Episode 7 Differences in the way men and women think.

<Why great inventors tend to be male rather than female >

Reported below is a collection of various observations interwoven with hypotheses obtained during a brief period. There are some exceptions, but the results generally fit together. I decided to report the observations in case they might be useful in the study of humans in management engineering, creativity engineering, psychology, and behavioral science.

(1) An experiment which easily shows the difference between the left and right brains

We move our heads left and right to negate or admire. Do you know in which direction we start to shake our heads? There are two: to the left and to the right.

Let us now do an experiment. To the following questions answer no with a natural motion of your head. <Case 1>

"Do you have a million yen now?" \rightarrow "No"

"Have you ever murdered a person?" → "No"

In which direction did you start to shake your head?

<Case 2>

Next imagine you are disgusted, and shake your head emphatically "No!" once with accompanying gestures. If it's not clear in which direction you shake your head, shake to the right and then shake to the left to determine which direction is more natural. Another example is when you say "Brrr!" because the air conditioning is too cold, or when you say "Tm so glad!" with excitement. In which direction did you shake your head this time?

Most people should have began in the left direction in <Case 1> and in the right in direction <Case 2>. I have interpreted this phenomenon as follows. In <Case 1>, we establish a thread of logic or words and then negate it, whereas in <Case 2> we shake our heads while changing sensory content into words. When logic or words come first, the information is transferred from the left (logic, word) brain to the right (image, experience) brain, and a judgment is arrived at through a comparison with other images. When the image comes first, the information is transferred from the right brain to the left, and a judgment is arrived at by a classification of words. This applies to the majority of people (we call them type A). However, there are also different patterns.

1. Some women $(1/3 \sim 1/4)$ shake in the right direction even for <Case 1>. They seem to be of the sensory

type rather than theoretical. We call them type B.

- 2. For both men and women, a few people (2 \sim 4 %) shake in the opposite direction for both <Case 1> and <Case 2>. We shall call them type C.
- 3. Extremely few people shake their heads opposite to type B. These people we call type D. The examples so far have all been women.

One may wonder whether the above results are related to right-handedness or left-handedness, but there seems to be no correlation.

(2) For a man to talk in a relaxed manner to a woman, on which side should she be positioned? If you are a man, and would like to talk in a relaxed mannerwith a woman, would you prefer her to be on your left side or right side? Probably most of you want her on your left. What if you are a woman? You probably would feel more relaxed if the man sat on your right. The tendency for men and woman is therefore opposite. The situation of the man being to the right and the woman to the left is most common.

Let's look at another situation. If you are a man, please ask a women whether she likes to hear words of love whispered into her right ear or left ear. The answer should be the right. Let us suppose you are a man. Please stroke the left side and right side of your neck with one hand. Which side of the neck has a stronger sense of touch? There should be a difference. I think the answer will be the left. If we make further observations, we come up with the following results:

- 1. The more sensitive side has a slightly lower temperature.
- 2. For women, this tendency appears in two-year old girls. They feel ticklish more on the right side of their necks.
- 3. The differences in sensitivity depend on the person. Even with the same person, sensitivity and the stronger side can change during the day. This also occurs with the intake of alcohol.
- 4. However, if we take the majority as the norm, there are exceptions. Types C and D mentioned above usually feel the opposite.
- 5. Here is another little-known fact. Turn your head to the left and right. There are some exceptions, but most men can rotate their heads further to the left than women. Women can rotate their heads further to the right than men.
- (3) The portion of the brain which is responsible for tasting

Let's try another experiment. When you try to taste, you may say, "Is this too sweet, or not sweet enough, or just right?" In such a case, you tilt your head. Which is more natural, to tilt to the left or to the right? The answer should be to the right. It appears from this that the tasting function of the brain is located in

the lower right, somewhere beneath the ear. If we compare this with the 4 boxes of the input-output relationship in Steplist management, we obtain good agreement, as in Fig. 1. We obtain correspondence between the item "taste" on the right and the lower part of the right brain.

The above suggests that the lower part of the right brain is better developed in women, and so they are good at tasting. It also explains that their ideas come from the thoughtful caring about their husband's tastes (post-assurance condition that the wife doing the tasting should know her husband's tastes).

(4) Differences between the way men and women think

Suppose that a couple is taking breakfast. If the husband asks "Where did you buy this rice?" the wife will almost always respond "Was something wrong with it?" What happens is that in both cases whether the rice tasted good or bad, the husband thinks analytically about where and what brand was bought, whereas the wife worries whether something was wrong with the cooking or tasting before asking whether the rice tasted good or bad.

The left and right hemispheres of the brain must collate with each other. If there is collation, it is evident that one side must have called the other side. If we take this into account while looking at the figure comparing the Steplist and the left and right brains, and consider the difference in the way the husband and wife think in the above example, we are led to the idea that males tend to think starting from the left brain, and females tend to think starting from the right brain.

It has often been said that great inventors and composers are predominantly male. If we apply the above explanation further to Fig. 2, which compares the FBS block diagram with the left and right brains, it appears that the pattern of the FBS technique starting from the theme corresponds to the male way of thinking. Therefore, to effectively create a new thing, men and women should both keep the concept of the FBS block diagram in mind, and start from the theme. By doing this, their creativity should significantly improve.

We gave this explanation to a woman and she complained that male and female ways of thinking were stereotypes. I wish these terms to be understood as provisional terms for patterns of thought more frequent among males or females in the present social system. For women, I am trying to show that by starting from the theme, they can match or even surpass men.

From the theory based on the above hypotheses, we may suggest that creative management begins

precisely with "faultless structurizing and assignment of themes." Using this mechanism, women can also become great inventors. Women exhibiting leadership in creative management have mastered this.

(5) A hypothetical view of the location in the brain which analyzes themes and chooses words.

If we adopt the above view, we are led to a further hypothesis. That is, if the lower right brain has the function of selection of taste, perhaps the lower left brain also has a selective function. The hypothesis is the following:

Fig. 3 shows a photograph of a section of the brain. If we contrast this picture with the FBS block diagram, the lower right brain corresponds to the idea selection step and the lower left brain corresponds to the theme division. Therefore, the lower left brain may have the functions of analyzing, assigning, and choosing themes, and taken one step further, choosing language. This is in agreement with the fact that when we choose or manage language, we feel that we are exerting the lower left brain. Also, when we are writing, it is more natural to incline our head to the left. This is again in agreement.

From these things, we can understand the mechanism of whispering words of love discussed earlier. Information from the right ear goes through the cross-over nerve bundle into the left brain strongly or quickly, so a male-type pattern is formed in the woman's brain, making the message easier to understand. If this mechanism is recognized, it also agrees with the fact that even between men, persuasion is easier if the person to be persuaded is approached from the right.

(6) Two more facts which show that males tend to male-type thinking and females to female-type thinking. Excuse me for being explicit, but the penis generally tends slightly to the left. This leads to the question of whether the vulva is also curved. The answer according to investigation is that it tends to the right when seen from above. Recently, exceptions have been found.

Two C-type men (with respect to head shaking) had their penises to the right. They were good at sensing the feelings of women. These bodily differences could be the cause of males tending to male-type thinking and females to female-type thinking. Because there are also great women, this suggests that with proper awareness and training, people can start thinking from either brain.

There is another practical and interesting fact. The direction of friendly glances is different between men and women. It is difficult, but I have tried to show the difference in Fig. 4. Let us try another experiment. If you ask your wife to glance upwards to the right with her head slightly tilted towards you, she should appear very cute. I have asked many people to participate in this experiment, and the trend is quite clear.

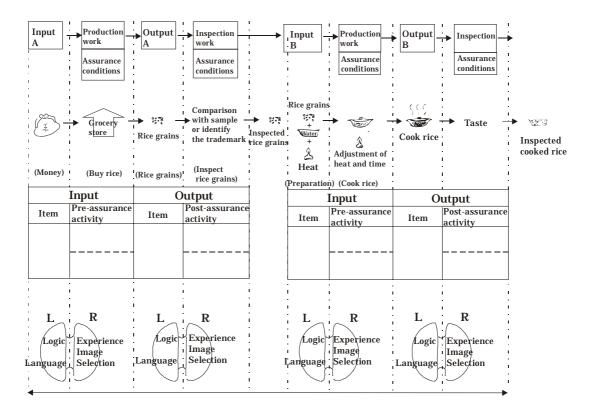
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In the case of men, the glance should be to the upwards to the left.

(7) Summary

The above is what I found looking through the frames of the Steplist and the FBS block diagram. I think that they, together with the NM method, will provide a tool to link the spheres and concepts of behavioral science, creativity engineering, and management engineering. (Refer Appendix A for of NM method)

Episode 7 Fig.1

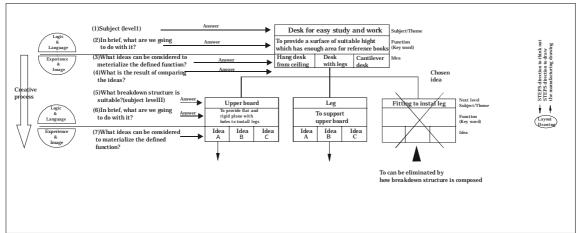


Episode 7 Fig.2

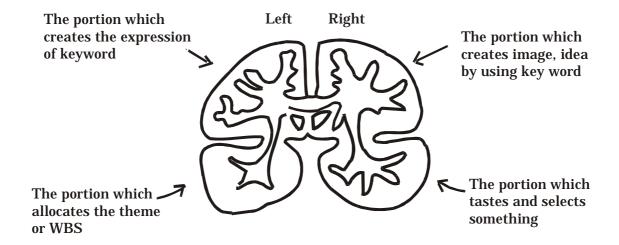
Example: Desk for easy study and work

Thinking sequence for execting the desi

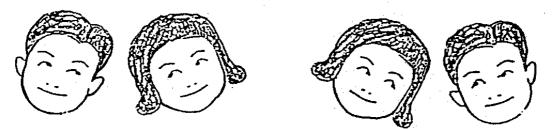
Thinking sequence for creating the design image



Episode 7 Fig.3



Episode 7 Fig.4



Eye direction when the feeling between he and she

Eye direction when the feeling is not too bad between he and she.