

Managing the Functionality of the Real World



The Functionalist Principle

The functionalist principle explains the functionality of the real world and allows managing the roots of the functionality of things.



The Unicist
Research Institute

Pioneers in Research since 1976

The Functionalist Principle

The functionalist principle defines that there is nothing in the universe, which is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function, which define its unified field. Their interaction defines the functionality of the binary actions that make things work.

Binary actions are two synchronized actions that, on the one hand, open possibilities establishing a functional context and, on the other hand, close processes to generate results.

The functionalist principle is based on the fact that the real world works as a unified field, which requires that the different functions are driven by the same principle to work as an integrated unit.

The research of functionalist principles is based on the use of unicist ontological reverse engineering of facts to find the roots of their functionality.

The discovery of the functional structure of functionalist principles and binary actions made the systematic design of synchronized binary actions possible, which simplified and ensured the results of processes of any kind.

Contents

	04
	05
	06
	08
	11
	12
	15

The Research of Functionalist Principles

The unicist ontology defines and describes things based on their functionality. Its knowledge is needed to define the functionality of things and the functionalist principles and the synchronized binary actions that make them work.

The purpose of developing the unicist ontology was to define the nature of things based on their functionality to generate a bridge between metaphysics and empirical science that allows managing the principles of the functionality of things based on a scientific approach. It gave birth to functionalist knowledge that describes the functionality of things.

The Unicist Ontological Research

The research of the unicist ontology of things is based on using unicist ontological reverse engineering that begins with the operational facts and ends with the discovery of the functionalist principles that define the unicist ontology.

The unicist ontology is a universalization of the discovery of the ontogenetic intelligence of nature that defines the nature and functionality of an entity.

The ontogenetic intelligence of nature is defined by a purpose, an active and entropic principle, and an energy conservation principle that are integrated into their oneness defining the functionalist principles that integrate the unified field of things.

There are two different unicist ontological structures of things, the intrinsic structure that describes the functionality of something, and the extrinsic structure that describes the functional use of things.

It is strongly recommended to experience an intuitive approach to functionalist principles to grasp their functionality in the real world.

Access

Managing the Roots of the Functionality of Things

This approach is based on the functionalist principle that defines the how and why of the functionality of things to install the binary actions that make things work. The functionalist principle gave birth to functional knowledge to manage the real world by integrating the know-how and the knowwhy of things.

The unicist ontology defines the unified field of things based on their functionalist principles. Their research requires using ontological reverse engineering and their use is based on conceptual engineering. The unicist functionalist principle uses unicist logic to define the unified field of things and was developed at The Unicist Re-search Institute.

Unicist functionalist knowledge defines the concepts and fundamentals of things and builds a bridge between the metaphysics of the first principle of Aristotle and the TAO of Lao Tzu and the empirical world.

Comparison with the First Principle Method

Aspect	First Principles	Functionalist Principles
Purpose	Structural Solutions	Structural Solutions
Structure	Undefined	Triadic (*)
Initial Approach	Reverse Engineering	Ontological Reverse Engineering
The structure of solutions	Based on Cause-effect Actions	Based on Binary Cause-effect Actions
Solution Building	Abductive Reasoning	Conceptual Engineering & Abductive Reasoning
Analytical Method	Root Cause Management	Unicist Logic Driven Root Cause Mgmt.
Testing	Pilot Testing	Pilot Testing & Destructive Testing

(*) Defined by a Purpose, an Active Function, and an Energy Conservation Function.

Functionalist Principle: Comparison with the TAO

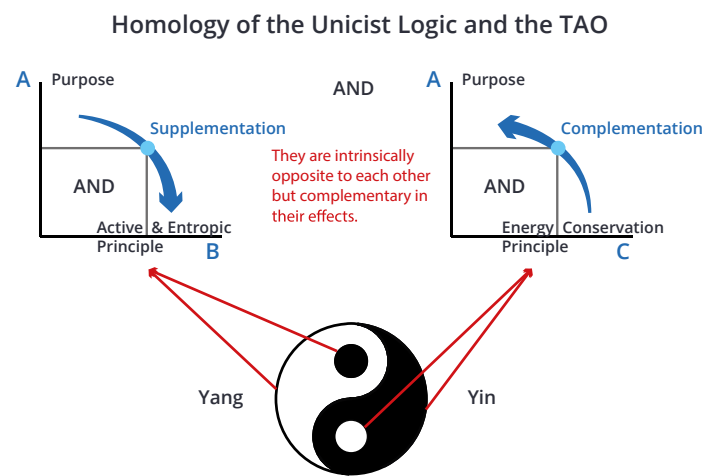
The first principle of Aristotle and the TAO deal with the metaphysics of the real world. Both the Unicist Logic, which is a double dialectical logic, and the functionalist principles build a bridge between metaphysics and the real world to define the functionality of things.

As it was said, the functionalist principle defines that there is nothing in the universe, which is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function. Their interaction defines the functionality of the binary actions that produce results.

The integration of the binary actions defined by Yin and Yang makes the triadic structure of the unicist logic work. Both the TAO and the Unicist Logic explain the structure of the unified field of the functionality of a specific reality including its dynamics and evolution.

*Tao gives birth to One,
One gives birth to Two,
The Two gives birth to Three,
The Three gives birth to all things.*

Chapter 42 of the Tao Te Ching



Copyright© The Unicist Research Institute

Both the TAO and the Unicist Logic are based on the use of the conjunction “and” excluding the use of the exclusive disjunction “or”.

Yang is one of the binary actions that is homologous to the dialectics between the purpose and the active principle. It defines the active functionality of an entity.

Yin is one of the binary actions that is homologous to the dialectics between the purpose and the energy conservation principle. It defines the energy conservation functionality. The conjunction of both actions is defined by the triadic structure that integrates the ultimate functional purpose of an entity.

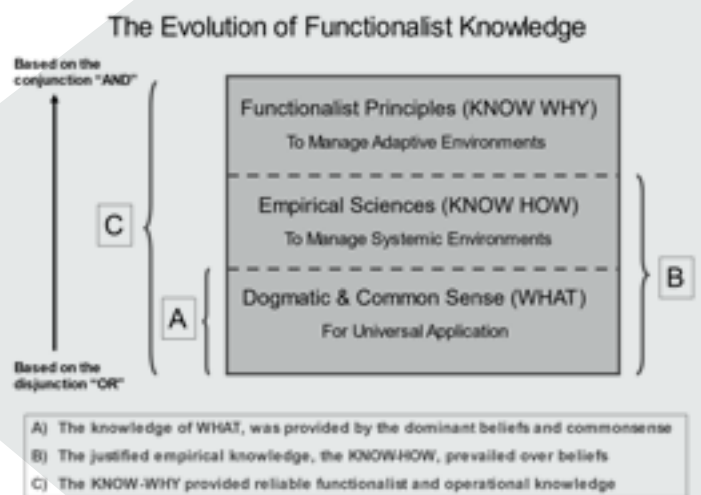
Unicist Functionalist Knowledge

To Manage the Root Causes of Problems

The unicist functionalist knowledge allows for managing the root causes of problems. Functionalist knowledge deals with the functionalist principles of things that define their functional structures.

Functionalist knowledge describes and defines the functionalist principles that drive things and the binary actions that make them work. It defines the functional structure of things and the root causes of the problems that may exist.

Functionalist knowledge requires integrating the know-how of solutions with the know-why that is defined by the functionalist principles of the solutions, using the necessary reasoning patterns to develop functional solutions.



Levels of knowledge

There are different levels of knowledge that have different uses:

- 1** Dogmatic knowledge that establishes the subjective limits of actions. Commonsense knowledge is a type of dogmatic knowledge.
- 2** Empirical knowledge that deals with the know-how of things
- 3** Conceptual knowledge that deals with the functionalist principles of things and provides the know-why of their functionality.

Functionalist knowledge integrates these three levels of knowledge. It is the knowledge that defines and describes the functionality of things based on their functionalist principles.

It establishes the bridge between empirical knowledge and metaphysical principles.

Introduction:

The Functionalist Principles in Everyday Life

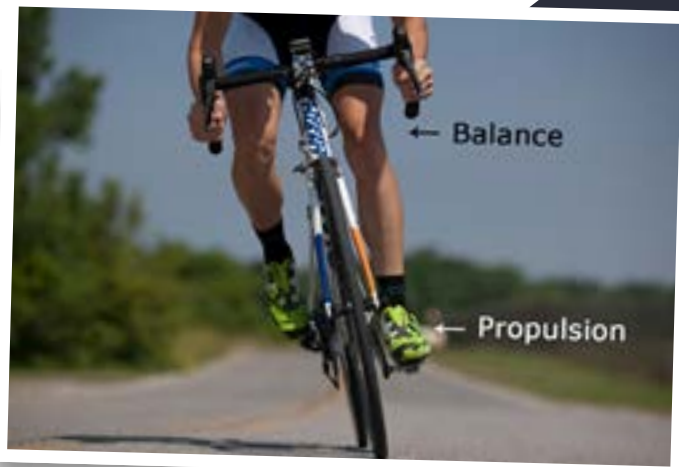
A description of the Roots of the Functionality of Things

The Functionalist Principle of Bicycling

The purpose of riding a bicycle is to travel from one place to another.

The active function of riding of bicycles is given by the actions on the pedals while the body of the rider is the energy conservation function that sustains the balance to ensure their functionality.

The binary actions of riding a bicycle begin by producing the propulsion to be able to balance on it.



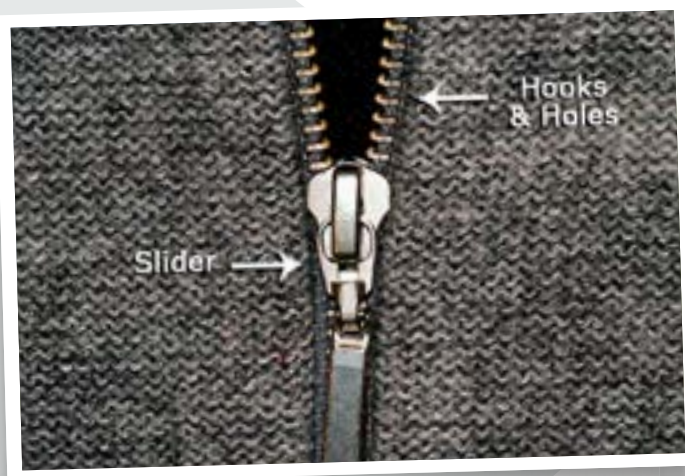
The Functionalist Principle of a Zipper

The purpose of the zipper in the textile industry is to join two parts or pieces of a garment.

The active function of the zipper is provided by the slider which, when moved, engages the hooks of one section with the holes of the other.

The energy conservation function is given by the hooks and holes located in the two pieces that are joined when pushed by the slider.

The binary actions that define the use of a zipper begin by the functionality of the slider and continue with the functionality of the hooks and the holes.

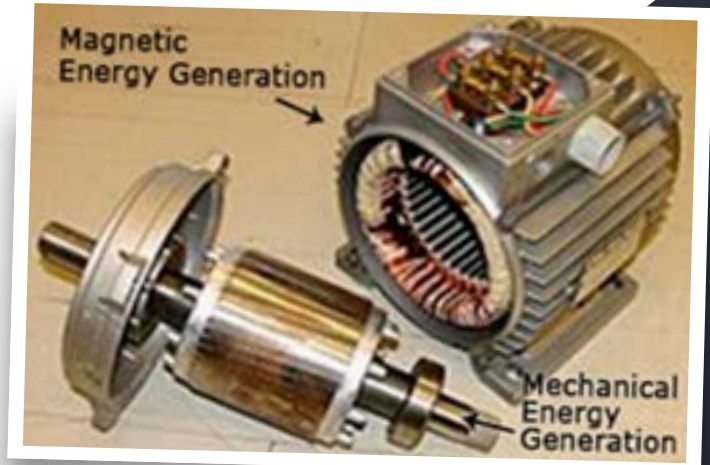


The Functionalist Principle of an Electric Motor

The purpose of an electric motor is to convert electrical energy into mechanical energy. DC motors and AC motors are based on the same essential principles that define their triadic structure.

Their active function is based on transforming electrical energy into magnetic energy. The energy conservation function transforms the magnetic energy into mechanical energy.

The binary actions of the process are, on the one hand, the transformation of electrical energy into magnetic energy and, on the other hand, the transformation of the magnetic force into mechanical energy. These processes happen within the rotor and the stator of an electric motor.



The Functionalist Principle of Leadership

The purpose of leadership is to ensure the authority of a leader by driving people toward the achievement of something. It applies to all kinds of leadership, whether they are in familiar, social, or business environments.

The active function is given by the participation of the members of a group who aim at achieving their goals while they challenge authority.

The energy conservation function is based on the non-exerted power the authority has to sustain the functionality of the participation and the achievement of goals. The binary actions are, on the one hand, the participative activities between the leader and the members and, on the other hand, the existence of the necessary power to influence people without needing to exert it.



The Functionalist Principle of Relationship Building

The purpose of relationship building is to establish complementation between two or more people. This applies to all types of relationships, whether they are familiar, personal, business, or social relationships.

The active function of relationship building is the demonstration of the existence of a functional value, which means that the participation of the person who is building a relationship is necessary.



The energy conservation function is the existence of a personal common space that can be shared.

The binary actions of the process are, on the one hand, the demonstration of the value that is being added and, on the other hand, the finding of a personal common goal that integrates the participants.

The Functionalist Principle of Educational Activities

The purpose of educational activities is to help people to acquire knowledge. The knowledge that is possible to be acquired depends on the structure of the intelligence of the participants.

The active function is based on the development of activities that establish a learning framework.

The energy conservation function is based on teaching activities that simplify the acquisition of knowledge and ensure that it can be stored in the long-term memory. The binary actions consist in exposing the participants to experiences that make the knowledge necessary and, on the other hand, on developing teaching activities that help the learning process.



The Functionalist Principle works driven by Binary Actions

The functionalist principle defines the integration of the purpose with the active function based on the supplementation law which implies that the active function is redundant with the purpose but aims at a superior level of evolution. This produced a binary action that expands possibilities.

On the other hand, the purpose is integrated with the energy conservation function based on complementation law, where the second binary actions complement the purpose to ensure the achievement of its objectives. Example:

The Functional Principle of Airplanes

The purpose of flying an airplane can be considered to move from one airport to another.

The active function is given by the propulsion and the energy conservation function is given by the lift provided by the wings.

The binary actions to make an airplane fly begin by producing the propulsion that generates the necessary speed of the airflow on the wings of the airplane to generate the lift.



Examples of Evident Binary Actions

- Learning + Teaching = Knowledge acquisition
- Productivity + Quality = Production
- Marketing + Selling = Generation of revenue
- Root Causes + Triggering Causes = Solutions
- Efficacy + Efficiency = Effectiveness
- Empathy + Sympathy = Influence building
- Participation + Power = Leadership
- Processes + Objects = Organization
- Desirability + Harmony = Aesthetics

We suggest that you recognize the functionality of the binary actions you already use.

The Basics of the Functionalist Principle

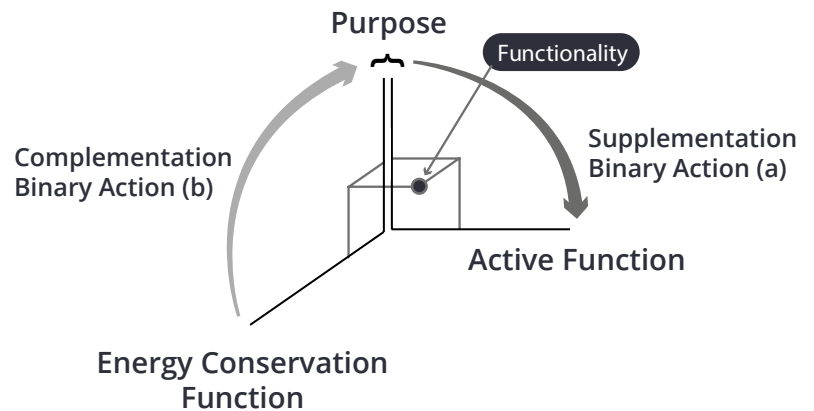
The functionalist principle defines that there is nothing in the universe, which is part of a system, that does not work with a purpose, an active and entropic function, and an energy conservation function.

These elements are integrated by the complementation and supplementation laws established by the unicist logic.

This structure works through unicist binary actions (UBA) that produce the functionality of any entity or process, whatever its kind.

The Functional Structure of Things

Ontogenetic Map in Unicist Standard Language



Copyright© The Unicist Research Institute

This approach was based on the discovery of the triadic structure of the intelligence that underlies nature that defines the principles of its functionality and led to the development of the unicist logic that manages the functionality of “things”. The unicist logic describes the functionality, dynamics, and evolution of things and allows managing them.

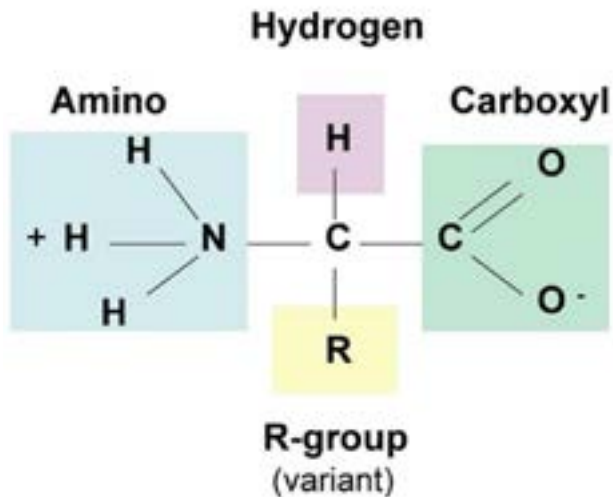
From Physics to Genomics

The triadic structure of the atom, defined by the proton, the electron, and the neutron, is an example of functionality in physics.

Unicist mechanics and quantum mechanics are essentially homologous, which allows an understanding of their functionality. This knowledge allows for influencing the unified field of entities and actions in the real world.

Access

Amino Acid Structure



The functionality of chemical elements, which can be part of a molecule, is focused on the purpose of achieving a level of stable energy, the active functions are the valences, and the energy conservation functions are the bonds they build.

In genomics, you will find its triadic functionality in all its functions. E.g., nucleotides, integrated by sugar, nitrogenous base, and phosphate; amino acids integrated by hydrogen and amine and carboxylic acid groups; codons that are a specific sequence of three consecu-

tive nucleotides that is part of the genetic code. The triadic structure of the unicist ontology of DNA and RNA viruses explains their functional structure.

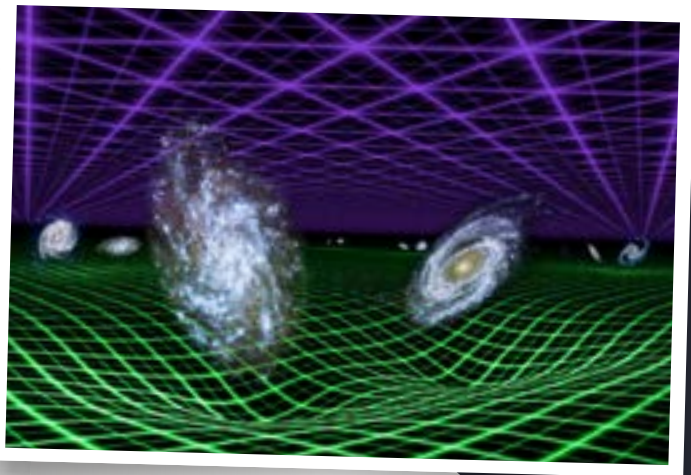
Epigenetic functions work as inhibitors or catalysts that affect the behavior of genes.

From Microcosmos to Macrocosmos

The unified field of the macro and the microcosmos is beyond the operational solutions developed in physics and needs to be found at the functional level of the "system".

The microcosmos is the active function and the macrocosmos is the energy conservation function while the purpose is blurred or subject to speculation or religious beliefs.

The macro and the microcosmos are evident in social and economic systems, where family and society or microeconomics and macroeconomics are, respectively, the active functions and the energy conservation functions of the systems that have evident purposes.



Functionalist Principles of Social Evolution

Unicist functionalist anthropology is the scientific approach to human social behavior and the structural analysis of individuals' deeds to forecast their evolution.

Unicist anthropology conceptually structures taboos, myths, and utopias that influence social actions.

Its main objective is to forecast the behavior of individuals, institutions, and cultures to influence their evolution.

Functionalist Principles of Economic Strategies

The unicist functionalist economy was developed to build economic strategies to sustain the development of countries.

It deals with the functionalist principles of economic behavior allowing the development of short-term plans and transgenerational strategies (20-50 years) to promote the development of countries. The functionalist principles of the economy were found in the history of countries and became acceptable after the model of an adapted economy was established in the United States and China.

Functionalist Principles of Personal Evolution

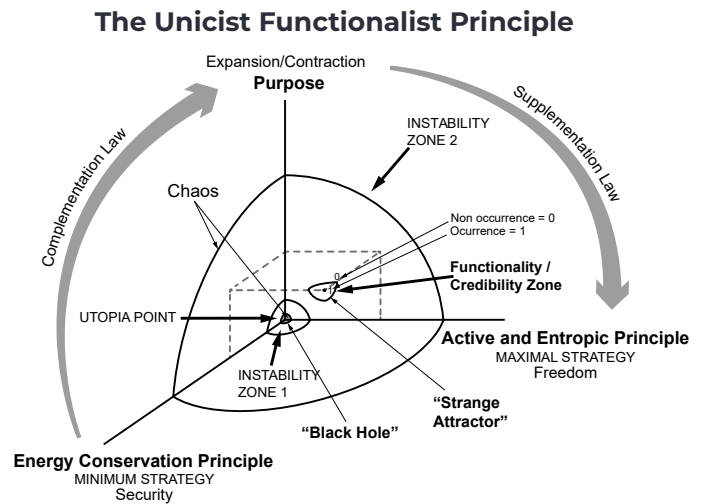
Functionalist psychology is defined as the mental process that manages intrapersonal and interpersonal relationships. The functionalist principles that drive human behavior allow inferring the natural actions of individuals to adapt to the environment.

It provides the functionalist principles that define the power of people, which allow them to better adapt to the environment and to increase their potential energy, generated by their resilience, to enhance their influence in the environment.

Mathematics of the Functionalist Principles

The mathematics validates the use of functionalist principles. It is provided by the mathematics of the unicist logic that allows measuring the functionality of things. It allows measuring the intrinsic functionality of things and credibility of things in the environment.

There are functionalist principles that define the intrinsic functionality of things and explain how they work and functionalist principles that define the extrinsic functionality of things that explain their use value in the environment. The mathematics of intrinsic functions defines their possibility of working and the mathematic of extrinsic functions defines the possibilities of their use.



As it can be seen on the description of the functionalist principle, it is composed by the conjunction of a purpose (P), an active and entropic function (AF) and an energy conservation function (ECF).

This implies that the mathematics that defines the functionality of something requires the multiplication of the values of P, AF and ECF. The value of the functionality of things varies between 1 and 0.

$$\text{Intrinsic Functionalist Principle (IFP)} = P * AF * ECF$$

This defines the different values of each element of the triadic structure of a functionalist principle. The values of the elements are defined by the value generated by the operational components of things.

The instability zones 1 and 2 define the influence of the wide context, which works as a gravitational force (GF) that makes things possible. The displacement of the functionality or credibility zone is influenced by the restricted context, which works as a catalyst (C) to open possibilities and accelerate processes.

$$\text{Functionality} = GF * C * IFP / EFP$$

Mathematics to measure Functionality

Measure of the Functionality of

	Substitute	Wide Context	Restricted Context	Function	
0					1 Indicator
					2
.25					3 Indicator
					4
.50					5 Indicator
					6
.75					7 Indicator
					8
1.					9 Indicator

Concept of the system that transforms qualitative and quantitative indicators into mathematical algorithms.

Substitute		
Wide Context		
Restricted Context		
Function		

Learn about The Unicist Research Institute

Since 1976, The Unicist Research Institute has been the world-leading research organization that introduced the functionalist approach to science to research and develop the functionalist principles of the real world.



Websites

Research Center: <https://www.unicist.org>

Collaboration Center: <https://www.unicist.org/scientific-collaboration>

Business Arm: <https://www.unicist.net>

Intelligent Systems: <https://www.unicist-systems.com>

Academic Arm: <https://www.unicist.org/academic>



Phone: +1 315-506-6720



Contact us: n.i.brown@unicist.org