Towards A New Model Of Teaching Creativity Through Metaphors.

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Introduction

The topic of creative thinking has been marked by two characteristics. It was discussed by academicians who have analysed the scientific side of it and it was marred with complexity and abstractness. The focus of creative thinking thinkers was on giving general advice to the reader and usually abstract one. They failed to provide a clear roadmap outlining the steps to follow in order to come up with creative ideas.

Students are taught to believe that each person has his point of view which gives them the impression that they simply have to contemplate to generate ideas. Following specific strategies as techniques was never of specific focus. Students are taught that there exists many different perspectives and viewpoints and that people can see the same thing and yet differ in their perceptions. The traditional view of creative thinking proposals sees creativity as a sign of genius that can be developed by suggesting general advice.

The problem with creativity is that students are asked to be creative without enabling them to analyse well. This leads them to believe that creativity is about imagining new things instead of developing things systematically. This study proposes to look at creativity as a form of additional thinking and not an outside box thinking.

It proposes that we use the metaphor not only to develop creativity but also to decompose ideas and recompose them. Creativity is suggested as as complimentary to analytical thinking and part and parcel of it.

This article uses metaphor as a tool to develop thinking skills and creativity. It proposes using metaphor as a model to figure out complexities of certain issues and based on this model to reach findings that could not be reached using otherwise. It suggests seeing abstract complex topics as systems and applying systematic rules as tools to understand abstract issues.

A very significant part of the metaphoric studies involves making sense of the complex situation in which the problem occurs. Problems can be analysed based on their original meanings and can be understood based on similar categories. Using metaphors as models to analyse and decompose abstract issues sheds lights on new perceptions and generate creative ideas. In fact creativity is but new ideas based on new perceptions and new conceptualizations.

Background to the Study

To understand how we think in a certain situation, we need to understand the stepping stones that we use when we think. Concepts are the stepping stones that control how we think. By understanding them and controlling them, we are able to manipulate thinking. Concepts are formed by taking a limited amount of information and producing a perception depending on it; we make inferences about a certain thing. In other words, concepts formation consists of impressions plus the inferences we make as a results of our perceptions.

Concepts interconnect things in our minds to represent how we perceive, act, react and consider. The role of concepts is to provide a means of organizing information and filtering out other information. According to Lakoff and Johnson (1980), our concepts formation is usually metaphorical in nature and that metaphors reveal our concepts.

We understand things in terms of other things we are familiar with (lakoff and Johnson: 1980) and when we speak, we use the concepts we have in the metaphors we produce. For example: when we say: ‘This argument is hard to defeat’, we are not aware of the fact that the word ‘defeat’ shows that the metaphor ‘argument is war’ underlines this statement. Metaphor is a form of categorization that enables us to view things as categories in the world.

Metaphors organize our experience, create realities that guide our futures and reinforce interpretations. Truth is therefore truth relative to some understanding which involves categories emerging from our interaction with our experience.
The same process responsible in making metaphors is also responsible of making concepts.

Although it is true that our thinking system is based on boxes, it is not true that this system is the result of the Greek philosophy. Our mind processes information to give meaning to it. And what gives meaning to things is our classification of it according to categories (boxes) we have in mind. It is a characteristic of the mind to categorize and not the result of Greek influence in our thinking.

De Buono (1991) proposes ‘lateral thinking’ by which he means to follow a new path instead of the one we are used to it in order to be creative. The question is whether the new path can do without our mental system of classification. The answer is no. It will be only a reclassification of the concepts according to new proposed concepts; in this, it is similar to metaphors. In Metaphors we propose viewing something in terms of a new categorization like viewing humans in terms of lions.

Categorization generates expectations and beliefs. Metaphors, as a form of categorization (categorizing war with argument) and reclassification (ignoring the normal categories and creating new ones) lies at the heart of human creativity.

An attempt to delineate this cognitive faculty leads to better understanding of our creative abilities. Creativity can happen by viewing something in terms of a new categorization like viewing humans in terms of lions.

A more inclusive way of looking at metaphors is to see them as a part of everyday speech which affects the ways in which people perceive, think and act. Realities and problems are defined by metaphors although people might not be aware of this. A good metaphor is enriching and says more than a logical explanation and even generate new ideas.

The limitation of our creativity and our abilities in problem solving attempts is most of the time not the result of our lack of ideas but because of our deviance from the right intelligence behavior.

Intelligence behavior determines the success or the failure of any work being done. Getting rid of obstacles and obstruction means allowing the idea to grow up and develop and creativity to flourish which has a significant role in intelligence development.

One of the intelligent behaviours we can teach students to follow is to teach them how to compose concepts and decompose them by using metaphors.
into creativity, Michael Mumford suggests: "Over the course of the last decade, however, we seem to have reached a general agreement that creativity involves the production of novel, useful products" (Mumford, 2003, p. 110).

Guilford (1967) distinguishes between convergent and divergent production. While convergent thinking strives to come up with a single solution to a problem, divergent thinking seeks to find multiple solutions to one specific problem.

Daniel Pink (2005), in his book A Whole New Mind argues that we are entering a new age where creativity is becoming increasingly important. Pink (2005) highlights the importance of creativity in recent times. He claims that there is a need to boost creativity over logical and analytical thinking. His analysis is well illustrated and shows the extent to which our modern age is in need of creativity more than other forms of thinking.

In 2005, Alice Flaherty highlights the physical anatomy of our brain and how it affects creativity. Based on evidence shown in brain damaging, she came to conclusion that frontal lobes is responsible of ideas generation and the temporal lobes is in charge of evaluation. She shows that anxiety or depression significantly weakens creativity by affecting the frontal lobes. She confirms that abnormalities seen in temporal lobe plays a significant role in reinforcing creative abilities.

Metaphorical reasoning is a way for designers to develop their knowledge of a design situation. Basically, the use of metaphors helps to figure out understanding design problems (Gero, 2000a). Designers who have not developed cognitive schemas (Lawson, 2004) are more willing to think in terms of practical situations when they desire to design creatively.

Methodology

This article proposes a new model based on which we can develop creative thinking. This model deems complex things as system with elements and relations. Based on this model, we can analyse complex issues and generate solutions. To validate the model, three concepts are proposed to be seen as systems, ‘teaching’, ‘family’, and ‘citizenship’. Then after analysing these concepts based on a system model, creative analysis and ideas are proposed.

This article uses the metaphor as a tool to understand concepts’ nature, its components and their interaction. The topic adopted in this study is ‘Topics are Systems’. By ‘system’, it is meant a group of things working together to achieve a certain purpose. A system refer to elements and the organization of these elements according to certain patterns. It consist of a series of elements performing certain actions to achieve certain objectives. Topics are information gathered in a systematic way and analyzing how topics are systematized means understanding their nature, characteristics and how they work. The model proposed in this article is based on perceiving concepts as systems having the following components:

Elements: They are the components of the system. Elements form units when they share certain characteristics.

Objective: It is the destination the system strives to reach.

Function: The actions performed by the elements to reach the objectives.

Relations: There are different types of relations such as neutrality, support, complementation, struggle and contradiction.

Unity: it is achieved when we have complementation and single leadership. It is based on a common subject, shared objectives and the same direction.

Complementation: The objectives of some elements depend on the functions of others.

Support: Some elements are helping other elements in their functions and objectives

Harmony: The elements are working in accordance with the objectives of other elements while not harming each other.

Neutrality: The elements are not obstructing the functions of each other and not supporting each other at the same time.

Struggle: The elements are obstructing each others’ objectives.

Contradiction: The elements are denying each other

Leadership: The leadership that guides the direction of the elements, coordinates between them, and controls the communication.

Beliefs: They are important in defining the roles
and expectations of the elements.

**Rules:** They are the boundaries that define the limits of the actions and the space of the system.

**Communication:** It means communicating the targets, the needs and the path using specific terms. For example, components of writing are called words but in family they are called ‘husband’, ‘wife’ and ‘children’.

**Outcome:** The product of the system. It is measured according to the objectives of the system.

**Failure of system:** It means two things: The disruption of the system and / or its failure to achieve its objectives.

**DATA ANALYSIS**

The validation the model will be tested through three concepts that will be analysed based on the model. These concepts are ‘family’, ‘teaching’ and ‘citizenship’.

1. **The concept of family**

**The Elements:** The elements are Husband, wife who give birth to daughters and sons

Units: A) parents: husband and wife form one unity called parents. B) daughter and sons form one unity called children

**The objective :** Establishing a family could be for pleasure (sex) or giving birth to children or to meet the needs of the couple.

**Functions :** The function of the man is to provide financial needs while the function of the woman is to take care of home and children. The elements of the western families have different functions as most of the western families, we find most of the time that both parents provide the financial needs for the family.

**Relation:**

**Unity:** The family is supposed to be united which means that the parents have the same objective and the same leadership. The leadership could the father or the mother or both while the objective is protecting and satisfying the needs of each other.

**Complementation:** The wife and the husband complement each other. Together they can produce children and they could satisfy the needs of each other.

**Support:** Each element in the family is supposed to support the other elements, for- example when one of the family members is sick or got trouble, the other family members show their support.

**Harmony:** It is expected to exist in the family; otherwise the existence of the family could be at risk.

**Neutrality:** It is not to be found in this system because blood relations are seen very strong relations and supporting each other is a translation of these strong relations.

**Struggle:** It is not expected to exist but if it exists, it cannot reach the extent of contradiction.

**Contradiction:** The relations in the family are based on support and by definition contradiction between family members is not expected to be found. This is why if we hear that one of the family members try to hurt another one, we feel shocked.

**Leadership:** It could be the husband who runs the family or both parents depending on the culture.

**Beliefs:** They define the roles of the parents, the children, their expectations and their interests such as children schooling, housing and expenditures.

**Rules:** Such as faithfulness, permission to sleep outside the house, coming home not too late and so on.

**Language and Terms:** The male element is called the husband and the female element is called the wife. The unity between the husband and wife is called marriage while their break up is called divorce. The produce of the family is called children, sons and daughters.

**Outcome:** The wife and the husband may give birth to children and see to their education and growth.

**System failure:** It means the break up of the system. It can take place if the central objective of the elements is not met. The objective depends on expectations and expectations depend on cultural
impressions of functions. Divorce means the system stops to exist as far as its primary elements are concerned (the husband and the wife).

2. The concept of teaching.

Space: Classroom

The elements: They are the Students and the teachers. Students form one unit while teachers form another unit.

Objective: Learning

Functions: Teachers teach and students learn

Relation:

Unity: It means that the elements are under one leadership (the teacher) while the students follow the rules of the leadership.

Complementation: both students and the teacher need each other for learning to take place.

Support: The teacher as the leader of the classroom is supposed to support the other elements (the learners) by meeting their learning needs. The students are encouraged to support each other.

Harmony: It is expected to exist otherwise the existence of the objective of learning cannot take place.

Neutralty: It is not to be found in this system because learning has to be achieved and this requires cooperation of the elements.

Struggle: It is expected to exist from the part of some elements

Contradiction: It is not expected to exist in this system. Students come to class because they are interested to learn with the help of the teacher. So, the relation is based on support and not contradiction.

Leadership: The leader is the teacher who has full authority over the students.

Beliefs: Beliefs are cultural and this leads to cultural specificity such as clothing which differ according to societies. For example in muslim societies, clothing in classes are supposed to respect certain specifications.

Rules: They are needed to ensure that learning takes place such as absence, lateness and respecting the dress code.

Language: Those who communicate the information are called teachers and learners are called students while space where learning takes place is called classroom.

Outcome: It is the competence that the students get which takes the form of certificates, degrees and diplomas.

System Failure: It occurs when the objectives of learning are not met because the function of the teacher is not performed as it should be or because rules such as absence are not respected.

3. The concept of citizenship

Space: Country

The elements: They are the citizens. They form many different units such as the government, civil servants and soldiers.

The objective: Having a life according to the needs and values of the citizens.

The function: Each citizen fulfills a function that is needed by someone else.

Relation:

Unity: they are united by having the same nationality and the same leadership.

Complementation: The elements are complimenting each other by having different jobs that meet the needs of each other.

Support: Each element is supposed to support the other elements in certain areas and this is called public interest.

Harmony: It is expected to exist; otherwise the existence of the country could be at risk.

Neutralty: It exists among a big segments of society. This can be seen in votes as many people do not vote.

Struggle: Crimes could be a form of struggle that can be found. Business competition is another one.
**Contradiction:** There could be some contradictions in the form of social or political views leading to extremism in the form of racism and fashism. Once these contradictions take the form of armed struggle, the system fails.

**Leadership:** It can take the form of governments, local councils and other public institutions.

**Beliefs:** Each society has its norms that are derived from religion or other forms of belief systems.

**Rules:** They are meant to protect the society, its belief and values systems. Some rules are derived from religion while others are made because they are taught to achieve certain purposes.

**Language:** Leadership is called the government; the elements are called citizens; the rules and principles are called the constitution.

**Outcome:** Needs are consistently sought to be met. Public services such as health services, security and good education are expected to be satisfied.

**System failure:** The system breaks up when the contradictions between two or more segments of the society are too big to contain. When this happens, elements start struggling with each other. This struggle may take the form of civil war. People seek accepted life in accordance with their values and needs (peace, food and material needs, spiritual needs). Other reasons of failure could be the result of beliefs that consider the conduct of the leadership or part of the society as against their beliefs.

**Conclusion**

In conclusion, we can say that this article outlines new approach to creative thinking. It proposes a model that can be followed to come up with creative ideas. This model is based on using metaphors to understand issues. It proposes a plan to be used when approaching a problem. The model proposed is based on viewing issues as systems with elements, relations, functions and interaction between a group of things working together to achieve a certain purpose.

A certain topic is divided into interrelated aspects. Each aspect is made of a group of elements that are related to each other and that when interacted, result in a set of actions that lead to change. The elements are either in harmony and this leads to the continuity of the system or it is in struggle and this leads to the disunity of the system. Systems have functions and objectives and the objective keeps the system working. To validate the model, three concepts are proposed: ‘Teaching’, ‘family’ and ‘citizenship’. The model allows to understand the complexities of any issue and helps to look at the issues from a different perspective. It was found out that the three concepts share the same components though they differ in their nature and relations.

This study is an attempt to contribute to the current studies on creativity from the perspective of cognitive linguistics. It aims at giving teachers, students and researcher the opportunity to discover the nature of certain issues, the interaction of its components and the outcome of the actions of the players involved. The study aims at helping students at making sense of complex situations by following steps as outlined in the model. The model does not claim to provide a comprehensive process to understand issues and analyse them but just steps to be followed that could help students adopt new perspectives on how to understand situations they face.

**References**


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