# Known mechanisms **of nature**

# Physical Mechanism Movement and Force

The physical mechanism is the fundamental mechanism that exists throughout the world. It is well described by physics and chemistry books. The basic components of the physical mechanism are force and movement. Galileo and later Newton and many others developed the physical and mathematical thinking appropriate to this mechanism.



MM

LEPHEN

## Information Mechanism

## Code and Switch

The information mechanism is a descendant of the physical mechanism. But, instead of force and movement, two other components enable this mechanism. The components are code and a logical switch with two options. This mechanism has important advantages over the physical mechanism. The information mechanism makes it possible to copy and distribute the code. The mechanism exists in computers but already exists in biology in the genetic code.

# Mind Mechanism

## Images and Goal

Let us assign the simple notation Aleph ("x") to the mind and the notation "Alephem" to the mind mechanism From the beginning, humankind believed that there was another non-physical mechanism of the mind. My task is to delineate Alephem and show that the mechanism of the mind is also a descendant of the physical mechanism. That is, I am a complete materialist. I aim to describe and explain the operation of Alephem from top to bottom - that is, from the human mind to the molecular mechanism. The mechanism is based on imagination and goals. Therefore, I aim to convince you that an image of a goal accompanies every human or biological

# **Functions of the mind**

Memory

**Drives (Hunger, Sex)** 

**Emotions (Happiness,** 

Sadness, Anger, Fear)

Thinking (Logic, Language)

Sensory (The five senses)

Motion

Attention

Social (Attachment, Leadership, Group, Communication, Empathy)

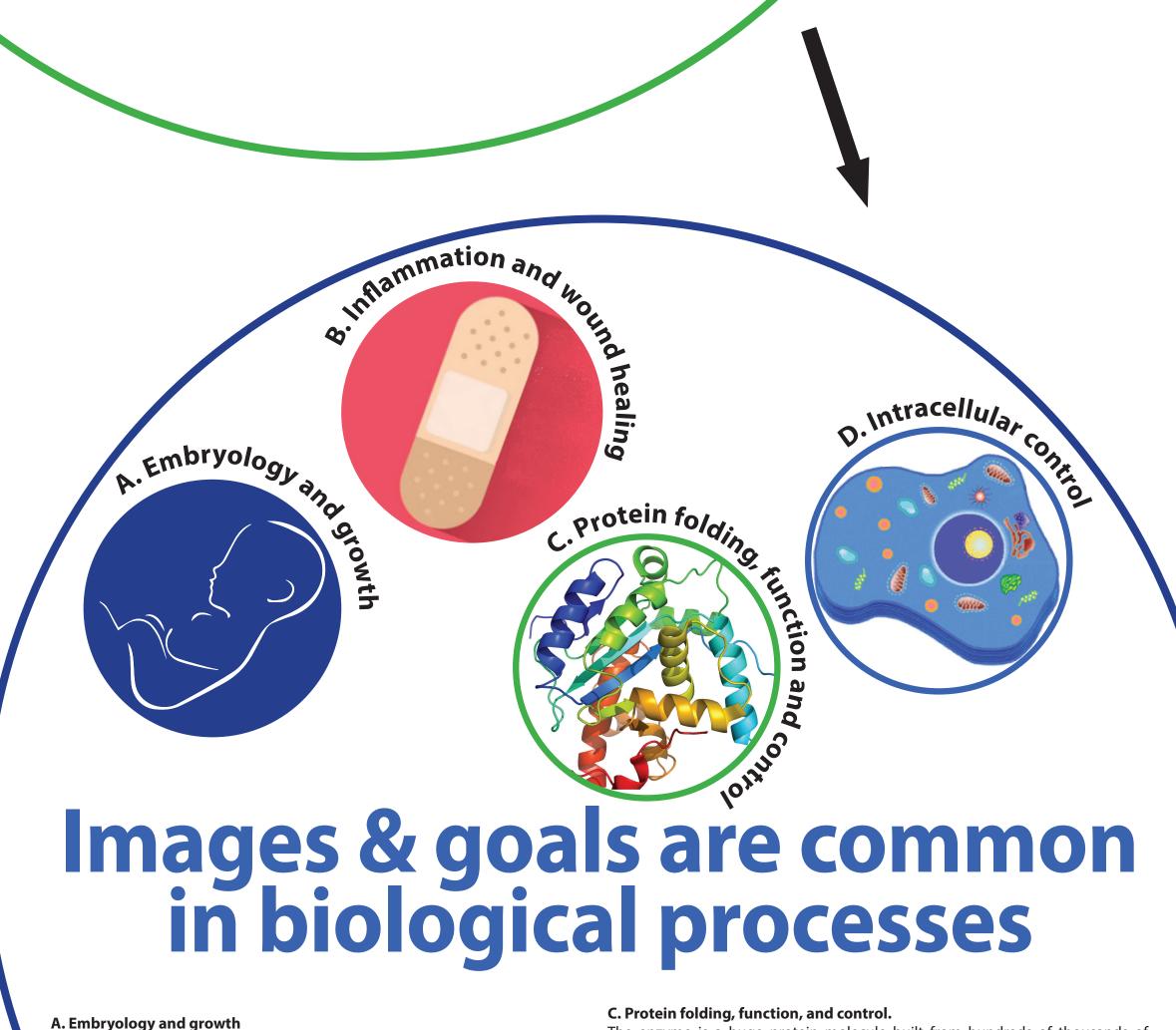
There are several applications on a cell phone. Every application has a role or, in other words, a function that works for this purpose. Similarly, in the mind, there are functions with a defined role.

Children from a very young age can indicate their mind functions and any difficulty that arises. Each function has a role and an image of the process of achieving the goal. The functions of the mind are the building blocks of the mind.

# **Quantum Mechanics** and the mind mechanism Alephem

Avraham Oren





The genetic code contains instructions on how to build an embryo and later a complete creature. Every biological being, from a bacterium to a human being, has a unique appearance created following a precise embryological process. I assume there are instructions within the genetic code, and a detailed map accurately describes its buildup.

In inflammation and especially in the healing processes of wounds there is impressive coordination between the inflammatory cells, the

The enzyme is a huge protein molecule built from hundreds of thousands c atoms. The protein begins as a linear sequence of amino acids formed in the ribosome. The complicated folding takes place at breakneck speed. The aming acid sequence has a detailed map of how to place the atoms in a precise three dimensional manner and therefore enables proper functioning. The substrates of the enzymes are usually tiny molecules. Why is such a conglomerate protein required to perform such a small task? A huge enzyme is required to create a virtual image of the substrate. This image enables the substrate to be tampered with at the highest speed.

local cells, and various chemical processes. The result is maximum wound healing. It seems that the coordination between all the components of inflammation is based on a **battle map with** defined goals and objectives and an inflammation control mechanism that allows each cell to understand its place and duty in the process

**D. Intracellular control** In the smallest living cell, there are complex processes that include thousands of substances and hundreds of enzymes - it seems that the process is regulated by a precise map that connects all the intracellular players. The map allows the cell, as a single unit, to make decisions critical to its existence and continued functioning.

# The proposed mechanism - From

# **Quantum to Mind**

The Alphem mind mechanism is found in all levels of biology - it always has a goal and an image (i.e., map) representing the process.

The folding of proteins of the enzymes is performed using an image (Alephem) encoded in the sequence of the amino acids themselves. Part of the folding is assisted by chaperons that observe the process (Alephem) and assist and accelerate it. ,

Activity of the enzymes is carried out by identifying the image of the substrates (Alephem) and mapping the chemical process within the enzyme itself (Aleph

The position of the organelles in the cell is created using microtubules that network and create a map (Alephem) of the cell.

**Processes inside the cell** - each process in the cell is regulated by a control system that watches (Alephem) the process.

**Cellular decision making** - the cell has an overall image (Alephem) of everything happening and thus makes decisions. For example, a decision to reproduce is made when suitable conditions appear in a suitable image (Alephem) inside the cell.

Multicellular processes such as embryology and inflammation - are controlled by a map (Alephem) of the process that joins all the involved cells.

Body system and organs - each organ is in charge of some body function. That function is described by specific cells with an image of the function (Alephem) and its current state and future planned state.

**Neurology** - The depolarization process in a neuron is an intracellular process of a decision. The process is holistic, i.e., it is obtained based on an image (Alephem) presented by the neighboring cells and creates an image of the situation (Alephem). Following the decision, the neuron transmits its decision, via the axon, to thousands of other cells that listen to it.

Psychiatry - Functions of the mind contain the two essential components of Alephem, namely imagination and goals. This way, the developmental, psychological, and psychiatric conditions can be more accurately diagnosed.

Social level - complex sociological processes can be understood if they are examined according to the functions of the mind (Alepher

## The goal is symmetry

**QM is required** 

In physical systems, the goal is to decrease the potential energy and replace it with kinetic energy or, in other words, to increase the entropy. In biological systems, a different goal is required. Complex systems are meant to increase the order, or in other words, to increase the symmetry. Quantum mechanics (i.e., QM) is based on waves and therefore allows the construction of a mechanism whose purpose is to improve symmetry. Symmetry is a goal in many mind functions - from esthetic beauty to logical thinking.



### Defining an object by quantization.

Physical and nonphysical objects (such as numbers) exist on their own. Our mental needs and purposes define a particular set of objects into which we organize our experience. It is the mind that is able to define these objects and their properties. Quantum mechanics can support a mechanism that can define objects of interest. The idea of quantization enables the mind to separate continuous waves and fields into discrete quanta, which are separate objects. Since all parts of an object are objects in themselves, it is flexible to define two or more objects as a single new combined object. For example, one may question whether the earth is a single object since nothing unites its atoms into a single unit, and each atom does whatever it knows to do in its little corner. The Earth does not know that it circles the sun as a single unit. However, the earth is indeed considered one object, only virtually in our mind. In addition, in our mind, the circular path of the earth around the sun is also a single and well-defined object, even though it does not have any physical reality or mass.

The definition of an object appears in quantum physics. A quantum is a physically separate object. The mind uses objects all the time; therefore, using quantum physics, it is possible to expand and build a complete mechanical model that will explain the mind

# Creating an image by entanglement

When creating an image, several components must be closely related to each other within the image. For example, an oval face and round eyes are virtual objects within an image. When the objects are virtual, there must be some interweaving between them based on their alignment. In quantum mechanics, the term for this interweaving is an entanglement of the two objects. For instance: Entanglement can be used when drawing the image of a face. The face is an object, and the eyes are a pair of objects. The position of the eyes is aligned with the position of the face. Each one of these

## **Video Presentation of TSC Poster**



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objects can be anywhere. But when we are told the position of the face, we will immediately know the position of the eyes and vice versa. Therefore it is postulated that the process of creating a figure or map can be described by entanglement.



