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International Comparisons of Attitudes toward Nature XI Questionnaire in Belgium

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Introduction

The problem of nature and forest conservations is today of high priority in all parts of the world and the methods of conservation employed are numerous and varied. This variety in the approach is caused not only by differences in the natural conditions of each country but also by the habits and attitudes of its inhabitants.

Therefore, without a clear understanding of the manner in which these national attitudes vary it would be impossible for us to make an adequate planning to introduce any of those conservation methods into wider use.

This study is going to learn how the inhabitants feel and think about their natural surroundings and to make considerations on the future of the forests of each district.

We have already investigated those in several towns in Japan, West Germany and a town in France.

Furthermore, included here are the results of the survey taken in Belgium situated between West Germany and France.

The attitude of the Belgian inhabitants toward nature will be investigated and discussed in comparison with those in other countries.

Methods

Our study is divided into the following two principal parts. Namely, the first is a survey of the forest environment and the second is a survey of the attitude of inhabitants toward nature and forest. Six towns in Japan, four towns in West Germany and one town in France were selected according to the population size and the forest environment. Through the surveys in Japan and Germany, we found an unexpected heterogeneity among the countries and an incredible homogeneity within each country in the attitude toward nature. In France, we carried out only one survey in Nancy. The results of that are partly like those of Japan and partly like those of Germany. Belgium is situated between West Germany and France, therefore, the attitude of the inhabitants in Belgium toward nature is quite interesting for us.

In Belgium, the forest covers about 617,000 ha. This amounts to about 20% of the Belgian land. The hardwood forests amount to 317,000 ha and soft-wood forests amount to 283,000 ha. The main species of the hardwood forest are beech and oak. The most commonly found species

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of softwood forest is spruce.

The survey was carried out in Eupen, Belgium. The results in Eupen are compared with those in Neuenbuerg, Germany, in Nancy, France and in Kushibiki, Japan. These towns were selected according to two points of view of population size and forest environments.

The outlines of these towns are as follows:

Eupen: Population 15,000, a town located in the middle east of Belgium near Liège and about 10 km from the West German border. The southern part of this town adjoins the large forest region "Hertogenwald". The main tree species found in this forest are spruce and also the large stands of oak, beech and pine. Small groups of Douglas fir, fir and larch are found, too.

Neuenbuerg: Population 7,000, a small town surrounded by forests in the northern end of the North Black Forest. This district has a fair amount of rain and is rich in conifers. Neuenbuerg is closely related to Pforzheim in industry and recreation.

Nancy: Population 400,000, the principal town of Meurthe et Moselle in Lorraine. The suburb of this town is a plain with low hills where stands of trees are scattered. The mountains of Vosges are about 60 km south-east of this town.

Kushibiki: Population 9,000, a small agricultural town adjoining Tsuruoka city situated on the northern part of Honshu-Island facing the Japan Sea. The southern part of this town, the skirt of Mt. Gassan was usually covered with trees, but since the World War II it has been cultivated and changed into farm land.

The questionnaire was carried out by mail in Neuenbuerg and Kushibiki and by interview in Nancy and Eupen. In Eupen several streets were selected at random and every family living along those streets was interviewed.

The number of respondents was as follows: Eupen, 326; Nancy, 411; Neuenbuerg, 258; Kushibiki, 313.

The questionnaire consists of a face sheet containing thirteen questions which are to be classified into the following seven types:

The primitive and religious emotions toward nature.

The mystic and holy feelings about trees and forests.

The affections toward forests in daily life.

The feeling for trees and knowledge of trees.

The attitude toward hunting.

The propriety of forest management.

The preference of the forest type ascertained by the paired comparison methods using five pairs of photographs.

Results and Discussion

The results are analyzed and discussed on the following four main points:

1. Affections toward forests in daily life

Question 1 "When you make a tour, which place do you prefer?" (Select only one).

Seven places selected in the answer are shown in Fig. 1.

In Eupen 48.5% of the respondents selected forest. In Neuenbuerg 61.9% did.

On the contrary, the percentage is 21.2% in Nancy and only 5.8% in Kushibiki. Fig. 2 shows

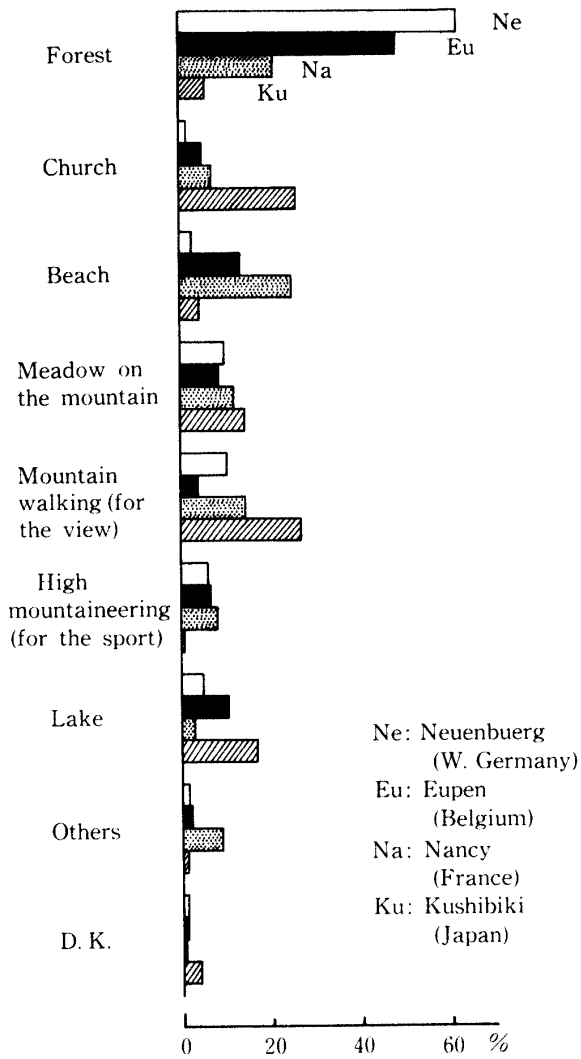


Fig. 1. "When you make a tour, which place do you prefer?" (Select only one).

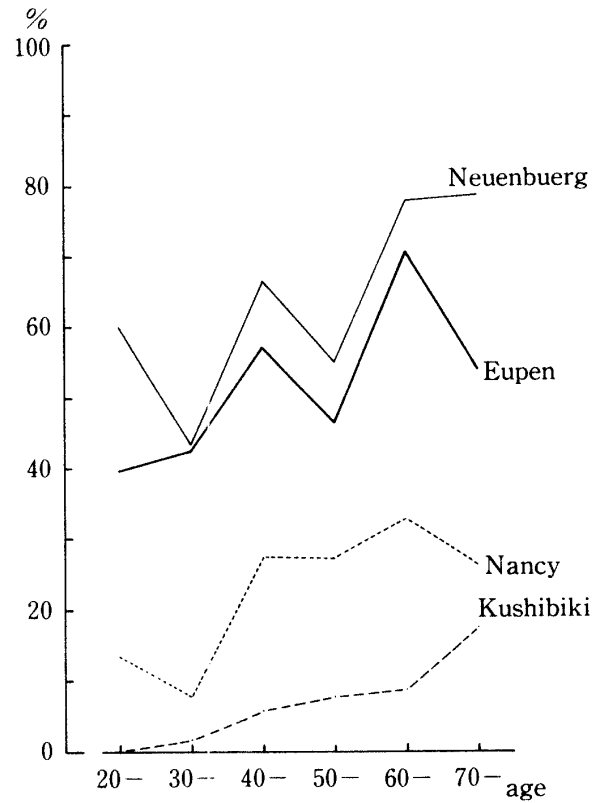


Fig. 2. The percentage of the forest selected in Question 1 in the respective generations.

the percentage of the forest selected in Question 1 in each generation.

From this figure it is clear that in each generation the percentage of the respondents of Neuenbuerg who selected forest is higher than that of Eupen. The results are quite different from those of France and Japan.

2. The primitive and religious emotions toward nature and the mystic and holy feelings about trees and forests

The questions related to this are as follows:

- Q.5 "When you happen to see a huge old tree, do you feel something holy?"
- Q.6 "When you go into a deep forest, do you have a mysterious feeling?"
- Q.11 "When you happen to see a sunrise, a sunset or a silent mountain, are you deeply impressed by them?"
- Q.12 "Do you believe in a spirit existing in natural things; such as mountains, valleys, streams, trees, plants and so on?"

The results are shown in Table 1.

In general, the following tendency can be observed.

Table 1. The primitive and religious emotions toward nature and the mystic and holy feelings about trees and forests

Question	Town	Yes	No	D.K.
Q.5	Ne	92.2	6.6	1.2%
	Eu	86.5	11.7	1.8
	Na	69.6	30.4	0.0
	Ku	87.3	10.5	2.2
Q.6	Ne	83.7	14.7	1.6
	Eu	85.3	13.5	1.2
	Na	79.6	20.4	0.0
	Ku	86.9	10.2	2.9
Q.11	Ne	97.3	2.7	0.0
	Eu	88.3	10.4	1.2
	Na	91.8	8.0	0.2
	Ku	78.3	13.7	8.0
Q.12	Ne	44.2	54.6	1.2
	Eu	40.2	57.7	2.1
	Na	66.2	33.6	0.2
	Ku	51.8	40.9	7.3

Ne: Neuenbuerg Eu: Eupen Na: Nancy
Ku: Kushibiki

Table 2. The feeling for trees and knowledge of trees

Town	Tree	Q.3	%	Q.4	%
Ne	Fir	202	78.2	73	28.2
	Beech	196	75.9	41	15.8
	Oak	167	64.6	18	7.0
	Birch	160	62.0	35	13.5
	Pine	100	38.8	15	5.8
Eu	Oak	260	79.8	79	24.2
	Beech	251	77.0	48	14.7
	Birch	239	73.3	55	16.9
	Fir	174	53.4	35	10.7
	Spruce	118	36.2	11	3.4
Na	Oak	314	76.6	119	29.3
	Birch	247	60.2	32	7.9
	Fir	219	53.4	54	13.3
	Beech	209	51.0	14	3.5
	Poplar	109	26.6	12	2.9
Ku	Cryptomeria	264	84.5	79	25.3
	Pine	246	78.8	66	21.2
	Beech	117	37.5	16	5.1
	Zelkova	113	36.2	31	10.0
	Maple	96	30.8	10	3.2

Ne: Neuenbuerg Eu: Eupen Na: Nancy
Ku: Kushibiki

The results in Eupen are similar to those in Neuenbuerg.

3. The feeling for trees and knowledge of trees

Q.3 "Name five trees which are most familiar to you." Q.4 "Which one of these trees do you like best?"

The answers are shown in Table 2.

The tree species selected in Eupen, Neuenbuerg and Nancy are similar. They reveal an affinity for the forest trees. In Eupen and Nancy the term "oak" was most frequently named.

4. The propriety of forest management

Here two questions — No. 7 and No. 10 are given.

Q.7 "Which is your opinion?"

1. Man should manage forests to keep them beautiful.
2. Man should not manage forests at all.

Q.10 "Which do you prefer?"

1. Nature, influenced by man, with mixed farm, meadow and forest.
2. Unspoiled nature, such as the virgin forests and wilds.

The results are shown in Fig. 3, Fig. 4, Fig. 5 and Fig. 6. 86% of the respondents in Neuenbuerg selected answer No. 1 in Q.7 as 74% did in Eupen (Fig. 3). 83% of the respondents in Neuenbuerg

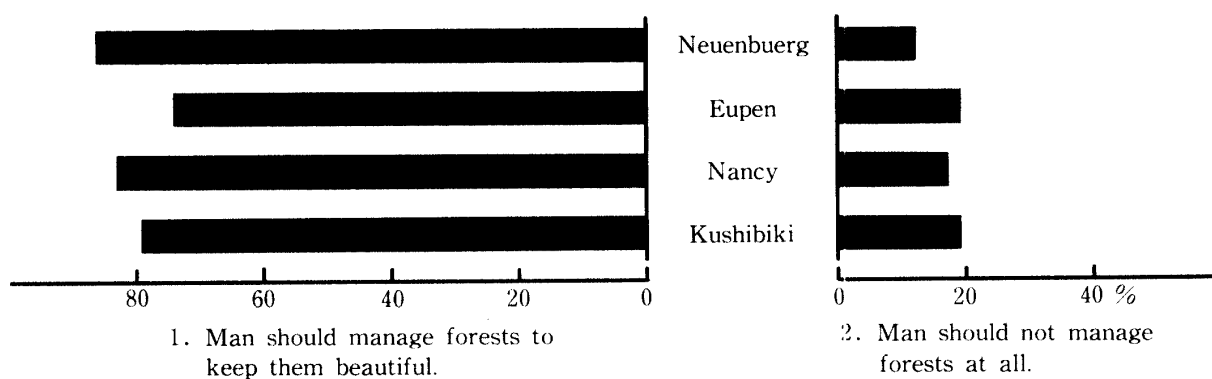


Fig. 3. Q.7 "Which is your opinion?"

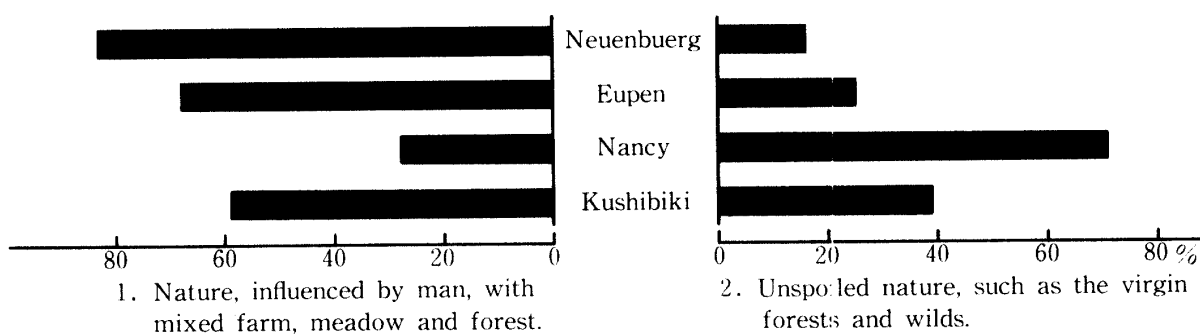


Fig. 4. Q.10 "Which do you prefer?"

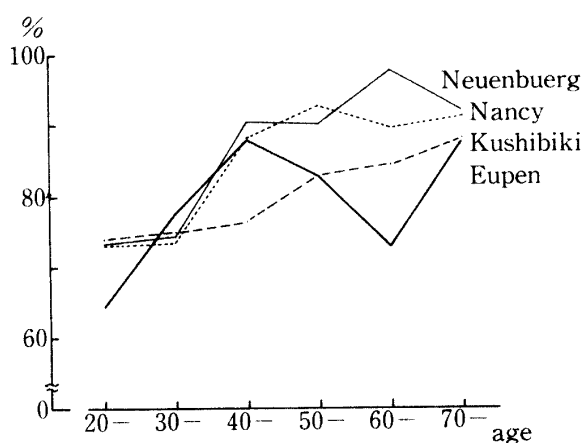


Fig. 5. The percentage of No. 1 in Q.7 selected in the respective generations.

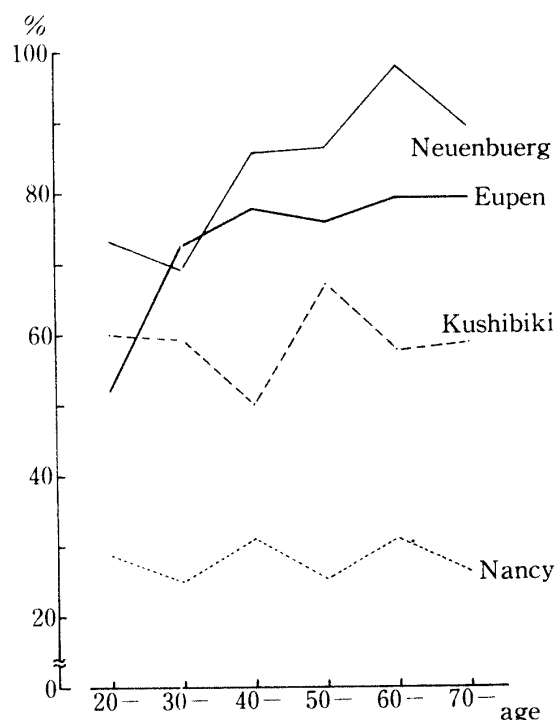


Fig. 6. The percentage of No. 1 in Q.10 selected in the respective generations.

selected answer No. 1 in Q.10 as 68% did in Eupen (Fig. 4).

The tendency found, is that the older they grow, the more they select answers No. 1 in Q.7. The percentage of respondents in Neuenbuerg who selected answer No. 1 in both Q.7 and Q.10 is

higher than that in Eupen over all generations except for those in their thirties (Fig. 5, Fig. 6).

Eupen in Belgium is situated near the German border, and the forest environment of this town wholly resembles that of Germany, therefore, it is quite natural that the results of the survey in Eupen should be similar to those of Neuenbuerg in Germany.

The percentage of the forest selected in the question "When you make a tour, which place do you prefer?" is found to be quite different among the four towns. It is certain that for the overall generations, this percentage of forest is the highest in Neuenbuerg, that in Eupen being a little lower than that of Neuenbuerg. In Nancy, it is the third in order, and in Kushibiki, it is the lowest of the four towns.

These results seem to show the rank concerning how affectionate, in daily life, the inhabitants of the four towns in the four different countries are toward the forests.

Summary

We carried out the questionnaire survey in Eupen in Belgium. By comparing those with the results of the surveys carried out in other countries, the followings were made clear.

a. As to the question of the most preferable distinction of the tour, the percentage of the respondents of Eupen who selected forest is comparatively high, but it is not so high as that of Neuenbuerg in West Germany.

b. The respondents of Eupen have strong religious emotions and feelings of awe toward nature, trees and forests.

c. They reveal an affinity for the trees in the forest. As in Nancy in France, the number of those who selected oak is the largest of all.

d. The percentage of the respondents having the opinion "man should manage forests to keep them beautiful", being about 10% lower than that in Neuenbuerg.

e. The percentage of the respondents who preferring "the nature influenced by man" to "the unspoiled nature", being rather lower than that in Neuenbuerg.

f. In general, the results in Eupen in Belgium are similar to those in Neuenbuerg in West Germany, but it seems that the affections of the inhabitants of Eupen toward the forest are a little weaker than that in Neuenbuerg.

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