

## Lyee bringing a revolution into the software world

After interviews with Mr. Fumio Negoro, inventor of the Software Development Methodology "Lyee". (by Takanori Matsui)

Why is Lyee regarded as the one and only methodology?  
I wanted to know the deeper part of Lyee!

**"Is it one of so-called development techniques?"**

Before a series of interviews with Mr. Negoro, I had an impression that Lyee was "one of so-called development techniques" or alike. Also, I had an understanding that it seems to be true that it has overwhelmingly enhanced the development productivity, even if it may be a development technique or a development methodology. Probably, many people may have similar impressions.

When viewed from the "Ends well, all well" standpoint, it is more than enough that the software development productivity has been made 10 to 20 times traditional techniques. However, Mr. Negoro (= Mr.) (He doesn't like to be called by his title and qualifications) and the key staff at The Institute of Computer Based Software Methodology and Technology unanimously say that the productivity's 10 to 20 times enhancement is merely a matter of transition viewed from goals, which surprised me. However, through a series of interviews, there was a discovery which surprised me to greater extent. It was the very point that Lyee is most different from other development techniques.

The following is a summary of my understanding obtained through my interviews of more than 100 hours with Fumio Negro and his staff of research.

For those who want to know more, I recommend to attend Lyee seminar courses to make sure of what I describe hereinafter.

**"A meaning cannot be captured, unless a process before the occurrence of words is grasped."**

The software requirement definition is comprised of words.

Programs are also comprised of words.

It may as well be said that the word becomes an origin of human wisdom and software is a zenith of wisdom human beings could arrive at. The word may as well be said to be the mankind by itself, making human beings as a human, however, it is also a troublesome issue that there are misunderstandings arising because there are words.

The amazing part of Mr. Negoro is what he has fixed his eyes upon the perception that **"There won't be any ultimate software development methodology, unless the formation of words and meanings can be elucidated"**.

And, on a certain stage of research, he arrived at his guess that the meaning formation process and the software programs' creation process may, in fact, take the same steps. This has led to the invention of Lyee.

"Invention"? Why not "technique development"?

It may as well be said to be "development" in the sense that the procedure and method has been completed as a development methodology, enabling anyone to obtain the same result. Prior to it, however, there was an 'discovery of the providence'.

In front of some musician, Mr. Negoro told "When you compose a music score, no way knowing what's all about very before you actually think of a tune, is it?" If in front of novelists, he might have said "very before you think of words'.

Either words or inspirations, there is no way knowing very before the person himself recognize them. Mr. Negoro arrived at the thinking that a meaning might not be able to be grasped unless a structure or a process or a working thereabouts was grasped.

### **"A thinking that "Words and meanings have no entity originally"**

There is such a thinking from the past. Based on this thinking, explanation must be repeated from various angles so as to grasp the meaning of words accurately.

If so, however, there is a probability that a meaning will become the more incomprehensible, the more explanation is made by originally ambiguous words. Even if it happens to be grasped accurately, it requires tremendous output of labor.

### **"Are words and meanings truly dubious?"**

If words and meanings are truly dubious, we will eventually have to negate our thinking with words and words themselves. Is that so? The mankind has made its progress with words and abstract concepts composed of words. Nobody can negate it. If words and meanings are dubious, why could the civilization progress up to the levels today within thousands or tens of thousands of years, while depending upon such dubious entity?

Repeating myself, "The mankind has made its progress with words and abstract concepts composed of words. Nobody can negate it."

There is another opinion, saying that "No, no, it is not the case. It is arithmetic expressions and chemical formulas that can accurately express a true state and a concept, and words contains too many emotional elements."

Surely, at academic society meetings related to mathematics, it is said the procedure can progress with the need of almost no explanation with words. However, even if numerical expressions and chemical formulas, the origination of those imaginations must be owing to a grasp by words. Is that right?

From academic standpoint, the view of liberal arts and science as the exact opposite, or the view of science and philosophy•religion as the confrontation has been negated, however, such obsession is extremely deep.

Again, do we say science is 'anti-Christianity'? Is it a wrong understanding of liberal arts that science originates from Greek philosophy and Christianity?

"Human beings has made progress with a wonderful seed called words imbedded. The progress of words (or languages) and the understanding of abstract concepts advanced proportionally. Mathematics and mathematical thinking is also one system brought out inevitably by words, and, thanks to it, our grasping ability has advanced overwhelmingly. This may be a right conclusion of thinking.

**"Are music and visual arts also what the word has brought out?"**

What is common to arts and imaginations•inventions are 'inspirations'. To position arts as what were brought out by words is a little narrow-minded way of understanding. To be important is inspirations. However, either words or inspirations, it is Mr. Negoro's insight that origins of their occurrence are the same.

**"Arts, inspirations, or words, they are only different in expression. The origin is one."**

The entity very before recognizing inspirations is 'an invisible world', that is it is an area outside recognition. Mr. Negoro explains '**a subject of invisible presence (or existence)**', saying as follows.

**"Our civilization has been built through the history recognizing visibles. Therefore, the civilization recognizing invisibles has been dealt with in an outlook on the speculative world, and has never dealt with so-called as an object of natural science. In this regard, a meaning and time are typical invisible presence."**

'An outlook on the speculative world' is meant to be so-called cultures such as philosophy, religion, politics, literature, arts, etc., and the civilization means material civilizations that is, intellectual activities which can be reduced to concrete colors and forms. Mr. Negoro says that anything is left without appropriate understandings by such a departmental grasping method.

If a non-materialistic entity is to be categorized outside natural sciences, we will eventually have to negate even 'time'. Time can be treated as an object of physics. So, a meaning can also be treated as an object of research. This is a base of thinking.

**"Like an elementary particle, for example, the discovery was realized with efforts assuming that it is to be visible, -(an ellipsis)- however, the discovery supported with whatever schemes involved invisible parts. Therefore, even if an object is a physical**

**presence, we need to adopt a thinking method purported to an invisible part being existing, in order to grasp it correctly," Mr. Negoro said.**

It seems that, through his research on the formation process of a meaning, he recognized that 'a thing' called a meaning and a materialistic presence called 'matter' take the same formation process at the invisible stage. And yet, "To elucidate the feasibility of application of the theoretical grasping method called Lyee to other fields rather than software must be entrusted to researchers of the next generation," Mr. Negoro said. **"I, with my social standing as engineer, want to persistently prove to the best that Lyee is an established supreme development method for all software developments."**

His assertion indicates that it was Mr. Negoro himself that knew by intuition the greatness (or impact) of the discovery led by the theory called Lyee. Because of the vastness of the impact, he had to admit that the verification work in the fields other than the software field will have to be left to researchers in respective specialist fields. The words seemingly came out of Mr. Negoro's academic attitude of modesty.

### **"Why is a proposition, that is, a solution?"**

The featured side of the Lyee theory is a thinking that "A proposition is, that is, a solution'.

Here is an existing insight that, if software can be grasped in the way of a proposition, it leads to a solution, that is, programs.

In reality, has an approach of grasping by a proposition ever tried in the past?

It seems that Mr. Negoro thought that a requirement expressed by words cannot be grasped as a proposition, even if it is scrutinized as it is.

In the first place, what is a meaning of grasping in the way of a proposition?

A process in an invisible stage before words are manifested (maybe, rephrased by in an unconscious state), that is, the procedure for picking words after the meaning is formed through whatever process it may be must be firmly captured. Unless otherwise, it is not possible to grasp in the way of a proposition. Seemingly, it is Mr. Negoro's standpoint. and, it can be achieved by Lyee.

**"Words and grammar are a means for expressing a meaning, but the correlation of words and grammar and a meaning is ambiguous. Also, words and grammar can be rephrased by letters and words, however, their correlation with a meaning is ambiguous. A meaning flows and exists as time does, and a way of our existence using languages and words cannot capture the their flow accurately." This provides a base of the explanation for the said ambiguity, Mr. Negoro mentioned in his writing.**

The first-mentioned "Words and grammar are a means for expressing a meaning.' isn't easy to understand, if we assume words and grammar had existed autonomously before the mankind possessed languages. Words and grammar are not a self-will concept created by a

man in freedom. They were a product which a man properly applied a language to. This is a base of thinking. As a providence of recognition, there was a frame of words and grammar, and in accordance with the frame, each race applied their own language to it. According to my own view, it can safely be said that translation can be realized merely because words and grammar exist as a providence in universality in the proximity of the unconsciousness. A recognition of I, a recognition of you, a recognition for the space, ...  
\*

If attention is paid to substantial identity but not minor differences of languages of races, we will be surprised with a similar figure. (As a word, "I" and "watashi" (in Japanese) are regarded as the same.)

**Autonomously existing words, grammars and meanings, referred herein, will change with the passage of time**, same as a natural phenomenon, regardless of the thought of a man.

Mr. Negoro says that a man can rule languages, a product of his invention, but the change of autonomous words, grammars and meanings, which provide a base, is different from the change of human beings.

There are human beings, so a meaning exists, A human recognition is a meaning. - This is what we think without any doubts. However, Mr. Negoro grasps words, grammars and meanings as if they were a natural phenomenon. Although Mr. Negoro admits 'a humanly meaning', but, at the same time, he recognizes that a humanly meaning is also a "so many men, so many minds'. That is, he says the original meaning is different from 'a humanly meaning'.

If words, grammars and meanings autonomously exist, software also exists as a fait accompli. - This is a result the theory of Lyee leads to.

The meaning of grasping in the way of a proposition is to capture words used in a requirement by going upstream up to the level of **autonomously existing words, grammars and meanings**. It means to understand them as a literal proposition without leaving ambiguity. By doing so, the discovery was made thereabouts that a proposition and a solution was readily existed in one set.

Lyee is a methodology to capture by going upstream up to this extent.

Same as we cannot see a naked figure of a person wearing multiple layers of brand clothes with a form adjustment undershirt, even if observed in any way, it is not possible to understand humanly words and sentences based on individual understandings of individual circumstances, even if tried with efforts. Mr. Negoro says that a solution can be obtained which synchronizes a proposition, if grasping in the way of proposition by returning back to **a principle world of autonomously existing words, grammars and meanings**, same as we can know a naked object called a human being, if returning the person naked.

Note that the expression of 'autonomously existing' is a term used by the writer for convenience of explanation.

**"Lyee is a Providence and accompanied by a concrete methodology."**

The meaning of **a principle world of autonomously existing words, grammars and meanings** is an area of the invisible presence. It is not invisible = not corroborative.

Lyee corroborated a proof over and over again.

Lyee is a theory insight and a methodology which realized the discovery obtained thereabouts into an extremely concrete technique. Therefore, by using the technique even if not understanding the theory, anyone can obtain the same result. The 10 to 20 times' productivity can be gained due to the readily imbedded providence. It simply provides the way standing to reason. The correctness of the theory is proven by experiencing overwhelming achievements by using the technique directed by Lyee.

By capturing a working of the invisible area called a meaning formation processes, it is transferred into pallets, as its is, merely for bringing it to life for the software development. - This is a compact explanation of Lyee.

The writer dared to say 'merely for bringing it to life'.

However, there is a primary premise thereabouts. The issue is whether software is grasped as one inevitable presence of the natural world or as a self-willed humanly structure.

The writer is compelled to wish that specialists involved in the diversity of software development fields will vindicate the proof by Lyee and enjoy its greatest amounts of merits.

*Remarks: Parentheses inserted in Mr. Negoro's snarrative tatements are added by the writer of this interview article.*