# IV -81

# A study on the structure of cognition concerning regional and city planning

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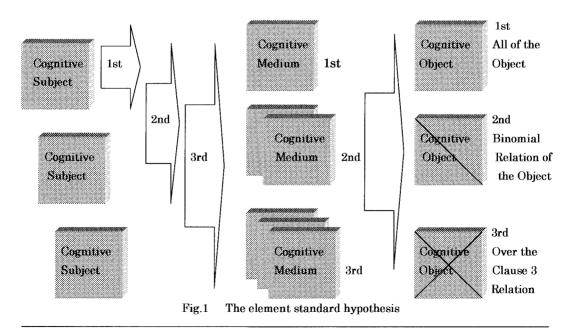
## 1. The purpose

The regional and city planning systems are changing to the participation by citizen from the administrative guidance, but the cognition of these plans is not enough to citizen. The reason is the lack of the system for citizen to understand the plans easily. There are many studies on the civic consciousness in former studies but there are few studies that discuss the subjectivity of the citizen. The subjectivity of the citizen is the key that promotes plans in the future.

There are two purposes in this study. The former is to establish the system that the planning subject can recognize the plans each other in the process of consensus. The latter is to make the way for the citizen to have firm consciousness as the planning subject.

# 2. The hypothesis of the structure of cognition

In this study, two hypothetical cases about the structure of cognition concerning the regional and city planning are presented. The structure of cognition is composed of three elements such as the subject, the object and the medium, and we name it a primary hypothesis "the composition concept hypothesis". These three elements have the three dimensions such as the 1st, the 2nd and the 3rd respectively, and we name it the 2nd hypothesis "the element standard hypothesis". The usefulness of these two hypotheses is verified at the following paragraph.



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### 3. The verification of the hypothesis

In this study, a regional image was chosen as a case, and the verification of the composition concept hypothesis is tried. That is, the citizen (the subject) in the region is the hypothesis to recognize an image (the object) in the region through the phenomenon and the things (the medium) which is in the region.

As a result of the questionnaire investigation about the regional image that are based on the Semantic Differential method for 11 municipalities in Fukui prefecture, the following things were obtained. The cognition of the regional image by the citizen is different outside in the region and depends on the record of the residence. A regional image is recognized through two measures, the activity and the arrangement, and the structure doesn't depend on the sex and the age. The phenomenon and the things that are in the region influence a regional image.

Potential traffic accident data was used for the verification of the element standard hypothesis about the subject as the case. As a result of the verification, the human errors and the simple mistake of the driving manners increased and the evaluation value with dangerous degree became higher with becoming from the 2nd to the 3rd dimension.

A result of questionnaire investigation about the greenery for the 35 municipalities in Fukui prefecture was used for the verification of the element standard hypothesis about the object as the case. The citizens, who are impressed with plentiful greenery at residential places, think that rare nature should be valued. No matter how natural surrounding mountains and rural fields exist, desire of neighbourhood-park is notable.

A result of questionnaire investigation about the green space agreement for the 35 municipalities in Fukui prefecture was used for the verification of the element standard hypothesis about the medium as the case. The improvement of environmental facilities such as sewerage has substantial effect on environmental consciousness. The approving ratio with green space agreement was not correlative with the ratio of the greening experience and intention, but was correlative with the ratio of the greening ways.

#### 4. The conclusion

By using the structure "citizen (the subject) recognize the plan (the object) through various phenomenon and things (the medium) ", the citizen become easy to understand the planning and to participate subjectively. By dividing cognitive subject, cognitive object and cognitive medium into 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> dimension, the understanding of complicated mutual relation becomes easy.

## References

- [1] T.Kato, Y.Honda and Y.Kawakami, "A Study on Survey Method of Potential Traffic Accident", Papers on City Planning, No.26, Nov., 1991
- [2] T.Kato, Y.Kawakami and Y.Honda, "A Study on the Structure of Cognition concerning Regional Image", Papers on City Planning, No.31, Nov., 1996
- [3] T.Kato and Y.Honda, "A Study on the Structure of Cognition concerning Greenery in Local Cities", Infrastructure Planning Review, No.14, Sept. 1997
- [4] T.Kato and Y.Honda, "Relationship of Environmental Consciousness to the Structure of Cognition concerning Green Space Agreement in Fukui Prefecture", Papers on Environmental Information Science, No.11, Oct. 1997