U-SIT And Think News Letter - 61

Unified **S**tructured **I**nventive **T**hinking is a problem-solving methodology for creating unconventional perspectives of a problem, and discovering innovative solution concepts, when conventional methodology has waned.

Updates and Commentary

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Dear Readers:

. The mini-lecture in this newsletter addresses the goal of structured problem solving methodologies. They are not algorithmic procedures for generating solutions, as in mathematics. They are paths to follow with one's eyes wide open. They show us how to plant seeds along these paths that can spark new concepts.

3. Mini USIT Lecture – 61
5. Heuristics for Solving Technical Problems

A Point of View

Creative thinkers often stand out in a group, problem-solving exercise. They have a trait that becomes evident in early stages of the exercise as the group struggles to clarify a problem situation. As the exercise unfolds, all members of the group are exposed to the same information. All share in the questions and discussion that gradually brings the group to a common understanding of the problem to be solved. Of course, backgrounds, experience, and ages of the group members are different but the creative thinkers among them will exhibit one common, distinguishing trait. They express different or unexpected insights.

A common feature in the definition of a creative thinker is the ability to draw new insight from the same information available to others. I'll call this a new *point-of-view* and then discuss how it comes about.

Structured problem-solving methodologies tend to have a lot of structure and a lot of methods. Their goal is to help a problem solver discover a new point-of-view of a problem. To understand how they can work let's begin by asking, what is a point-of-view?

My left-brain-literalist orientation started me thinking about the meanings of the two words, *point* and *view*. The first idea to come to mind was how we are trained in hunting animals to not stare at a potential location and examine its detail. Rather, a more effective procedure is to move one's head slowly while noting any motion in one's peripheral vision. When motion is noted, then look

straight ahead at it for detail. The reason is that our peripheral vision is more sensitive to motion while our central vision recognizes detail.

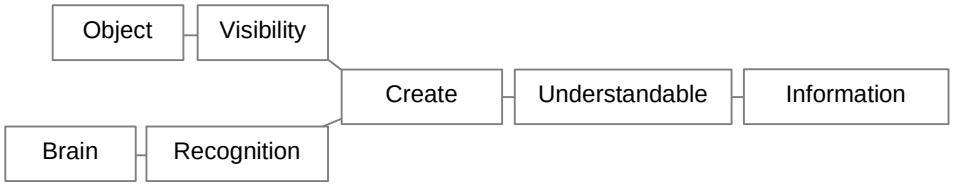
However, my problem-solving experience interrupted that train of thought to recognize that maybe some creative thinking would be useful here. That brought to mind the heuristic *to generify*. The value of generification in creative thinking is to subdue left-hemisphere logic in order to encourage right-hemisphere intuition and leaps of insight.

But how should point of view be generified? That's an unanswered question; it's now my problem to be solved. I'll begin by identifying objects, attributes, and an unwanted effect.

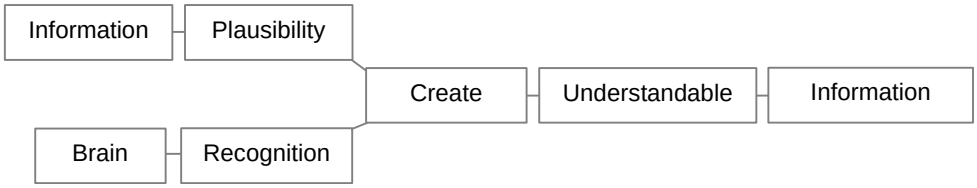
For discussion purposes, the unwanted effect can be expressed as "point-of-view is not generic".

Point-of-view suggests two things: something being seen and a mental reaction to it – a view, an interpretation of what is seen. The mental interpretation is an information object. The "something being seen" could refer to a physical object or an activity that the eyes physically see – "I see the dog chasing the ball." It could also refer to a mental concept that the brain metaphorically sees – "I see the point you are trying to make." Let's construct and compare OAF diagrams for these two cases to see if any enlightenment occurs.

In the first case, a physical object has the attribute of its visibility interacting with the attribute recognition (recall) of the brain to create understandable information.



In the second case, a purely mental exercise is at play in which the plausibility of information as an idea is tested for sensibility.



In both of these the brain plays similar interpretive roles. The two differ in the nature of what is being recognized. On noting this distinction a generification came to mind. Namely, that the conscious brain gets the information it tries to understand from the five senses and from the subconscious.

The conscious gets ideas from the subconscious throughout the problem-solving process. These ideas may need reshaping, trimming, and assembly before becoming a viable solution. We do that consciously.

By analogy, we have discovered that generification of point-of-view can be interpreted in terms of six paths of mental cognition – six metaphors. One new idea came from this, that the subconscious, as well

as the senses, is an information path to the conscious. Is there more RH creativity to be found from *point-of-view*?

It seems evident that so far I have favored LH logical thinking in this discussion. Generification has not engaged much RH thinking. The way to solve this problem is to remove the words that cue the LH and in their place use words that cue the RH. This calls for metaphors, words not immediately acted on by LH. RH deals in metaphors. Yes, words are metaphors and simple rewording of metaphors can be an effective thought seed.

In the case at hand, only two words were being considered, point and view. As a phrase, point-of-view, is a metaphor. This was seen when two interpretations were found for it.

Can more metaphors be found for point-of-view? Try these:

> "I have the feeling that …"; "It tastes a little like …"; "It smells of …"; "It sounds to me like …"; "I can see a …"; "This idea comes to mind …".

These show some insight and a lot of logical association with the discussion above – finding an expression for each of the six pathways to cognition.

We can also find different wordings for point-of-view that convey its intended use in problem solving:

> "insight"; "perspective"; "new focus"; "mental vision"; "new interpretation"; "fresh outlook"; "fresh eyes"; and "pathway to cognition", among others.

The latter caused me to wonder what is a pathway to cognition? Can this lead to any new ideas?

There are many pathways to cognition. Of interest here are those that lead to discoveries of solution concepts. A simplification of this process is that an idea surfaces to the conscious and there is tested for rational and logic in resolving an unwanted effect. It is not known how the subconscious does this. Another simplification is that the subconscious can be sparked into action by metaphors, which require interpretation.

The structure and methods of structured problem solving take us down paths of cognition as metaphors spark new ideas.

Point-of-view is a pathway to cognition.

6. Feedback

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7. Papers and essays

The following materials can be read by clicking on their titles. Links are also available on the USIT website (www.u-sit.net/Publications)

1. "Injecting Creative Thinking Into Product Flow"
2. "Problem Statement"
3. "Metaphorical Observations"

8. Other Interests

1. Have a look at the USIT textbook, "Unified Structured Inventive Thinking – How to Invent", details may be found at the Ntelleck website: www.u-sit.net (*Note*; not at www.ic.net)
2. USIT Resources Visit www.u-sit.net and click on Registration.

Publications	Language	Translators	Available at …
1. Textbook: **Unified Structured Inventive Thinking – How to Invent**	English	Ed Sickafus (author)	www.u-sit.net
2. eBook: **Unified Structured Inventive Thinking – an Overview**	English	Ed Sickafus (author)	www.u-sit.net
	Japanese	Keishi Kawamo, Shigeomi Koshimizu and Toru Nakagawa	www.osaka-gu.ac.jp/php/nakagawa/TRIZ/
	Korean	Yong-Taek Park	www.ktriza.com/www/usit/register_form.htm
"**Pensamiento Inventivo Estructurado Unificado – Una Apreciación Global**"	Spanish	Juan Carlos Nishiyama y Carlos Eduardo Requena	www.u-sit.net
3. eBook "**Heuristics for Solving Technical Problems – Theory, Derivation, Application**" -- **HSTP**	English	Ed Sickafus (author)	www.u-sit.net
"**Heurísticas para Resolver Problemas técnicos – Teoría Deducción Aplicación**"	Spanish	Juan Carlos Nishiyama y Carlos Eduardo Requena	www.u-sit.net
4. **U-SIT and Think Newsletter**	English	Ed Sickafus (Editor)	www.u-sit.net
	Japanese	Toru Nakagawa and Hideaki Kosha	www.osaka-gu.ac.jp/php/nakagawa/TRIZ/
	Korean	Yong-Taek Park	www.ktriza.com.
Mini-lectures from NL_01 through NL_59	Spanish	Juan Carlos Nishiyama y Carlos Eduardo Requena	www.u-sit.net click on Registration

Please send your feedback and suggestions to Ntelleck@u-sit.net and visit www.u-sit.net

To be creative, U-SIT and think.

