# INTUITION

# By Thomas G. Lang, Ph.D. 3-3-16

Because I used intuition so extensively in developing my various new ideas, including a new theory of physics, I wanted to share my beliefs on intuition with others. Contrary to popular opinion, I believe that intuition is not mysterious; I believe that it is thought-based. I further believe that intuition can be taught and learned. In 2007, the idea suddenly came to mind that intuition is like an "instant computer". This thought led to the concept that our minds work much like an "instant computer" in combination with a "thinking computer".

# Thinking Computer.

The idea of a thinking computer is not new; however, no one has replicated human thought. In any case, a thinking computer must include all of the hardware and software needed for conscious thought, such as making associations, detecting similarities, using logic, drawing conclusions, solving problems, planning, and creating ideas. Any such computer must also include a memory bank.

# **Instant Computer.**

My concept of an instant computer is very different because it provides **intuition**. The instant computer contains the hardware and software needed to give the best possible instant answer to any question or problem.

Importantly, the instant computer must have access to the thinking computer. Its goal is to provide instant associations, instantly create new ideas, and to instantly combine many ideas into **instant decisions, answers, and actions**. To do these things, the instant computer must have access to what I call **generalisms**, which are simplified conclusions generated by the thinking computer that are almost always true.

No one has developed such a computer. Furthermore, if this instant computer cannot provide an instant answer, it will keep trying.

This is why I believe that intuitive answers

often come in the middle of the night, or when one is in the shower. Any such **intuitive answer** can come minutes, days, months, or even years later. This delay is caused by the need of the mind to collect enough information to provide an instant answer.

However, the instant computer is limited in accuracy because it is based on simple general findings that I call one-liners. **One-liners** condense our knowledge of a topic into a simple one-line statement. Only by basing intuition on these one-liners, can the instant computer combine many kinds of thoughts and ideas into an instant solution. Consequently, our intuition does not have the power of conscious thought. However, the instant computer can instantly do important and creative things that the thinking computer cannot do. These dual abilities explain why and how each type of computer supports the other.

# Good and Bad Intuition.

The reader might ask "Why do some people have very good intuition, while others do not?" A short answer is that the minds of people with bad intuitions are probably filled with conflicting and incorrect information. Therefore, even though their instant computer works properly, the best answer that it can give is a poor answer.

Alternatively, the minds of people who have unusually good intuition are probably filled with well-correlated and correct information. People with good intuitions tend to think a lot, use good thought processes, are curious, learn from their mistakes, and like to generalize ideas. In other words, people with good intuitions use both kinds of computers very well, and have wellorganized memories that minimize conflict.

For more background, and before discussing intuition, I now want to describe what I believe are the two very different kinds of memory that people use: event memory and thought memory.

# **Event Memory.**

Event memory results from experiencing an event. I believe that the mind records events using all five senses; these recordings resemble the two-sense (sight and sound) recordings made by video cameras. Our mind tends to automatically title and subtitle an event by mentally associating that event with a topic, person, place, and/or calendar date.

Event memories tend to consume a huge amount of memory space, as video makers well know. This is why I believe that we have a short-term memory. Our short-term memory permits us to extract those parts of an event that we want to permanently remember, and is much like editing a video.

Although our memories seem to have infinite capacity, I believe that it is important to limit event memory wisely. I believe that, if the mind is filled with event memories, then other mental abilities, such as intuition and thought, can be adversely affected in the long run.

#### **Thought Memory.**

The second kind of memory is very different from event memory. I believe that a thought memory results from mentally extracting ideas and conclusions from things that we know. For best recall, I think that thought memories should be widely associated.

Since thought memories use relatively little memory space, I believe that one should think more, and not less. A thought memory results from understanding something, while an event memory is a rote memory that is much like a video recording.

#### **Improve Intuition.**

I believe that intuition is improved by learning how to use each kind of computer better. I will show that the instant computer relies on the thinking computer to organize information in the memory in such a way that the instant computer can more quickly find the best possible instant answer.

Alternatively, whenever the instant computer provides an answer, the thinking computer can be used to more thoroughly analyze and explore that answer. Conversely, if the thinking computer is suddenly halted by a problem, then the instant computer can often solve that problem.

Summarizing, the better that we learn to use

one type of computer, the better we are able to use the other type. This win-win situation leads to great improvements in both intuition and conscious thought.

#### Track Back.

I firmly believe that every intuitive thought results from a logical, subconscious, very rapid thought sequence. Therefore, one of the first steps in improving intuition is to understand it better by mentally tracking back your intuitive thoughts. Begin by tracking back your simplest intuitive thoughts and ideas; then continue by tracking back your more-complex intuitive thoughts and ideas.

Tracking back your most complex intuitive thoughts is doable, but is probably not worth the effort because tracking complex thoughts can take hours or days if dozens of variables and intricate thought patterns are involved.

#### **Organize Memory.**

Memory is like a gigantic library. Because of its huge size, I believe that it is important to organize one's memory so that information is filed in the same ways that you might want to recall it. Experience shows that information is filed by associating new information with existing information. There seems to be almost no limit to the number or complexity of associations that can be made. The number of associations accumulated in a lifetime must be immense. Associations are discussed next, and are made as fast as one can think; which, for example, is far faster than filling out a library file card, filing it, and then later trying to find the card again. The mind is a wonderful thing!

#### Associate.

Many kinds of information can be associated, such as words, ideas, concepts, devices, methods, procedures, documents, plans, and almost anything. Furthermore, associations can be grouped, and even these groups can be grouped.

One might ask: "What are the best associations to make? My answer is: "The best associations are those that work best for you". The reason is that each person's mind and goals are unique. However, I will provide three general suggestions that will help. First, as mentioned earlier, it is best to associate information in the way that you want to recall it. Second, many kinds of information can be associated by summarizing it. Lastly, unusual associations are needed for greater creativity.

# Understand.

We say that we understand something after we learn "how that something acts in many different situations", and "how changes in that something affect its actions". These comments apply to objects, ideas, words, and people.

I visualize "understanding" as being an island of associated information. With greater understanding, that island grows. Given time, that island becomes associated with many other islands of understanding. If these islands are well inter-connected, then that person becomes "wise".

# **Remove Clutter.**

A quick way to improve intuition is to clear the mind of conflicting information and other kinds of clutter. Begin by analyzing your simplest conflicts.

Any conflict that has an obvious solution disappears by simply associating it with that solution. Similarly, an obsolete conflict disappears the moment that it is associated with the reason for it being obsolete.

Considerable thought and new information might be required to resolve most of the conflicts in the mind. However, solving conflicts gets easier with experience, and can become almost automatic.

### Weaken Negative Events.

Negative events such as negative thoughts, habits, and memories can sidetrack or block intuition. It is helpful to eliminate, bypass, or weaken negative events. For example, one can substitute a better thought, habit, or memory. Alternatively, one can blunt the effects of negative events by finding the positive lessons learned from each negative event.

#### Summarize.

I believe that summaries are especially useful. Summaries prepared for the instant computer should be **general and brief**. Alternatively, summaries made by the thinking computer can be **very detailed and complex**. Either computer can handle a wide variety of summaries, including summaries of summaries. Summaries include generalizations, similarities, and basic truths.

# Think.

Conscious thought helps to generalize ideas, summarize and categorize ideas, find associations, develop analogies, create new ideas, organize memory, and solve problems. **Thinking takes time, but it has great power**.

# Problem solving.

Learning to solve problems better and better tends makes the process more automatic and intuitive. Note that problem statements typically include: (1) a specific goal, (2) conditions that must be satisfied, and (3) things to optimize.

A well-worded problem statement is a major step in finding its solution. I firmly believe that a best solution exists for any problem at any given time.

A good way to jump-start creativity in problem solving is to first think of all possible solutions, and then conduct a literature search, rather than vice-versa. A helpful way to solve very complex problems is to **first solve related and simpler problems**.

# **Practice the Thought Processes.**

Practice and use the various thought processes until they become intuitive. These processes include making associations, finding similarities, making summaries, finding alternatives, analyzing things, and problem solving. Practicing the thought processes is much like practicing riding a bicycle; eventually, they become automatic.

### **Creative Intuition.**

Creativity in intuition can be improved in many ways. Most important is to **improve all of** 

the thought processes because I believe that they all are involved in optimum creativity. Finding analogies and similarities certainly assists creativity. Conducting **leading edge research** helps creativity by learning how something behaves in many different situations, and how changes in that something affect the results. Research can be done experimentally, analytically, or by doing both. I prefer doing both when possible.

#### **Improve Memory.**

In theory, a lasting memory is made instantly by mentally associating something new with things that you already know. However, since recall tends to reduce with time, memories are strengthened by use.

Also, memories can be greatly strengthened by **adding parallel associations**. For example, to better remember a person's name, make parallel associations between that person and others who look similar, and who have similar names, hobbies, backgrounds, friends, etc.

Additionally, a very effective way to remember to do something is to use visualization. For example, **visualize yourself returning from a trip**, entering your home, and then doing that something. Visualization almost always works!

#### Listen with Understanding.

If you want to listen, then listen with understanding by associating what you hear with what you know. Also, when listening, avoid debates because I believe that debates too often lead to a battle of wits or ideologies that leads nowhere. Instead, try to work together with the speaker, if possible, to build on ideas.

#### Learn from Mistakes.

Ideally, learn from the mistakes of others. But always learn from your own mistakes, and then generalize what you have learned. For example, if something was lost, then determine the cause, think of how to avoid losing that object again, and then think of ways to avoid losing any object.

### The Controller of the Mind.

People have wondered where the controller of the mind is located. During one of my many reviews of this section on intuition, the following intuitive idea suddenly came to mind: "The instant computer is the controller of the mind." I do not know if this is true or not, but it might be.

#### Summary.

I believe that intuition can be improved, taught, and learned. I have offered suggestions on how to do these things. These suggestions are spread throughout this brief paper. Overall, I hope to have demystified intuition, and to have provided useful ideas for teaching, learning, and improving intuition.