Complexity Sciences

Future Research

The 10-Year Future Scenario of Adaptive Marketing

The reach of one's globalization is defined by the limit of the pronoun "WE"…

The Unicist Research Institute
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The 10-Year Future Scenario of Adaptive Marketing 2018 - 2028

The future scenario for Adaptive Marketing was developed by the Future Research Lab of The Unicist Research Institute, led by Peter Belohlavek, to provide information on the next step in marketing in the XXI Century. The following synthesis of the results of the research shows what is already happening in the market and how these actions will evolve due to the use of the technologies that are now available. Adaptive Marketing implies transforming the activity of marketing managers from a technical analytical role to an architectural role.

To access the basics on Unicist Future Research please enter: www.unicist.org/sdp.shtml

Introduction

Marketing should be adaptive by definition, but this is not always the case. The changes in communications, the era of participation, Internet and the IT technologies are driving marketing towards the next step, which is in fact a back to basics: Adaptive Marketing.

Adaptiveness is the capacity to develop actions based on the influential power one has and managing the influence that is exerted by the environment. In the business world adaptive marketing implies being able to manage the feedback to build a functional relationship that allows fostering and accelerating buying processes.

Adaptive marketing implies a high level of empathy in order to perceive the signs of what is happening in an environment and be able to develop the necessary empathic actions that allow fostering the buying process.

The drivers towards adaptive marketing are:

1. The customer relationship management systems
2. Supply driven or highly competitive markets
3. Global marketing
4. The market orientation of companies
5. Virtualization

This process requires being able to emulate in mind the structure of the different segments that are addressed in a commercial process. This requires the use of models that make this possible in a reasonable, understandable and provable way.

Unfortunately, the proof can only be confirmed when the market has been approached. That is why adaptive marketing requires a full credibility in what is being done.

Adaptive marketing integrates commercial driving objects to influence buying decisions, entropy inhibitors to avoid losing clients, catalysts to influence the commercial

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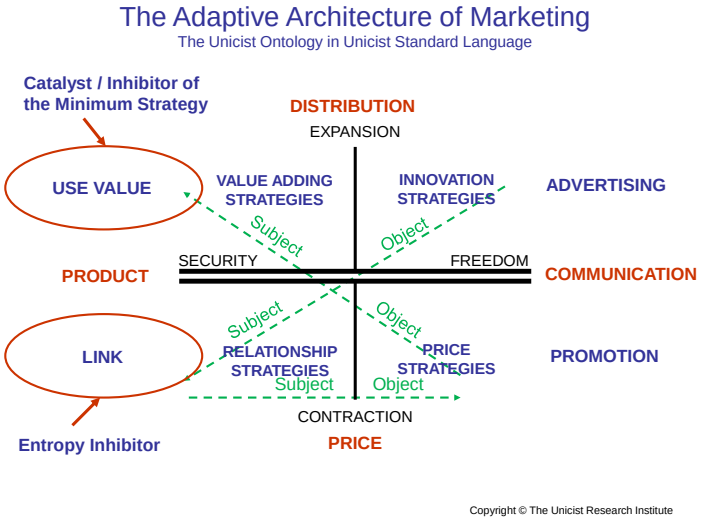
process and gravitational object to sustain the value propositions. Inhibiting objects are used to avoid dysfunctional commercial activities.

Commercial objects are homologous to the autopilot of an airplane. They are automated adaptive units to influence the marketing having a scope within which they are functional. When the scope is exceeded it is necessary that the managers assume the responsibility to influence the market with other means.



Merchandising, packaging and promotion can be considered as some of the predecessors of commercial objects. Adaptive marketing is just the materialization of traditional marketing mix in a structured adaptive commercial process.

The new technologies that make adaptive marketing possible are:

- Adaptive IT solutions
- Internet
- Consumer behavior segmentation
- Corporate behavior segmentation
- Commercial Objects
- Semantic and Semiotic objects
- Unicist Ontology of Ambiguous Language
- Adaptive automation

What will have happened during the next 10 years?

1. The effectiveness of marketing campaigns will have been notoriously increased
2. Global marketing will have become fully objects driven
3. CRM will have become adaptive
4. Diving objects will be regularly used
5. Catalysts will be used by the market segments leaders
6. The relative commercial cost will have been significantly reduced

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7. The role of marketing managers will be focused on marketing architecture
8. The expansion of markets beyond the boundaries of an existing business will have been simplified.

"Adaptiveness is the name of the new Era"

The Role of the Architect

Architects can only design and monitor the construction of something that is being built if they have the functional model in their minds. Architecture begins being a mind model and ends integrated in a deed.

The role of the architect includes necessarily the integration of both the science and the technology that architects need to manage.

Art is what makes the integration of science and technology possible. In this sense, architects need to integrate both science and technology considering that the scientific knowledge they manage is essentially objective and the technologies are driven by the values of those who developed them.

Architecture requires a high level of knowledge in order to integrate the objective value, the subjective value and the environment in a unified field. It has to be considered that the etymology of architects implies "director of works".

Architects need to build a functional model that represents the object that will be constructed.

This functional model requires having apprehended the ontological functionality of reality, having developed a strategy that includes both maximal strategies, to expand the functionality of the object that has been built based on the knowledge of its unified field, and minimum strategies, to ensure the functionality of the model.

Object Driven Marketing: A Solution for Adaptiveness

Commercial Objects

Unicist commercial objects are adaptive systems that have been developed to install ideas in the mind of the potential customers. These ideas need to follow the steps of object driven marketing.

The goal of commercial objects is to manage commercial processes of supply driven markets. This implies that they have been designed to sustain the marketing process of products and services that are being proposed and not just respond to the demand of a market.

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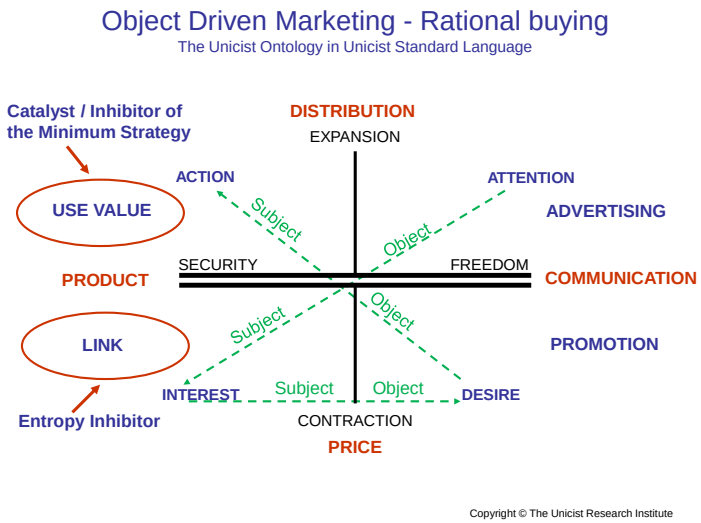
They deal with all the markets where there is a differentiation of the value proposition. Commercial objects work as an autopilot; under normal conditions they manage the process of helping customers in their buying processes.



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By definition they are extremely segmented, which means they consider each segment as a different universe in order to have the capacity to exert influence on them.

About the Unicist Commercial Objects

The purpose of a commercial object is to install “hope” in the mind of the potential customer. This hope is related to finding the solution for a latent need s/he has that is arising driven by the commercial proposition that is being made.

But commercial objects actually begin to work as such when they awaken the interest in the value proposition that satisfies the latent needs.

This implies that the commercial objects have been designed based on a true knowledge of the segment that is being approached, its needs and beliefs.

In supply driven markets the knowledge of what the segments believe is basic because people need to believe in order to see a previously inexistent solution.

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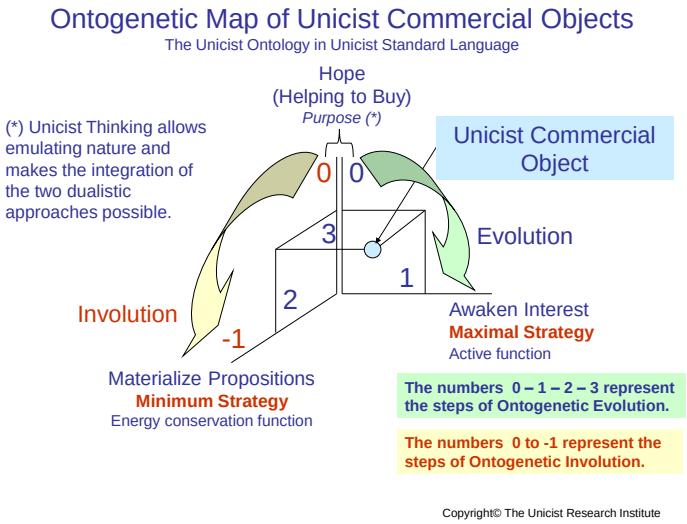

While demand driven markets are based on “seeing to believe”, supply driven markets are organized for people who accept that they need to “believe to see”.

The materialization of the value propositions has to happen within the accepted myths of a culture in order to be accepted.

The development of commercial objects needs to include an adequate use of semantic objects and semiotic signs to install the necessary ideas in the mind of the segments that allow them to perceive the solution that is being proposed.

The purpose to be achieved by the commercial objects is to “install hope” that a new solution will satisfy a latent need for the potential buyers.

For this purpose it is necessary that the segment discovers that the solution proposed allows them to overcome adverse conditions in some environment.

The Functionality of Unicist Commercial Objects

There are four types of commercial objects that establish the steps that need to be followed for their use in the object driven marketing process.

Step 1: Empathy building objects

Step 2: Brand power objects

Step 3: Value adding objects

Step 4: Value generation objects

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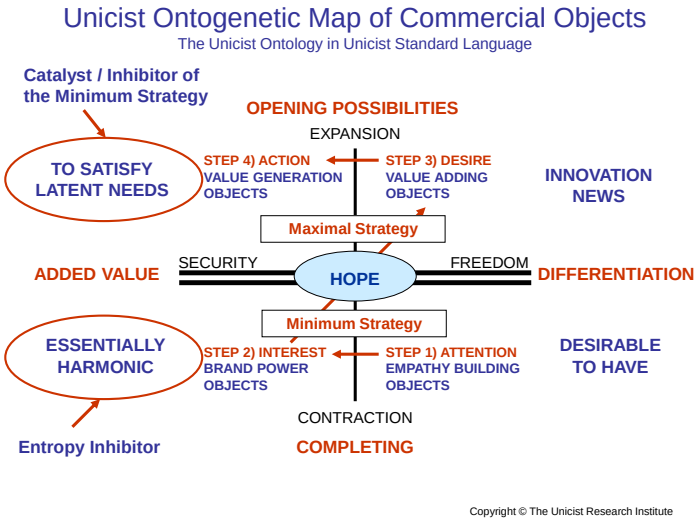

Step 1: Empathy Building Object

The first step is the use of objects that provide solutions to the latent needs of the potential customers.

These objects need to be aesthetic so people feel the need to have them.

The “what for” of the value proposition is the core of the empathy building object.

Their functionality has been achieved when the potential customers have transformed their latent needs into an analogy that arise their interest.

Step 2: Brand Power Objects

Once a potential interest has been achieved, it becomes necessary to confirm the reliability of the proposal. This requires confirming the added value that is included in the value proposal sustaining it with the corresponding attributes deposited on the brand.
The functionality of brand power objects has been achieved when the potential customers feel the desire to “own” the value proposition.

Step 3: Value Adding Objects

Value adding objects deliver the value that is included in a proposal that covers a latent need. As such, it is necessarily an innovation for the potential customer. Value adding objects have been designed to manage the authority conflicts produced by the innovations. They use conflict management semantic objects and are based on a mind opening figurative communication and on objective information.

Their functionality has been achieved when the potential customer has bought the idea of the value added by the innovation included in the value proposition.

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Step 4: Value Generation Objects

Value generation objects integrate complementation building semantic objects and value adding semiotic signs.

They need to be based on a homology driven figurative communication and include a message that opens and expands the possibilities of the individual.

Their functionality has been achieved when the potential customers discover that the complementation reinforces their own value and they remain in power of their activity.

Commercial Objects Building

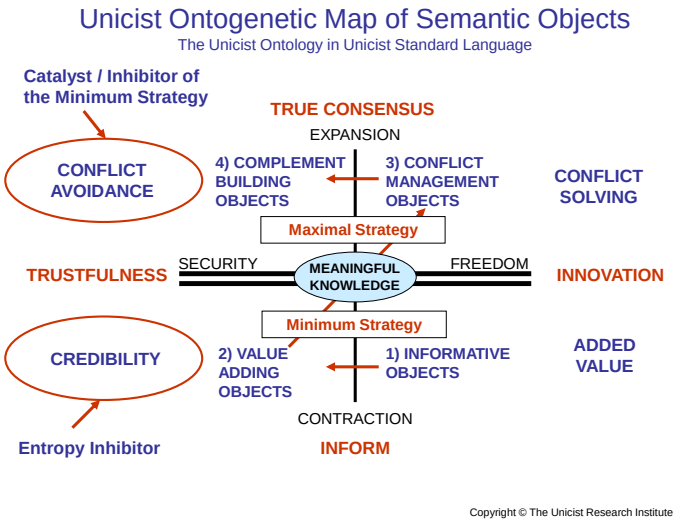
R&D Market Labs build and/or use commercial objects in order to drive, catalyze or inhibit the entropy of specific aspects of the business processes.

A commercial object is an encapsulated adaptive process that has been designed to generate value within a commercial process.

It has a feedback and quality assurance mechanism to make it fully reliable. It is used within commercial processes to save energy, minimize conflicts, maximize influence and as a basic auto-pilot to manage the feedback from the market.

Basically, the commercial object driven processes use:

1. Driving Objects
2. Semantic Objects
3. Semiotic Objects
4. Entropy Inhibiting Objects
5. Catalyzing Objects



1) Driving objects that deal with the operational aspects of buying processes.

They centrally define the functionality of a product or service. The products or services can be included or not in these objects.

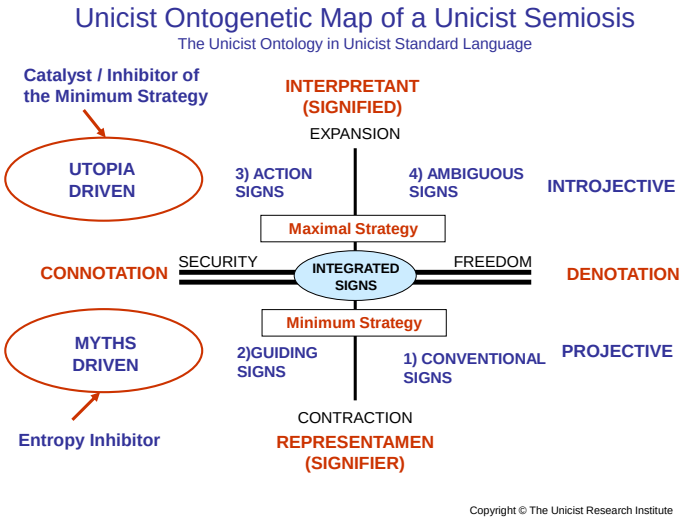
They are the objects that provide the "proof" of the functional value of what is being proposed. In the marketing process they are integrated with semantic objects and with semiotic objects in order to increase the influence on the potential client.

2) Semantic objects that deal with the communicative aspects of a buying process.

They are integrated by different objects that allow managing the communication following a plan A, when the complementation is natural, a plan B, when it is necessary to exert more influence on the mind of the buyer, and a plan C, when a high level of innovation is implicit in the buying decision.

The goal of these objects is to install the idea of the concept of the value proposition in the mind of the potential customer.

3) Semiotic objects that deal with the guidance of the potential customer during the buying process.



They guide customers towards a buying decision and also manage the denotation of what is being proposed with the connotation that is "between the lines" of the value proposition.

The guidance is based on the effectiveness of the communication provided by the semantic objects and begins with the identification of what the value proposition is about and ends with the building of product synergy guiding towards the concept that sustains it.

4) Entropy inhibiting objects that are behind the buying processes. They sustain the stability of the relationship with customers and clients.

Their main goal is to ensure the satisfaction of the value promises and the needs of the customers.

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They focus on the functional relationship with customers and clients monitoring this process in order to ensure its stability. They imply institutional actions to build a common functional space.

They use virtual tools like networks, forums and similar ways to integrate participants based on a functional greater good.

5) Catalyzing objects that accelerate buying processes. They are based on the influential power of elements that expand the possibilities of the potential buyers.

Catalysts cannot be part of the marketing process; they need to be beyond it, they are part of the context of the business.

They have to be preinstalled in the business context in order to be used without generating resistance in the environment.

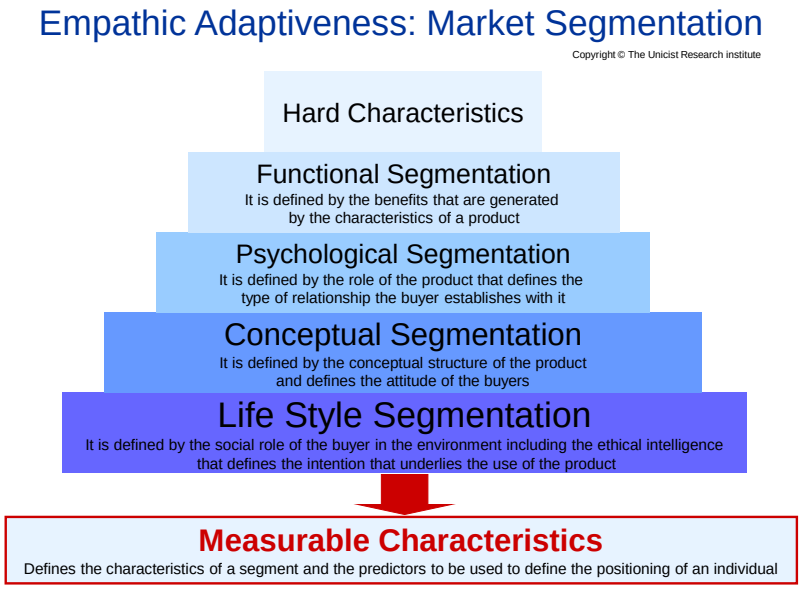
They are not credible when they are built for a certain commercial purpose. They are perceived as a manipulation.

They need to have a "perfect" timing with the needs of the client.

They need to have an extreme aesthetics and credibility in order to be able to influence the context of the business.

Adaptiveness Requires Segmentation

Developing adaptive marketing approaches demands developing segmentations that allow influencing the market considering the functional aspects, the relationship (psychological) aspects, the conceptual aspects that define the attitude of the segment and the lifestyle aspects that define their final intentions.



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B2C Segmentation

Functional segmentation

Functionality is defined as the capacity of something to fill an individual's need. Functionality is homologous to aesthetics. When talking about functionality we refer to the perceived functionality which defines what we call the hard segmentation.

Psychological segmentation

It is the segmentation that defines the type of relation an individual has with a product/service. An individual adapts to reality within limits. Psychology established the limits of an individual's context.

Conceptual segmentation

The conceptual market segmentation describes the nature of a product as perceived by the market. Conceptual market segmentation describes the concept that is implicit in a product or service. These three segmentations need to work within the context of the corresponding lifestyle segmentation.

B2B Segmentation

The monitoring process considers 3 levels of structural segmentations and the context:

Level 1)

- Competitive positioning
- Conceptual Product/Service segmentation
- Link building segmentation

Level 2)

- Customer's positioning segmentation
- Brand attributes segmentation
- Customer's culture segmentation

Level 3)

- Functional Segmentation
- Relationship Segmentation
- Conceptual Segmentation

The Context

The type of market is considered as a context for the business. This implies that it is an input to evaluate.

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Conclusion

Object driven marketing is the consequence of the maturity of commercial processes. It allows using adaptive automation to deal with different segments in global and local markets based on the adaptiveness included in the objects that are being used.

This approach is necessary for supply driven markets, innovations, market expansion and extreme competition. Object driven marketing implies the use of segmentation models that allow dealing with the functional needs, the attitudes and the intentions of the buyers.

Object driven marketing is an architectural approach to improve the utility, aesthetics and solidity of the commercial processes.

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Annex

About Complexity

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The Unicist Logical Approach to Complexity

(a unicist ontological approach)

The unicist logical approach to complex problems

The most primitive complex problem is given by two elements that have a biunivocal relation (loop). For example:

- The lack of credibility of an innovation inhibits its use and the absence of use impedes credibility.
- The absence of production causes inappropriate distribution and dysfunctional distribution causes a lack in productivity.

Until the appearance of the solution given by the unicist approach, there were four palliatives:

- Intuition
- More or less subjective arbitrary models
- Fallacies to avoid the perception of complexity
- Ceteris paribus

Complexity is self-evident in the field of social, institutional and individual evolution. It can be said that evolution is a complex problem itself.

Complexity is implicit in the core of the business world. Those who can apprehend it and influence the environment are successful. Those who cannot influence complexity, fail. The unicist approach is necessary for those who need to manage complex problems to transform them into simple solutions, easy to be implemented.

The Unicist approach transforms complex problems into simple solutions, and these simple solutions into "easy" actions.

We define a complex system as an open system, which determines the functionality of a unified field through the conjunction of objects and/or subsystems.

A complex system has the following characteristics:

1) It is an open system, meaning that the energy flows to and from the system itself.
2) The external limits of the unified field (its globality) behave as the ones of a fuzzy set.
3) Functionality is determined by the "conjunction" of elements that influence each other, generating "loops" of cause-effect relations.
4) The "disjunction" does not exist in a complex system.
5) The sum of the results of the subsystems is not equal to the result of the total complex system.
6) Relationships among subsystems are not linear; they respond to the double dialectics laws (purpose-antithesis / purpose-homeostasis).

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7) Complex systems generate their own energy transformation using their own energy and the energy from the environment.

8) Complex systems are composed of subsystems, which are also composed of other subsystems, until reaching a descriptive level that is functional to their purposes.

9) Complex systems cannot be observed. The observer is part of the system.

10) Complex adaptive systems can only be measured in their results.

"The Unicist Theory of Evolution", the "Unicist Logic" and the "Logic of Fallacies and the Anti-concepts", made the conceptual modeling and operation of complex adaptive systems possible.

Some examples of complex adaptive systems can be found in the social, economical, political and cultural aspects of reality as well as in management, marketing, strategy (of countries, institutions and individuals), learning processes, continuous improvement and interpersonal relations.

Transforming complex systems into simple systems is making them operational in a univocal way, with cause-effect relations that permit to influence the environment. This means transforming strategy, which, by definition, is a complex system, into operational tactics.

Transforming them into an easy task implies materializing these tactics through well defined actions, using a language that could be understood by all participants and the proper tools that could be used by all of them.

Nevertheless, even though we operate with simple solutions, in their essence, these problems remain complex.

The Unicist Logical Approach to Applied Complexity Sciences

The complexity of a specific aspect of reality is objective. This means that it is impossible to deal with it using cause-effect research without changing its functional nature. This indicates the existence of complexity.

The unicist approach to complexity sciences implies the discovery of the ontological structure of a reality and the objects that integrate it, defining the ontological algorithm and then the actions that can be done to influence such reality.

This approach starts with the finding of the nature of a specific element of reality and ends with the definition of the actions that can influence such reality.

The unicist ontology is a specific type of ontology that is structured emulating the ontogenetic intelligence of nature. It considers that the nature of living beings and their ac-

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tions is defined by a purpose, an active principle and an energy conservation principle which are integrated following the rules of the supplementation law (between the purpose and the active principle) and the complementation law (between the purpose and the energy conservation principle).

The ontology of a functional aspect of reality is unique, being therefore timeless and cross-cultural. Its application integrates unicist ontology, with unicist logic and the unicist ontology of evolution.

Things in real life might have different functionalities. Each of these functionalities has its ontology. For example, the same type of boat can be used as a fishing boat or a survival boat. A fishing boat has “one” ontology and the survival boat has another.

Human Complex Adaptive Systems

Human individual, institutional, businesses and social behavior are also paradigmatic complex adaptive systems. The application fields of the unicist approach to complexity science are the human complex adaptive systems.

Examples of Human Complex Adaptive Systems:

Cultural Behavior and Archetypes

Cultures have to be considered as a unified field, which implies that they have a structure of taboos, utopias and myths to face the external reality in a defined way that has to be considered as a limit for any human complex adaptive system.

Economic Models

As economic models have to be redundant with the social values included in a cultural archetype, the use of non-consistent economic rules will produce paradoxical effects because it cannot be recognized as valid.

Educational Models

One of the objectives of an educational model is to socialize people’s behavior making it consistent with a cultural archetype. The introduction of alien educational models produces necessarily paradoxical results.

Businesses

Businesses are, by definition, complex systems that need to deal with the market, going beyond the present boundaries of the activity. Therefore they need to be defined considered as part of the unified field of the market they work with.

Conscious Personal Development

Personal evolution depends on the capacity of individuals to adapt to the environment they decided to live in. Thus it depends on the individual’s capacity to apprehend the unified field of that environment and influence it.

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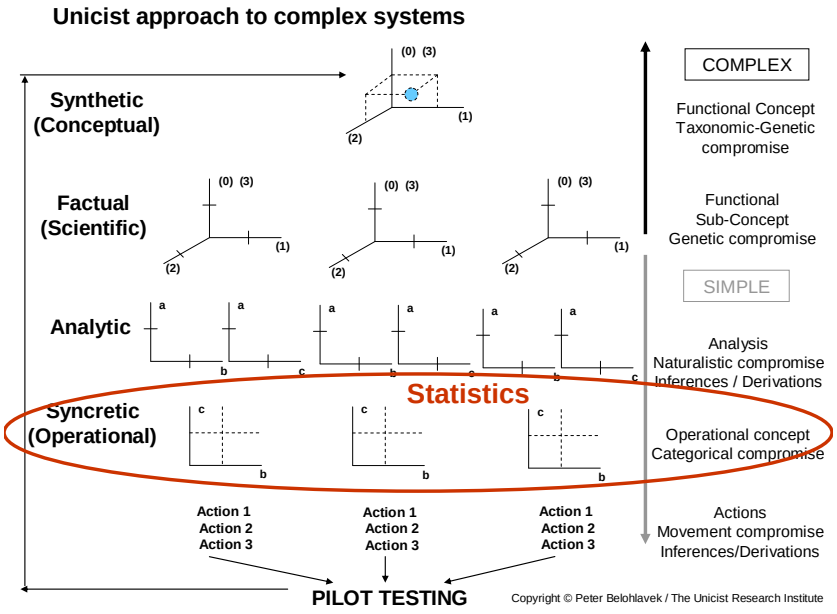
Necessary Compromises to Manage Complex Adaptive Systems



The generic approach:

1) Human adaptive systems are in permanent motion. To establish a fixed point based on their oneness the ontological structure needs to be discovered. This definition includes limiting the boundaries of the system.
2) A taxonomic-genetic compromise needs to be done to transform the oneness into the elements that integrate its ontogenetic structure.
3) A genetic compromise is needed to deal with the sub-ontologies or objects included in the ontogenetic structure.
4) A naturalist compromise is necessary to divide the objects of the ontogenetic structure into the double dialectical elements and make the consequent inferences on their behavior.
5) A categorical compromise needs to be done to define the ontological categories at an operational level.
6) A motion compromise has to be done to define the actions that allow influencing the adaptive system.

This approach implies transforming a human complex adaptive system into a manageable system making the necessary compromises to transform its oneness into operational actions to generate results.

The knowledge of an ontological structure of a unified field defines the existence of the possibility to exert influence on it. Mathematically, a possibility exists or not (1 or 0). The success of influential actions belongs to the field of probabilities because of the multiple compromises that have been done.

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The Use of Statistics in Complex Problem Solving

Statistics are only valid if the "variables" they manage describe the ontological structure of a reality. This means that the knowledge of the ontology of a complex problem must pre-exist before statistics can be used.

From an ontological point of view statistics are necessary to enter at an operational concept level to define the sizes of the segments that might be relevant.

Comparison of the Approaches to Complexity Sciences

Aspect	**Peter Belohlavek's approach to Complexity Sciences** (*)	**Preexisting approaches: Bateson, Förster, Lorenz, Maturana, Morin, Prigogine and others**
Field of Study	Complex adaptive systems	Complex adaptive systems
Approach	Pragmatic - Structural - Functionalist	Empirical
Definition of the field of study	A specific reality as a unified field that includes the restricted and wide contexts and the emergence of the system	Based on the emergence of the system
Possibility of external observation	Inexistent	Inexistent
Research method	Unicist Ontological Research	Systemic research
Boundaries of the system	Open	Open
Self-organization	Concepts – analogous to strange attractors	Strange Attractors / undefined
Structure	Double Dialectics Dynamics Purpose - active function - energy conservation function	Variables
Relationship between the elements	Following complementation and supplementation laws	Undefined
Evolution / Involution	Based on the evolution/involution laws of the ontogenetic intelligence of nature	Undefined
Processes	Object driven processes	Undefined
Certainty	Dealing with possibilities and probabilities	Dealing with probabilities
Demonstration	Real applications	Real applications
Emulation in mind	Double dialectical thinking (using ontointelligence)	Complex thought
Emergence	Results	Results
Chaos	Inexistent	Existent
Influence on the system	Based on actions and driving, inhibiting, entropy inhibiting, catalyzing and gravitational objects.	Based on actions
Validation	Destructive and non-destructive tests (real applications)	Systemic research validation methods

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