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A Study on Residents' Visual Perceptions and Attitudes Towards the Historic Landscape

— A Case Study in the Western Urban Fringe of Kobe City —

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歴史的景観に対する住民の態度と視覚的選好に関する研究
— 神戸市西区のアーバン・フリンジを事例として —

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Résumé

In this study, resident groups from an urban and a rural district, both located in the western urban fringe of Kobe City were interviewed in order to evaluate their attitudes towards the historic landscape of Taisan-ji temple. The residents' interests and their activities in this area were asked by a questionnaire and an aerial-photograph was used to visualize their favorite and hateful places. In a previous study,⁵⁾ this area was assessed by residents as the most favorite place in the region, which should be protected. From the results, each group possesses different attitudes which are mostly based on their everyday living experiences and cultural values. Through a comparative analysis of preferences the main attitudes were defined into the "native" and "visitor" points of views. To improve this area, the Ikawa river should be restored by its own natural features and a stroll path should connect a desired hillside forest park with a parking lot.

要 旨

神戸市西区の互いに隣接する市街化区域と市街化調整区域（農村地区）の住民を対象として太山寺の歴史的景観に対する意識と選好を評価する目的でインタビューを行った。前回の研究⁵⁾で住民はこの場所をすべての地域の中で最も気に入った場所として保存が必要と評価した。今回は、3つの住民グループにこの地区についての関心とそこでの生活に関して質問を行うとともに、航空写真を用いて、その地区での住民の最も好きな場所と最も嫌いな場所の選定を行った。その結果、各グループは異なった意識を示した。これらの意識は、日常生活における経験と文化的背景によって異なり、「地元の人」の意識と「訪問者」の意識とみなす事ができた。この地区を改善するために伊川をはその固有の自然的特徴を活かして修復し、駐車場と森林公園を連結した遊歩道をつくる必要があると考えられた。

Introduction

The term "rural conservation" is used to define the preservation, rehabilitation, and recreation of tangible historic and cultural resources in rural areas.¹⁾ A special treatment has to be given on the urban fringe, where conservation efforts might include the revitalization of rural lands affected by urbanization. The origins of the rural conservation efforts in Japan can be traced to 1897 when a law for protection of old shrines and temples was promulgated.¹⁾ Actually, the historic preservation movement outside the governmental circles, has been associated with the rapid economic growth period, when it was revealed that the urban impact contributed to certain harmful situations or even destruction of these valuable resources.

A survey²⁾ indicates that there are 462 historic towns located in the fringes of 307 different cities in Japan. This study describes the current situation of the historic towns as contrasted with the adjacent urban cores from the viewpoint of city planning. The result has revealed that a large number of small cities along the country had kept some of their historic townscapes intact. According to another study,¹⁾ in many of these small cities, the designation of a "Historic Preservation Area" has been included in the overall urban development schemes as one means of revitalizing the town's environment. Nevertheless, the preservation of individual monuments located in the urban fringe has not yet achieved the same level of enthusiasm. Some of them have been designated as "Historic Spot Area," in order to provide measures for their protection and maintenance, but due to the fringe location, a missing link between conservation goals and economic development is remarkable.

Studies on landscape preferences should be an important tool in the conservation process of the historic landscape, because through the analysis of the resident's attitudes we can appraise the degree in which conserved settings satisfy current human needs and values. This study was developed around the historic and cultural heritage of Taisan-ji temple, where the lack of promotion and urban advance in the area has drastically affected its surrounding landscape.

Survey Area

According to Taisan-ji no Engi,³⁾ the temple was built in the year 973 A.D (Heian period), and its origin was related to the spread of the Tendai-sect of Buddhism. It flourished in the Kamakura period. In the Momoyama period the temple belonged to the feudal territory of Kyu-Arima-no-Kuni, and in the Edo period it was part of the culture of "Akashi-Bunka," displaying a strong relation of commercial dependence to the Akashi region. Actually, the temple is located in the rural community of Zenkai Kami, Its main structure is elevated and allows an encompassing view of the countryside. The main building is surrounded by a three story pagoda and a structure with an image of Amida-buddha. There are five sub-temples and four gardens remaining, while some other structures have disappeared.

The temple is an important point of reference in the western region. Regrettably, outside the district, it is not held in high regard by the new residents and has not been able to become an area for enjoyment and relaxation. In accordance to the City's Master Plan (1986), new urban areas have been planned behind the mountains that surround the temple. Nonetheless, new



Figure 1. Aerial-photograph of Taisan-ji temple's historic area

residents do not show ties with this land. The opening of a health center and hot spring has contributed to revitalizing the area, attracting tourists. However, harmonious relationships with rural residents have not been established due to differences in behavior and cultural values.^{4,5)}

Research Objective

This research is based on a previous study,⁵⁾ in which the identification of public preferences

regarding the landscape and future development was the main objective. The study concluded that old and new residents have different attitudes towards their region. Nevertheless, 61.9% of them defined the temple as the "favorite place," which needs to be conserved. The objective of the present research is to analyze attitudes and represent the preferences, in order to craft a plan for conservation which can satisfy the current needs of residents and visitors.

Methodology

A questionnaire composed of 8 questions was used, and various images of Taisan-ji were displayed on panels. Residents marked their choices for favorite and hateful places on a transparency placed on an aerial-photo (60cm x 80cm; scale: 1/2.500). The choices were marked with colored pencils and the reasons were written on the questionnaire. The questionnaire was composed as follows:

(A). Section One: (Relate to the resident's activities)	Question No.1: Why do you come to the Taisan-ji temple area? Question No.2: What do you usually do here? Question No.3: How often do you come to the Taisan-ji temple area? Question No.4: What is the most important thing inside this area? Question No.5: How would you improve this place for better? and Why?
(B). Section Two: (Questions with the use of aerial-photo)	Question No.6: In which direction do you usually walk? Please draw the symbol (--->) with a black pen over the aerial-photo to indicate your way. Question No.7: What do you like most? and Why? Please, draw a circle () with a blue pen over the aerial-photo to indicate your selection. Question No.8: What do you hate most? and Why? Please, draw a circle () with a red pen over the aerial-photo to indicate your selection.

Analysis Procedures

The analysis procedures were carried out in two stages: The first stage evaluated preferences and attitudes of residents in each community. The questions were based on the Design Assessment, technique which has been developed as an experimental evaluative method of attitudes for outdoor spaces.⁶⁾ The second stage focused on visualizing the preferences related to favorite and hateful places (questions 7 and 8).

Results and Discussion

175 respondents were surveyed and distributed in three groups (Ikegami district: 105; Zenkai Shimo: 40; and Zenkai Kami: 30). As is shown in Table 1, the urban district of Ikegami has a high proportion of people who have lived there from among 2 to 20 years. They also hold a wide variety in jobs. This is due to the fact that it is the region's newer district, where development began only 15 years ago. Nevertheless, in the rural district of Zenkai (Shimo and Kami) there are many people who have lived here for more than 20 years, and who are mostly involved in agricultural activities. Following is a discussion of the results by each question:

Table 1. Personal data of respondents (%)

		Ikegami District	Zenkai Shimo	Zenkai Kami	Total
No. of Respondents:		105	40	30	175
Length of Residence:	Less than 2 years	6.6	0	0	4
	From 2 to 5 years	25.7	2.5	10	17.7
	From 5 to 10 years	25.7	2.5	6.6	17.1
	From 10 to 20 years	27.6	5	10	19.4
	From 20 to 30 years	7.6	10	23.3	10.8
	More than 30 years	6.6	80	50	30.8
Occupation:	Company or Government	40	20	40	35.4
	Own business	1.9	7.5	16.6	5.7
	Agriculture	0	70	20	19.4
	Freelance	1.9	2.5	3.3	2.2
	House-keeper	20.9	0	6.6	13.7
	Student	11.4	0	0	6.8
	Un-employed	12.3	2.5	10	9.7
	Others	11.4	0	10	9.7
Age:	Less than 29 years old	15.2	7.5	0	10.8
	From 30 to 39 years old	16.1	27.5	26.6	20.5
	From 40 to 49 years old	32.3	27.5	16.6	28.5
	From 50 to 59 years old	20.9	17.5	36.6	22.8
	From 60 to 69 years old	8.5	15	10	10.2
	More than 70 years old	6.6	5	10	6.8
Gender:	Male	51.4	100	80	67.4
	Female	48.5	0	20	32.5

(1) About Question No. 1 and No. 2: (Why do you come to the Taisan-ji temple area?, and What do you usually do here?)

Although the residents of Ikegami district have shown a cultural interest that motivates them to come to this area for enjoyment, it has also been determined that they come to participate in sport and tourist activities in contact with nature (Fig. 2). Their search for a healthy environment shows their preference for natural and rural landscapes that has been fostered by the pressures of the urban life, motivating them to come to Taisan-ji temple for enjoyment. For that reason we shall refer to them as "Visitors" or "Outsiders," because their contact with this land mainly occurs as tourists or visitors. The residents of the rural communities of Zenkai (Shimo and especially those from Kami) will be referred to as "Natives" because they live inside the district and close to the temple, and do not show the same interest for sports and tourism, but rather a respect for the holiness of the place, old traditions and agriculture.

The Taisan-ji Health Center and Radium Hot Spring are attracting tourists from the City of Kobe and other regions, by offering of a health service in contact with nature. For this reason, the "visitors" show the highest levels of preference. Nevertheless, the "native" or rural people of Zenkai Shimo and Kami do not have the same appreciation, because for them it is not easy to accept the arrival of "urban people" with different type of behavior and attitudes (see Table 2).

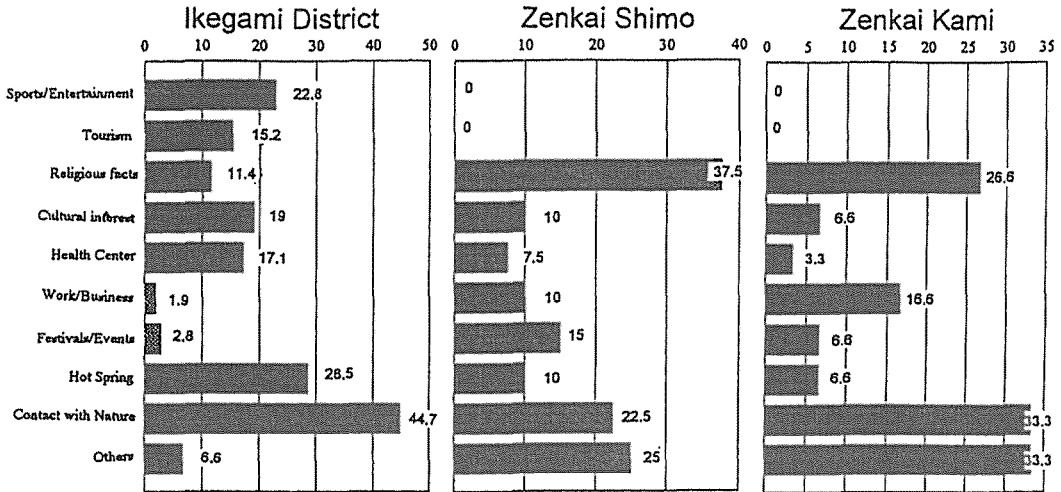


Figure2. Preferences from question No.1 (%) (Why do you come to Taisan-ji temple historic area?)

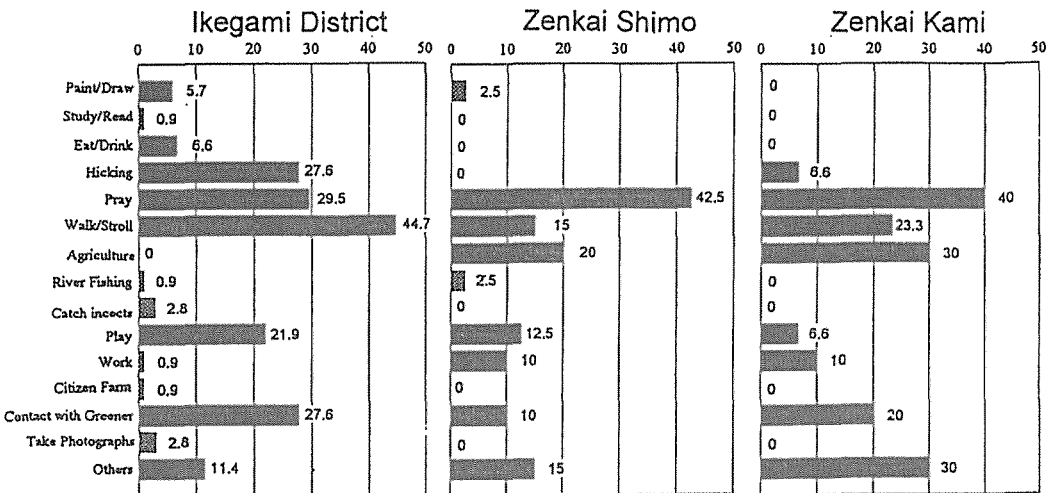


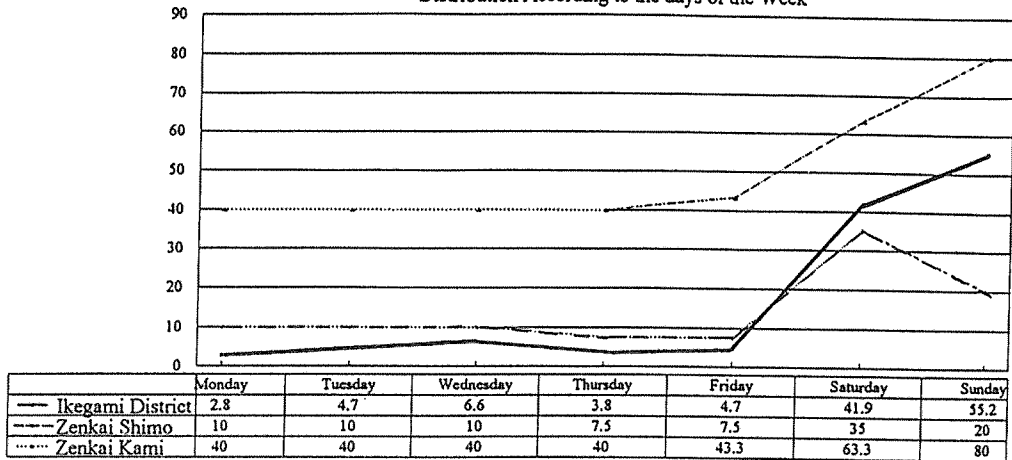
Figure 3. Preferences from question No.2 (%) (What do you usually do here?)

Regarding question No. 2 (Fig. 3) "recreational activities" such as walking, hiking, eating, painting, catching insects, taking photographs, fishing and reading are preferred by the "Visitors." On the other hand, praying and agricultural activities are those which are most done by the "Natives" of Zenkai Shimo and Kami.

(2) About Question No. 3: (How often do you come to the Taisan-ji temple area?)

As shown in Fig. 4 (No. 1 and No. 2), the residents of Zenkai Kami are most in contact with the temple's environment and activities throughout the year due to its location near their dwellings and places for work (farmlands). The residents of Zenkai Shimo are the second most in contact with the temple owing to the distance separating them from the temple (about 3.5 kilometers). Finally, the residents of Ikegami district, who are the furthest away from the temple

Distribution of peoples that Visit Taisan-ji Temple (1)
Distribution According to the days of the Week



Distribution of Peoples that Visit Taisan-ji Temple (2)
Distribution According to the Months of the Year

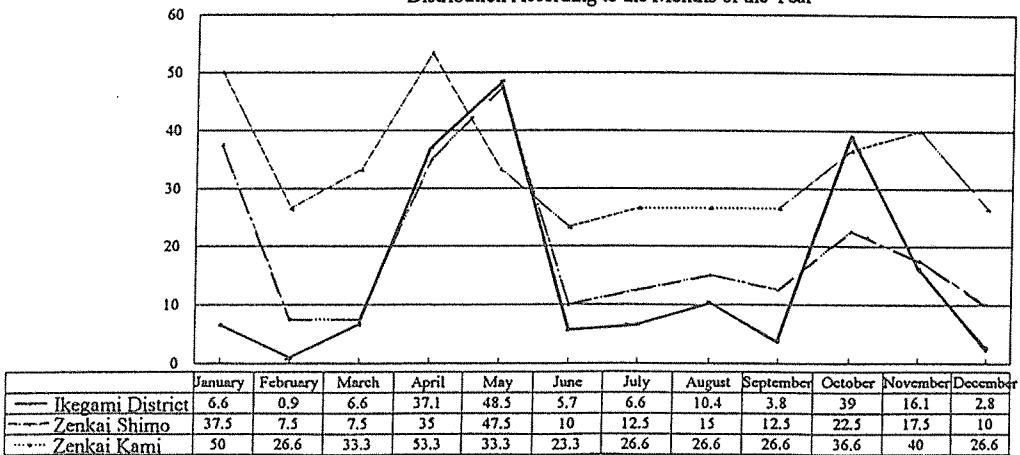


Figure 4. Preferences from question No.3 (%) (How often do you come to Taisan-ji temple area?)

(about 8 kilometers), visit it mostly on the weekends of some specifics months.

Regarding the months of the years, the three groups surveyed selected the months of April, May, October and November as the best times to visit the temple. This is due to the beauty of flowers, vegetation and good weather conditions which are characteristic of spring and autumn. It is important to note that at the beginning of each year (January) the residents of Zenkai Shimo and especially Zenkai Kami conduct religious activities inside the temple and this is why there is an increase in the number of "natives" during this month. December and February show the fewest numbers of "visitors" owing to the unfavorable weather conditions.

(3) About Question No. 4: (What is the most important thing inside this area?)

Figure 5 shows the choices regarding the most important thing inside this area. "Natives"

(Shimo and Kami) chose the temples and gardens, while "Visitors" (Ikegami) chose places with greenery and flowers. The three groups surveyed evaluated the elements which make up the landscape at differing levels (Ikawa river, farmland, rural villages and nearby mountains). According to their reasons, it can be concluded that visitors and natives made their selection based on their amount of contact or attachment with those places. The "Visitor"s' assessment were based on aesthetics and they tended to evaluate the landscape according to some formal standards of beauty. The "Visitors" (as tourists) has a viewpoint; his perception is often a matter of using his eyes to compose pictures. The "Native" by contrast has a more complex attitude derived from his immersion in the totality of his environment. Summary, the "Visitor" viewpoint, being simple and is easily stated. The complex attitude of the "Native," on the other hand, can be expressed by his difficulty and indirectly through behavior, local tradition, and religious myth. Therefore, it was determined that the residents' point of view is related to the affections of the place and is based on their everyday living experiences and cultural values. Finally, is important to say that the outsider's judgment may be superficial, but they are often able to perceive others merits and defects no visible by the "Natives." Nevertheless, this "Native"s' preferences is more personal and longer lasting because it has been mixed with their experiences and memories (See in Table 3, keywords: "feel season/history" and "memories").

(4) About Question No. 5: (How would you modify this place to make it better?)

As can be seen in Figure 6, many of the residents wish to keep the place like it is now, but the "Visitors" showed a lower percentage of satisfaction because they noticed the lack of tourist facilities to satisfy their needs (as a stroll path, forest park, parking lot, information, seats, tea house, restaurant, tennis court, stores, cultural center, and horticulture or flower shops). Most rural residents prefer only basic improvements as a stroll path, forest park, and parking lot with information about the area. It is important to notice that residents of Zenkai Shimo have preferences which are somewhere between those of the other two groups. We believe that this is due to the recent and growing influence of urban culture on this rural community.

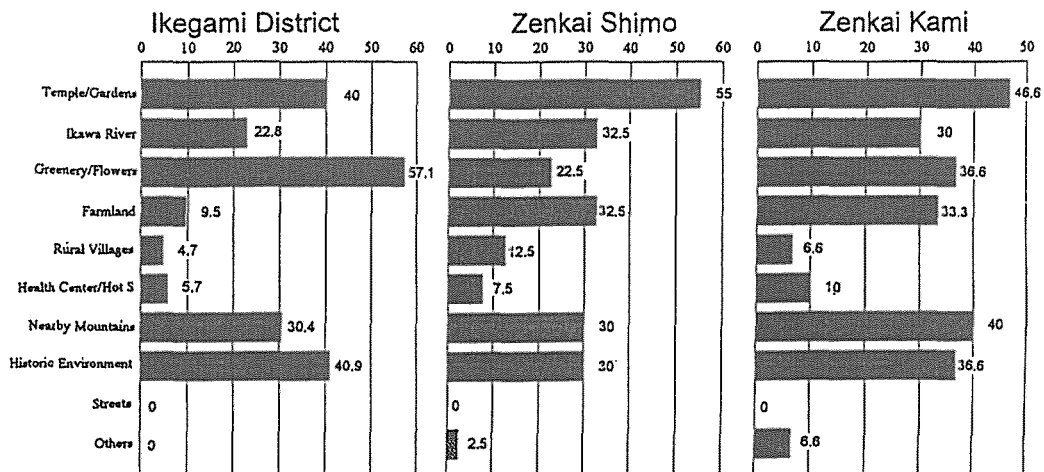


Figure 5. Preferences from question No.4 (%)
(In your opinion, what is the most important thing inside this area?)

Up until now the regional conservation was carried out by treating each natural element as a separate entity. For example: the river, farmlands, and forests. The construction of new facilities such as paths or parking lots should be take into account the integration with the surrounding environment. This fact should be done through visual evaluation studies that can determine the effects of the new structures on the landscape. The results should give an "Image-Concept" to give a guideline to develop the region, and in accordance with the local government,⁷⁾ this "Image-Concept" should be defined under keywords such as: "river environment" surrounded by "green mountains."

(5) About Question No. 6: (In which directions do you usually walk in this area?)

Figure 7 illustrates the pedestrian path analysis from the survey data. Percentage figures indicate use of primary pedestrian paths. Line thickness also indicates intensity of use. In the Figure there is a rather limited space for moving around, and this is why residents wish to have a walking path built. This request fits in with the results of the local government's study,^{7,8)} which states that the construction of a "Route Network" is needed to conserve and add value to the natural features of the area. Through the results of this analysis, we can argue that residents of Zenkai Kami have more presence in using the main path (76.6%), which is located between the 1st entrance (Nyumon) until the 2nd one (Chumon). Also, they have a more presence in the temple's north side entrances and in access from difficult places located between the Ikawa river and the western mountains. As part of their everyday living environment, the difficult access to hidden natural areas and "secret" entrances to the temple area are well known

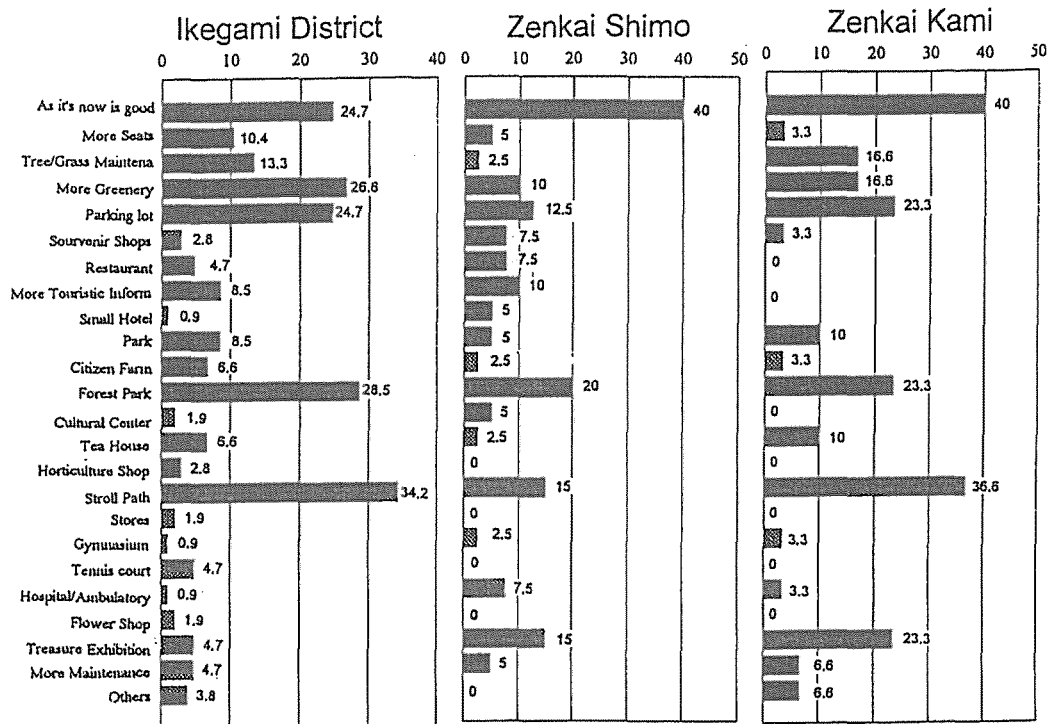


Figure 6. Preferences from question No.5 (%) (How would you modify this place to make it better?)

by them. A second path that connects the health center to the temple is used more by tourists because it connects to the parking lot and tourist services. The villages' streets (with old stone monuments) shows low preference by all the groups because this area has not been revitalized yet and the lack of activities and tourist information here gives it an abandoned atmosphere.

(6) About Questions No. 7 and No. 8:

(What do you like most in this area?, and What do you hate most in this area?)

Figures 8 and 9 show preferences regarding favorites and hateful places. Most of the residents chose areas as temples/gardens, greenery areas, and landscape as the most favorite ones. Table 3 shows the reasons for these choices based on keywords ("nature, history, peace/relaxation, experiencing the seasons, and nice landscape"). The Taisan-ji Health Center and its hot spring seem to be more appreciated by residents of Ikegami while important features such as river and rural villages are more appreciated by residents of rural communities.

The Hanshin Highway (due to its sound and visual impact) and main streets of the district (due to its narrowness and dangerous speed transit) were chosen as the most hateful places by all the groups, Ikegami (18%); Shimo (25%); and Kami (33.3%). The selection of the Ikawa river as hateful place received a high percentage from residents of Zenkai Kami, and low percentages from residents of Ikegami. Residents of Zenkai Shimo were somewhere in between. The reasons can be seen in Table 3, which are represented by keywords such as: river pollution, development, and loss of nature. For Zenkai Kami the problems of the river environment are more perceived than the visual impact offered by the Hanshin Highway. The selection of the Ikawa river is a paradox, because it was evaluated proportionally the same as a favorite place. This fact shows that the river should be recovered by embracing its natural features and reducing the canalization by concrete blocks. Finally, for Ikegami district and Zenkai Shimo, the keywords: traffic, and lack of parking seems to be major problems because they use cars and bus to access this area. For residents of Zenkai Kami, the use of the keyword "Garbage" represents to them a daily problem, mainly caused by the behavior of the tourists (see Table 2).

(7) Isometric Representation of Preferences

This stage is related to questions No.7 and No.8, where an aerial-photograph was used to request preferential data. Residents marked on a transparent film placed on the aerial-photo

Table 2. Selected reason for the area improvement (%)

In Ikegami District	%
To protect nature	29.5
Against development	10
Lack of parking	7.6
For river maintenance	3.8
A place for rest is needed	3.8
Inconvenient	2.8
Need of maintenance	1.9
To play tennis	1.9
Inconvenient	1.9
Lack of bathroom	1.9
More promotion is needed	1.9
In Zenkai Shimo	%
Natural things are better	12.5
Balance is needed	10
Change in the landscape	2.5
Hospital is needed	2.5
More promotion is needed	2.5
In Zenkai Kami	%
Tourist with bad behavior	11.6
Tourist bring garbage	11.6
To protect nature	16.6
Is better to don't touch	6.6
Traffic	3.3
For pray	3.3
Bus schedule is bad	3.3
Need of maintenance	3.3
Lack of stores	3.3
No place for childrens	3.3

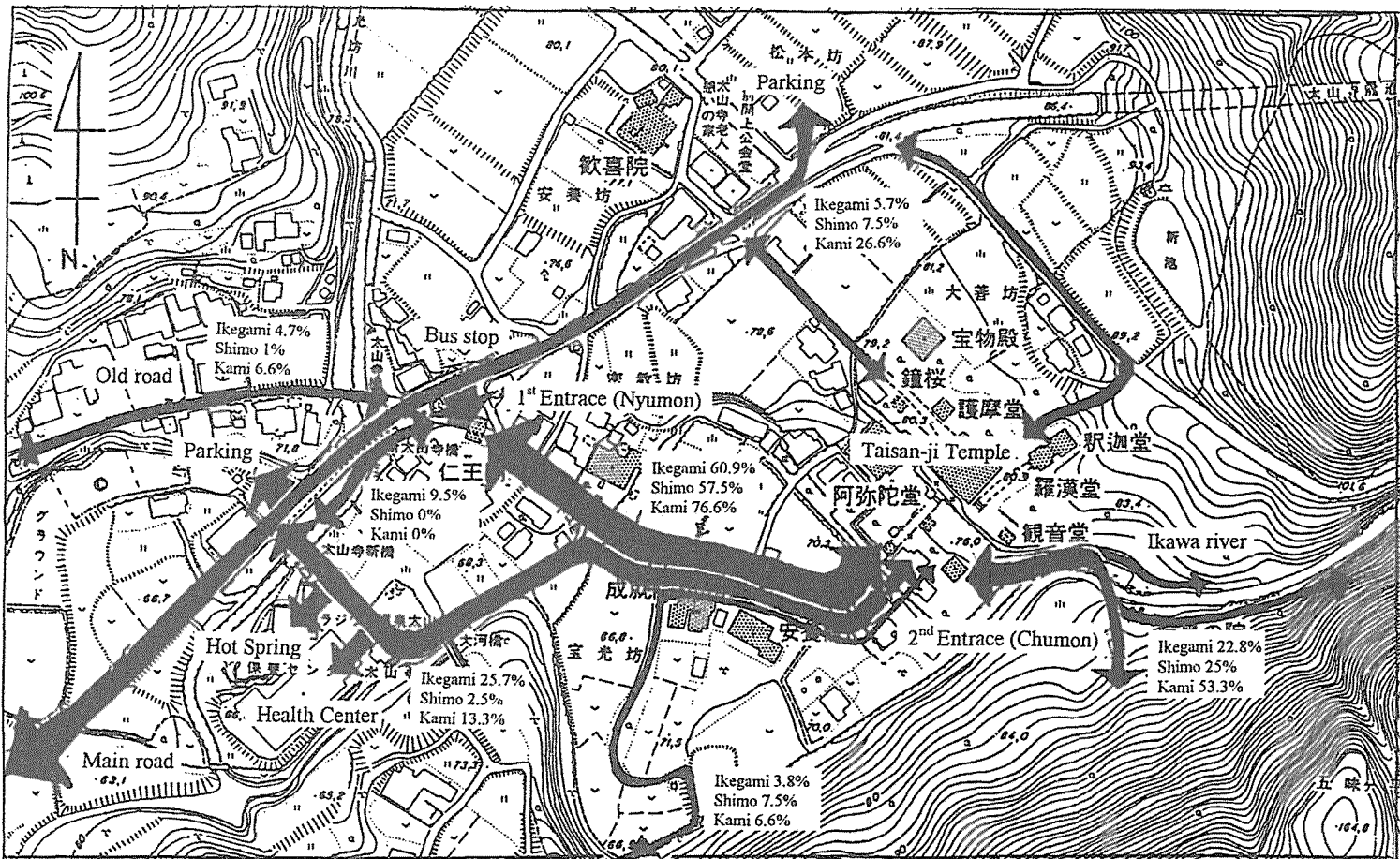


Figure 7. Resident's preferences from question No.6 (%)
(In what direction do you usually walk inside this area?)

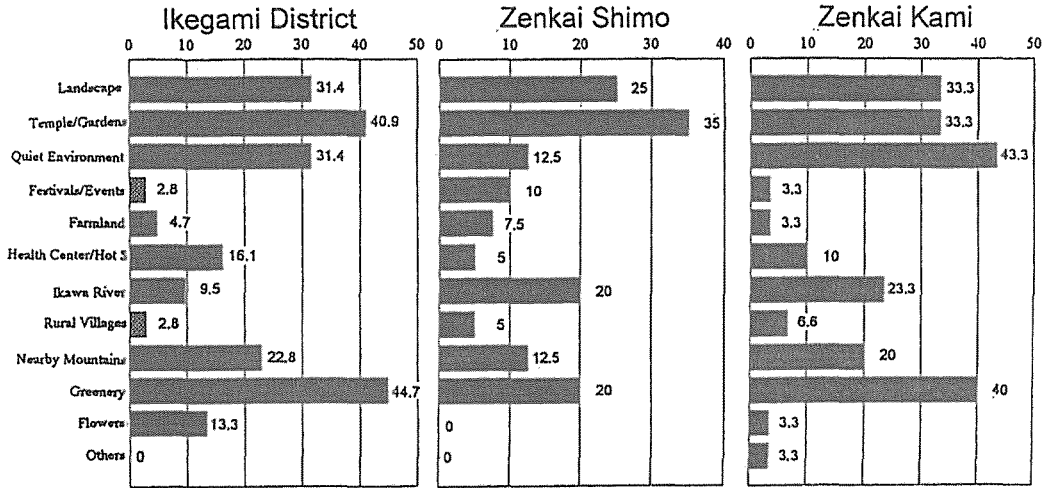


Figure 8. Preferences from question No.7 (%) (What do you like most in this area?)

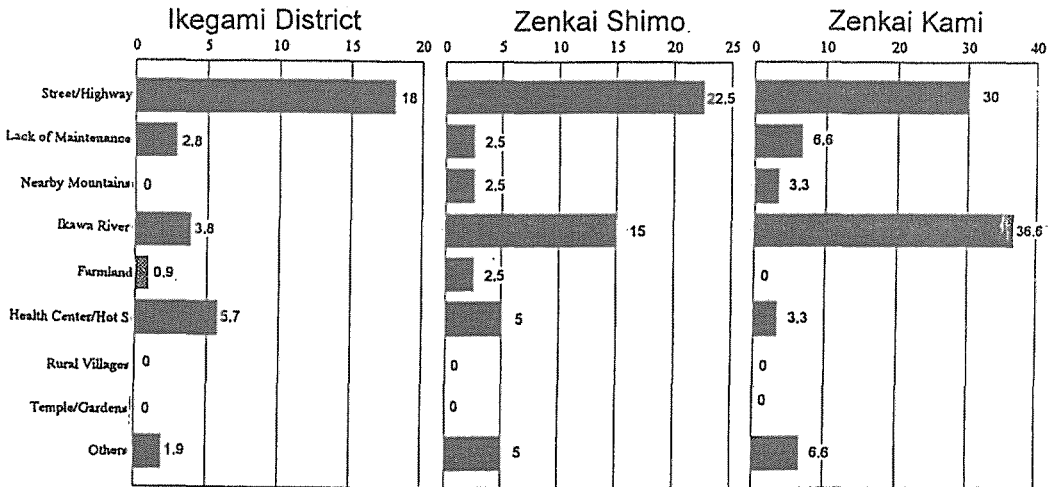


Figure 9. Preferences from question No.8 (%) (What do you hate most in this area?)

their selection about their favorites and hateful places in the area. We prepared a mesh-map of 150m x 150m grids (representing about 2.25 ha.). The marked areas on the transparent film were transferred to the grid pattern. Each cell of the grid that was marked got one point. These points were totaled up for each surveyed group by each question, and the frequency obtained in each cell was calculated as a percentage. Then evaluation was made and the high percentage results were marked on the grid. Finally, an orthogonal mesh-map was elaborated in order to represent it in a sidelong view and to display the percentages in a volumetric form.

In Figure 10, the results were done for each group. Favorite places represented a considerable density of answers with high preference for the temple itself (Ikegami: 88.5%; Shimo: 57.5%; and Kami: 76.6%). Although the preference from Ikegami is higher than Zenkai Kami, the attitude is different; in Ikegami see it as a tourist resource while in Zenkai is as a special intimate

place. On the other hand, hateful places were more varied, but showed a considerable percentage disliking the Hanshin Highway and main roads (Ikegami: 10.4%; Shimo: 15%; and Kami: 76,6%). According to the results, we can argue that residents of Zenkai Shimo and specially those from Zenkai Kami perceived more the impact of the Hanshin Highway, due to its presence in the everyday life of their communities.

Conclusion

From the results, the following conclusions were made:

Each group surveyed has different types of attitudes toward the historic landscape of Taisan-ji temple, which are mostly based on resident's cultural values and their everyday experiences in the area. Residents of Ikegami evaluated the landscape from the point of view of a "Visitor," evaluating by aesthetic values, and functional needs. Residents of Zenkai Kami, who live close to the temple, evaluated the landscape from the point of view of a "Native," with ties to the history, old traditions and agriculture. Preferences from Zenkai Shimo evidence an intermediate position, somewhere in between the other two groups surveyed. They show an ambiguous attitude as they live in the same agricultural district, but they find themselves detached from the temple. The influence of the nearby urban development over this community is changing the preference of its inhabitants.

The temple is most visited on weekends, in April, May, October and November. People visit the temple to enjoy natural landscape. In January the temple is most visited by the "Native" for religious events. Most popular activities are walking (for Ikegami) and praying (for Zenkai Shimo and Kami). To improve this area, a stroll path to be connected with a parking lot and a hillside forest area needs to be built. The three groups surveyed show similarity in favorite areas. Nevertheless, these preferences have different motives: In Ikegami as a tourist resource and in Zenkai as an intimate place. Hateful places are perceived more by residents of Zenkai

Table 3. Reason of selected favorites and hateful places

Reasons of Selection in Ikegami District:			
Keywords for Favorite Areas	%	Keywords for Hateful Areas	%
Nature/Greenery	41.9	Lost of nature	6.6
Peace/Relax	10.4	River pollution	2.8
Feel the seasons	6.6	Traffic	2.8
Historic place	5.7	Unpleasant	2.8
Temple	5.7	Bad landscape	2.8
Good air	3.8	Highway	2.8
Health Center	2.8	Street narrowness	1.9
Interesting	1.9	No balance	1.9
Hot Spring	0.9	Farms	0.9
Vegetables	0.9	Lack of people	0.9
Lake	0.9	Academic City	0.9
Good for childrens	0.9	Garbage	0.9
		Artificial	0.9

Reasons of Selection in Zenkai Shimo:			
Keywords for Favorite Areas	%	Keywords for Hateful Areas	%
Nature/Greenery	40	Too developed	12.5
Feel the seasons	22.5	River pollution	10
Peace/Relax	15	Traffic	7.5
Memories	5	Lack of nature	7
National treasure	2.5	Unpleasant	2.5
Good landscape	2.5	Garbage	2.5
Feel the history	2.5	Lack of parking	2.5
		No related	2.5

Reasons of Selection in Zenkai Kami:			
Keywords for Favorite Areas	%	Keywords for Hateful Areas	%
Nature/Greenery	30	River pollution	33.3
Feel the seasons	26.6	Lost of nature	16.6
Peace/Relax	20	Unpleasant	13.3
Good landscape	10	Garbage	10
Stoll	6.6	No balance	3.3
River presence	3.3	No maintenance	3.3
Feel the history	3.3	Too crowded	3.3

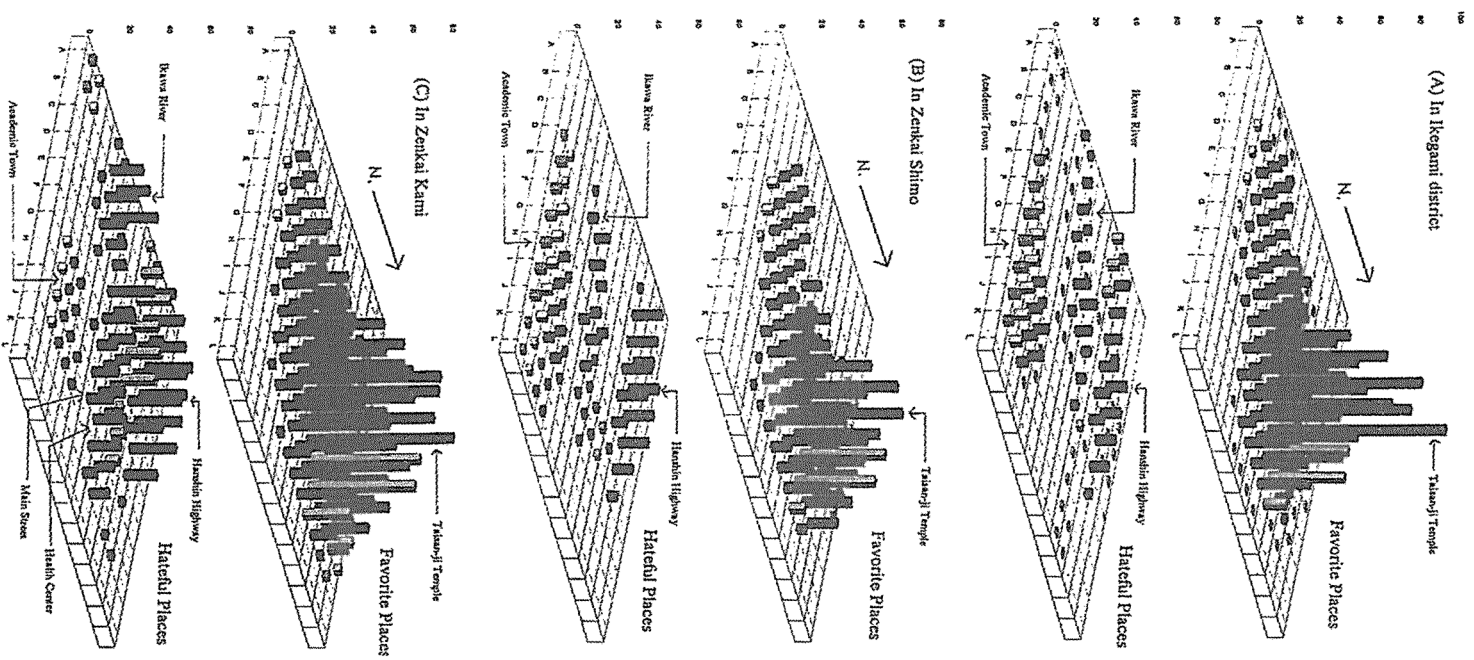


Figure 10. Isometric representation of preferences

Note: Results divided into (A) Ikegami district, (B) Zenkai Shimo, (C) Zenkai Kami.

Kami, because it is their everyday landscape. Greenery and the temple's quiet atmosphere are the most preferred aspect of the environment, while the Hanshin Highway and main streets are the most hateful ones. Finally, the Ikawa river should be restored by its own natural features, reducing the current concrete block canalization.

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