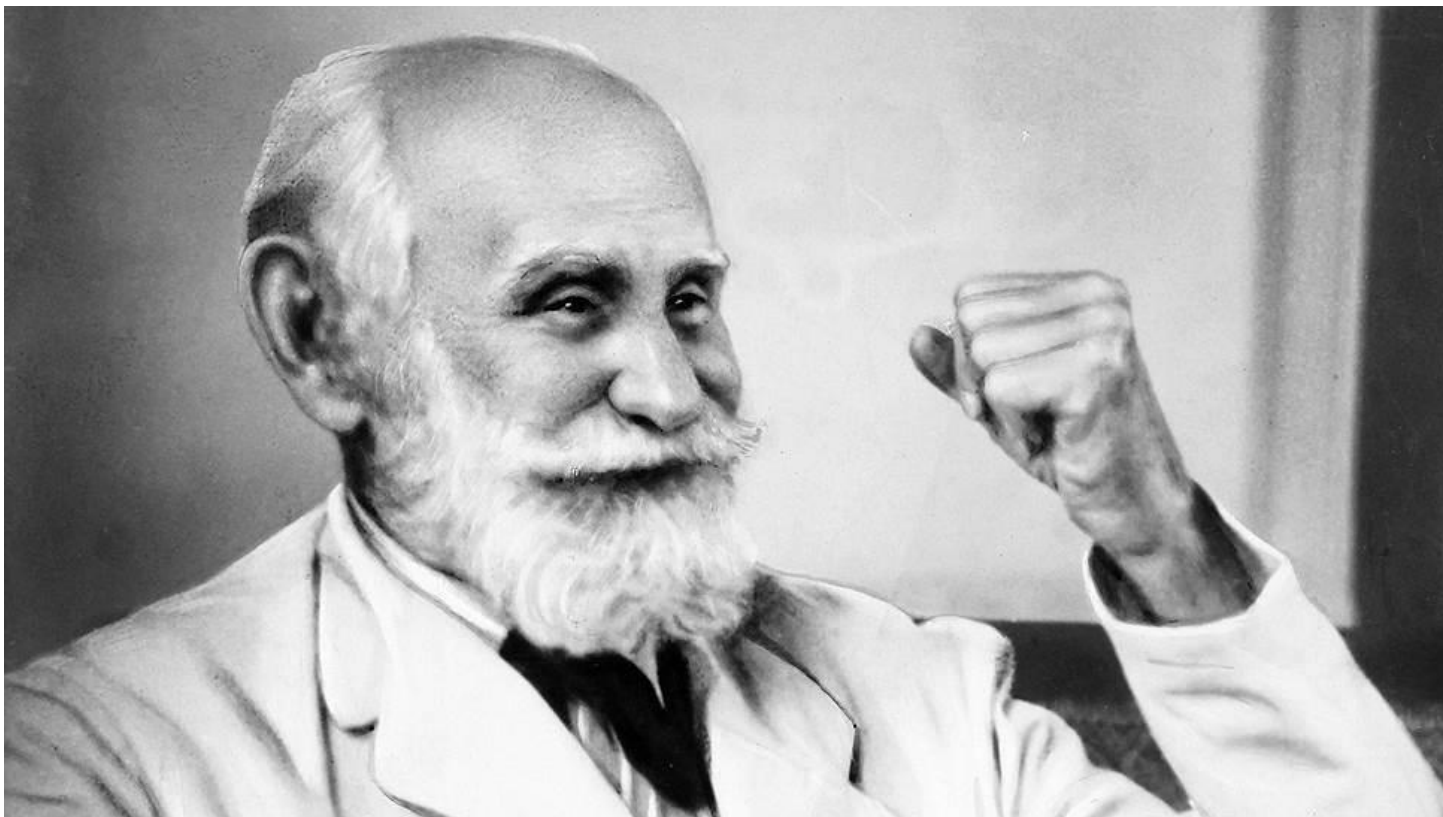
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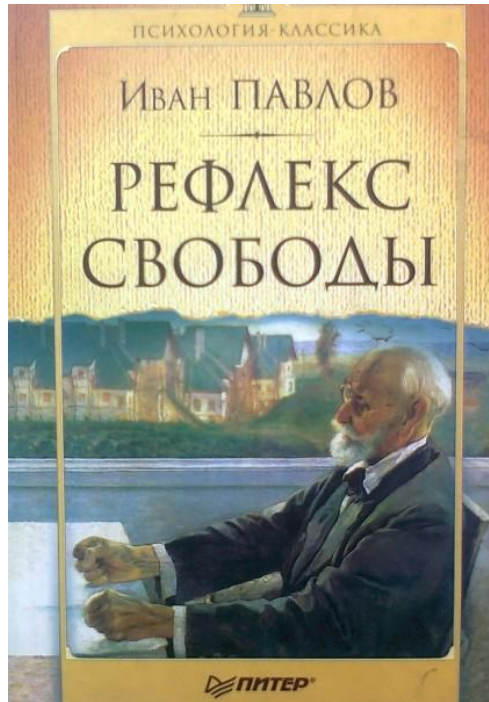
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# The reflex of freedom



I.P. Pavlov and the freedom reflex



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# Ivan Mikhailovich Sechenov

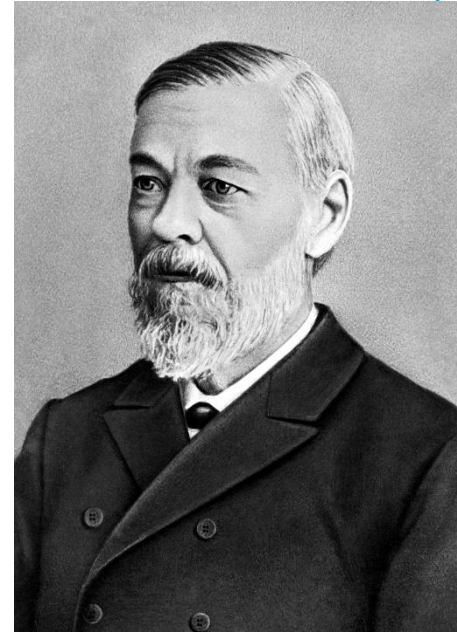
Russian educator, natural scientist and physiologist, one of the founders of the natural science direction in psychiatry.

Since 1876 — Professor of the Imperial St. Petersburg University at the Department of physiology

In 1863 Sechenov discovered the phenomenon of Central inhibition (delaying the influence of the nerve centers of the brain on the motor activity of the body). This phenomenon was the basis of the doctrine of the relationship between the body and the environment, gave a physiological basis for mental activity as a nervous mechanism that determines the ability of a person to resist external influences. The discovery was crucial for the formation of psychological and physiological views Sechenov, the first presentation of which he gave in the "Reflexes of the brain" (1863).

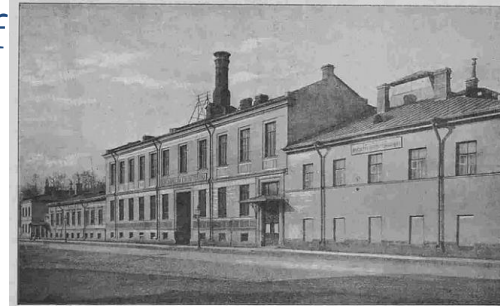


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- This year we celebrated the centenary of “Clinic of neuroses” or **St. Petersburg** "City psychiatric hospital № 7. academician I. P. Pavlov", and will also celebrate the 170th anniversary of Ivan Petrovich Pavlov.
- The history of the clinic began in March 1881, with the decision of the German community of St. Petersburg to create a men's hospital dedicated to the memory of Tsar-Emperor Alexander II. Alexander men's hospital was inaugurated on June 12, 1884 and before the revolution worked as a somatic hospital and outpatient clinic.



Наружный вид здания Александровской мужской больницы в С.-Петербурге, учрежденной гражданами германской империи в 1881 г.



# Clinical psychotherapeutic Institute

- After the October revolution, the base of the Alexander hospital was established hospital for psychoneurotics and since 1919 on its basis was organized Clinical psychotherapeutic Institute, conducting research in the field of clinics and therapy of neuroses.
- In the structure of the Institute for the first time in the country were opened 50 beds of psychotherapeutic profile, and soon was opened outpatient reception of patients suffering from neuroses.
- The inpatient and outpatient departments received persons affected by the civil war, as well as civilians suffering from hysteria with seizures, paralysis, severe sensory disorders, as well as subclinical manifestations of certain mental diseases.



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# Clinical psychotherapeutic Institute

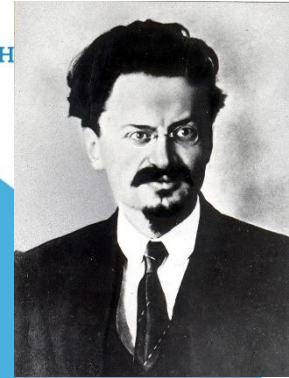
The clinical psychotherapeutic Institute was established in may 1919 and served the Red army for 90% until the end of the Civil war. The Institute was a highly specialized medical institution, as "of all diseases of the nervous system it treated some psychoneurosis (hysteria, neurasthenia, psychoasthenia, traumatic neurosis and other functional disorders of the nervous system)."



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# Clinical psychotherapeutic Institute

- Director of the Institute and the chief physician was appointed as A. B. Zalkind, the assistant V. S. Siegel. Am Etkind, emphasizing the original psychoanalytic orientation of the Institute, indicates that its Director was one of the founders of freudomarxism Aron Borisovich Zalkind (1889-1936).
- Thus, in the collective of the Institute there was a conflict situation between psychoanalysts and supporters of domestic psychotherapy. It is important to emphasize that, according To N. N. Traugott, in the first years of Soviet power to engage in psychoanalysis was prestigious. Moreover, psychoanalysis has had a significant preference in his career.
- But the adherents of the old "pre-revolutionary" approaches in psychology and psychotherapy, on the contrary, were subjected to obstruction. The reason for this was the patronage of psychoanalysis on the part of the highest leaders of the state, among which it is enough to mention the second person of the Communist party L. D. Trotsky and Lenin's wife — N. K. Krupskaya.



# I. P. Pavlov

- The scientific work of the Institute since 1931 was officially led by I. P. Pavlov. Although his scientific conversations, which took place on Wednesdays and were called «Pavlov's Wednesdays», came into practice in 1929 and continued until 1935.
- In their work much attention was paid to professional, methodological, ideological training of the young scientific staff. Pavlov's teaching about the first and second signal system was a major contribution not only to physiology, but also to psychology and practical medicine.



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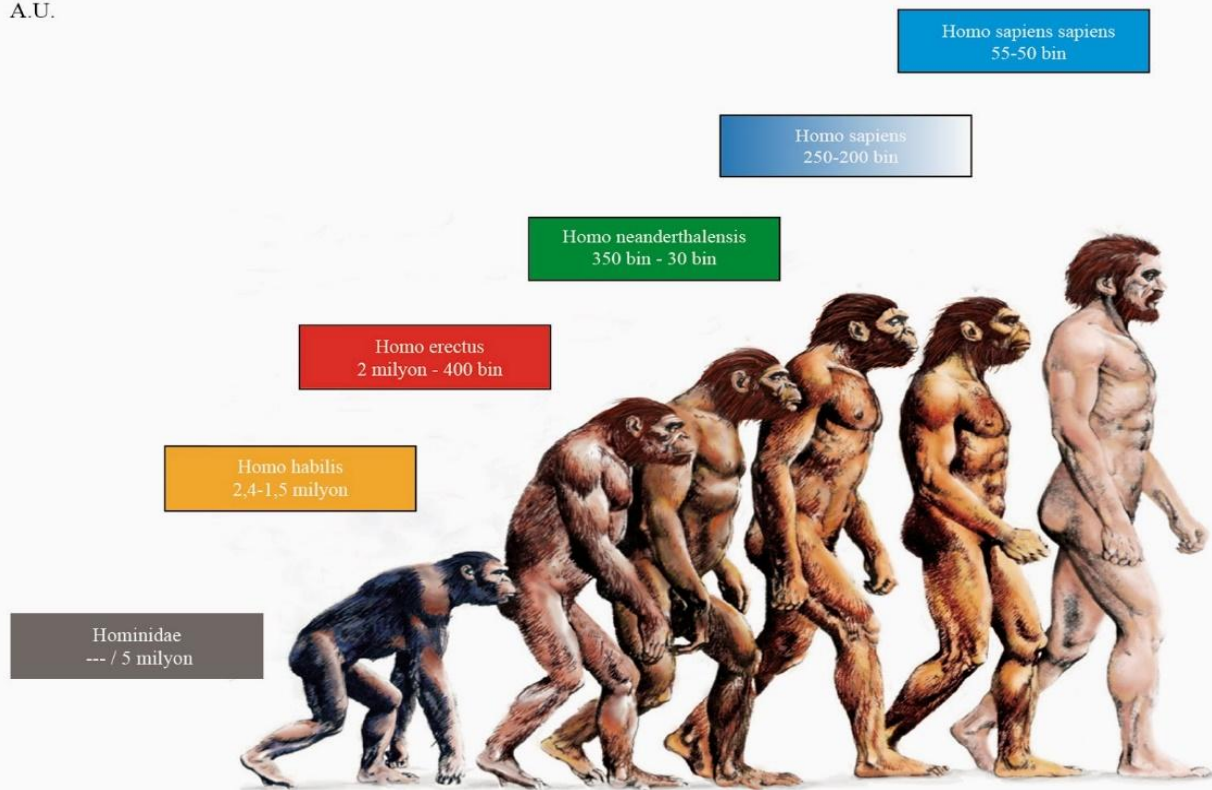
- Higher nervous activity is a set of mental functions that provide complex individual forms of adequate behavior in changing natural and social conditions.
- Pavlov identified the first and second "signals" and their systems.
- The second signal system, as we would now call, the cognitive component of the system, is a system of "signals" from duplicates of the first "signals" coming from the first signal system common with animals-sensations, perceptual information related to the surrounding reality. And use the codes of the second signal system to interact with other people and exchange information with the society.



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# Homo sapiens sapiens

A.U.

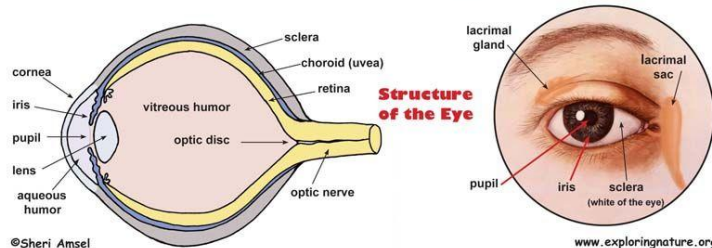
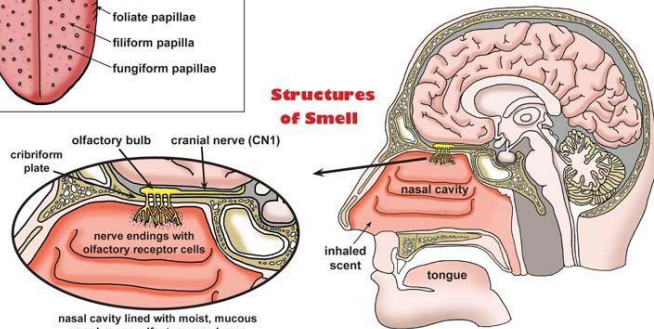
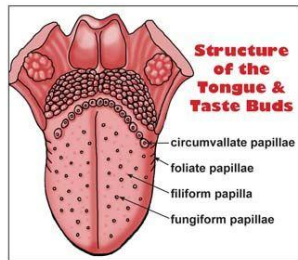
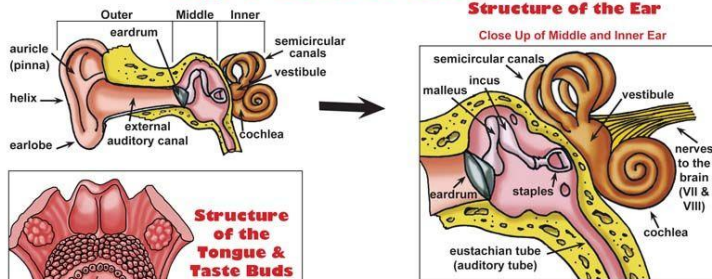


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вид рода Люди  
(Homo) из  
семейства  
гоминид в отряде  
приматов

# Special Senses



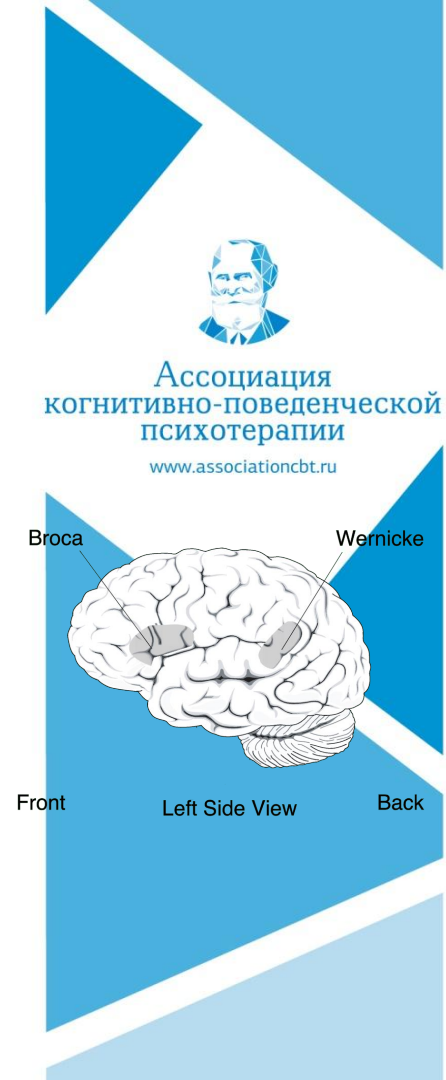
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# Language and communication

The time of the appearance of language and speech in man or his ancestors can be deduced only approximately only on the basis of indirect archaeological or anatomical data. The development of areas of the human brain associated with the regulation of speech (Broca's zone and Wernicke's zone) can be traced in the skull of Homo habilis, which is 2 million years old.



- To prevent his system from being seen as mechanistic or reductionist while, also trying to draw a basic distinction between animal and human learning, Pavlov wrote in 1927: “Of course a word is for man as much a real conditioned stimulus as are other stimuli common to men and animals, yet at the same time it is so all-comprehending that it allows no quantitative or qualitative comparisons with conditioned stimuli in animals.”

*Pavlov, Ivan P. (1960). Conditioned Reflexes: An Investigation of the Physiological Activity of the Cerebral Cortex. New York: Dover.*

- In 1932, Pavlov made the claim that speech is signals of signals—or second signals. These second signals are, at their core, abstractions of reality and a method of generalization that is distinctive of human higher thought.

*Physiology of the Higher Nervous Activity. (1941). Ivan P. Pavlov, Lectures on Conditioned Reflexes, 2, 60–70. Journal*



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- Pavlov stated, again in 1932: “In man there comes to be . . . another system of signalization, a signalization of the first system . . . a new principle of neural action is [thus] introduced”. This is the Pavlov “second-signal system” principle that distinguishes verbal conditioning, or language acquisition, in man from first-signal conditioning in men and animals. This view is different from most American behaviorists, who claim language is either a mediator, operating principally according to the laws of the reactions that it mediates, or is simply a conditioned vocal reaction.

*Essays on the Physiological Concept of the Symptomatology of Hysteria (1941). Ivan P. Pavlov, Lectures on Conditioned Reflexes, 2, 102–116. Journal.*



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Within the walls of the Clinic of neuroses, in which he was scientific director since 1931, he gave a systematic presentation of his theories on the examples of analysis on psychiatric patients. It is on the basis of the concepts of conditioned reflexes, the first and second signal systems that the scientific foundation not only of the cognitive-behavioral direction of psychotherapy appeared, but of the whole practical clinical psychology and psychotherapy. And the methodology of cognitive-behavioral therapy is largely based on the fundamental works and principles qualitatively disclosed, clearly described and clearly shown for use in practical medicine and psychology I. Pavlov and his followers.



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How to build an effective work with patients of the neurotic register using the first and second signaling systems, concepts and methodology deepening the understanding and effectiveness of cognitive behavioral therapy gave an explanation of the theory and their practical application in the clinic Pavlov and his followers, such as L. A. Orbeli, K. M. Bykov, A. G. Ivanov-Smolensky, B. N. Burman, S. N. Davidenkov and others.



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# Human as a holistic biopsychosocial phenomenon



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