

#### Subject Keys

- PD = Problem definition
- H = Heuristics
- T = Theory
- M = Metaphors
- A = Analysis

# U-SIT And Think $N_{ews}L_{etter}$ - 68

Unified Structured Inventive Thinking is a problem-solving methodology for creating unconventional perspectives of a problem, and discovering innovative solution concepts, when conventional methodology has waned.

### Dear Readers:

- . This issue of the U-SIT and Think News Letter has no mini-lecture. Instead, I'm using it to give you an overdue update on why the long gap of no newsletters.
- . A brief report on The 2<sup>nd</sup> TRIZ Symposium in Japan 2006 is included.
- . An interesting article in Popular Science magazine is referenced.

## UPDATE

# "All's well!"

**Thank you** for the nice letters subtly inquiring about my possible demise. I am pleased to report that all is well here. The recent hiatus is nearly over, but not quite. I'm reworking the web site in order to announce a new book that compliments and extends USIT. At the moment, I'm calling it Heuristic Innovation. More on this in the next news letter.

# "ESP" Computer Keys (extrasensory perception)

An article in the December issue of Popular Science magazine caught my attention – as you may appreciate. The article, "Animated Keyboard", on pp. 104-105, states, "Program the keys on this customizable controller for your computer to take on different functions based on the application you're working on." Apparently, they are now selling this product.

My immediate interest follows from having written, among others, idea #19 in the USIT and Think News Letter (April 24, 2006) that states, "Inlay key tops with miniature digital screens for displaying information – such as keyboard overlays for specific software." (In NLs 61 – 66 some 39 ideas for keyboard inventions were discussed.) I wonder how long it took them to come up with their idea and whether they used any thinking methodology to do it? No such details were discussed in the article.

# The 2<sup>nd</sup> TRIZ Symposium in Japan, 2006\*

(\* These notes incorporate comments extracted from the Preface for the Proceedings written by the Program Chairman, Professor Toru Nakagawa, and from his report on the meeting.)

I had the pleasure of being one of two keynote speakers at the 2<sup>nd</sup> TRIZ Symposium held in Osaka, Japan, August 31 to September 2, 2006. The symposium was attended by 157 technologists with 18 from China (Hong Kong), Germany, India, Japan, Korea, Russia, Taiwan, UK, and the US. Among the 34 presentations made, 11 were given by overseas attendees. Of interest for this newsletter are the number of papers presented (6 of 34) that had direct relevance to USIT and demonstrate its rapid growth in Japan. More detailed comments will be found at http://www.osaka-gu.ac.jp/php/nakagawa/TRIZ/eTRIZ/.

The USIT oriented papers include the following:

- 1) "Practices Applying TRIZ/USIT in Konica Minolta Business Technologies, Inc.", by Tateki Oka and Shigeru Sawada, both from Konica Minolta Business Technologies, Inc.
- 2) "A trial of 'Phenomenon-Attribute-Analysis (PAA)' application for the USIT textbook problem, 'Picture Hanging Kit Problem': a new device for the USIT Process", by Hideaki Kosha, Fuji Photo Film Co., Ltd.
- 3) "A Simple Theory Underlying Structured Problem-Solving Methodologies ASIT, TRIZ, USIT (and others)", by Ed Sickafus, Ntelleck, LLC, Grosse Ile, MI, USA.

(This paper is available as a 92 KB .pdf file; Click here)

- 4) "A New Paradigm of Creative Problem Solving (3) Usage and Significance of the Six-Box Scheme in USIT", by Toru Nakagawa, Osaka Gakuin University.
- 5) "Introducing USIT in Matsushita Electric Works", by Kouji Tsuji and Jiro Hashizume, Matsushita Electrical Works, Ltd., Japan.
- 6) "TRIZ Home Page for Students by Students" Understanding TRIZ/USIT by Solving Everday-Life Problems, by Masayuki Hida, Tsubasa Shimoda, Naoya Hayashi, Mizuo Omori, and Toru Nakagawa, Osaka Gakuin University, Japan.

It was heartening to me to see the rapid acceptance and adoption of USIT in the Japanese technical community. The Japanese industrial and academic efforts, and the symposium embracing USIT, are largely a result of the interest and motivation of Professor Toru Nakagawa.

With Professor Nakagawa's permission I'll quote a paragraph from his report that fit perfectly the message I was trying to deliver in my paper. (Yes, ego also influenced this selection.)

"-- Ed Sickafus' papers always have much deep insights. Sometimes we do not nderstand them at first and try to refuse them. (Emphasizing the limitation in the structured way of thinking may be such a case.) And then, eventually we would find them true. In Japan, there has been a traditional way of mastering anything: "First study and enter the Form, and finally leave the Form". The 'Structure' in Sickafus' paper is the Form in the Japanese saying. Beginners have to learn the Structure first, because it is the means of communication from masters (or teachers) to beginners (or students). When they have learned and practiced it sufficiently they would come to the stage of using or applying it more freely without *<being>* bounded by the Structure."

This topic is much of the gist of Heuristic Innovation.

In my experience organizing international meetings for the American Vacuum Society I never confronted the difficulties this symposium presented to its organizers. Imagine dealing with 1/3 of the papers being presented by foreigners, an audience made up of attendees from 9 countries, and two official languages for the symposium! The "Collaborative Board of TRIZ Promoters and Users in Japan", the symposium organizers, are to be commended for deciding not to have simultaneous translation of the papers – a doubling of the time alloted to speakers, or halving of information presented if standard time were not alloted. They did use two projection screens, one each for the two languages (Japanese and English). This was not a perfect solution, as the board surmised, but its difficulties were eased with printed versions of the slides in Japanese or English being presented to each attendee at registration.

One of the highlights for me was meeting Japanese and Korean technologists who are on teams in their companies that use USIT. Another was encountering three generations of teacher-student pairs using USIT. And another was witnessing the interest and excitement of students in a poster session discussing a USIT paper. Although I couldn't understand a word of their conversation, their animation and facial expressions conveyed a lot.

The poster sessions, always a difficult thing to make work, seemed to go very well in this symposium. They were held in a not too large room with hors d'oeuvres and refreshments on tables in the center and posters mounted around the walls. This arrangement encouraged individual investigation of the posters followed by small group discussions. With food readily available, there was no need to quickly take in the posters and then leave to find food.

In all, it was an effective meeting as demonstrated by audience approval – they voted to have number 3 next year, probably in Tokyo.

I wish you a pleasant celebration of the season and transition to the new year.

#### Papers and essays

The following materials can be accessed 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. "<u>Problem Statement</u>"
- 3. "Metaphorical Observations"
- 4. <u>"A Simple Theory Underlying Structured Problem Solving Methodologies –</u> <u>ASIT, TRIZ, USIT (and others)</u>", abstract and slides presented at The 2<sup>nd</sup> TRIZ Symposium in Japan 2006 held in Osaka, Japan, August 31 – September 2, 2006.

### **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_64	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.