

The Ideal of TRIZ TRIZ as the Way of Life? Part 2

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Abstract

TRIZ could be applicable to every area including technological area and institutional area because TRIZ is an assemblage of methods consisting of changing one attribute, solving contradictions, segmenting and merging of attributes and objects, as I presented at the 4th Japan TRIZ Symposium. This paper surveys an idea of object, methods and thought of TRIZ. I will investigate the movement of objects of consciousness at the beginning process of barter as an example in the area which usual TRIZ does not deal with. And I will show unified four types of realization of purposes and propose a radical thinking for enumeration.

1. The Ideal Method of TRIZ

The ideal of the theory to recognize and change the world is that everyone can objectify everything one can recognize and one can change them by specifying one of possible types of change to fulfil proper purposes immediately.

We have three types of purposes in resolving differences which is intentional change common in every area.

- 1) Make new function : Make new system or add new function to existing system
- 2) Solve issues : Solve problems in existing system
- 3) Idealize : Improve functions in existing system or realize existing functions with less resources

We have three types of transformation to realize purposes as follows.

1) Transform purpose into type of Object change

P- O1 : Transform purpose into type of Object change within one attributes of one Object by each purpose.

P- O2 (PC) - S : Handling Physical Contradiction. Transform purpose into Physical Contradiction with two values of one attribute of one Object.

P- O2 (TC) - S : Handling Technical Contradiction in advance. Transform purpose into Technical Contradiction with two attributes of one Object. Expansion of usual Technical Contradiction.

2) Transform type of Object change to the other type of Object change

O1- O1 : Transform type of Object change to the other type of Object change

Change of one attribute can cause deleting Object, generating Object or changing number of attributes according to the law of the mutual transformation of quantitative and qualitative changes or its expansion.

O1- O2: Transform by side-effect autonomously

O2- O2 (TC) - S: Handling Technical Contradiction to deal with side effects.

3) Transform type of Object change into solution

O1- S: Transform type of Object change into solution within one value of one attribute of one Object. This types consists of three types.

O2- S: Transform type of Object change into solution within two attributes of two Objects

As a combination of these results we get four types of resolving differences which is intentional change.

1) P- O1, (O1- O1), O1- S: We can try this type at first for all purposes.

2) P- O1, (O1- O1), O1- O2, O2- O2 (TC), O2- S: If case 1) would cause side effects we should solve Technical Contradiction afterwards.

3) P- O2(PC), O2- S: Solve Physical Contradiction in advance.

4) P- O2(TC), O2- S: Solve Technical Contradiction in advance.

2. The Ideal Thought of TRIZ: Radical thinking for enumeration

Thought is viewpoint, attitude and framework of method to decide details of method.

The ideal thought of TRIZ is radical thinking for enumeration which consists of two parts. First part is viewpoint and attitudes grasping movement to be changed at this moment and always keeping proper viewpoint and attitude; "to be or not to be", function and granularity, definition from outside and inside, modesty and criticism. For second part of radical thinking for enumeration we need to take some time to enumerate candidates of image of recognition and change from among everything recognizable and changeable and to investigate possibility of extreme change radically.