Adopt the

Unicist Functionalist Technologies

in your Company

The unicist functionalist technologies use fundamentals-based AI and unicist logical rules to simplify business processes, build cobots and install intelligent systems to foster growth and save costs.

Experience them

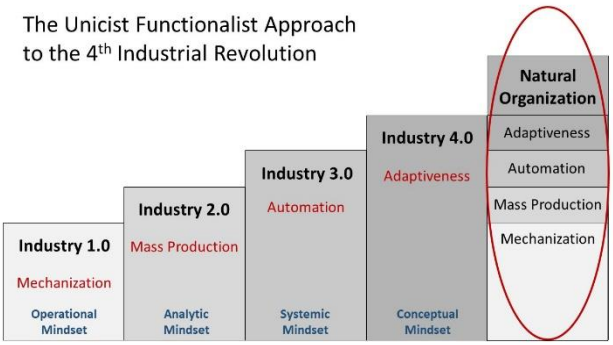
The Unicist Research Institute

Pioneers in Complexity Science Research since 1976

The Unicist Functionalist Approach to Businesses

The unicist functionalist approach, developed at The Unicist Research Institute, affirms that all that is part of a system, works with a purpose, an active and entropic function, and an energy conservation function. This structure works through unicist binary actions (UBA) that produce the functionality of any entity or process, whatever its kind. The unified field of an entity or process needs to be managed to ensure its functionality.

The 4th Industrial Revolution introduced the functionalist approach to businesses based on managing the functionality of their processes to make them adaptive and customer-centered.



The solution for this new stage was introduced in the market by the unicist functionalist technologies.

Thus, the functionalities of all business functions, which are defined by their concepts, have a triadic structure that needs to be known to be managed. Concepts are defined by a purpose, an active and entropic function, and an energy conservation function.

The applied research of The Unicist Research Institute has been focused on the study of the functionality of entities and processes. More than 5,000 unicist ontological research works were developed since 1976 in the field of individual, business and social functionality.

Unicist Functional Design:
Managing the Triadic Structure of Business Functions

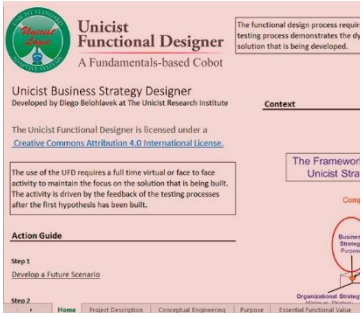
Unicist functional design is the unicist ontological approach to design solutions in adaptive environments. The unicist functional design is based on the use of the ontogenetic maps that define the functionality of adaptive entities whatever their kind. These ontogenetic maps define the triadic structure of business functions.

The input to any functional design is the conceptual structure of the functionality of the entity that is being designed and the output is the definition of the operational design that includes the definition of the necessary binary actions.

The unicist functional design is sustained by the knowledge of the triadic structure of the concepts of business functions using binary actions, business objects and catalysts to ensure results.

Application Fields

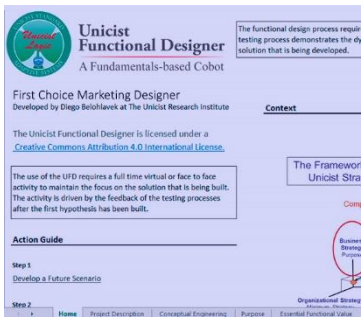
Functional Design of Strategies & Business Intelligence



The unicist strategy designer is focused on the generation of value, although it always includes the development of competitive strategies. It is based on the management of the concepts and fundamentals of businesses.

The core aspects of the development of unicist strategies are the use of binary actions to ensure results, the use of objects to optimize processes and the use of catalysts to open new possibilities and accelerate processes.

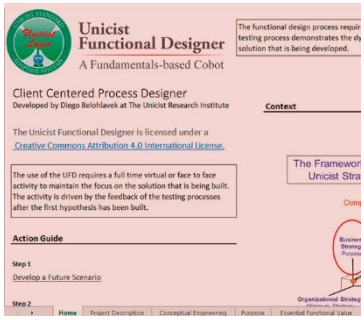
Functional Design of Marketing & Sales



The designer uses a segmented approach to the market because it requires finding the segments where the first-choice positioning is feasible. In marketing it is rare to find products or services that have a universal first choice position.

The purpose of the first-choice strategy is to achieve the perception that a superior subjective value is being proposed. This superiority needs to be proven through the differentiation of the value propositions and be confirmed through the satisfaction of the needs of the client.

Functional Design of Organization & Management

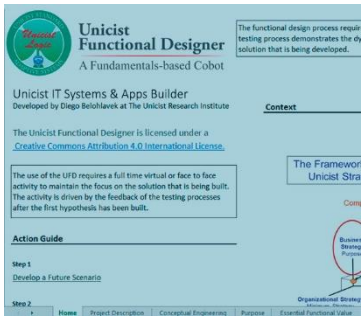


The unicist organizational design is based on emulating nature in organizations.

An extremely effective organization can be developed integrating both structural aspects that sustain evolution and incidental aspects that allow dealing with conjunctures.

The design of business objects structures the timing and synchronicity of business processes. It also provides the necessary speed and acceleration to achieve the necessary critical mass.

Functional Design of Information Technology



The unicist functional design cobots provide the knowledge of the structure of business functions and the methods to transform the knowledge into processes and binary actions.

They provide the structure of the class diagram of IT systems and are the direct input to develop applications.

The operation is based on functional design groups integrated by designers, builders and users that include the roles of an ombudsperson, a coordinator, and a fallacy shooter.

Adopt the Use of Functionalist Technologies

The use of business cobots, unicist AI, binary actions, catalysts, business objects, and design groups is what makes the management of the functionality of adaptive business processes possible.

1) Install Business Cobots to accelerate processes and save costs

Unicist Cobots are collaborative robots that manage the functionality of business processes. The use of concepts and fundamentals allowed managing the functionality of business processes and enabled the development of collaborative robots to provide the resources -including functional knowledge- that are needed to manage business processes. Cobots interact with people to ensure the functionality and the adaptive automation of processes.

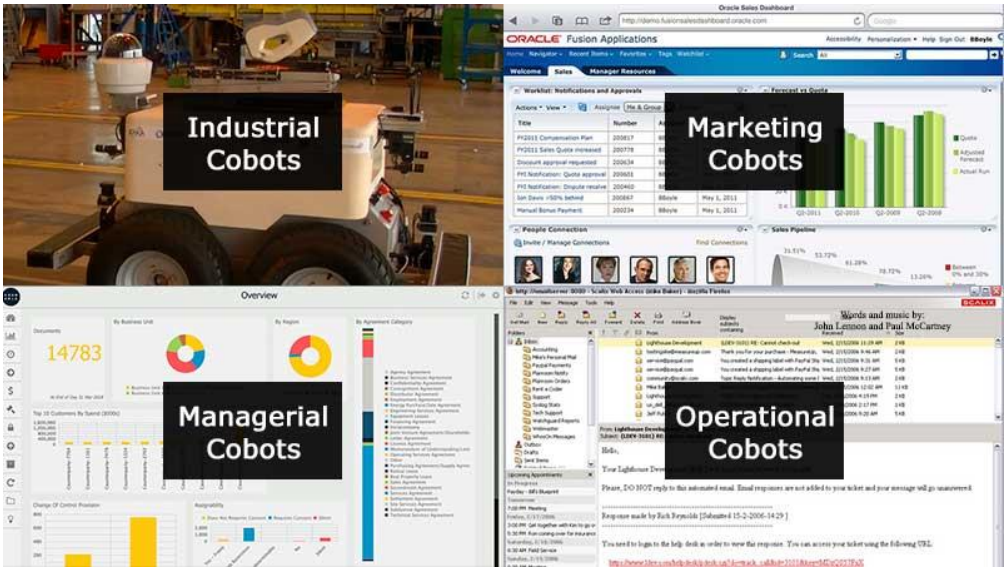
The functionality of business cobots manages, on the one hand, the efficacy of processes using logical rules or artificial intelligence and, on the other hand, the efficiency of the operation to ensure the achievement of their purpose.

In business, there are two possible uses:

1. As part of a backward integration, to sustain decision processes.
2. As part of a forward integration, to transform decisions into automated actions.

The business applications of Cobots became possible due to the development of the fundamentals-based AI and the binary actions that ensure the generation of results. Cobots are not based on empirical rules; they use functional rules to build empirical solutions.

Business Cobots enhance efficacy. According to their use, they include different levels of adaptability and intelligence, but all types of Cobots include the delivery of the necessary functional knowledge. There are four application fields of Cobots: Industrial, Marketing, Management and Operation.



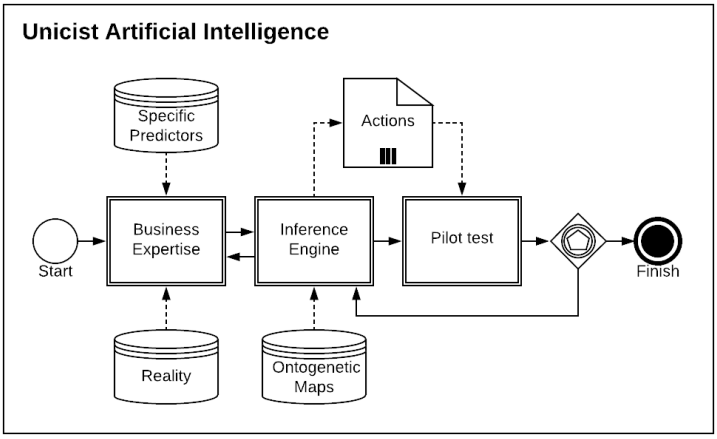
Cobots are based on human-robot interaction. They have been used for decades in the industrial field and now the unicist functionalist technologies enabled introducing them in the rest of the business processes. They are extremely valuable to introduce adaptability and customer orientation in business processes.

2) Use Unicist AI to build reliable knowledge

Unicist AI is based on the triadic functionality of the unicist logic that allows managing the functionality of things. Fundamentals-based AI allows managing the functionality of processes and building intelligent systems and cobots.

It has to be considered that fundamentals provide the framework of the meaning of data. Therefore, the use of Unicist AI integrated with data-based AI, allows managing processes using adaptive automation.

Fundamentals-based AI uses indicators and predictors both to monitor the functionality of processes and as an input to the inference engine.



The unicist artificial intelligence emulates the intelligence of nature and human intelligence to apprehend the concepts of complex adaptive systems and environments. It uses the rules of the unicist logic and allows developing solutions and learning from the pilot tests of their implementation until their functionality has been confirmed.

Fundamentals-based AI allows automating the use of binary actions, catalysts, business objects, and marketing objects to develop business processes of any kind.

Data-based AI refines the structural information provided by fundamentals-based AI and - when sufficient customer's data are available - allows establishing databases of potential buyers.

3) Install Binary Actions to ensure results

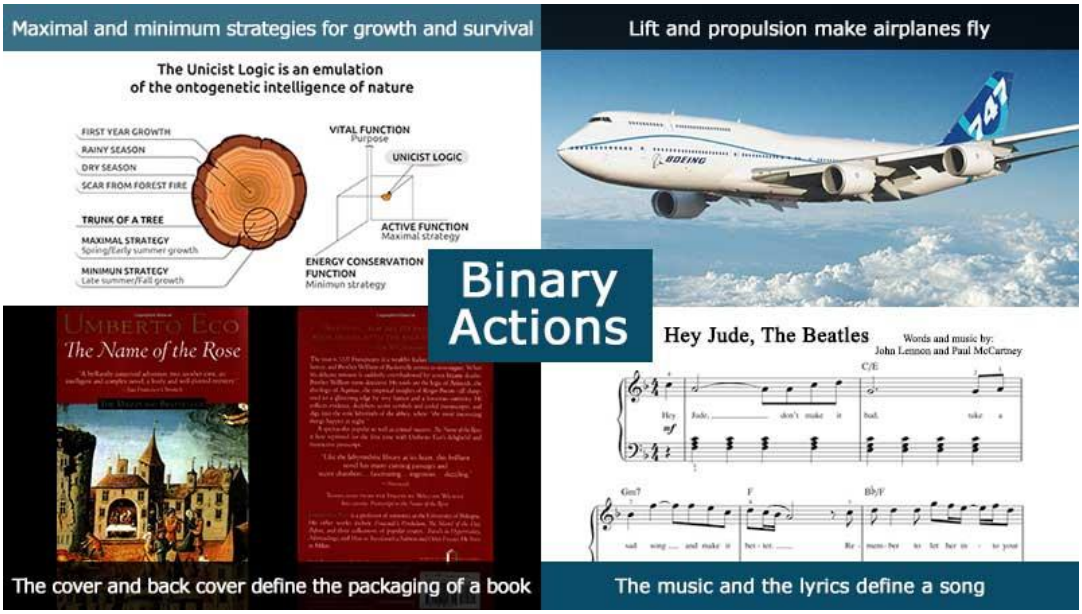
Every action generates a reaction. This principle is evident at an operational level, but it is not evident when dealing with adaptive systems and environments, which are driven by a triadic functional structure defined by a purpose, an active function, and an energy conservation function.

What was discovered is that the triadic functionality of any adaptive system and environment is generated by binary actions driven by an active function and an energy conservation function. These binary actions are two synchronized actions that aim at the same purpose. They are needed to develop solutions in adaptive environments.

Binary actions require approaching the world by accessing the functionality of a solution, which implies being focused on the generation of value.

Binary actions empower the value of processes while they diminish their costs. They use catalysts to expand the boundaries of solutions and business objects to accelerate processes and ensure their functionality.

Some examples will help to grasp the idea:



1. The active function and the energy conservation function of the intelligence of a tree drive its growth and survival.
2. Propulsion and lift make airplanes take-off and fly. Propulsion drives the active action and lift drives the energy conservation action.
3. The cover and the back-cover define the functionality of the packaging of a book. The cover drives the active action, and the back-cover drives the energy conservation action
4. The lyrics and the music of a song define its aesthetics. The lyrics drives the active action, and the music drives the energy conservation action.

4) Build Business Catalysts to accelerate growth

The functionality of businesses requires the use of catalysts. Catalysts are process accelerators that diminish the efforts needed to produce results. The discovery of the structure of the functionality of biological and behavioral catalysts allowed developing business catalysts, which are necessary to accelerate processes and drive the evolution of businesses.

The levels of acceleration that catalysts introduce in processes depend on the specificity of their functions:

a) **Generic catalysts** accelerate the functionality of institutions or organizations. Their acceleration is low.

b) **Systemic catalysts** accelerate the functionality of functions and roles. Their acceleration is medium.

c) **Specific catalysts** accelerate the functionality of processes. Their acceleration is high.

d) **Conjunctural catalysts** accelerate the functionality of conjuncture driven processes. Their acceleration is very high.

Some examples will help to grasp the idea:

1. The GE Open Innovation works as a catalyst for the GE Business.
2. Special offers are sales catalysts.
3. The direct publishing alternative is a catalyst that expands the business of Amazon.
4. The Deep Blue chess-playing supercomputer versus Garry Kasparov in the 90's was an equity catalyst for IBM.

5) Install Business Objects to save costs & ensure quality

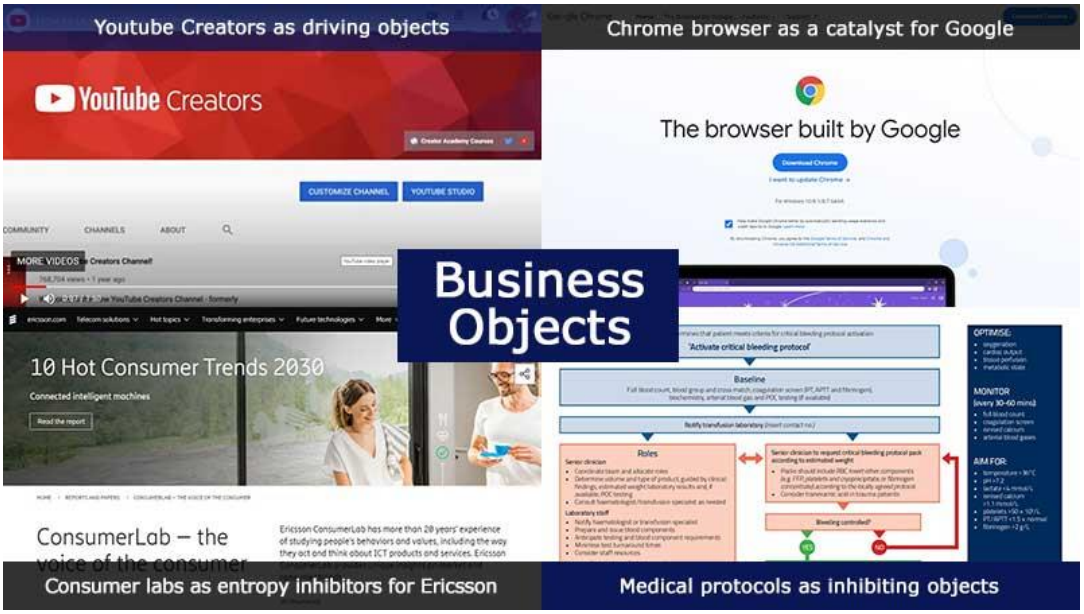
The functionality of adaptive systems is based on the use of objects. Unicist business objects are encapsulated adaptive systems that produce predefined results that can be inserted in work processes to increase productivity and quality and to save energy. The triadic functionality of business objects is defined by their concept that defines their purpose, a value generation function, and a quality assurance function.

To imagine an object please consider an automatic pilot in an airplane. It can be considered a "paradigmatic" object.

From a functional point of view there are five types of objects:

- **Driving Objects:** To drive processes
- **Catalyzing Objects:** To accelerate processes
- **Entropy Inhibiting Objects:** To inhibit the entropy of business processes
- **Inhibiting Objects:** To inhibit dysfunctional events in a business
- **Gravitational Objects:** To influence the results of processes

Some examples will help to grasp the idea:



1. YouTube Creators work as Driving Objects.
2. Google Chrome works as a Catalyzing Object that expands and increases the functionality of the Google business.
3. Ericsson Consumer Lab works as an Entropy Inhibiting Object that inhibits the entropy of marketing processes ensuring that the value propositions are focused on real needs.
4. Medical Protocols work as Inhibiting Objects that inhibit dysfunctional events in medical praxis.

6) Install Roles in Design Groups

The installation of roles that assume specific complementary responsibilities empowers the synergy of groups. The members of the design group that participate in the development of solutions as well as the members of the testing group that test the solutions also assume a differentiated responsibility within the group, taking one of the following roles:

1) **The "Coordinator"** is responsible for guiding the group towards the objectives that have been defined. The coordinator has the full responsibility for the diagnoses and for achieving the results that have been defined as being possible to be achieved. The participants also have full responsibility for the results after they agreed that such results are possible.

2) **The "Fallacy-Shooter"** is responsible for assuring the quality of the foundations and justifications in the decision-making processes. The "Fallacy-Shooter" is the person responsible for guiding the action-reflection-action process to improve the accuracy of the diagnoses and of the work processes.

3) **The "Ombudsperson"** is responsible for monitoring the value generation of the design processes. The "Ombudsperson" is responsible for monitoring that the proposals respond to the functional needs of the solutions that are required; s/he guarantees results. The ombudsperson represents the "user" and is responsible for generating value to the environment.

Main Markets

• Automobile • Food • Mass consumption • Financial • Insurance • Sports and social institutions • Information Technology (IT) • High-Tech • Knowledge Businesses • Communications • Perishable goods • Mass media • Direct sales • Industrial commodities • Agribusiness • Healthcare • Pharmaceutical • Oil and Gas • Chemical • Paints • Fashion • Education • Services • Commerce and distribution • Mining • Timber • Apparel • Passenger transportation –land, sea and air • Tourism • Cargo transportation • Professional services • e-market • Entertainment and show-business • Advertising • Gastronomic • Hospitality • Credit card • Real estate • Fishing • Publishing • Industrial Equipment • Construction and Engineering • Bike, motorbike, scooter and moped • Sporting goods

Country Archetypes Developed

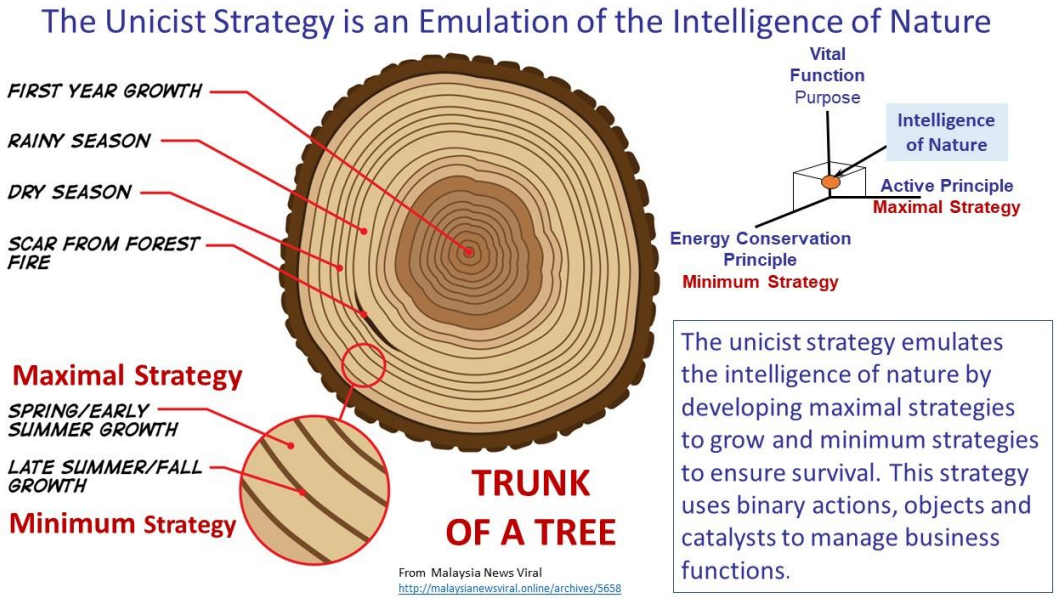
• Algeria • Argentina • Australia • Austria • Belarus • Belgium • Bolivia • Brazil • Cambodia • Canada • Chile • China • Colombia • Costa Rica • Croatia • Cuba • Czech Republic • Denmark • Ecuador • Egypt • Finland • France • Georgia • Germany • Honduras • Hungary • India • Iran • Iraq • Ireland • Israel • Italy • Japan • Jordan • Libya • Malaysia • Mexico • Morocco • Netherlands • New Zealand • Nicaragua • Norway • Pakistan • Panama • Paraguay • Peru • Philippines • Poland • Portugal • Romania • Russia • Saudi Arabia • Serbia • Singapore • Slovakia • South Africa • Spain • Sweden • Switzerland • Syria • Thailand • Tunisia • Turkey • Ukraine • United Arab Emirates • United Kingdom • United States • Uruguay • Venezuela • Vietnam.

Learn more about the Functionalist Technologies

Annex

The Unicist Functionalist Approach Emulates Nature

The discovery of the ontogenetic intelligence of nature allowed defining that the functionality of any living being is driven by a purpose and has an active and entropic principle that drives its growth and an energy conservation principle that ensures its survival. This triadic structure gave birth to the unicist logic, that has also been proven in the functionality of human intelligence and drove to the development of unicist AI.



The research on the functionality of intelligence allowed finding that human actions are driven by the concept people have stored in the long-term memory, which are triggered by the CSTM (conceptual short-term memory) to generate instantaneous responses to any external stimuli.

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The following discoveries made at The Unicist Research Institute were the milestones of the development of the functionalist approach: complex systems research method (1980), the functionality of human ontointelligence (1984), the ontogenetic intelligence of nature (1998), the unicist ontology of biological systems (2012), and the unicist ontology of wide and restricted contexts (2017).

The breakthrough in science and the researches that allowed developing the unicist functional technologies were led by Peter Belohlavek at The Unicist Research Institute.

Unicist Logic: The Logic of Functionality

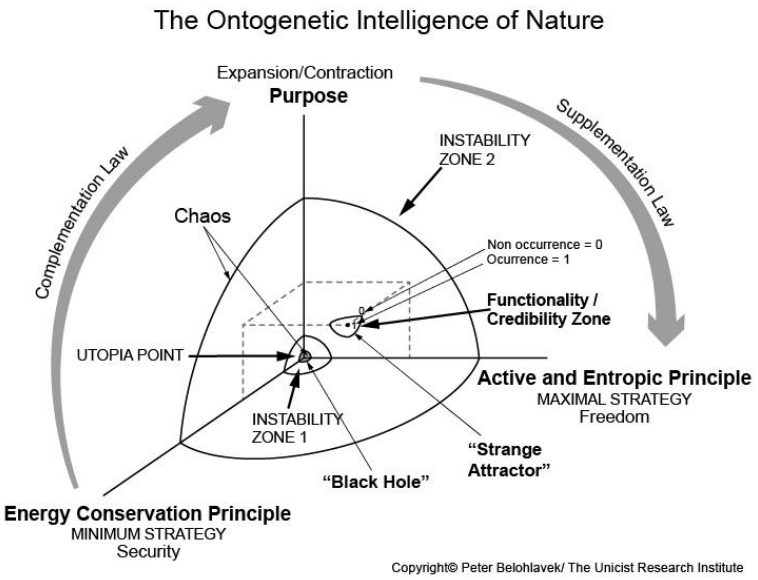
The Unicist Logic allows understanding and managing the functionality of the real world. The Unicist Logic is a synthetic logic that emulates the ontogenetic intelligence of nature and its maximal strategies to grow and minimum strategies to survive. The functional structures of things were named concepts, which are integrated by a purpose, an active function, and an energy conservation function.

The unicist logic provides the logical structure of the concepts and fundamentals that are used to manage the functionality of things.

The logic defines the complementation laws and supplementation laws that allow defining the rules of the behavior of fundamentals.

The unicist logic is used to manage the conceptual structure of adaptive entities and to design and build binary actions to manage them.

The unicist logic gave birth to the unicist AI which is a fundamentals-based AI that allows managing the rules that manage the functionality of processes.



The unicist logic is the natural logic to deal with adaptive environments and is the integrator of all logical reasoning patterns.

Concepts drive the Functionalist Technologies

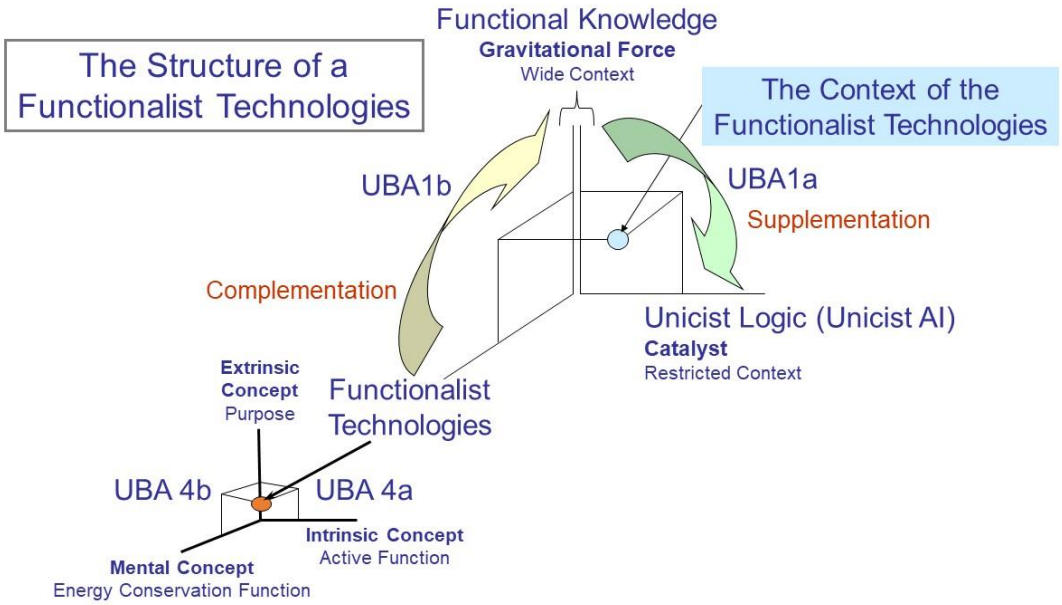
The concepts and fundamentals of things and actions define their functionality and the root causes of the problems that appear. As it was mentioned, the unicist functionalist approach affirms that all that is part of a system works with a purpose, an active and entropic function, and an energy conservation function.

Each of the elements of the triadic structure is a fundamental and their integration define the concept of the entity or actions. This structure works through unicist binary actions (UBA) that produce the functionality of any entity or process, whatever its kind. The unified field of an entity or process needs to be managed to ensure its functionality.

The Functionalist Technologies

The context of the functionalist technologies is defined by the functional knowledge that underlies them. This knowledge is an integration of the know-how, which is the purpose of functional knowledge and the know-why, which defines the intrinsic functionality of this type of knowledge.

This know-why is managed using the unicist logic that is a synthetic universal logic to understand and manage the functionality of things. This logic drove to the development of the unicist AI, which is a fundamentals-based AI that works based on indicators and predictors.



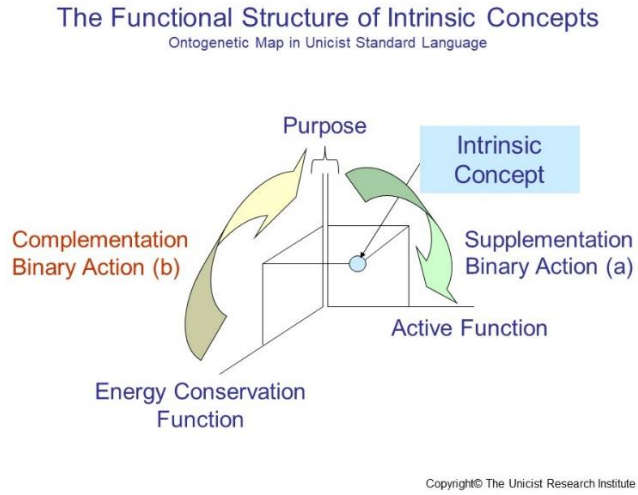
The functionalist technologies were developed to manage the conceptual design that defines the functionality of processes and transforms them into actions using binary actions.

The functionalist technologies manage the three types of concepts that exist in the real world:

1) **Intrinsic concepts** define the functionality of any entity that works as part of a system.
2) **Extrinsic concepts** define the functional use value of any entity.
3) **Mental concepts** work as behavioral objects that drive human actions.

About Intrinsic Concepts

Intrinsic concepts define the functionality of any entity that works as part of a system. The intrinsic concepts define a purpose that is put into action by an active function and is sustained by an energy conservation function. These two relationships (i.e.: purpose-active function and purpose-energy conservation function) define the binary actions that drive the functionality of any system, being it a living entity or not.



Intrinsic concepts are derived from the integration of functions that are based on the principles that drive the functionality of things. Functions can be defined as the materialization of the principles that underly states and actions. Therefore, to deal with the intrinsic concept of something a sound knowledge of the operation and the underlying principles is needed.

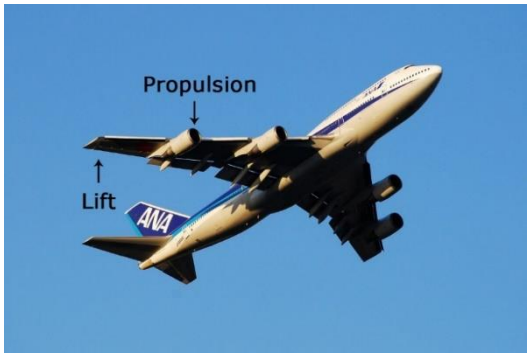
Examples of Intrinsic Concepts

The Intrinsic Concept of an Airplane

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

The active function is given by their 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.



The Intrinsic Concept 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.

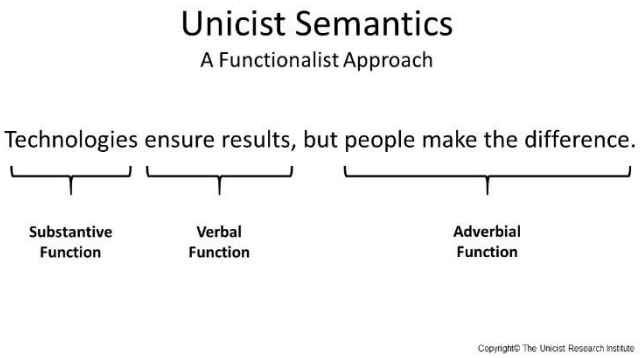
The binary actions of the process are, on the one hand, the transformation of electrical energy into magnetic energy and, on the other hand, the transformation of the magnetic force into mechanical energy.

These processes happen within the rotor and the stator of an electric motor.

The Intrinsic Concept of Sentences in Western Language

Unicist semantics deals with the meaning of words and sentences by understanding and managing their functionality. It defines that a sentence is a system, that has a purpose, an active function, and an energy conservation function.

In semantics, the purpose is given by the substantive function of the sentence, which includes the noun.

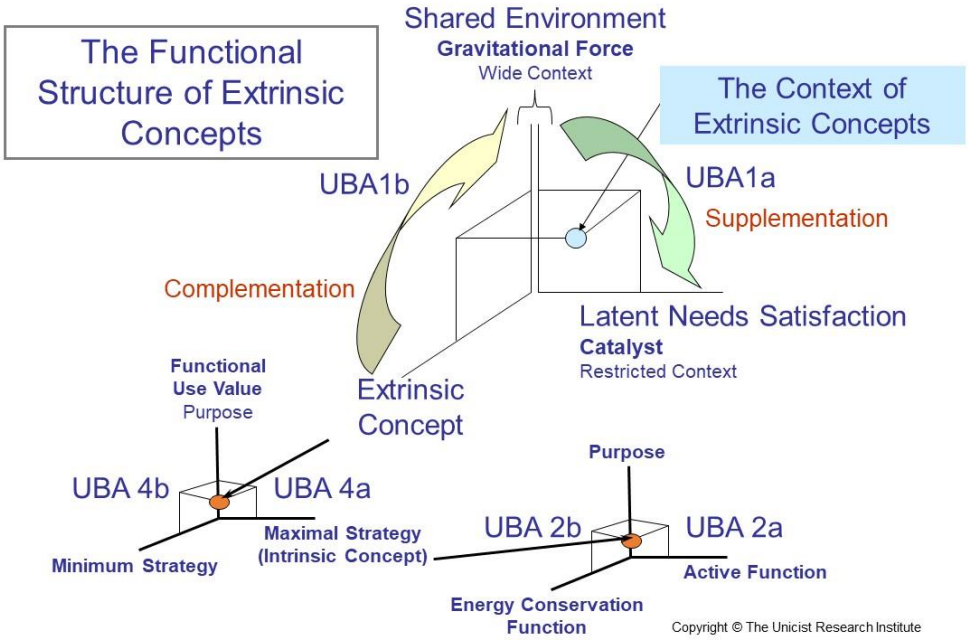


The active function is defined by the verbal function, which includes verbs, and the energy conservation function is defined by the adverbial function, which includes adverbs and adjectives.

The first binary action integrates the verbal function with the substantive function, proposing an action. The second binary action closes the circle using the boundaries introduced by the adverbial function.

About Extrinsic Concepts

The purpose of extrinsic concepts defines the functional use value of any entity. Extrinsic concepts are deposited by humans on any entity that is being used and include the intrinsic concept that generates the usability of things. The functionality of an extrinsic concept also includes the influential aspects of the wide context and the restricted context that make the functionality of an entity possible.



Extrinsic concepts exist when there is an environment that is shared. That is why breakthrough innovations have no extrinsic concept because at the initial stage there is no environment to be shared. The catalyst of an extrinsic concept is given by the latent needs that are being satisfied.

The purpose of the extrinsic concept is to achieve the functional use value of something. This means that the UX is a way to confirm the functionality of the extrinsic concept.

The maximal strategy includes the intrinsic concept of what is being done that has its own purpose that expands the boundaries to foster growth, an active function to make the difference, and an entropic function to ensure results.

The minimum strategy of an extrinsic concept requires that such extrinsic concept be in the mind of the people involved to ensure the confirmation of its functional use value.

Examples of Extrinsic Concepts in Business

The extrinsic concept of First Choice Marketing

The purpose of first choice marketing is to achieve the perception of superior subjective value propositions. The active function is defined by the differentiation and the energy conservation function is given by the satisfaction of the needs of the client.

The intrinsic concept of first choice marketing is defined by its purpose of installing differentiated attributes, the active function aims at installing an operational differentiation, and the energy conservation function is the demonstration of a price-value differentiation.

The wide context of first choice marketing is the selection of the adequate segments to be approached and the catalyst is given by the expectations that can be generated by satisfying latent needs or solving implicit weaknesses of competitors.

The basic binary actions are, on the one hand, generating expectations and then having fully segmented value propositions and, on the other hand, managing the differentiation and then developing the actual segmented value propositions.

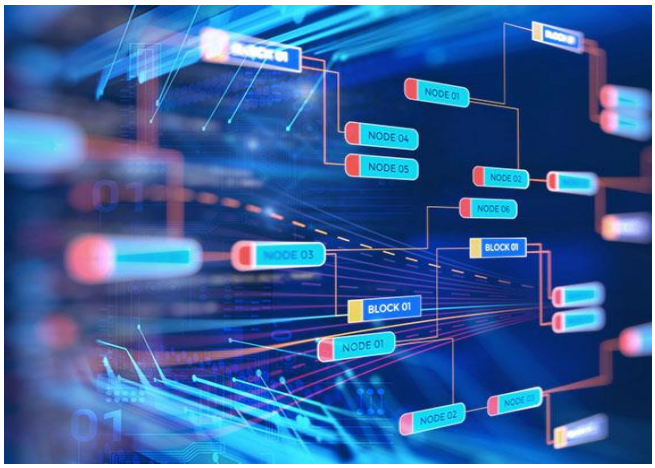
The extrinsic concept of Business Organization

The purpose of business process organization is to achieve the objectives established in the business strategy. The active function is given by the processes and the energy conservation function is defined by the objects installed.

The intrinsic concept of business organization aims at the purpose of establishing an adaptive system.

This purpose is driven by an active function, that is defined by the efficacy of the roles established, and the energy conservation function, that is defined by the efficiency of the system.

The wide context is defined by the required adaptability of the organization while the catalyst is given by the customer orientation of the processes.



On the one hand, the binary actions deal with providing customer orientation and operational adaptability. On the other hand, it is necessary to ensure the reliability of the processes and the functionality of the objects that are installed.

The extrinsic concept of Cobots (Collaborative Robots)

The purpose of Cobots is to be able to generate client centered processes that ensure results by being customer oriented through the assurance of added value.

The active function is defined by the efficacy of the cobot that is defined by its intelligent behavior, and the energy conservation function is given by the efficiency, which is driven by the automation of processes.

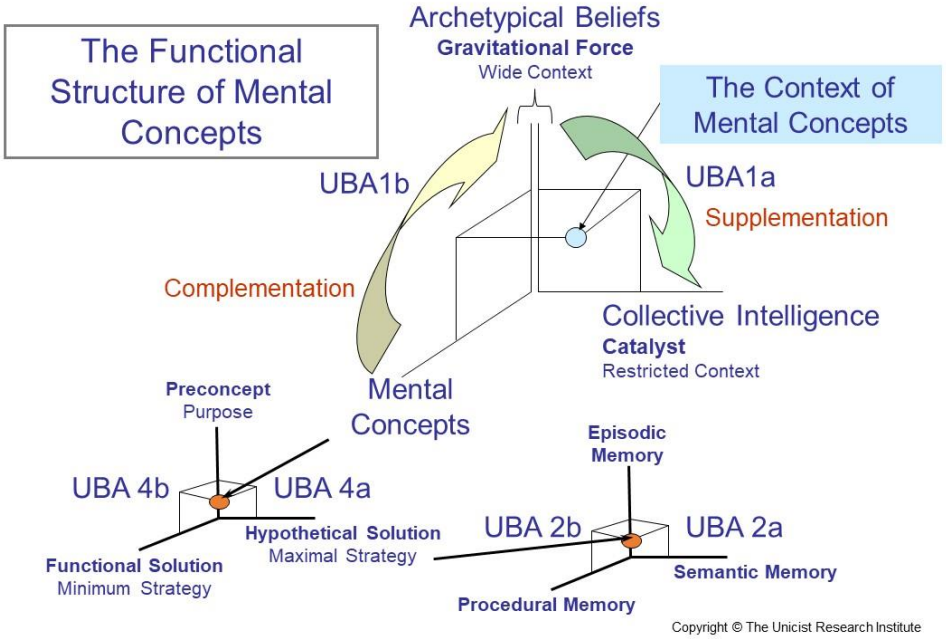
The intrinsic concept of a cobot includes the adaptive automation as its purpose, functionality assurance as its active function and the development of binary actions as its energy conservation function.

The wide context of cobots is the adaptability of business processes. The customer orientation works as the catalyst for the use of cobots.

The basic binary actions are, on the one hand, the assurance of customer orientation and adaptability and, on the other hand, the provision of intelligent behavior and automation of processes.

About Mental Concepts

The concepts people have in their minds drive their actions. That is why mental concepts work as behavioral objects that drive human actions whatever their kind. They are the drivers of any functionalist approach to the real world. Concepts are stored in the long-term memory and their syntheses are stored as preconcepts in the conceptual short-term memory (CSTM).



Archetypical beliefs define the wide context of mental concepts and establish the limits of their functionality while collective intelligence works as their catalyst. Mental concepts define the functional pattern for the recognition and use of things.

The conscious approach to concepts implies expanding the preconcepts people have by introducing new information in the episodic, semantic, and procedural memories that supersedes the functionality of preconcepts expanding the comfort zone of individuals.

The experience of functional solutions in operational terms sustains the functionality of the concepts that are being used. Mental concepts allow integrating the extrinsic and intrinsic concepts to make them usable.

Examples of Mental Concepts

The mental concept of Decision Making

The purpose of a decision-making process is to be able to make decisions that are justified and grounded. Justifications are the active function that puts the decision-making process into action. Foundations are the energy conservation function that provides reasonable, understandable, and provable arguments.

The purpose of the intrinsic concept is given by the intentions of the decider that are given by ethical justifications, the active function is the materialistic justification, and the energy conservation function is the personal justification.

While the wide context is composed of the accepted archetypical procedures for decision making, the rules of decision making of the collective intelligence work as the catalyst.

The binary actions begin by the functionality of the rules of decision making that open the possibilities for a functional decision-making process. On the other hand, the binary actions include the justification process of decisions and the management of foundations to ensure their functionality.

The mental concept of Personal Strategy

The purpose of personal strategies is to achieve goals in adaptive environments. The active function is the use of a maximal strategy to foster growth that is environment dependent. The energy conservation function is the development of a minimum strategy that depends on the actions of the individual.

The purpose of the intrinsic concept of a personal strategy is the generation of value for the environment, the active function is the competitive advantage, and the energy conservation function is the influence an individual has.

The wide context of personal strategies is the archetypical influence on individual actions and the catalyst is the collective intelligence that provides the necessary empathic approach.

On the one hand, the binary actions are given by empathic actions and by the adaptability of an individual. On the other hand, the binary actions are opened by the power of the competitive advantage and are sustained by the influence in the environment.

The mental concept of Ideologies

The purpose of ideologies is to achieve personal consensus in a group or environment. The active function is based on the sharing of beliefs and the energy conservation function is the sharing of the dominant myths in a group or environment.

The purpose of the intrinsic concept of an ideology is the sharing of beliefs, the active function is given by the technology that is being used and the energy conservation function is based on the interests the ideology sustains.

The wide context is defined by the ideology that is implicit in the archetypical beliefs of the environment and the restricted context is the collective intelligence of individuals that works as a catalyst of their ideologies.

On the one hand, the binary actions are the functionality of the collective intelligence and the functionality of the ideologies to achieve consensus, and, on the other hand, they are driven by the integration of the shared beliefs and the fulfillment of the dominant myths of the environment.

Contributions of the Functionalist Approach to Science

In Scientific Research - 1980: Development of a unicist ontological methodology for complex systems research, substituting the systemic approach to research adaptive systems. **2014:** The integration of the unified field of macro and micro behavior. **2015:** Development of the destructive and non-destructive tests to research adaptive environments. **2021:** Discovery of the universal functional structure of things.

In Life Sciences - 1988: Discovery of the functional structure that regulates evolution and the unicist ontological structure of living beings as a unified field. **2006:** Discovery of the unicist ontological algorithm of evolution and involution. **2008:** Discovery of the two types of integration, complementation and supplementation, of elements in complex adaptive systems. **2012:** Discovery of the unicist ontology of biological entities. **2013:** Confirmation of the unicist ontology of viruses. **2014:** Discovery of the ontological structure of chronic diseases. **2014:** Discovery of the structure of therapeutics. **2015:** Discovery of the ontological structure of health. **2016:** Development of the Scientific Foundations of Medicine. **2021:** Discovery of the unicist ontology of the DNA.

In Complexity Sciences - 1998: Development of the unicist ontology emulating the ontogenetic intelligence of nature. **2003:** Discovery of the anti-concepts that work as antimatter. **2006:** Development of objects to manage human adaptive systems emulating the structure of nature. **2011:** Discovery of the unicist ontology of complex adaptive systems. **2014:** Discovery of the behavior of objects in complex adaptive systems. **2015:** Discovery of the essential opposition but operational complementation between the active function and the energy conservation function of concepts. **2017:** Discovery of the unicist ontology that integrates the wide and restricted contexts. **2017:** Discovery of the origin of root causes in adaptive environments.

In Information Sciences - 2002: Development of unicist ontogenetic based ontologies replacing the empirically structured ontologies. **2014:** Development of unicist adaptive robotics. **2015:** Development of prototypers. **2016:** Discovery of the nature of conceptual design. **2018:** Discovery of the ontogenetic map to emulate the unified field of adaptive environments. 2018: Development of the unicist cognitive systems. **2019:** Development of XD-Expert Systems. **2021:** Development of business cobots.

In Future Research and Strategy - 1984: Modeling of the ontological structures that allow inferring the evolution developing the ontogenetic maps of human adaptive systems. **2014:** Confirmation of the functionality of ethical intelligence in future research. **2015:** Discovery of the unicist ontology of personal strategies. **2016:** Discovery of the nature of entrepreneurial strategies. **2017:** Discovery of the double dialectical tactics. **2019:** Discovery of business catalysts.

In Logic - 1986: Development and formalization of the integrative and the unicist logic. 2013: Functionality of Dualistic Logic in complex environments. **2013:** Discovery of the structure of aprioristic fallacies.

In Anthropology - 1986: Discovery of the "invariables" of human behavior. **1997:** Discovery of the double dialectical behavior. **2008:** Discovery of the anthropological lifestyles. **2010:** Discovery of the institutional and social viruses. **2012:** Discovery of the integration of ontogeny and phylogeny. **2012:** Discovery of the stagnant survivors' role in societies. **2012:** Discovery of the unicist ontological structure of aptitudes, attitudes and intentions. **2013:** Development of the unicist ontology of cultural adaptiveness & over-adaptiveness. **2014:** Synthesis of Conceptual Anthropology. **2014:** Discovery of the Cultural, Institutional, Individual and Social Archetypes. **2015:** Discovery of the functionality of rationalism and subjectivism as social and individual addictions. **2016:** Discovery of the nature of innovation processes. **2017:** Discovery of the context of social dysfunctional utopias. **2019:** Discovery of social catalysts.

In Economic Science - 1989: Discovery of the unicist ontological structure of Economics. **1998:** Discovery of the unicist ontological algorithm of the price elasticity of demand. **2004:** Discovery of the ontogenetic structure of economic models and their functionality. **2011:** Discovery of the ontology of currency and inflation. **2012:** Discovery of the ontology of the industrialization level. **2012:** Discovery of the unicist ontology of the overcoming of scarcity. **2012:** Pricing of Futures and Options. **2012:** Discovery of the unicist ontology of speculative manipulation. **2014:** Synthesis of Conceptual Economy. **2015:** Discovery of the unicist ontology of economic freedom.

In Political Science - 1990: Development of the ontological algorithm and the ontogenesis and phylogeny of ideologies and their functionality. **2013:** Development of the unicist ontology of Social, Economic and Political Democracy.

In Social Sciences - 1993: Discovery of the collective unconscious and the unicist archetypes of cultures. **2012:** Discovery of the role of stagnant survivor elites in the stagnation of segments or cultures. **2016:** Discovery of the nature of social networks. **2020:** Discovery of the unicist ontology of evolutionary constructivism. **2020:** Discovery of the nature of counter cycle building.

In Linguistics - 2004: Discovery of the unicist ontological algorithms of natural, ambiguous and figurative languages and the unicist ontology of words. **2014:** Development of semantic objects. **2015:** Discovery of the ontological structure of subliminal communication. **2020:** Discovery of the unicist ontology of the evolution of languages.

In Mathematics - 1996: Development of the conceptual basis of interdependent, dependent and independent variables. **2014:** Development of the mathematical foundations of reality indicators.

In Philosophy - 1994: Development of the unicist ontology integrating philosophy, science and action in a unified field. **1997:** Refutation of Hegel's and Marx's dialectics and the formulation of the laws of the double dialectics.

In History - 2000: Development of a historical analysis methodology based on the unicist double dialectics.

In Cognitive Science - 2001: Development of a methodology to construct knowledge with existing information through an integrative logic. **2002:** Development of the unicist reflection methodology to deal with the nature of reality. **2006:** Discovery of the object driven organization of mental processes and the development of cognitive objects. **2008:** Development of the ontological algorithms of fundamental analysis. **2013:** Development of the unicist ontology of erudition and wisdom (observers vs. participants). **2014:** Discovery of the structure of the emulation of reality. **2015:** Discovery of the unicist ontology of conceptualization. **2018:** Discovery of the triadic functionality of conscious intelligence. **2018:** Development of the Unicist Artificial Intelligence. **2020:** Discovery of the Unicist Ontology of Functional Knowledge. **2021:** Development of the unicist theory of functionality.

In Education - 1979: Discovery of the ontogenetic algorithms of learning which has given scientific sustainability, amongst others, to Piaget. **2014:** Discovery and development of learning objects. **2015:** Development of Reflection Driven Education. **2016:** Discovery of the nature of learning by teaching.

In Psychology - 1984: Discovery of human ontointelligence to deal with adaptive systems. **2003:** Discovery of the unicist ontological structure of fallacies, the functionality of anti-intelligence and anti-intuition. **2004:** Discovery of the double dialectical thinking process. **2005:** Discovery of the unicist ontology and evolution laws of human essential complexes. **2011:** Discovery of the ontology of conscious behavior. **2012:** Discovery of the ontology of complementation of thinking processes. **2012:** Discovery of the unicist ontology of psychopathy. **2014:** Discovery of the structure of subliminal decision-making. **2014:** Synthesis of Conceptual Psychology. **2015:** Functionality of concepts as behavioral objects. **2016:** Discovery of the nature of human metamorphosis. **2016:** Discovery of the functionality of thinking processes. **2017:** Discovery of the context of personal dysfunctional utopias. **2017:** Discovery of the nature of self-criticism. **2021:** Discovery of the functionality of neurosis.

In Semiology - 2012: Discovery of the unicist ontology of semiosis as a complex adaptive system. **2015:** Development of semiotic role objects. **2017:** Development of the semiotic research groups.

Websites

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