Getting an Idea Seek Yet More. How Video Communication Helps in Psychiatry and Business and How Cameras Detect Lies and Improve Communication.

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When you find good ideas using patterns of evolution as a tool, think how you might continue the same pattern or the line of evolution. Try yet once to use the pattern. Very obviously, yet more exciting discoveries and innovations will wait you.

I want illustrate this statement by two unusual and surprising examples of communication. I discovered these phenomena having written, for year 2003, already seven stories covering video communication from different points of view. About some topics I have told also in English in articles in the TRIZ Journal [see, for example 4-6].

I understood that there are yet many fascinating things to be found. I hope that you agree seeing the examples.

The first example tells how the videophone increases the intensity of conversation in psychiatry.

The second is from video technology: The camera and the software that read body language and detects lies.

What Does Psychiatry Teach Us about Video Communication?

In a pilot project, psychiatric services were made accessible via videophone in the archipelago in South-Western Finland, from 1997 to 2000.

A report on the project tells of some surprising results:
"An intense personal contact and a marked dimension of intimacy are apparent in videophony. This was a surprize for the projectmakers. One possible explanation is that the videophone can be seen as a "neutral" medium, which affords a sense of freedom and a scope for emotional commitment. Another is that, on one hand, the videophone will catch the attention, and on the other, the contact will easily be broken. In both cases the conclusion is that the intensity of the conversation will increase..." [7, p. 9]

Let's insert the result into the framework of the evolution patterns. "Simplified TRIZ..." [3, p. 119, for example, gives the following ways to improve interactions:

1. Introduction of new substances
2. Introduction of modified substances
3. Introduction of a void

4. Introduction of action

We can see "a sense of freedom and a scope for emotional commitment" as an additional "emotional" interaction, a new action introduced to the system of communication (4). The finding that contact can be easily broken we can see as an example of the introduction of a void (3). Going out from the screen is also a message!

We put available knowledge into an existing framework. What new we can get out? In an earlier paper I told how deaf people are pioneering video communication as lead users [4].

Can we consider psychiatrists and their customers another group of lead users? I think we can.

Additional "sense of freedom" helps when people feel uneasy discussing the problem.

Really, in business one can detect the same "sense of freedom" as in psychiatry. Users have said that it is easier to give questions or make critical comments over the net than face-to-face, particularly if senior managers are taking part in meetings.

Psychiatrists tell that they use "common text making"—for example
"What did you say? What does it contain?... Could you tell me what you were thinking when you mentioned that word?"
.... Both conversational partners... have a chance to increase the meaningful possibilities... during the dialog where open and shared construction of meaning is encouraged. Surprisingly often this seems to happen." [7, p. 21]

Here is something similar to "common problem solving" in corporations, universities and other organisations.

From other side, some people report that additional requirements and problems arise when video is added to communication. For example, Peter Meyers wrote in The New York Times last year:
"... make sure you are appropriately groomed. Second, go to the gym. Webcams can reveal chin and neck bulges that you might not know you have. Rule No. 3: be careful where you put your hands, especially in the neighborhood of your nose." [2]

Here we have reason to learn from psychiatry. Perhaps "the sense of freedom" and good emotional climate can be transferred to other situations?

Can the Camera that Detects Lies Make Other Things, too?

Seeking for new cases on communication and increasing interactions I saw a small article in the Futurist. I thought first there was something on video communication, since a photo seemed to display a video telephone.

Not exactly. Researchers in the University of Manchester have developed the Silent Talker, a device that process patterns of non-verbal communication. Artificial intelligence is used to analyze body language.

Researchers hope that the Silent Talker will give additional information of various disorders like tiredness, aggression, and Parkinson's disease. An intriguing extra benefit is that it also can detect

lies. In a pilot study the Silent Talker managed to select true responses from false ones with 80% accuracy. For more information, see Futurist [1].

Again we put the case to the context. The Silent Talker, obviously, also mirrors the increase of interactions, but different way.

We have talked of interactions between sender and receiver or speaker and listener. We can see communication as interaction between them. According to TRIZ, the system "speaker - video phone - message - video phone - listener" can be improved also by introduction of new and modified substances, see "Simplified TRIZ..." [3, p. 119].

The Silent Talker is a new substance, making the message more reliable.

There are other "substances" that have been developed long time, for example, machines and software for automatic interpretation.

Perhaps we don't want lie detectors to check our speech, but we can imagine other applications, more easy to accept. Intelligent cameras can, for example, check whether the advertisement or the product advertised appeal to the viewer or not.

We can foresee a whole class of new technology: "modified phones", or smart phones. Perhaps we can call them "improves", since they improve message, not only transmit it.

At last, if the camera can analyze the body language, it perhaps learns to improve the image. It would be nice if it could those "chin and neck bulges" Peter Meters talked about.

Yes, Patterns of Evolution are Really Valid and Meaningful

We see that communication can be more rich than one could imagine at first glance.

Additional examples of the increase of interactions you find in the book "Simplified TRIZ..." [3, pp. 117-120].

We can forecast, that yet new interactions can be found in future, both in nature and in technology. It is reasonable to believe the patterns of evolution! They help to get rich and meaningful knowledge and insights.

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