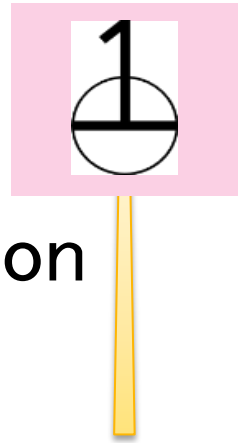
TRIZ user's skirts of a mountain is expanded.
Invention principle workshop
～　Interactive, experience, and own declaration



◆Device1）　Interactive is considered.
◆Device2）　Various beginning to be able to come and go in seat study and experience
◆Device3）　It discovers and it explains the invention principle and the contradiction solution for myself.

It is a screen that has been displayed to the workshop beginning to appear.

Business card exchange & introduces first.
It talks afterwards.
It explains each other.
I hope the degree in which the sit-down is considered.

Idea creator　Yoshitoku Takagi

(reference)Flow of workshop

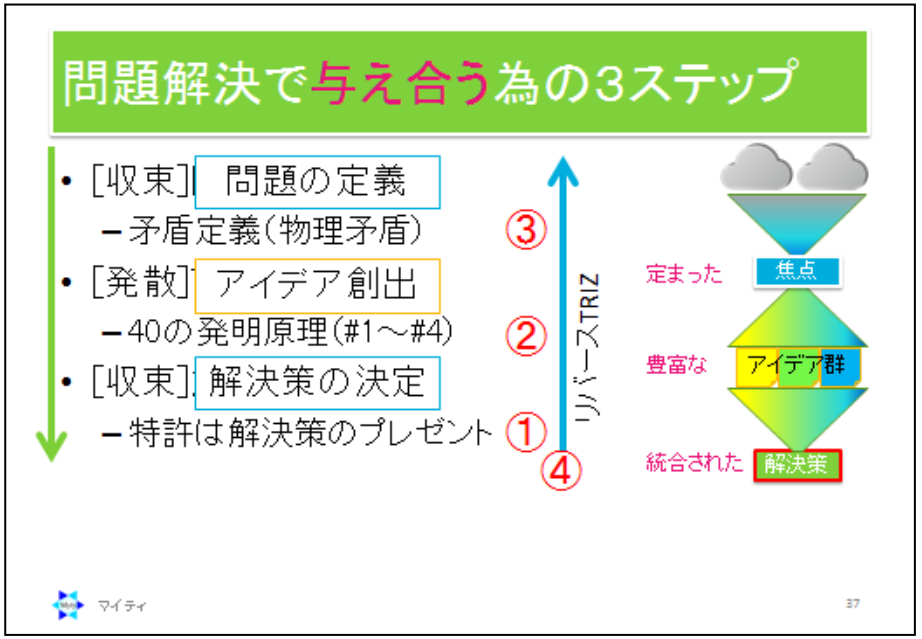
It makes can doing reverse TRIZ a goal.

・Importance of common language

・Invention principle

・Physical contradiction

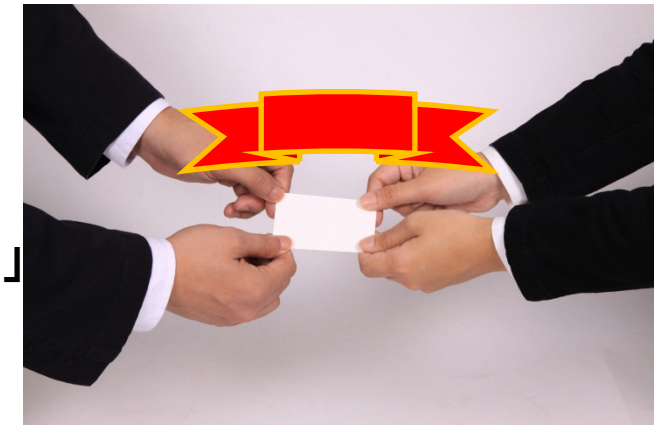
It experiences in this order.



Why is it easy to give the business card each other?

- Shape and the material become complete.
- The content of the description becomes complete.
- The exchange procedure becomes complete.

Therefore,「Common language of self introduction」



＝**Present**

To present the problem solving experience

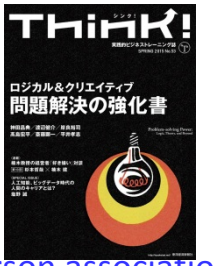
Official language of 15
It is a cooperation of labor in English.

トリーズの発明原理40 TRIZ

Common language of problem solving

Myty マイティ

Results～It introduces execution & to 300 description people or more.



- Sansouken
- Technological person association
- The University of Tokyo
- Daikanyama ivy shop bookstore
- (Toyo Keizai Shinposha)
- (Nikkei Business Publications,Inc.)

『トリーズ(TRIZ)の発明原理40』刊行記念　高木芳徳 特別講義　I

日経ビジネス ONLINE

amazon ランキング

‹ すべてのカテゴリ
‹ 本
科学・テクノロジー
科学読み物
数学
物理学
化学
宇宙学・天文学
地球科学・エコロジー

科学・テクノロジー の 売れ筋ランキング

Amazon.co.jpの売れ筋ランキング。ランキングは1時間ごとに更新されます。

1. ↑234日間100位以内

トリーズ(TRIZ)の発明原理40 あらゆる問題解決に使える[科学的]思考支援ツール

高木芳徳

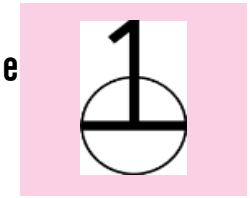
★★★★★ (5)

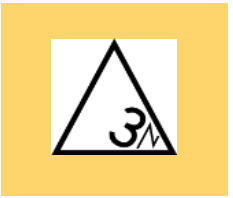
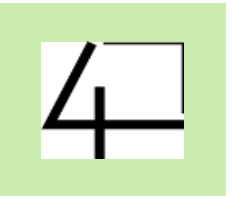
単行本（ソフトカバー）

Device 1：Interactive valuing

Answer plate　How to make

It is each one in the pertinent tag pape
ention symbol is drawn.



It explains separately by one step.

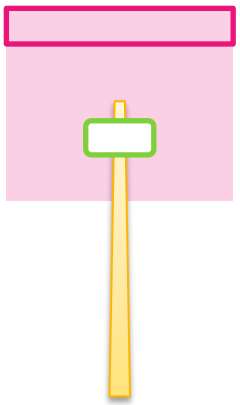
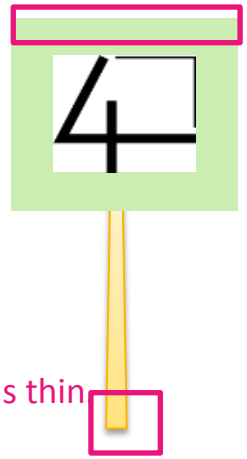
chopsticks are taken out of the bag.
des in two.

It is fat ahead.

It is partially a paste.

rd is turned over.
it with the seal with chopsticks.

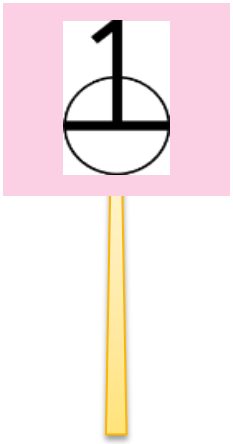
4. It completes making 4.

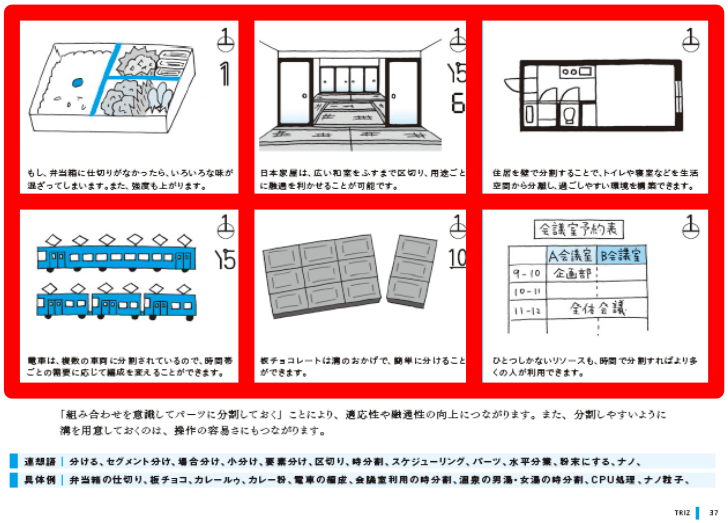



The possession person is thin

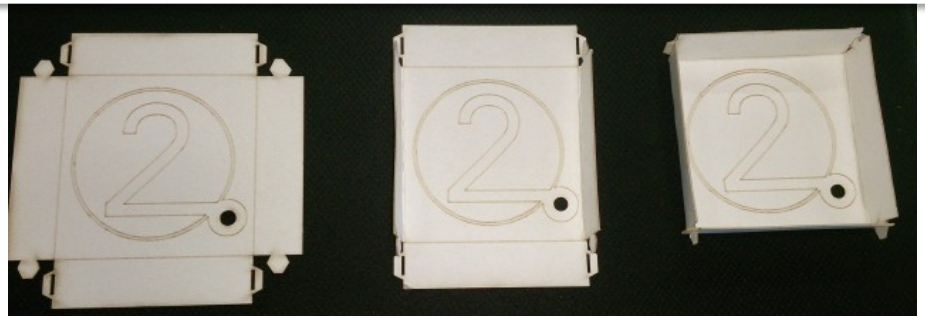
Invention principle observation from familiarity and a variety of device examples

Interactive is maintained also in WS of 75 people.

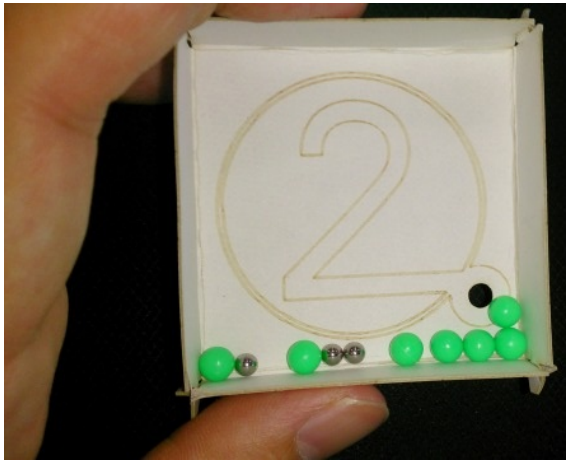




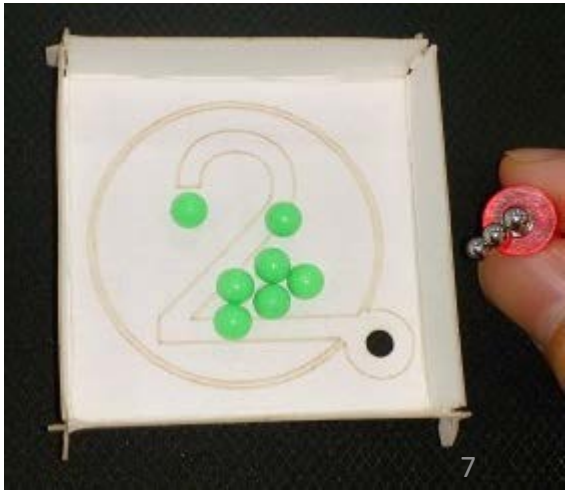
Device 2 : Valuing of experience



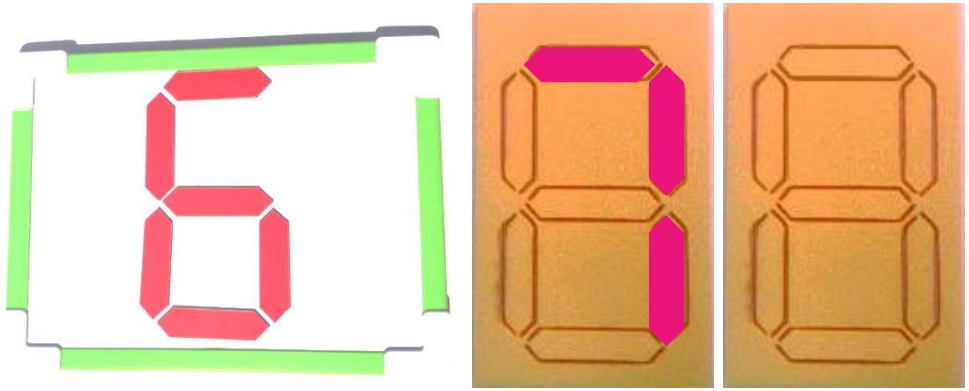
#2 Separation principle



- How to make and How to use.
  - Cardboard is put in the direction where two is seen. The right and left vicinity is squarely folded. The upper and lower vicinity is squarely folded. It passes through the hole of the tab part of four corners and it is ..shape of the mass...
  - Can the gem able to be put, and put out from the hole only the gem of iron?
  - Let's appropriate the magnet from the back and separate.

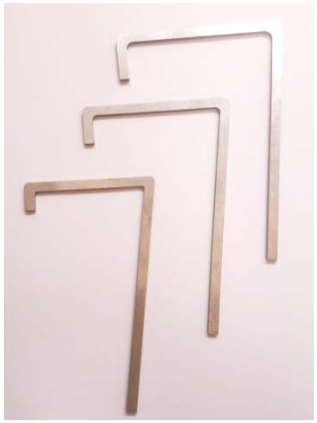


#6 Generality principle: Experience toy

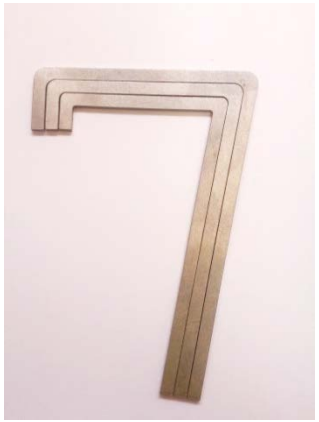


It is possible to make it by touching 0-9 of the digital numbers.

#7Nest principle: Experience toy



The place is not taken up by the nest.

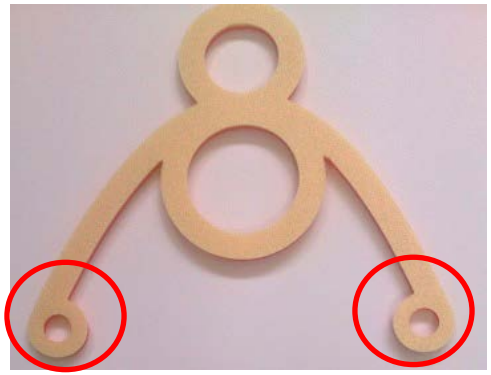


#8Balance principle: Experience toy

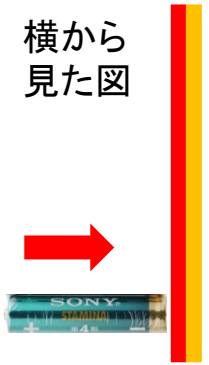
Material：Two batteries（や）＋「Yaji

①Is yajirobee supported from the under and do it balance?

②Please do two batteries to each both arms in and crowd.



横から見た図



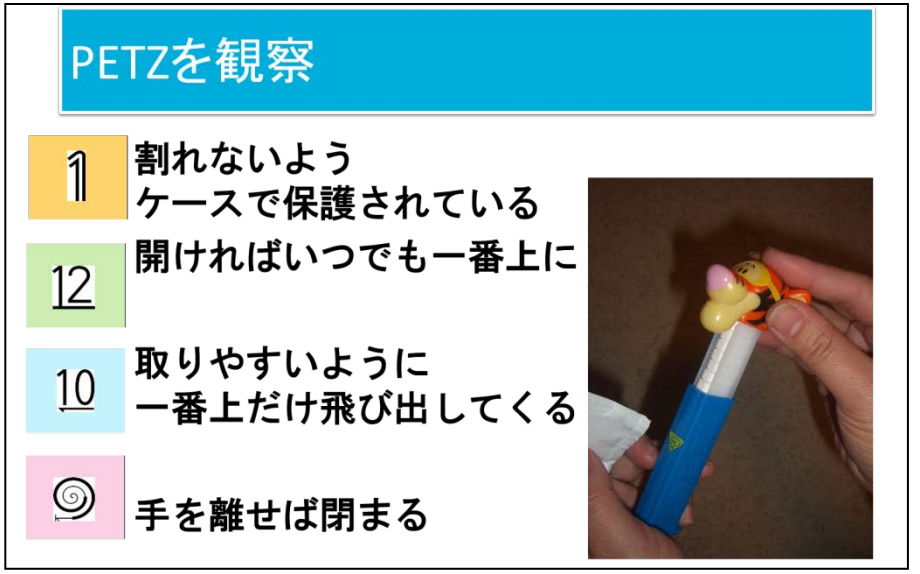
③It balances in various points when completing.
Let's play. With stability.
This is invention principle # 8"Balance principle".

Publishing request from science Communication Center
http://www.jst.go.jp/csc/workshop/tool.html

Device 2-2 : It experiences by using the cake.

The chocolate bar is divided because it is too large to eat in short.

It is an invention principle in prior. in PETZ
#9　Advance reaction principle
#11　Prior protection principle
#10　Advance action principle
#12　Place principle



It becomes a chance also for atmosphere to become peaceful when the cake is served and to open the mouth.

Device 2-2 : It observes it by using the thing.

Fresh discoveries were able to be received from it was easy to ring in one's heart, and the participant by actually touching.
Example:Tip of tape measure.

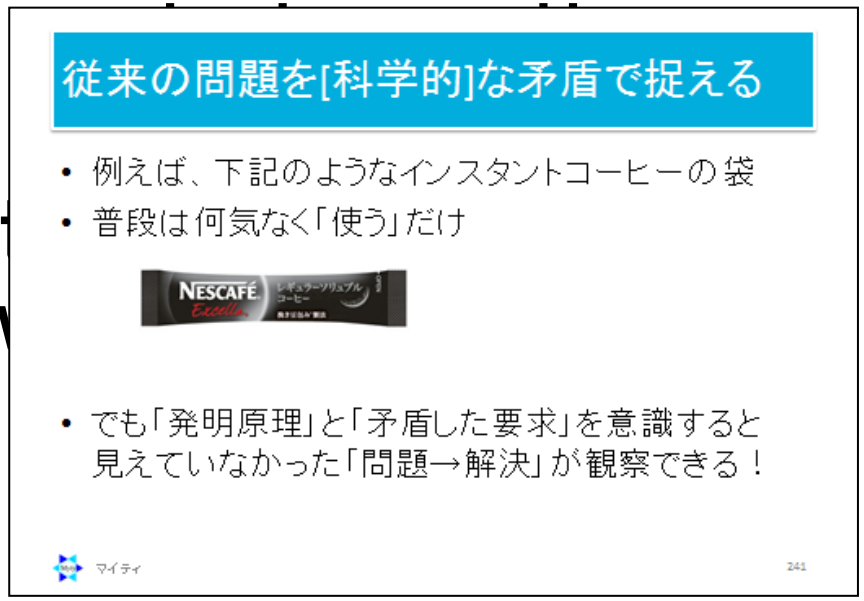
The battery is observed by <# four asymmetric principle >.

It is possible to put it on piece wrapping instant coffee.「Separation invention principle」

#1 Division principle
#3 Locality quality principle
#2 Separation principle
#4 Asymmetric principle

Device 3
It discovers and it explains the invention principle and the contradiction solution for myself.

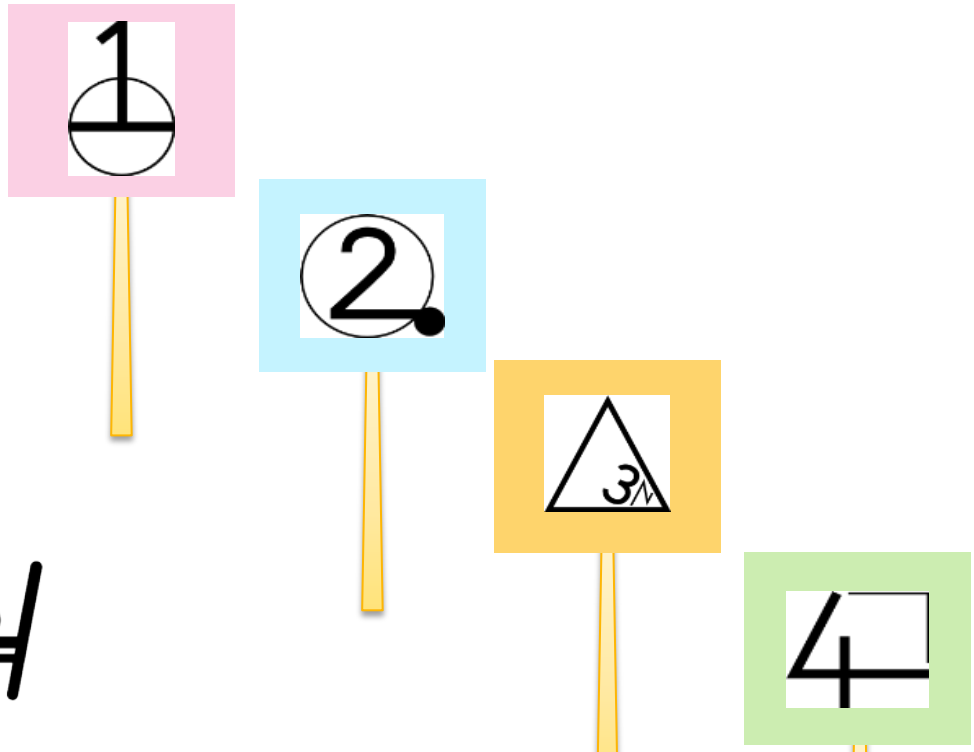
- Unpalatable "Favorite invention principle" is chosen.
  - It explains it to others.
  - Something is observed
    invention principle.
- Contradiction is extract
  together from the observ
  - Contradiction→Invent
    →Solution introducti
- It is given each other.



Did you like it most?

＃１：Division principle？
＃２：Separation principle？
＃３：Locality quality princip
＃４：Asymmetric principle？

該当する番号札を挙げて下さい



「By a pair,　Please speak the invention principle that entered a nature each other in one minute.」

Device 3&2 n principle observation seat

The invention method can be scientific and, otherwise, doesn't become it.

TRIZCreator G・Alto Schurer

Observation object: Nescafe Excella

Observation day

1 <#1 Division principle>

e problem is solved by dividing the thing and the space and time.
he is delimited and it makes it to subdivision.
resource is used by timesharing ・・・.

・It divides fully in each amount.
・It is easy to be melted by dividing like the powder.

2 <#2 Separation principle>

and the space and time are separated and the problem is solved.
xtracted, and it isolates it from another.
one at limited time ・・・.

・Moisture is separated and it is made it only to the powder.
・It separates from moisture on the outside by wrapping.

3 <#3 Locality quality principle>

lters one's nature locally and the problem is solved.
ickness is changed, and they are made to shine.
e is seen, the trained hint : fully ・・. ▪

・It is easy to open it by partially of the furnace that blows being cut.

Let's think about the problem of becoming the origin of this device (contradicted demand).

4 <#4 Asymmetric principle>

problem is solved by destroying symmetry.
ent by right and the left, and the material is different.
larity that is not the object in usual 0

・It is easy to clarify the top and bottom by making the display of the furnace that blows asymmetry completely (The right-handed person :).

トリーズの発明原理40
TRIZ
あらゆる問題解決に使える「科学的」思考支援ツール
TRIZアイデアクリエータ 高木芳徳

The solved problem is caught by scientific contradiction and it presents it.

It wanted it, and strength was locally lowered because it wanted it even if it was low each other and strength of the package solved the problem though it was high each other.

Observation object

The parameter is arranged and it defines it contradiction.

①:Demand

When it wants to drink and it becomes it
The package at once
I want to be opened.

【②:Problem to "1"】

The package : first.
It was not easy to have cut it.

⇒ Strength of the package
It should be low.

【③ ..:.. ① and contradicted demand 】

The package : while transporting it.
You should not cut.

⇒ Strength of the package
It should be high.

Then, let's give it between tables each other.

- Please decide the table representa
- Two minutes a person
  - Contradiction definition (for on
    →The order of invention princip (for one minute)
- Declaration of the following action

次のアクションをお願いする例

私は＿＿番の＿＿＿＿原理で、
＿＿＿＿＿を観察してみようと思います。

- ＿＿＿＿さんから、＿＿＿＿＿＿についての工夫を聞いてみたいです。
- 私も＿＿＿＿＿の工夫について一般化し、他者に与えられるプレゼントにします。

Pleasure that can present person device that I found

Summary

- The workshop where convenience was actually felt because TRIZ was assumed to be "Common language of problem solving" was held.
- Even if it is a workshop of 75 people, interactive is maintained by introducing the answer plate.
- The experience with a cake and an invention principle toy is popular.
- Announcing "Contradiction → solution" found for myself in front of all members rises.
- Please continue your favors toward the guidance encouragement in the future.