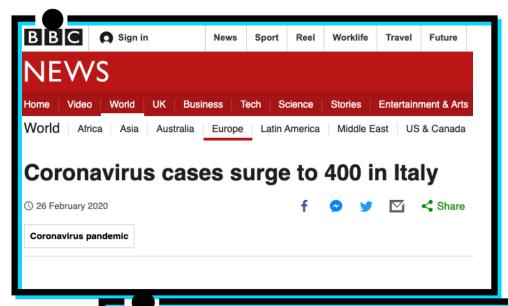
# design institute







#### THE MECHANISTIC VIEW OF THE WORLD



r•¬ dualism

One of the deepest and most lasting legacies of Descartes' philosophy is his thesis that mind and body are really distinct - "mind-body dualism." He argued that the nature of the mind is completely different from that of the body and therefore it is possible for one to exist without the other.

reductionism

He argued that the world was like a clockwork machine, which could be understood by taking it to pieces and studying the individual components.

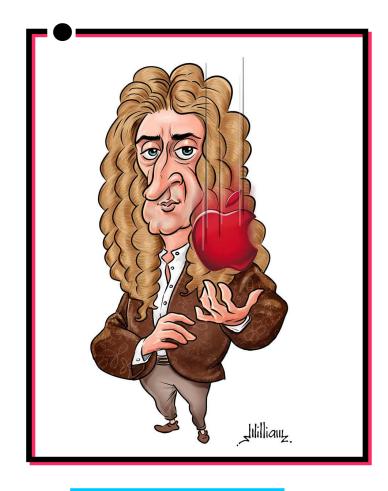
René descartes



XVII century

#### THE MECHANISTIC VIEW OF THE WORLD

XVII century





#### Newtonian

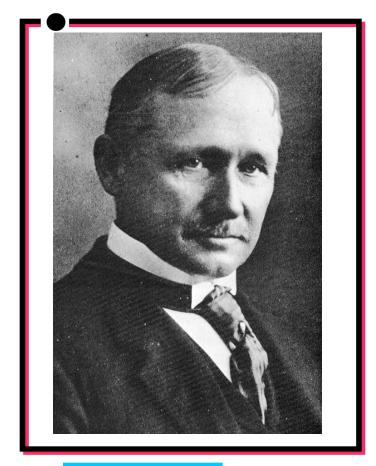
Newtonian mechanics underlay the view that all physical phenomena would be understood in mechanical terms. This view, referred to as the mechanical world view, incorporated the hope that Newton's laws would become the basis for explaining everything





#### THE MECHANISTIC VIEW OF THE WORLD

XX Century







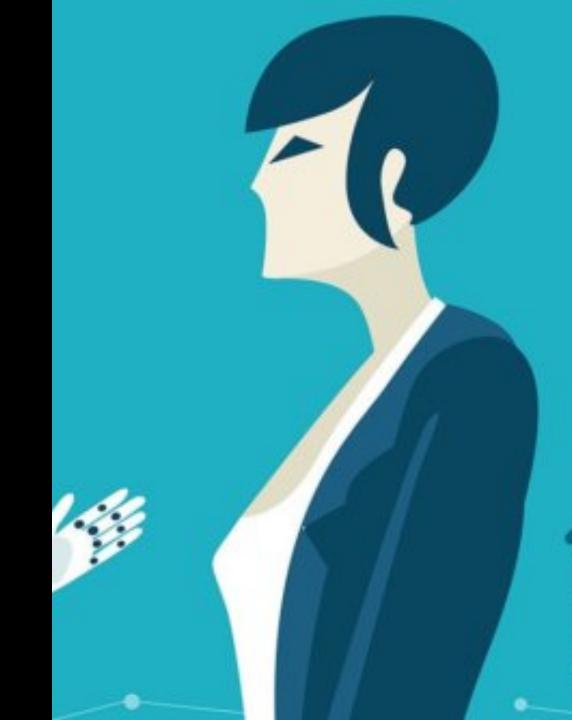
#### Scientific

Instead of assigning an entire project to one individual and allowing them the proper time to complete it, managers break down larger tasks into smaller parts.



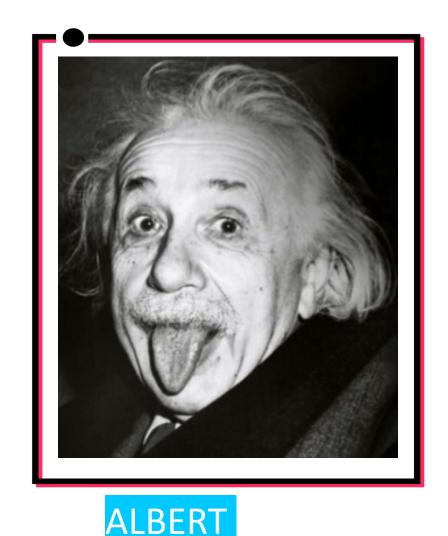


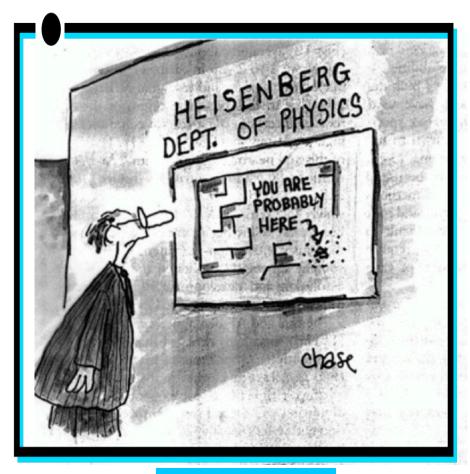
# QUIZZ TIME!!!



#### **CHANGING VIEWS OF THE WORLD**

XX Century









#### THE HOLISTIC VIEW OF THE WORLD

XX Century





#### General system

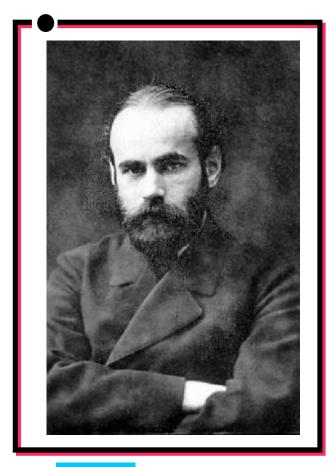
It is necessary to study not only parts and processes in isolation, but also to solve the decisive problems found in organization and order unifying them, resulting from dynamic interaction of parts, and making the the behavior of the parts different when studied in isolation or within the whole.





#### THE HOLISTIC VIEW OF THE WORLD

XX Century





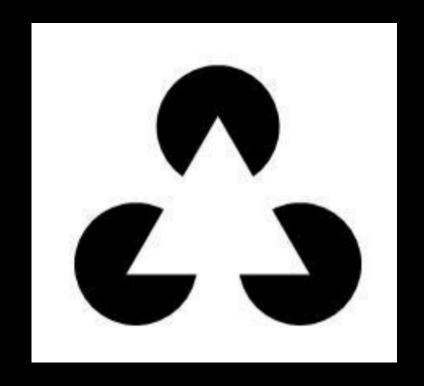
There are wholes, the behaviour of which is not determined by that of their individual elements, but where the part-processes are themselves determined by the intrinsic nature of the whole. It is the hope of Gestalt theory to determine the nature of such wholes.



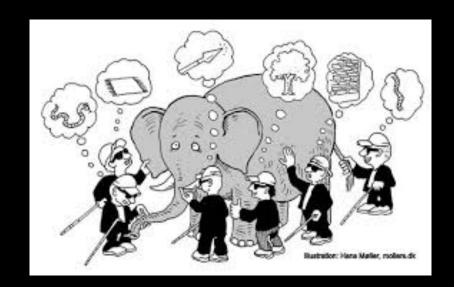


## GESTALT EXAMPLE

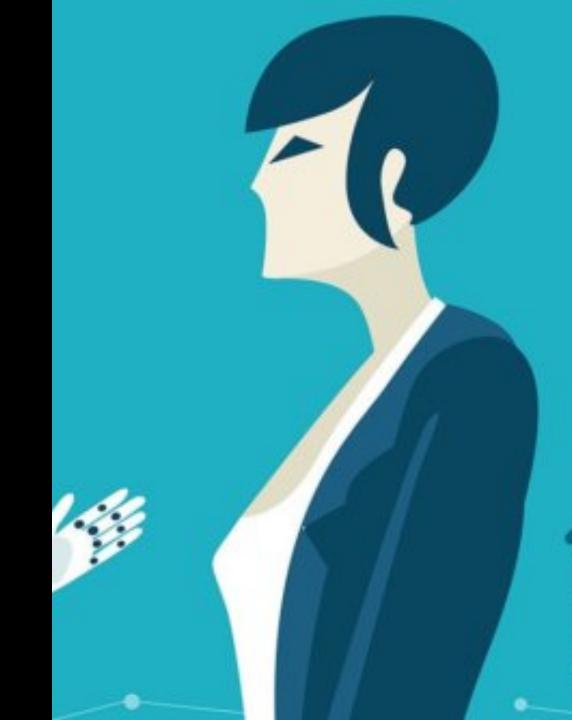
Law of closure



### The whole is greater than the sum of its parts



# QUIZZ TIME!!!



#### **EMBRACING THE COMPLEXITY**

XX Century





The word complex comes from the Latin root plectere: to weave, entwine. In complex systems, many simple parts are irreducibly entwined, and the field of complexity is itself an entwining of many different fields.





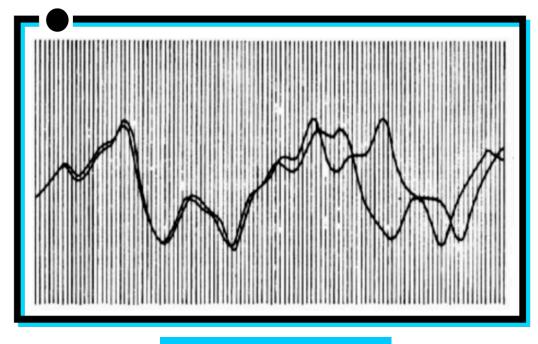
#### EMBRACING THE COMPLEXITY

XX Century



## Butterfly effect

Sensitivity the initial conditions. the idea that small things can have nonlinear impacts on a complex system.



**Edward lorenz** 



#### **EMBRACING THE COMPLEXITY**

XX Century

•	
Subject	Predictability; Does the Flap of a But- terfly's wings in Brazil Set Off a Tor- nado in Texas?
Author	Edward N. Lorenz, Sc.D. Professor of Meteorology

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE, 139th MEETING

Place.....Sheraton Park Hotel, Wilmington Room

Program......AAAS Section on Environmental Sciences
New Approaches to Global Weather: GARP
(The Global Atmospheric Research Program)

Convention Address.....Sheraton Park Hotel

RELEASE TIME 10:00 a.m., December 29



For want of a nail the shoe was lost.

For want of a shoe the horse was lost.

For want of a horse the rider was lost.

For want of a rider the message was lost.

For want of a message the battle was lost.

For want of a battle the kingdom was lost.

And all for the want of a horseshoe nail.

-Herbert, George.

#### The Black Swan

"First, it is an outlier, as it lies outside the realm of regular expectations, because nothing in the past can convincingly point to its possibility. Second, it carries an extreme 'impact.' Third, in spite of its outlier status, human nature makes us concoct explanations for its occurrence after the fact, making it explainable and predictable."

-Taleb, Nicholas.

## Reading time!!!

