

Reality, Language and Creativity

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This paper was presented in the Workshop on Language and Culture held on Feb 28 - March 03, 2013 at IIT Hyderabad. The group consisted of Software engineers working in language as well as Language experts in English and Indian Languages, few experts were in local Culture. I was specially invited by Dr.Mukul Sinha, one of the organisers

abstract: How do we perceive Reality? Each person builds a perception of the world around based on the sense perceptions he or she experiences. When a child encounters 'mother', multiple sensory experiences are involved. Rich, unique, multi-sensory (Auditory, Visual, Tactile, Kinesthetic and Olfactory) images are formed by that individual. Slowly these individual impressions get abstracted into a word 'Ma', 'Mummy' or 'Amma', which the child learns. We can say word has a 'Deep Connection'(DC) which is encoded for that individual. But this richness of the word gets reduced, as it acquires a common meaning to enable the person to function in that Culture. We can even say that one is 'at the mercy of a particular language which has become the medium of expression of that Society' as Edward Sapir, a well known Anthropologist puts it. At the same time the word gathers a 'Surface Connection' (SC) unique to that Culture. For example, 'Mathru devo bhava' , 'See Mother as a Goddess!' becomes unique to Hindu culture. Thus Language in a Culture becomes the means and 'organizing order' in the perception of the Reality. 'Arupa' a Sanskrit word aptly describes the nature of this 'un-manifested Reality. Rupa (shape or form) and Nama(name) manifest from Arupa. The Reality is thus modeled by the Cultural Envelop (CE) caste by the Society around.

CE in effect carries the myths, beliefs and values of that Culture with its Language as medium. A concept of 'self', acting as Self Envelop (SE) conditioned by social programming is also formed by each individual within the CE. A person's encounters with a new CE leads to

creative tensions of positive and negative kind depending on how he or she is able to reformat his/her SE. Reflection can play a major role in such reformatting. New CEs are also formed by new disciplines. Thomas Kuhn explains 'Paradigm' as a binding order of Science, in his work on 'Structure of Scientific Revolution'. Paradigm of science in this sense can also be seen as a CE. Today we can see each profession creating its own CE with a specific language. New Concepts symbolized by words, learnt in a new CE, also acquire binding 'Surface Connections(SCs). We can build a 'Matrix' of ' Reality', CEs through which we perceive this Reality, Deep and Surface Connections of Language acting as windows and SEs of individuals built in CEs. In this Matrix we can see 'Patterns of Creativity'.

Three of them are chosen for elaboration in the paper.

- Creativity as a Free Flow with in a CE.
- Role of 'Metaphors' to trigger imagery to surpass boundaries of SCs in CE. with a case study in Design
- Strategies of great Thinkers like Einstein, Mozart, Tagore and others connecting to the DCs to build new perceptions of Reality.

How do we perceive the Reality ?

We can look at how a child learns. A child is experiencing "Mother" and slowly learns a sound and word for it "Ma or Amma or Mother" in a cultural surrounding, listening to similar sound made by many elders around. Prompting ,reward, response and repetition help in slowly consolidating the experience with a word "Ma or Mummy". But the rich personal experience of touch, warmth , security conveyed through beats of Mother's embrace and getting fed through Mothers breast,..all gets encoded in the word 'Ma or Amma' for that person. We can say the word has a deep connection (DC) to Reality as experienced by that person. How does a surrounding human culture shape the same word as a common word accepted by that

community?. Can a person have deep connection which is original, rich and even mystic beyond the rational of the community.

We come across many accounts in various religions how language is linked to Reality. “ The mythical view of language develops in the same direction, rising from the perception of particular force contained in the individual word and individual magical formula to the idea of a universal potency possessed by the word as such by speech as whole. Vedic religion looks upon the spiritual power of word as its essential sources” (P. 118, East Cassierer Philosophy of symbolic forms”)

Thus we see that ancient cultures accounted for the unknown in the mystical power of word. In Hindu tradition ‘Vac” emanates from all pervading “God” as goddess Saraswati . The Language become the tool to perceive ‘Reality’. As Reality, equated with ultimate is unknowable (designated as Arupa, the un-manifested) manifests as “Rupa and Nama which become perceivable. The culture active with such beliefs will carry a surface connection (SC) to the words as a person learns the word like ‘Mother’ in that culture. The values which are practiced like ‘Mathru devo bhava”- ‘Think Mother as a Goddess’ enriches the SC of that word. At the same time the Deep connection (DC) which individual had, may have to be necessarily limited for the reasons of generalization and communication as a category. So we see the Reality is molded by the very language we learn in a culture. We can say that we are at the mercy of a particular language which has become the medium of expression of that society as Edward Sapir a well known Anthropologist puts it. We can conclude that “Reality is modeled by the Cultural Envelop(C.E). Cultures may offer rich surface connections built as values in that culture. What is the effect of such a CE (LE the Language Envelop will be sub-set of CE) on thinking and creativity ?

In a Global situation one also encounters other ‘CEs’.

Other CEs are not only the language of distant cultures but the new languages formed locally and globally. Mathematical language can be seen as a CE. Thinking ordered by 'paradigms' in Science rooted in rational based on prevailing theories can be another CE.

Each profession develops a language which becomes a CE.

In addition to the cultural envelopes one also forms a Self Envelop (SE).

SE is an individual identification with oneself as so and so, mainly formed by the social programming which takes place in a Culture. Self identity is a phase of SE. 'SE functions within and across CEs. So we can see a Matrix of Envelops in which one's thinking takes place. Reality expressed aptly as "Arupa"(in Sanskrit) the un-manifested is the very space of the Matrix. How does Creativity operate in this Matrix? We can hypothecate several scenarios.

Creativity as a Free Flow with in a CE.

A person encountering one CE to another. A persons thinking is bound by the C.E Verbal language will be one medium of thinking. A SE formed rigidly with only a verbal language becomes dominated by the left brain thinking.

Exercise of Multiple intelligences can open up the "Creative possibilities" Howard Gardener identifies following intelligences.

- [1.1 Logical-mathematical](#)
- [1.2 Spatial](#)
- [1.3 Linguistic](#)
- [1.4 Bodily-kinesthetic](#)
- [1.5 Musical](#)
- [1.6 Interpersonal](#)
- [1.7 Intrapersonal](#)
- [1.8 Naturalistic](#)
- [1.9 Existential](#)

Creativity of a person gets limited by use of single intelligence. Creativity can increase with imagery generated across these intelligences. Imagery generated with sense perceptions like tactile and sense of smell can also enhance creativity. Metaphors play a significant role in creativity .Especially a Generative Metaphor coined by Donald Schön can have a key role in creativity . Schön offers the example of Harvey who saw ‘Heart as Pump’, Harvey makes a sudden connection of blood flow and a flow of water in a pump to see Heart as pump. A problem space was already created with the limitation of earlier belief that blood flows from ‘Head to Foot’. There was no logical answer as to how it goes back or circulates. Certain activity of Heart full of blood also might have been observed. All these set a stage for the generative metaphor to operate. Mihaly Csikszent mihalyi's concept of flow can be seen as a state of mind with the requisite information to break the ground to see a new Metaphoric connection.

SE can limit the creativity of a person at a different level. Darwin in his formation of ‘Survival of Fittest’ took many years to see the connection. He used five Metaphors as analyzed by Edward Gruber.

Tree

Tangled bank

Wedging

War

Artificial selection

Would some cultures offer better zone of operation for creativity?. The values in a some cultures offer a better zone for creativity within the CE. One can find higher level of openness and readiness for acceptance of new ideas, better facility for entrepreneurship and less emphasis on failure of new entrepreneurship as contributive factors for higher creativity in U.S. ‘Failure

of new business idea can lead to a lower social status in countries like India. Professional values and LEs they create can also cause creativity. In Design, Architecture and Art, fuzzy boundaries in use of language are accepted. Donald Schön describes how a committee formed with himself as chairman, three teachers and seven MCP (Master of City Planning Programme) students as members, in 1981, articulated the idea of Studio.

‘Somewhere along the line, the idea of a studio or a case, emerged as... a shared context. It came partly out of some of my experience working with very diverse groups. We all decided that we were talking different language and that one thing we should do is have some common pieces to look at. and the conversation became more interesting. We decided, “That’s what we need!”

We would imbue in people the idea of playing, sketching, thinking things out loud through extremes.sort of, “What if we did this?” And it teaches you a lot about a thinking process, a way of attacking problems.’

What happens when a person well versed in one CE encounters another. Person’s SE plays a significant role. One gets a chance to look at oneself with the values of a new culture. If the person is able to ‘transform’ in the process, a new ground develops for creativity. Persons coming from Villages and persons belonging to lower economic strata face different set up problems, when they encounter urban, English culture. Many with better social status and higher economic strata are able to reflect and readjust to the new ‘SC’s. A healthy mapping gives a new opportunity for ‘Creativity’. When people are insecure, or forced into a new CE experience difficulties in mapping. They may keep the two CEs segregated which may reduce the creativity. Often we see the ‘Cultural shock’ which affects people. A genius like “Ramanujan” who got a great opportunity to link his unique links with ‘Reality’ producing high level of Maths, got the benefit of his talent recognized. But he could not adjust to the living style in West due to which

he had to suffer. We need to recognize the sophisticated boundary of SE which connects the body and mind demanding a reflection and reformatting of oneself. Alfred Russell Wallace got the advantage of reaching same conclusions on 'Survival of the Fittest' as Darwin at much younger age, as he started seeing the positive values in the behavior of tribals and the body freedom they enjoyed in their native cultures. Compared to him Darwin was rather conservative in his outlook. He was even afraid to expose his theory till he read Wallace's similar conclusions.

Role of Generative Metaphors

'Metaphors' consciously can be used to create a new ground for creativity. In 1991 a competition was announced by 'Sony' for new concepts in 'Telephone' The participants could use advanced technologies but needed to come out with completely new concepts. The problem was taken as one month project of Master of Design. Students at IDC had a background of Engineering or Architecture. They had completed a year of training at IDC. A week went on with efforts at coming with new concepts. I, as a teacher observed that students were highly conditioned with existing designs and design concepts which are reported in "Design Magazines". There was no originality or 'surprise' in the concepts. I as a teacher, imposed an arbitrary constraint to use a letter form as basis for design. I was charged with potential of Indian letter forms with induction of Prof R.K. Joshi, well known Calligrapher and Typographer into IDC faculty. He would excitedly point out the hidden potentials for 'Indian Design'. India has 14 recognized languages with different scripts. Each language offered 50 to 52 letter forms with uniqueness and order. All Indians get educated in one of them as their mother tongues ! What else could be a better way to bring in the rich Culture into modern design?

The arbitrary imposition created intrigue since all the 'letter forms' i.e. alphabets are created in 2D. What would be their three dimensional 'Rupa'

or shape?. How can one see a telephone in the new manifestation?. Abbott Abbott's 'Flat land' was introduced to students. The book introduced to me by Prof. R. K. Joshi had a great impact on me. Slowly, with several discussions and iterations students started coming out with unique shapes for telephones. I left to them the trouble of sending the 'Entries to the Competition'. IDC students had not won any awards in International Competitions till then. Out of 12, only 5 students sent the entries. To the surprise of everybody one of them Saleem Ahmed hailing from Tamilnadu with 'Tamil' as his mother tongue, won an award. He chose letter 'Oh' in Tamil which had weird curves. Part of the Telephone which replaced the 'Head gear' had a unique form. Women could wear it on the neck. It was like an ornament ideal for a receptionist. One could see how some of the letter forms led to unique, otherwise unthinkable shapes. The letter forms created a new 'problem context' for a 'generative metaphor to operate'!

Strategies of great thinkers to connect to Reality .

Reflection seems to play a great role in the 'Creativity of high order'. The creative break-through can only happen when the surrounding shell is broken akin to a 'Chick' which breaks its shell to become alive. Einstein looks at the language and says: The first step towards language was to link acoustically or otherwise commutable signs to sense impressions. Most likely all primitive animals have arrived at this primitive kind of communication at least to a certain degree.

But it is also this development which turns language into a dangerous source of error and deception. Everything depends on degree to which words and word combinations correspond to the world of impression".

In their book the Structure of Magic Vol I Richard Bandler and Ghon Grinder the co-founders of NLP (Neuro Linguistic Programming) echo Einstein when they write:

The most pervasive paradox of the human condition which we see is that the processes which allow us to survive, grow change and experience joy are the same Processes which allow us to maintain an impoverished model of the world – our ability to manipulate symbols that is, to create models. So the processes which allow us to accomplish the most extraordinary and unique human activities are the same processes which block our further growth if we commit the error of mistaking the model of the world for 'Reality'. We can identify three general mechanisms by which we do this : Generalization, Deletion and Distortion.

Genius often seem to have reached, through reflection, a level of clarity which can be only called “Spiritual”. They see clearly that Modeling of the world with whatever “Language” can not be confused with Reality. Such clarity allows one to position and reformat SE depending on their profile. Robert Gilt who has done extensive study on strategies of genius gives a format.

- A. Who I am Identity - Mission
- B. My Belief of System - Values, Meta programs
Permission and
Motivation
- C. My capabilities - States, Strategies Direction.
- D. What I Do - Specific Behaviors , Actions.
- E. My Environment - External contexts, Reactions.

Each creative genius seem to be clear about such a detail to position themselves in their thinking, actions and life. Such creativity extends to the very life and practice of that person. Mahatma Gandhi was very strategic in choosing his actions like “Dandi March for Salt” and ‘Quit India’ movement. He acted like a general in strategizing war knowing the strength and weakness of his side as well as the opponent.

Rabindranath Tagore started painting without titles when he realized that his beliefs in Universalism were not getting emphasized in his songs and poetry which were based on the strength of local culture.

David Bohm a well known physicist who worked with Einstein brings out the issues of measure.

"But original and creative insight within the whole field of measure is the action of immeasurable. For when such insight occurs, the sources cannot be within ideas already contained in the field of measure but has to be in the immeasurable, which contains the essential formative cause of all that happens in the field of Measure. The measurable and immeasurable are then in harmony and indeed one sees that they are but different ways of considering the one and undivided whole. When such harmony prevails, man can not only have insight in the meaning of wholeness but, what is much more significant, he can realize the truth of this insight in every phase and aspect of life.

As Krishna Murthy has brought out with great force and clarity, this requires that man gives his full creative energies to the enquiry into the whole field of measure".

Thus the spiritual and everyday life can operate together to discover new envelops of Harmony and Goodness within the Matrix of envelops.

References:

Gruber Howard. E: Darwin's 'Tree of Nature' and other Images of wide scope in Wechsler Judith(Ed). On Aesthetics in Science, The M.I.T Press, Cambridge, 1979.p-132

David Böhm, F.David Peat, Science, Order and Creativity , Bantam Books, Toronto, Newyork,... 1987.

Radha Vinod Jalan ,Tagore –His Educational Theory and practice and its impact on Indian Education-phd Thesis , University of Florida 1976.

Robert B. Dilts, Strategies of the Genius, Volume II, Albert Einstein, Meta Publications, California,1994.

- Donald Schön introduced the word Generative Metaphor(G M)
- G M in problem solving context can be seen in ‘Generative Metaphor: A Perspective on problem Setting in Social Policy’ —Metaphor and Thought, Edited by Andrew Ortöny, Cambridge university Press, 1979.