

CONCEPTUALIZING AN IDEAL LANGUAGE FOR THE EXPRESSION OF CREATIVE THOUGHT

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In an article on psychonetics dating from August of 2009, Dr. Oleg Bakhtiyarov writes that languages used in modern scientific investigations and technologic works, both natural languages and formalized languages, produce texts that reflect only discrete aspects of the surrounding world and that the main characteristic of such languages is that their linear-discrete structure that does not allow them to reflect other aspects of the surrounding world. He writes that “overcoming of text-, language- and thinking filter limitations is the first and the most important task of psychonetics.”

I will assume that pure creative thought is the motive for wanting to remove Dr. Bakhtiyarov’s “thinking filter limitation,” and that the accurate and thorough communication and expression of that creative thought to others is the motive for removing his text and language filters. This paper addresses this second motive. Since human-to-human communication is primarily linguistic, the removal of the language filter cannot mean finding an efficient substitute for language itself. So it must mean finding or establishing a language which can efficiently and effectively communicate more than the linear-discrete structures of the external world and can capture and model thought at the purely cognitive level.

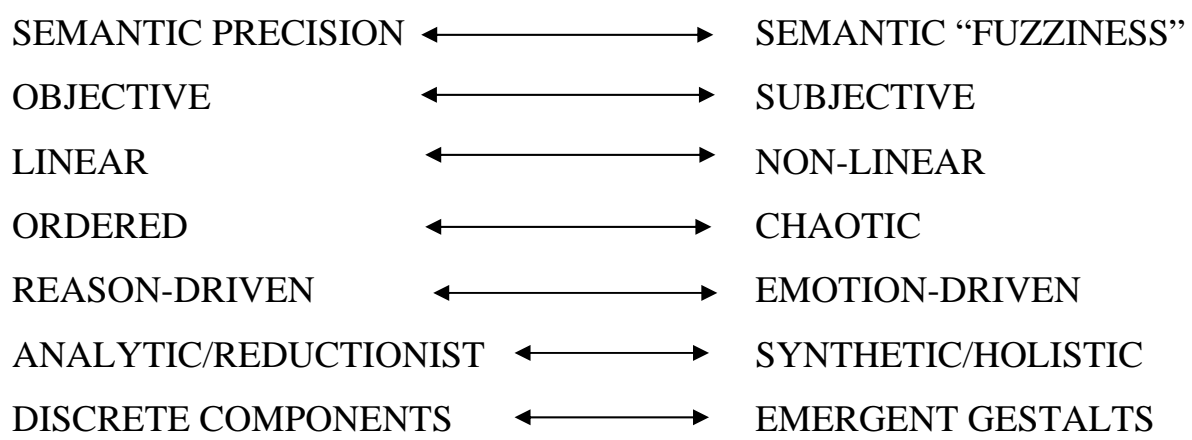
The American psychologist J.P. Guilford spoke of creativity in terms of divergent thinking as opposed to convergent thinking. Certainly imagination and counterfactual thinking are likewise core ingredients of creative thinking. But creativity is more than the ability to generate original, innovative ideas – the word implies that these ideas be manifested from thought into reality. Therefore, an ideal language for the expression of creative thought must be able to accomplish several goals:

The seminal work of American psychologist Dr. Eleanor Rosch which has in turn heavily influenced the writings of the American school of cognitive

linguistics, shows that human conceptualization of categories does not proceed according to classical set theory, but is instead governed by fuzzy logic, prototypes, and hierarchical subjective taxonomies. So our ideal language must be capable of capturing and modeling fuzzy sets and subjective taxonomies.

Furthermore, intelligent human beings, particularly those members of what Richard Florida has termed “the creative class” recognize intuitively that the external world operates in a systems-based manner, where seemingly discrete processes and entities are almost always either parts of a lower-order system, or are the emergent phenomena which derive from those lower-order systems, and that synthesis is key to understanding how things influence one another within a whole, as opposed to traditional reductionist, analytical thinking.

Consequently, an ideal language for creative thought must be capable of unambiguous semantic precision for the purposes of exactitude and objective description of reality while at same time being able to model and express subjective, non-linear, semantically “fuzzy” ideas, and the realm of imagination and emotion, in turn integrating these complementary aspects of cognition into emergent gestalt-like concepts which convey both a description of their objective physical components as well as a description of their subjective psychological components, diagrammed as follows:



At this point we can illustrate in a dramatic way the ability or inability of human language to express creative thought, by asking a simple question: How does one use a natural language such as English or Russian to verbally describe the image of motion seen in Marcel Duchamp's masterpiece *Nude Descending a Staircase*? (Fig.



Fig. 1

1). One English-language description excerpted from the Internet attempts to describe Duchamp's painting as follows:

“*Nude Descending a Staircase* shows a human figure in motion, in a style inspired by Cubist ideas about the deconstruction of forms. There is nothing in it resembling an anatomical nude, only abstract lines and planes. The lines suggest her successive static positions and create a rhythmic sense of motion; shaded planes give depth and volume to her form. Motion and nude alike occur only in the mind of the viewer.”

While this description may, in fact, explain the analytical process of how the artist created an emergent image using simple elements, such a description does not reflect a viewer's interpretation of what he or she is seeing, nor does it reflect the artist's intention of what the viewer should see in the painting.

How might a language designed for the expression of creative thought be used to describe this painting? From 1978 to 2003, I worked on the construction of a hypothetical language whose purpose ultimately was to better capture human thought at the cognitive (i.e., pre-linguistic level) and overtly express that thought linguistically. The result is a language called Ithkuil (*Iṭkuîl*), a word meaning more or less “hypothetical representation of language,” (see www.ithkuil.net) popularized by two articles in the Russian-language science magazine *Komputerra*. The following diagram and table illustrate how the Duchamp painting can be described in Ithkuil:

Qø'wem ŧelg ũpnu'wešča omëi halí éixnefandôln\.

- STEMS: *qöm* 'woman' < root: **Q-M** 'PERSON'
leg 'article of clothing as coverage' < root: **L-G** 'CLOTHING'
puč 'stair' < root: **P-Č** '(LARGE) IMPLEMENT FOR COUNTERING GRAVITY'
xef 'ambulatory bodily movement' < root: **X-F** 'AMBULATION'

qø'wem <i>qöm</i> - RPV - IND	"imaginary representation of a woman as self-initiator of action"
ŧelg AGG - <i>leg</i> - ABE	"without a set of clothing as bodily coverage", i.e., "nude"
ũpnu'wešča ASO - PRX - <i>puč</i> - COH - PLT	"along a portion of a staircase"
omëi PRG - ITR - SQN	[PROGRESSIVE] "being in the midst of, ...-ing" [ITERATIVE] "in a repetitive series of single manifestations", i.e., ●●●●●●●● [SEQUENTIAL] 'one after another'
halí h DERIVATION - ISR éixnefandôln\ PSN - COA - PRX - COH - <i>xef</i> - SPR/8 - SEP/5 - A - AMG	"descends by means of a tightly-integrated set of bodily ambulatory movements leaving a 3-dimensional wake/trail of their passage, all of which together form a timeless, emergent whole to be considered intellectually, emotionally, and aesthetically"

- RPV REPRESENTATIVE: indicates an imaginary representation of a noun or verb
- IND INDUCIVE: a case indicating the noun is the undergoer of a self-initiated action
- AGG AGGREGATIVE: indicates a set of related but non-identical items which function together
- ABE ABESSIVE: a case indicating the absence of the noun, i.e., 'without X' or 'X-less'
- ASO ASSOCIATIVE: indicates a set that serves a specific purposeful function
- PRX PROXIMAL: indicates the continuity of a set irrespective of its beginning, end or edges
- COH COHERENT: indicates a set of segmented items which together form a new gestalt entity
- PLT PROLATIVE: case indicating a noun as an orientational course or pathway, i.e., "along X"
- PRG PROGRESSIVE: verbal aspect indicating being in the midst of an act/event/situation, "...-ing"
- ITR ITERATIVE: verbal aspect indicating a repetitive series of point-like occurrences
- SQN SEQUENTIAL: verbal aspect emphasizing acts/events in a sequence, "one after another"
- h DERIVATION operates in conjunction with PSN below to convey a covert verb "descend"
- ISR INSTRUMENTATIVE: indicates a following verb conveys means/method of the covert verb
- PSN POSITIONAL: operates with h DERIVATION above to convey a covert verb "descend"

- COA** COALESCENT: indicates the word represents an emergent gestalt-like concept representing higher-order simplicity from lower-order complexity
- SPR/8** SPREAD/8TH DEGREE: indicates a 3-dimensional wake or trail of an entity's passage
- SEP/5** SEPARABILITY/5TH DEGREE: indicates a tightly integrated set of components
- A** ABSTRACT: indicates a timeless (i.e., tenseless) abstraction
- AMG** AMALGAMATIVE: indicates an act/event situation is to be considered not merely as a description of the external world but is to be considered subjectively/psychologically in terms of its social, emotional, and synergistic implications

LITERAL TRANSLATION: “An imaginary representation of a nude woman in the midst of descending a staircase in a step-by-step series of tightly-integrated ambulatory bodily movements which combine into a three-dimensional wake behind her, forming a timeless, emergent whole to be considered intellectually, emotionally and aesthetically.”

Ithkuil is a language which more closely reflects the cognitive methodology of the mind, including fuzzy logic, emergent concepts based on gestalt conceptualization, the principles of systems theory, and delineations of semantic role, and cognitive intent, without the pre-conceived, pre-established biases imposed by natural language grammars and metaphor systems, while at the same time expressing at an explicit level various cognitive nuances and shades of meaning which usually remain unexpressed in natural languages. As such, it functions theoretically as an alternative to natural languages as a means for the linguistic expression of creative thought.

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