54.ADAPTIVE MECHANISM OF MEMORIES

The mechanisms depend on the informational structures of the memories and on the adaptive decisions made over time. Information from simple feedback forms packets of packages on different levels of complexity.

Not all information is useful in the adaptive or evolutionary process. This means that only n-K-level sequences of complexity are required from the information structured at n-level.

The unused informational potential is triggered when the organism is obliged to change its behavioral pattern, the new patterns are discovered through the trial-error-resumption mechanisms.

This process is done with theexpenditure of vital energy and informational potentials, which can lead to the elimination of weak organisms and genetic evolution.

The energy related to information depends on the coherence and stability of informational patterns and structures. All information conflicts weaken the energy level leading to degraded processes.

When information energy becomes insufficient the body sacrifices subsystems that are less used and retains only the most frequently used ones.

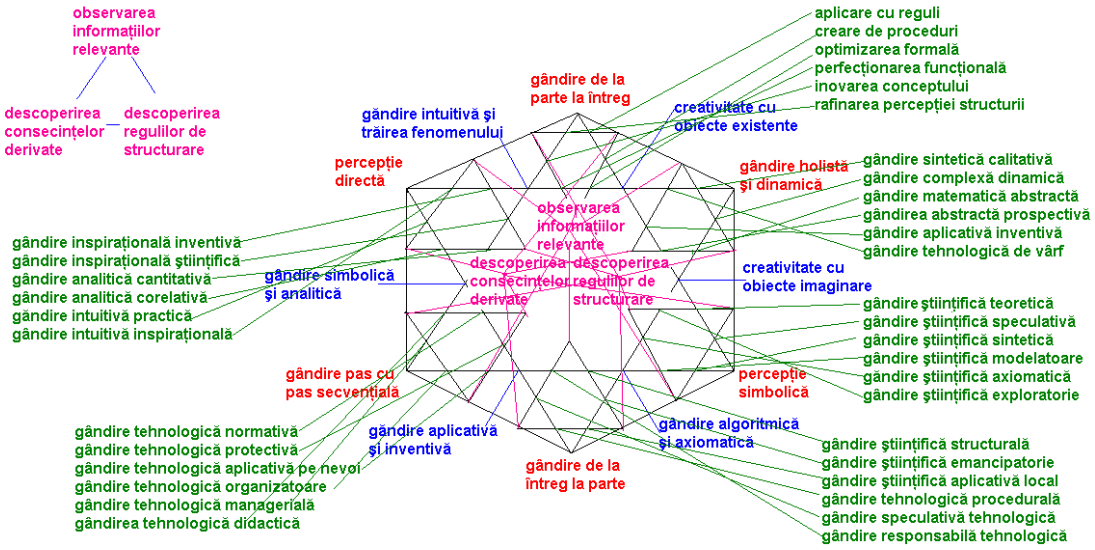
The described process is related to aging that ends with the death of the body.

On the other hand, the body benefits from a control center, the brain, which has special capabilities if it is integrated, meaning that the two hemispheres function cooperatively.

The brain becomes integrated if it is trained to develop beyond its limits permanently, but remaining harmonious through discovery and relevant questions.

This type of training can be done through training questions that aim to develop specific qualities.

An example is given by the structure of scientific thinking that can be trained. Its characteristics and a model of training questionnaire are presented below.



characteristics	***examples***
Application of rules	Calculate… .. using the rule….
Creating procedures	A traveler reaches the intersection of roads to Mecca and Medina. There he meets two identical twin brothers, but one of them always lies and the other always tells the truth. What single question can a single twin traveler ask whether he lies or not to find out what the road to Mecca is?
Formal organization	In how many ways can 20 children be placed in two-seat benches?
Functional improvement	Nine points are arranged so that they form the tis, the middle of the sides and the center of a square drawn on a sheet of paper. What is the broken line with the least number of sides that can go through all these points and under what conditions can the result be improved?
Concept innovation	We have two parallelograms ABCD and A ', B', C ', D'. If A ", B", C ", D" is a parallelogram congruent with sides parallel to A ', B', C ', D', then the means of segments A A ', B B', C C ', D D 'and A A', B B ", C C ", D D " are also the peaks of two congruent parallel and parallel sides. Define the concept of translation and resume the problem from this perspective.
Refining the perception of the structure	A forest with trees planted at the tops of equilateral triangles ignites. The fire is spreading in all directions at the same speed of one minute for the ignition of the neighboring trees. How long is the 1000th tree burning? Describe the equation of the spread of fire.
Qualitative synthetic thinking	Three cannibals and three missionaries were on the same bank of a river full of alligators and piranha fish. The six people had to cross the river, having a two-person boat, all missionaries and a cannibal knowing how to row. Given that at no time should cannibals be more numerous than the missionaries because they will kill the missionaries, what is the strategy by which they can all cross the other bank? Try all the possibilities and eliminate those that do not lead to the solution.
Dynamic complex thinking	Hawks and pigeons are found on an island. Model their breeding rate by taking into account their feeding mode so that bird populations can coexist without one being eliminated.

Abstract mathematical thinking	Show that if you take two non-coplanar straight lines, a and b, you can construct an infinity of other lines Di which is based on the initial lines a and b and you can also construct another infinity of lines Dj which will have common points with all Di lines. Also show that if the beam of lines Di intersects a straight line on the beam Dj at equidistant points, then it will intersect all at equidistant points. Generalize the problem.
Prospective abstract thinking	If a pair of flies leaves 100 eggs per week for seven months and the eggs become able to breed in 40 days, how many offspring will have the first pair of flies after seven months, assuming that all flies survive without consumers?
Inventive applicative thinking	A ship must pass through an L-shaped channel at the right angle of the channel. Knowing that the channel width is 7 meters which is the maximum size of a ship capable of passing through the channel
Top technological thinking	Design the mechanism of a mechanical clock knowing that it must fit in a 2 cm diameter box and move properly and coordinate three hands, showing seconds, minutes and hours
Theoretical scientific thinking	Assuming by hypothesis that ... prove that ...
Speculative scientific thinking	Argue the logical truth value of the statement "I always lie"
Synthetic scientific thinking	Show that if segments AB and CD are divided by points X and Y such that AX / XB = DY / YC = k, and segments AD and BC are divided by points Z and W such that BW / WC = AZ / ZD = l, then the XY and ZW lines intersect at T such that XT / TY = l and ZT / TW = k
Modeling scientific thinking	A lake was sown with water lilies, which doubles daily the surface it covers. If after a month the water lilies cover half the surface of the lake, how long will it take for them to cover the whole lake? Make the calculation of when you can no longer intervene effectively to control the multiplication of the water lilies by considering different possible scenarios.
Axiomatic scientific thinking	Assuming that from an outside point of a straight line there can be an infinity of parallels show that these lines are actually circles on a sphere
Exploratory scientific thinking	Determine under what conditions most circles with x-ray can fit into a circle with z-ray knowing that all circles are tangent to one another
Structural scientific thinking	Describe using a finite group table the local behaviors of a group or species.
Emancipatory scientific thinking	Demonstrate Pythagoras' theorem using geometric transformations
Local applicative scientific thinking	Model the weekly management of a grocery store using the matrix calculation, knowing the products, the quantities sold and the prices.
Technological procedural thinking	Describe the stages and material flows of a tractor production line using graph theory elements and identifying cybernetically describable circuits
Technological speculative thinking	What temperature parameters must be followed to obtain a ceramic material with the following characteristics ...
Technologically responsible thinking	Calculate the damages and the collateral consequences caused by the thermal treatment of the part… at the temperature…
Technological normative thinking	Characterize, list and describe the procedures to be followed for creating the product ... as well as functional parameters that allow the level of quality to be reached.
Protective technological thinking	What are the functional parameters and the working procedures necessary to obtain the part… which minimizes the pollution of the machine…
Technological thinking applied to needs	Determine what materials can be used to minimize production

	costs and maximize profit in the production of the piece ... without diminishing the quality of the piece
Organizational technological thinking	How to organize the production cycle ... to maximize the effectiveness and efficiency of the work and minimize the risks of production
Managerial technological thinking	Which organizational structure of the work teams simultaneously optimizes the production process while also respecting the choice of the preferred working time of the employees, if the production teams have the following parameters ...?
Didactic technological thinking	How can one optimize the presentation of a product to increase the level of interest in front of the public, without violating the rules of professional ethics compared to the competing products?
Inventive inspirational thinking	Design a hypothetical set of components that could produce the following effects, check if the predicted effects are obtained and improve the results by experimentally varying the operating parameters
Inspirational scientific thinking	What hypothesis can you launch to explain the phenomenon ...
Quantitative analytical thinking	Between what measurable parameters the occurrence of the phenomenon is predicted ...
Correlative analytical thinking	How do you explain the graphical correlation of the phenomenon ... with the graph of the phenomenon ...
Practical intuitive thinking	What pieces configuration can allow the mechanism ... to assemble in space ...
Intuitive inspirational thinking	What physical phenomenon do you think may be the basis of the manifestation occurrence ... Choose from the following ... phenomena and explain the choice

Matter memory needs landmarks like the human brain, these landmarks can be cognitive or informational with structured or circulating information. Like the human brain, the more information is packaged with a higher level of consistency, the more relevant they are. Relevance is given by the informational dimensions generated.