

Kenotomy, the Domain of Creative Thinking

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Creativity is designative for the mankind, distinguishing it among the other species. Everyone is born with the affinity to speculate the perceived reality—overlaying it by his own imagination, inventing a playful use for the encountered items and refreshing extant ideas by new approaches, creating new mental outcome. The perceived world is not enough for the human mind, which challenges the given reality, animated by the need for questing and creatively exploring beyond it. As a result, the history of humanity is a history of realized inventions and different visions. If the creativity is an organic part of the human nature, why are so few mature people creative?

Keywords: Kenotomy, extrinsic and subliminal creativity, cognitive/emotional dyads, *seminal thinking modes*, taxonomy of ideas, ideas' attributes

The Problems

Understanding of Creativity

Creativity is the driving force of culture and economy, making the civilization stand up to time, by enabling the mankind to adapt steady external changes. Therefore, it deserves a high priority and a strategy for fostering and enhancing the creative power along the education, but the reality is different, creativity is still perceived as a random fortuity within routine.

This perception is the result of an uncertain, superficial, and even confused understanding of creativity.

Creativity Emphasis

Several break-throughs in science and technology, like: Artificial Intelligence, DNA redesign by CRISPR, and ubiquity of information access by Cloud and 5G are outlining an upcoming living context of disruptive kind, challenging the established living routine and first of all the human mind, as the A.I. becomes able to cover all the routine domains and the Cloud delivers in real time and everywhere any needed information, the accustomed thinking patterns, and memorized knowledge, give in to creativity as the main asset of mankind and consequently demand without delaying a shifting of focus toward creativity, in the education, in the economy, and in the society.

Creativity Fading

The human is born free of inhibitions with an array of inborn mental attributes and personality traits specific to creativity (curiosity, speculation, playfulness, etc.) and the ability for inductive reasoning and divergent thinking.

The process of creativity fading starts early in the childhood and accelerates exponentially in the first decade of life, leaving the adolescent inhibited and with many mental templates, but with just a fraction of his

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inborn creative power. Just rare exceptions resist this phenomenon. The extensive and long-term survey of George Land and Beth Jarman on creativity decrease is identical with our observations and doesn't let any doubt about this matter: children loose in the first 15 years of life more than the half of their creative power. This fact raises several questions: What is triggering the decaying process of creativity? Which features of mind and personality are involved along this process? Is this decaying process reversible and how?

We have addressed these questions as research topics along the pedagogic practice, teaching the Master of Integral Innovation Program for educating inventors in State Academy Stuttgart, Germany (1992-2012) and further, integrating the results theoretically, in the International Institute for Integral Innovation.

As a result of experimentally stimulating and facilitating the ideation we have identified the mental attributes and personality traits related to creativity and the relationship among them, recognized the intimate structure of creativity and seminal processes, and built up a transparent understanding of creativity. This knowledge is now integrated in Kenotomy. Moreover, Kenotomy points out toward the inhibitors, which occur in the education processes at home and in the school, affecting severely the creative skills and disabling the mental and personality features relevant to creativity, and recommends the appropriate means and procedures for relieving them, in order to recover and enhance the creative ability.

Kenotomy is our original contribution to the domain of creativity, which reaches two goals:

- a comprehensive theory of creativity, answering the Problem 1: a transparent understanding of creativity;
- a methodology for training the creative ability, for compensating the Problem 2: creativity fading. As a theoretical body, Kenotomy:
- explains causes of creativity, the creative modes of thinking and inhibitions (1. Aetiology of Creativity)
- describes the elements and illustrates the framework of creativity (2. Morphology of Creativity)
- defines categories of Ideas and their Hierarchy and the Attributes of Ideas (3. Taxonomy of Ideas)

As a practice, Kenotomy is a training curriculum and a methodology for recovering and enhancing creative ability

Actiology of Creativity

Many attempts have been made, along the human civilization, for discovering the Graal of *deliberately igniting creativity*; most of those attempts have been awkward, hazardous interventions, resulting in reverie, trance, and hallucinations, but seldom in ideas.

Kenotomy has a different, original approach upon causes, structures, and operating ways of mind in the creative mode, which was confirmed recently by research in neuroscience (Frohlich, op.cit).

Consequently, Kenotomy distinguishes two different origins of seminal outcome, therefore two types of Ideation:

One origin is subliminal, inherent, due to the binary nature of human mind: consequent and disruptive, inductive and deductive, instinctive and rational. This dualism is a result of the evolutionary development of the brain structure, which originates interaction between the deductively operating neo-cortex and those ancestral neuronal networks, which generate emotional or instinctive impulses.

These impulses are seeding the regular neo-cortex activity of logic routine, converting it into distinct *seminal thinking modes*, hence arising unexpected mental outcome, imaginary projections, *disruptive ideas*, approaches and visions, which lay beyond the empiric apprehension and logic.

In this sequence, the creative state of mind, the seminal thinking modes are the effect of a

cognitive-emotional/instinctive synergy, which corresponds to the binary operating mode of the brain.

Dyads

As a consequence, Kenotomy represents the binary nature of human mind by the conceptual model of dual, instinctive/*emotional and* cognitive *Dyads*, which generate and power *seminal thinking modes*, besides profiling one's personality.

The role of Dyads for creativity control is crucial, as the random seminal seeding of unusual, creative neo-cortex activity can be replicated deliberately by stimulating the *Dyads' components* for installing *seminal thinking modes*. They are several *seminal thinking modes*, which stay behind the random, *Subliminal Creativity*, where the *disruptive ideas* origin.

Table 1 Seminal Thinking Modes I

Spirit of endeavour	Exploratory mindset for overcoming routine, limits, and thinking patterns			
Eccentric thinking	Opening unconventional thinking pathways, out of the beaten track			
Divergent thinking	Broad and indefinite random, fathoming, and heuristic approach			
Grit	Instinctual passion, enthusiasm, and firmness of purpose			
To the Seminal Thinking Modes I correspond following Dyads:				
Spirit of endeavour	Curiosity/risk propensity	Cognitive/instinctive		
Eccentric thinking	Originality/courage	Cognitive/emotional		
Divergent thinking	Distraction/fun	Cognitive/emotional		
Grit	Passion/guts	Instinctive/emotional		

The number of features from this list, which are characteristic for children's mentality, is salient. All these Dyads are present and highly active in the children minds, explaining their sparkling creativity and validating the allegation, that *subliminal creativity* is innate, inherent. This aspect explains as well the native creativity along the history, as the genuine imagination of vernacular folk-artists.

The creative thinking modes are dedicated, inducing ideas largely specific to various domains. For example: *Spirit of Endeavour* fosters entrepreneurial ideas, *Eccentric thinking* nurtures artistic ones, whereas *Divergent Thinking* rises pragmatic ideas, similar to *Speculative Thinking*, but disruptive ones. Different *seminal thinking modes* are mostly synchronous; therefore, these areas are not entirely distinct, but concurrent, blur, emerging in ideas heterogeneity.

Grit, the *instinctive/emotional* Dyad is an ancestral feature, inherited along the evolution and shared with many other mammals. It is located outside the neo-cortex and has a boosting function, for accelerating and amplifying vigorously the ideation process (Duckworth, 2017).

Another origin, is an *extrinsic, reactive* way, for setting the neo-cortex in creative mode, challenging it by speculative and integrative tasks, installing the respective *seminal thinking modes*.

Seminal Ininking Modes					
Speculative thinking	An ideation process triggered by associations, inversions, extrapolations, etc.				
Integrative thinking	Logic-supported synthesis of disparate perceptions, aspects, and approaches merging them into a new conceptual quality.				
To the Seminal Thinking Modes II correspond following Dyads:					
Speculative thinking	Speculation/playfulness	Cognitive/instinctive			

Cognitive/cognitive

Table 2 Seminal Thinking Modes II

Integrative thinking

These seminal thinking modes are the source of another kind of ideas, the consequent ones.

Knowledge/abstraction

Knowledge/Abstraction, the only cognitive/cognitive Dyad is acquired by experience and education.

The Dyads *Knowledge/Abstraction* and *Speculation/Playfulness* are rooted in logic ability of neo-cortex. The *Extrinsic Creativity* emerges out of the speculative approach upon acquired and abstracted knowledge, therefore its extrinsic character, related to experience and education.

The current education strategy is focused on the *knowledge transfer* and *logic convergence*. Any bit of knowledge, which is learned by heart and the prescribed thinking habits, obstructs severely the creativity. Generally, most of the knowledge is getting stored inertly in the mind, more as ballast, than as an incentive for ideation. As a result, the acquired knowledge, which should feed reflection and inspire original mental outcome, is not met by any creative approach. In order to contribute to creative thinking any bit of knowledge must be abstracted and internalized before, getting active as a sublimated matter. Internalized knowledge and abstracted direct experience are the exertive substance, which is nourishing the creative mind work.

The education process dominated by *knowledge transfer* and *convergent thinking* is the main inhibitor of *Creativity*. It is addressing the cognitive side of Dyads only, suppressing the *instinctive/emotional* components, which actually power and activate the *seminal thinking modes*, preventing hence their potential and obstructing the Grit. These are the reasons, why the children's inborn creativity power decreases dramatically along the education. The current education' approach ends up shifting the students' minds from the genuine *Knowledge Gap* into a *Creativity Gap*, providing them with a large amount of knowledge, but drying out their creativity power.

As a first conclusion:

They are two different pathways of ideation (inherent-subliminal and extrinsic-reactive), along which *the regular*, *logic activity of neo-cortex is diverted into creative mode, meaning that they are two* origins and consequently, that they are two kinds of creativity:

I. Extrinsic, Reactive Creativity, a conscious, speculative, cognitive process, located in neo-cortex only, wherefrom arise consequent ideas. This process has empiric subjects as a starting base. This conscious, speculative mind activity might get initiated by *directly challenging* the neo-cortex activity with several speculation methods, such as: combination, association, inversion etc. This is a current practice for stimulating improvements and upgrades of extant solutions by consequent ideas. Our experience shows, that *Extrinsic Creativity* might occur along the maieutic process too, when it reaches high levels of abstraction, beyond paradigmatic and pragmatic level, meaning at: rational, axiological, and archetypal ones. Any level of abstraction up toward the *Archetypal Perspective*, facilitates a deeper perception of the subject' meaning and

opens wide the array of potential for generating concepts and even approaches. *Extrinsic Creativity* can get ignited invasively too.

II. Subliminal Creativity, a random synergy, is ignited by the impact of emotional and instinctual impulses on neo-cortex activity, an entirely abstract process, without any empiric base, which gives rise to *disruptive ideas*, different approaches and inspiring visions beyond horizon. This *subliminal activity*, involving the disruptive emotional and instinctive interaction on neo-cortex, is a more complex matter and requires an essentially different, *indirect procedure* to follow in order to deliberately activate it. The networks of mirror neurons play a major role in igniting emotional impulses, as they are synchronously fired by perception of analogous inward impulses, a case of entanglement.

The core concept of *Dyads* and their particular *seminal thinking modes* suggest which specific emotional and instinctual impulses are effective in this respect, therefore allowing the conscious influence on those *seminal thinking modes, related to Subliminal Creativity*, facilitating a deliberate activation of disruptive creativity.

There is no dichotomy between *Explicit* and *Subliminal Creativity*, even if their natures are essentially different. The mirror neurons activity makes possible the activation of *Subliminal Creativity*, when the neo-cortex is excited into *Extrinsic Creativity* mode, too. Kenotomy employs this correspondence for igniting indirectly the *Subliminal Creativity* by "synergetic *team resonance*". Nevertheless, there is a substantial difference between *consequent ideas*, based on extant subjects, processed by cognitive speculation, along *Extrinsic Creativity* and the *disruptive ideas*, which are the result of abstract instinctual and emotional impulses on neo-cortex. The disruptive ideas are *primordial*, as the *Extrinsic Creativity* may use them as an essential commodity for producing the *consequent ideas*. The natural, inborn creative ability of human mind is inhibited in many ways. Inhibitions are *obstructive mental routines* of *seminal thinking modes* and as such a part of *Aetiology of Creativity*.

INHIBITIONS, Obstructive Mental Routines

We have seen, that human's ability of creative thinking is due to the dual nature of the human brain, meaning that it is imperishable, hard wired. However, the natural seminal modes of thinking may and actually get diminished by an antithetic body of inherent and extrinsic inhibitions. The inherent inhibitions obstruct the emotional and instinctive impulses on the neo-cortex, whereas the extrinsic inhibitions hamper the playful, speculative process in neo-cortex. They are either *inherent inhibitions*, installed instinctively and emotionally, or *extrinsic ones*, inflicted deliberately as regulatory prescriptions of any kind (behavioural: preventive, restrictive, directive, or even ideological: dogmas, precepts, canons, and tenets)

A substantial part of enhancing creative ability depends on removing each obstructive mental routine. Therefore, we need to understand the effect of inhibitions on *seminal thinking modes*, particularly the correlation between *seminal thinking modes* and their specific inhibitors. They are several *inherent inhibitions*: Empirical Myopia, Fear of Unknown, but many more *conditioned*, *acquired ones*, which *inflict thinking habits*, like: Fear of Making Mistakes, Compulsory Focus (close thought), Compliance to Conformity and Reluctance. Each of them dedicatedly obstructs the innate emotional valences of Dyads and specifically affects the correspondent *seminal thinking mode*:

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Empirical myopia	Knowledge/abstraction	Integrative thinking
Fear of unknown	Curiosity/risk propensity	Spirit of endeavour
Compliance to conformity	Speculate/playfulness	Speculative thinking
Compulsory focus (close thought)	Distraction/fun	Divergent thinking
Reluctance	Passion/guts	Grit
Fear of making mistakes	Originality/courage	Eccentric thinking

Table 3Corresponding Inhibitions to Seminal Thinking Modes

Empirical Myopia

Empirical Myopia is the dull, common horizon, restrained to factual perception, based on direct, sensorial experience, an accretion of outward aspects of reality. Notwithstanding the extent of this accumulation of appearances, this is not an inspiring background, but a collection of memories.

Experiences are stored as *synaesthesia' entities*, but they are heterogeneous and have no seminal effect; they build together a passive library. Reality per se is a roadblock to imagination. It requires, like the extrinsic knowledge too, to get internalized either emotionally or by abstraction, in order to develop into a fertile ground for creativity.

In this respect the abstraction process shall go through all the steps from empiric up to archetype, integrating the apparent heterogeneity into a coherent and comprehensive mental model of reality. The emotional load of experience can trigger the *subliminal creativity*. This means, that poignant, moving, touching, affecting, heartrending, uplifting, impassioned, dramatic experiences are powerful resources for emotional and instinctive triggers of subliminal creativity. The *extrinsic creativity* operates with the abstract substance of empirically perceived reality, whereas *subliminal creativity* needs the emotional content of the mnemonic synaesthesia' entities, which is beyond the reach of *Empirical Myopia*.

Empirical Myopia is inherent and grows rapidly in the childhood, by accumulation of experiences, into a distorted and tessellated image of reality, if the education strategy doesn't build up early the ability for abstraction. Educating a creative, harmonious mind means: a rich direct experience with confluent knowledge transfer, followed by internalization of the abstracted knowledge and of the emotional impact from direct experience, enabling the students to see beyond the knowledge and experience. *Empirical Myopia* rests a lifelong handicap for uneducated and asymmetrically educated people, hindering their convergent, integrative thinking mode. The corrective measure to *Empirical Myopia* is the *Archetypal Perspective* (see § Archetypal Perspective).

Fear of Unknown

Fear of Unknown is the other inherent, gregarious instinct. It is debilitating the *Curiosity and Risk Propensity* for exploring opportunities of any kind, including unusual ideas or approaches. Behind this fear lays a mental pattern, supposing an unpleasant or even dangerous outcome of any venture. People tend to weigh losses more than the potential gains. Therefore, the way out includes both: motivational and cognitive means.

Any *motivational procedure* must balance hedonic forces (fears vs. wishes), based on the understanding, that negative emotions related to potential losses out-weigh the emotions called up by hypothetical gains, considering igniting the enthusiasm and passion, for example. The cognitive way implies the easier calculation of benefits vs. the effort to evaluate the risks.

Compliance to Conformity and Comfort of Convenience

Along eons, the humanity, as a macro-entity, discovered many patterns of change and developed adequate procedure templates, for dealing with them, building a growing body of knowledge, treasured, and transmitted to the next generations, as a heritage, supposed to help them in their lifetime. However, patterns, templates, and algorithms are prescriptive pathways, which are inducing the anthropocentric illusion of a solid control upon the future and even of the universe.

Learned by heart and even understood in their essence, these inherited pathways and ready-made solutions, act noxiously, inhibiting one's creativity and fresh outlook, reassuring him by the *comfort of following* established, well-known roads, an opposite syndrome to the hypo-cognition one, described by Robert Levy.

The school-conditioned *reflex of looking up in a book*, or reproducing patterns, learned by heart, instead of figuring out by yourself a way out is blunting furthermore one's creative ability. Learning by heart is offering an easy alternative, of *reproducing* an extant solution, which is the result of the mental effort made by somebody else before, a humiliating, demotivating posture. This mental comfort of reproducing, instead of creating, is growing into the *Discomfort of Change*, the conservative *rejecting reflex* of any fresh, unusual input. As a result, creativity is often perceived and combatted in the society as a nuisance, as a disturbance of the established routine, as it is challenging already implemented and accepted solutions, concepts, even generally accepted approaches. This paralyzing inhibition trades the creativity for the blunt comfort of generally accepted conventions and believes. Dare, venture, ludic instinct, passion, and eccentricity are severely inhibited.

Compliance to conformity is in fact an addiction to routine, which is obstructing the inherent, speculative ludic instinct. Therefore, the way for clearing this inhibitory load is waking this instinct up by a teasing, playful approach, and speculative procedures like combination, association, analogy, and extrapolation.

Compulsory Focus

For one's creative power, *Compulsory Focus* is perhaps the most devastating of the inflicted inhibitions, as it dries out the roots of *Divergent Thinking*: *Distraction and Fun*. It is acquired along the educational process, starting with the children rearing, continuing with the school and professional training. It was well intended as an optimal state of mind for absorbing knowledge in the classical educational process, for lecturing a passive class. It became a pipeline for knowledge transfer, screening off any original thinking of the students and professors as well. Compulsory focus tends to become a reflex and is still a prized virtue, by many scholars, as it is increasing the efficiency of learning and helps any sustained, consequent routine work.

The Global Cloud data storage and the Artificial Intelligence are already shifting the paradigm of our civilization, taking over routine tasks, where focus and memory size are still advantageous, but soon will be usual features of infrastructure. Therefore, any contemporary learning strategy must consider the students' creativity as a priority, fostering and augmenting it, preparing the students for unusual, imaginative occupations, where *Divergent Thinking* is the essential, *seminal thinking mode*.

Encouraging Divergent Thinking instead of *Compulsory Focus* is a major task for the contemporary education, inducing a different learning attitude, shifting the centre of gravity of our civilization toward an essentially different, creativity-based culture. A new education methodology is required in this respect, where *Compulsory Focus* would be a prejudice, and *the Distraction* the enticing feature for exploring and gathering unexpected insights, approaches, and fresh inspiration, hence an explorative, creative education.

Open-end projects, a mental roaming attitude, spontaneity and the awareness for serendipity are remedies for relieving the *Compulsory Focus*. As it tends to become a reflex, related to maturity and is still a major part of the school training, the process for relieving this inhibition might meet a buoyant resistance.

Reluctance

Reluctance has many aspects: hesitancy, doubt, unwillingness, which paralyze the boosting function of *Grit*, laming and discouraging the ideation process. Not unlike *Compulsory Focus*, the *Reluctance* is generally considered a mature attitude, signalizing distance to "juvenile" ones like *Distraction*, *Passion and Fun*, reluctance enjoying a higher respect as an echo of scepticism but is just an inhibition that is used often as an alibit for procrastination.

Behind stiff *mature attitudes* are hidden usually major inhibitions of *seminal thinking modes* and always a spoiled creative potential. Mature people are generally resistant to any effort to relieve those inhibitions, which they perceive as *mature attitudes*, as parts of their identity. This defensive reaction limits often the age, where the relieving of *Reluctance* might have any success. *Reluctance* alone, doesn't mean old, but is a sign. *Reluctance* implies a distant attitude toward the addressed subject; therefore, it thwarts inherently any attempt of identification with it, missing thus the thrilling momentum of passion, the emotional trigger effect. Coolness might be socially desirable but is a deterrent of creative power.

Fear of Making Mistakes

Mistakes don't exist per se, their artificial concept is induced by parenting in the childhood and is related to a belief system or another, but echoes in the self confidence, which gets hurt sustainably by the negative reaction of parents and teachers, surprised by unexpected ideas or deeds of their pupils. Motto: How did you dare, to have a different idea? This must be a mistake! "Good and right, bad and wrong" are relative, axiological terms, which might get accredited in one belief system or even in a culture, without winning on these grounds any absolute validity, but they are often misused arbitrarily.

This educational attitude of ex cathedra perfectionism, blunts the originality and discourages the original thinking, inflicting a manipulative inhibition, largely abused as an instrument of individual and social control and censorship, until it becomes a self-censorship attitude: The *Fear of Making Mistakes*, inhibiting *Originality and even Courage*. Notwithstanding, trail and error, the natural way to explore, to learn, and to succeed, or win experience, includes the error as a mandatory step of the cognitive process. In order to evaluate you must have the opportunity to compare by yourself, therefore any "mistake" is a chance and a matter of building up the self-confidence. Acquiring this understanding is the best mean for relieving the *Fear of Making Mistakes*. This depressive inhibition involves self-doubt and might develop into a paralyzing phobia, if it is ignored.

In the early steps of education, the children must be encouraged to explore different ways to solve a problem, even those that might seem absurd or hopeless, making their own value judgments, for avoiding the void term "mistake" and the polar-associated illusion of "perfection". Speculative procedures like improvisation and inversion are helpful in this respect. Understanding how an inhibition impairs a specific *seminal thinking mode*, makes transparent, how to alleviate the consequent obstructions of creativity. Therefore, any training activity, for enhancing the creativity power, must start with identifying inhibitions and distinctively addressing and relieving them.

Morphology of Creativity

We have seen the interaction of basic: cognitive, emotional, and instinctive elements in *Dyads* and the correlation among *Dyads* and the *Seminal Thinking Modes*, as well as their specific inhibitors.

Empirical myopia	Knowledge/abstraction	Integrative thinking		
Fear of unknown	Curiosity/risk propensity	Spirit of endeavour		
Compliance to conformity	Speculate/playfulness	Speculative thinking		
Compulsory focus (close thought)	Distraction/fun	Divergent thinking		
Reluctance	Passion/guts	Grit		
Fear of making mistakes	Originality/courage	Eccentric thinking		

 Table 4

 Dvads
 Seminal Thinking Modes and Inhibitions

This interrelationship makes evident a coherent morphology, which together with the binary nature (cognitive-emotional/instinctive) of the basic elements suggests a spatial structure as a graphic model of creativity. In the top view the basic elements (innate and acquired attributes) might be expressed as a radial icon (Figure 1).





The concentric rings indicate the levels (low, middle, high) of proficiency in each of criteria. The basic elements marked by a ring are inborn attributes.

The basic elements might act as criteria for evaluating one's creativity profile, indicating the need for corrective action as well as the progress along the training. NASA uses a similar creativity test. This 2D model can't include the corresponding *Seminal Thinking Modes*, which need a separate 2D representation of their correlation with the Dyads (Figure 2).



The exceptional posture of the Dyad: Knowledge/Ability to Abstract illustrates her extrinsic nature, an acquired one and her affiliation to Reactive Creativity, together with the corresponding Integrative Thinking.

This model displays the binary nature (cognitive-emotional/instinctive) of the basic attributes too but lacks their radial distribution of the previous representation and systemic coherence. We can understand the radial design as a top view of a spatial model, which unfolds as a triangular helix, integrating the entire complexity of Creativity's Morphology (Figure 3).



Figure 3. 3D model of creativity structure creatiuv.

Taxonomy of Ideas

The original mental outcome is, by definition, not homogenous, but a mix of various ideas with different seminal potential and relevance and even more important, of different nature. The different nature of ideas requires identification of categories of ideas, a hierarchy of them, and a systemic model. Therefore, they require and deserve a taxonomic approach, including some redefinitions of terms.

Creativity Space

The categories of ideas are evidently sub-sequential. This fact confers them their hierarchy status, with the highest content relevance of Approaches, followed by Concepts, Solutions, and Designs (Figure 4).



Figure 4. Creativity space.

This Cartesian model, the Creativity Space, displays both: the dependent relationship between the categories of ideas and the increasing diversity down the hierarchy of ideas, which is expressing the convergence of apparent diversity in the generic archetypes. This sequence from the highest abstraction of Approaches down to materiality of Designs is the parallel counterpart to the maieutic abstraction, revealing the correspondence between the abstraction levels and the categories of ideas, where they are expected to arise empiric-designs, paradigmatic-solutions, rational-concepts, and axiological-concepts.

Creativity Space is more than just a coordinate system for systemizing and evaluating ideas along a creative process and in business. Screening the extant outcome along the coordinates, white spots become evident, like in the Mendeleev table, intriguing, inspiring, and challenging further creative effort, and focusing it on white spots, which invite to be explored. This screening mode of Creativity Space reveals the already busy conceptual areas and indicates the idle ones too.

Archetypal Perspective

They are several utmost desires, shared since eons by entire mankind, everlasting, abstract terms, which became mythical, distinctive features, lend to divinities. They express strong motivational aspirations, with instinctual flavour, like Defeating Time, Defeating Distance, Defeating Dependence, Universal Control, Pansophy (utmost acumen), and Universal Creativity.

These terms, translated in attributes: Demiurgic, Uniqueness, Autarchy, Omniscience, Omnipotence, Ubiquity, and Eternity, are intrinsic to Archetypal Horizon, the ultimate level of Perspective upon any topic. They address, correspondingly, all the essentials of Intellect: Genesis, Diversity, Freedom, Mind, Energy, Time,

and Space, which are points of convergence of any apparent diversity, hence of any imaginable topic too.

The identification of the corresponding Archetype, the apex reference per se, and the keystone of Creativity, should be considered as a prerequisite of any creative work, whatever the topic might be. This perception inspired the integration of both *kenotomial sequences*: the upward, maieutic abstraction, escalading to archetypes, with the downward sequence of the idea's categories (from Archetype, to Approach, to Concept, then to Solutions and Designs).

The result is a comprehensive synopsis of ideonomy, the Kenotomial Arcade.

Kenotomial Arcade

Kenotomial Arcade displays on one side the extraction of content and sublimation of meaning, from material subjects and merges this abstraction process on the other side with the process of archetype's metamorphose into lower, more material stages and their corresponding diversification, toward concrete designs. Junction point and keystone there is the specific archetype (Archetypal Perspective).

Kenotomial arcade makes evident the need of high abstraction for creating really new, disruptive content and the seminal power of high abstract perspective, far beyond empiric, and even pragmatic Stages. As such Kenotomial Arcade is a referential road map for navigating in the creativity domain and dealing with ideas.

This scheme illustrates the limits of the Reactive Creativity as well, on the conceptual threshold as the cognitive drive of it can't reach beyond the rational level (Figure 5).



Figure 5. TKenotomial arcade.

The image exemplifies the Kenotomial Arcade for the empiric topic "pen", showing the essential difference of results, induced by the implied abstraction levels. There is a close relationship between the levels

of abstraction and the potential of creative outcome. Higher the level of outgoing abstraction, more inspiring would be the creative outcome (see Seminality) and more original and unexpected would be the resulted ideas (see Disruptivity). Therefore, the creativity based on empiric perception is orbiting around perceived items.

The outcome would be subsequent, close to the extant designs and known solutions. The Pragmatic level of abstraction has the potential to inspire new Solutions, whereas the Rational one is the base for new Concepts. The axiomatic Insight level is inspiring new attitudes, shifting the point of view and generating new Approaches. Kenotomial arcade reveals several more aspects of the creative process. The maieutic inquiring must precede any creative activity:

• The empiric, concrete problem shouldn't be used as an outgoing base for the creative process, as the potential outcome would be just another design of the same paradigm.

• The empiric, paradigmatic, and pragmatic levels of abstraction address paradigms and functions only, which are just implementing steps of creativity outcome and as such can't inspire the creation of Content.

• As off the rational level of abstraction the outcome's seminal power is supporting disruptive concepts, providing substance for leadership, and inspiring new paradigms. The rational level of abstraction is the real threshold of conceptual creativity.

The potential yield of ideas and of the follow up diversity is related to the level of speculative thinking: The same speculative procedures might produce many dead-end designs, or highly inspiring concepts, depending on the generative level of abstraction.

Attributes of Ideas

Ideas have different levels of relevance, expressed by their attributes: Seminality and Disruptivity.

Seminality. *Seminality* defines the inspiring power of an idea, her potential for generating subsequent original outcome, hence an idea's impact on creativity. The triggering effect of disruptive ideas on reactive creativity is a generic example. As the hierarchy of ideas shows, approaches are peculiarly seminal, but even on paradigms level might arise highly seminal ideas; "the wheel" is such a salient example.

Seminality is time and culture related, meaning that, an idea's seminality depends on the cultural context and also, that ideas' seminality is of ephemeral nature, as the target problems are steadily changing, reducing the seminality, and even making an idea unsavory. Excepting archetypes, the Ideas are neither timeless, nor eternal, they are getting old and once depleted, they can become a bigger problem, than that one, they have been created to solve before. The light bulb and the combustion engine are here outstanding examples, as those ideas inspire now again many new alternative concepts, but for replacing them.

An idea's Seminality might be assessed by the extent of her progeny, even by number of her epigones.

Disruptivity. *Disruptivity* describes the originality of an idea—her dissimilarity to any extant knowledge. Disruptive ideas arise from subliminal creativity with unexpected, surprising, eccentric effect, making obsolete all the incremental effort for improving any concurrent, well-established ideas.

Just archetypal perspective, the rational and axiomatic level of abstraction support emerging of disruptive Ideas, outcome which is not related to anything already existing, neither items, nor solutions, nor concepts. This fact reveals the importance of the abstraction for preparing the ideation and the relevance of the level of abstraction for the outcome of Creativity. Disruptive ideas are controlled, by their radical input and merciless nature, the seminality of older ideas, replacing them and getting consequently disseminated in a follow-up seminality process.

Disruptivity is not a gradual attribute, but a temporary status, with revolutionary effect. As any revolution, a disruptive idea mutates in a new routine. An idea either is disruptive, or is customary. Disruptive ideas implemented in the economy, mean overcoming the mediocrity of routine competition, taking off for leadership, and even pioneering new fields of business.

Fresh Concepts open new business domains, whereas new approaches might pioneer new industries and might have a deep impact on civilization. Creativity on *Approaches level* means shifting axiological systems, creating new sets of values, seeding new cultural content, with sizeable impact on civilization.

Disruptive ideas are the *groundbreaking concepts* and first of all new, *visionary Approaches*. The Improvisations, the ad-hoc, spontaneous brain-sparks deserve a special mention among them. They are the subliminal creative answer to a specific situational pressure, but unrelated to any educational experience. Improvisations are the proof, that creativity is a *natural mental reflex, an innate ability*. The Improvisation is the genuine source of human civilization and survived both in the crafts as in the spontaneous reaction to any emergency.

Conclusions

Creativity is an innate ability, specific to mankind, based on the binary nature of the human mind: rational vs. emotional-instinctive and is ignited by their interaction, which induces seminal thinking modes. This interaction might get restrained, or even obstructed by inherent and acquired inhibitions. The creative power might get redeemed by relieving Inhibitions along a kenotomial training. Contemporary education should consider shifting the emphasis on fostering and enhancing creativity, and avoiding practices and customs, which inhibit the creative thinking modes.

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