Conservation and Possible Relocation for the Traditional Town of Koyasan, Based on the Surveys of Residents and Visitors

Yoshihiro Kametani*

1Associate Professor, Faculty of Environmental and Urban Engineering, Kansai University, Japan

Abstract
The town of Koyasan has 1,200 years of history as a center of Japanese esoteric Buddhism (Shingon Mikkyo). Koyasan was registered as a World Heritage Site in 2004, and its town government established a new townscape act in 2008, and landscape districts were decided. Although it is thought that the traditional houses have the most significant effect on the townscape, modern Koyasan consists of various other types of buildings as well, including temples and stores. Presently, 3,000 people live in Koyasan and 1,200,000 visit it every year. Therefore, when considering the townscape of Koyasan and the preservation of traditional houses, the experience of both residents and visitors must be taken into account.

Here the author presents the results of a survey that was conducted in 2008 about the townscape of Koyasan and its traditional houses to show its conservation and possible relocation. The responses of Koyasan's residents were distinguished from those of tourists and visitors; in fact, the survey helped clarify some differences of opinion between these two groups. The questionnaire was broken up into subsections consisting of questions on respondent characteristics, traditional houses, the townscape of Koyasan and the town itself. Completed questionnaires were received from 168 residents and 1,073 visitors.

Keywords: Koyasan; townscape; traditional house; conservation; relocation

1. Introduction
The town of Koyasan has 1,200 years of history as a center of Japanese esoteric Buddhism (Shingon Mikkyo). Koyasan was registered as a World Heritage Site in 2004, and its town government established a new townscape act in 2008, and landscape districts were decided. Although it is thought that the traditional houses have the most significant effect on the townscape, modern Koyasan consists of various other types of buildings as well, including temples and stores. Presently, 3,000 people live in Koyasan and 1,200,000 visit it every year. Therefore, when considering the townscape of Koyasan and the preservation of traditional houses, the experience of both residents and visitors must be taken into account.

It is important to clarify any differences of opinion between the two groups so that Koyasan's townscape can continue to meet both groups' needs and to develop as an attractive and sustainable town.

Previous studies have analyzed survey results concerning townscape formation in historic districts\(^1\),\(^3\), the elements of townscape in historic districts\(^4\),\(^5\), opinions on townscape held by residents of historic districts\(^6\),\(^8\), and visualization of townscape rules for public involvement\(^9\). Furthermore, previous studies have analyzed residents' views on traditional houses\(^10\) and housing performance\(^11\). In Koyasan, other studies have focused on typical plans of traditional houses\(^12\) and their accessibility\(^13\). Little research, however, has been conducted on differences of opinion between residents and visitors about townscape and traditional houses in historic districts, and none of this type of research has been conducted in Koyasan.

Here the author presents the results of a survey that was conducted in 2008 about the townscape of Koyasan and its traditional houses to show its conservation and possible relocation. The responses of Koyasan's residents were distinguished from those of tourists and visitors; in fact, the survey helped clarify some differences of opinion between these two groups. The questionnaire is believed to have been a suitable method for accurately assessing respondents' opinions.

2. About Koyasan
2.1 Townsite of Koyasan
Koyasan is located in Wakayama Prefecture (Fig.1.), in a basin surrounded by mountains with an altitude of about 1,000m. The townsite of Koyasan, which is the subject of this research, and World Heritage properties
are shown in Fig.2. The townsite of Koyasan is surrounded by the Nyomin-michi pilgrimage trail, and is also called "Sannai" or "Sanjo". Central Koyasan and its landscape district's targets are shown in Fig.3.

2.2 History
Koyasan is home to an active monastic center founded twelve centuries ago by the priest Kukai (posthumously known as Kobo Daishi) for the study and practice of Esoteric Buddhism. In 816, Emperor Saga granted Kukai permission to establish a monastic complex at Koyasan. In that same year, accompanied by numerous followers and laborers, Kukai ascended the mountain and began building. That was the founding of Koyasan's Kongobuji Temple (Fig.4.). Today, the town is the headquarters of the Koyasan sect of Shingon Buddhism, a faith with a wide following throughout Japan.

On July 7, 2004, the United Nations Educational, Scientific and Cultural Organization (UNESCO) added Koyasan to its World Heritage List as part of the "Sacred Sites and Pilgrimage Routes in the Kii Mountain Range". Now, as in the past, Koyasan continues to attract visitors, including Buddhist practitioners and devotees, from around the world. It is also an important destination for pilgrims returning from the "Pilgrimage to the 88 Temples of Shikoku."

2.3 Temples (Fig.4.)
The main temples are Danjo Garan, Okuno-in, Kongobuji, and Daimon. Danjo Garan, situated on a small plain at the top of Mount Koya, is a sacred complex of temples, halls, pagodas and Buddhist statuary; many visitors are attracted to this serene and hallowed place. The area known as Okuno-in, or the Inner Sanctuary, is the setting for a vast cemetery, surrounded by a thick forest of massive cedars and containing the mausolea of numerous famous Japanese including the samurai ruler Toyotomi Hideyoshi (or Taiko Hideyoshi) as well as memorials to the spirits of soldiers killed in the Pacific War. Kongobuji is the oldest temple in Koyasan, founded by Kukai in 816 as his primary temple. Daimon, which was rebuilt in 1705, takes the form of a great arch. Koyasan is home to a total of 117 temples; of these, 52 offer "shukubo", or overnight lodging for guests. At temples offering shukubo, monks welcome and host the visitors, who can partake of the monks' vegetarian diet and engage in Buddhist rituals such as sutra-copying or goma prayer.

2.4 Traditional Houses (Fig.5.)
In addition to temples, there are ordinary houses in Koyasan. Most of these are traditional Japanese wooden houses, typically consisting of a storefront on the ground floor and living space on the floor above. Although they were built in a traditional style and look older than they are, most of them were in fact built in the early Showa era, as the town was rezoned in 1934 and again in 1888. The modern townscape includes not only three-story RC and steel-supported houses built to look like traditional wooden houses, but also modern concrete apartment houses that are not intended to look traditional. Most of the storefronts house souvenir shops, Buddhist shops, and traditional restaurants, but there are also convenience stores and modern cafes.

In this study, "traditional houses" are defined as buildings that look like traditional houses, regardless of their construction materials. A building is considered to have "traditional" architecture if the questionnaire's respondents consider it to have "traditional" architecture, regardless of the style or era in which it was built.

2.5 Current Townscape (Fig.5.)
Koyasan is not only home to 3,000 people, it is also a religious destination that attracts 1,200,000 visitors each year. Throughout the town, houses and temples sit side by side, and while these two building types harmonize well in some places, they clash in others. The design and maintenance of ordinary houses thus has a profound effect on the townscape. Recently the town government of Koyasan has tried to establish a townscape act to preserve the town's historic and scenic appeal. Because Koyasan's population has both aged and diminished in size, however, it is difficult for residents to maintain their houses in good condition, and some houses have even been abandoned. This
Three shops also handed out copies. Five thousand three hundred and ninety two questionnaires for visitors were distributed and 1,073 completed questionnaires were received. 1,633 questionnaires for residents were posted around the town or handed out directly and 168 completed questionnaires were received.

3.5 Period

The questionnaire was offered to visitors in four high-traffic public spaces over a period of three days in August and September 2008 and was distributed by the participating shukubo temples from August through October 2008. The questionnaire was offered to residents from August through November 2008.

4. Results

4.1 Traditional Houses in Koyasan

(1) Appearance of traditional houses in Koyasan (Fig.6.)

Respondents were asked: "Do you think that the appearance of the traditional houses in Koyasan is beautiful?" Residents tended to think that the traditional houses were not beautiful, as almost all of them were rebuilt recently (early Showa) and are thus not historic, especially in contrast to the temples, which residents tended to admire for their long history as well as other reasons. Visitors, in contrast, tended to find the traditional houses very beautiful. This shows that the two groups have significantly different opinions on Koyasan's traditional houses, and that these differences arise in part from the knowledge or lack thereof of the houses' history.

(2) Good and bad aspects of living in a traditional house (Fig.7.)

When asked about the good aspects of living in a traditional house, residents were more likely than visitors to identify "coolness in summer", "room size" and "room convenience". The differences between residents' and visitors' responses to this question were significant. When asked about the bad aspects of living in a traditional house, residents were more likely than visitors to identify "humidity control", "accessibility for the aged", "warmth in winter", "protection against rain and snow measure", "airtightness", "maintenance costs" and "availability of parking". Again, the differences between residents' and visitors' responses were significant.

These responses highlight two major concerns of Koyasan's residents about their traditional houses,

![A Traditional House Among Modern Buildings](image1.png)

![A Row of Traditional Houses](image2.png)

![Traditional and Modern Houses Mixed](image3.png)

![Traditional Houses Refurbished](image4.png)

![A Temple in Koyasan](image5.png)

![Continuous Walls of Temples](image6.png)

Fig.5. Traditional Houses in the Current Townscape

issue must be addressed if the town is to retain its beauty and its appeal to visitors.

3. Outline of Questionnaire

3.1 Purpose

The purpose of this study is to clarify the opinions of residents and visitors, especially where these groups disagree, with regard to the traditional houses and townscape of Koyasan, to enable Koyasan to keep its historic and scenic appeal while continuing its development in a sustainable manner.

3.2 Contents

The questionnaire is divided into subsections consisting of questions on respondent characteristics, traditional houses, the townscape of Koyasan and the town itself.

3.3 Subjects

The subjects of this study, namely, those who responded to the questionnaire, included both residents and visitors. "Residents" are people who live or work in Koyasan; note that "residents" can include people who live in other nearby towns. "Visitors" are people who come to Koyasan for sightseeing or to participate in religious activities, including pilgrims.

3.4 Methods

Forty-eight of the temples offering shukubo (overnight lodging) provided copies of the questionnaire to their guests. In addition, three or four staff members distributed copies to visitors in each of four high-traffic public spaces where visitors typically gather.
namely, the houses' relatively poor weather resistance and the difficulty of aging in them. As the climate of Koyasan is rainy and humid in the summer, and cold and very snowy in the winter, the lesser ability of traditional houses to retain heat in the winter and to resist rain and snow has a significant impact on residents’ enjoyment and also contributes to the financial cost of living in them. As long as a house's appearance is traditional, the inside may be modern, but the inefficient insulation should be improved using new synthetic building materials etc. However, since the response of individual residents is limited, the whole town needs to address the issue. For example, the whole town's heating system via an energy plant using abundant thinned timber should be considered. Furthermore, as noted above, the population of Koyasan is aging, and traditional houses are not particularly well suited to the needs of older people. All the bedrooms are upstairs and there are no elevators, and that there is no space around the buildings to install wheelchair ramps when necessary. Related to accessibility is the fact that, since traditional houses are built immediately adjacent to one another, with no space between them, there is no room for driveways or parking spaces next to the houses, so residents must rely on street parking.

Not being able to depend on parking close to one's own home is particularly challenging for the elderly.

In order for visitors to know traditional houses in Koyasan and take into consideration their own houses, some vacant traditional houses that they experience should remain open and currently lived in homes should be open to the public.

(3) Improving houses' appearances to beautify the townscape (Fig.8.)

Respondents were asked: "Do you feel inclined to improve your home's appearance in order to beautify the townscape?" This question was only for residents of Koyasan. Approximately 50% of residents said yes, 40% said no, and 5% said that they had already made improvements with this purpose in mind. Respondents who answered no were asked to elaborate on their reasons for choosing not to improve the appearance of their homes. Of these reasons, the most common was the cost of improvements. The second most common reason was that the resident only rented or leased his or her home rather than owning it; this situation is particularly common in Koyasan. Other fairly common responses included a lack of interest in home improvement and not knowing what steps to take; thus it can be expected that efforts on the part of the city to increase awareness of the need for a beautiful townscape and to inform residents of good steps to take will increase home improvement. Many residents also responded that the government rather than the residents should be responsible for beautifying the town; this shows that it is necessary to consider possible methods of cooperation with government offices and assistance to residents.

(4) Priorities in rebuilding or renovating houses (Fig.9.)

When asked about their priorities in rebuilding or renovating their own houses, both residents and visitors commonly identified room convenience, expense, earthquake resistance and indoor environment. Residents were more likely than visitors to name fire prevention, harmony with townscape and accessibility for the aged, all of which reflect concerns that are particularly important in Koyasan. In order to make wooden materials easy-to-use, it is necessary to install water tanks and cannons for fire prevention, required by the town using abundant rain water. Priorities that
were less important to both groups included property values, contribution to the town, compliance with regulations and neighborly relations; raising residents' consciousness about these issues may help encourage home improvements in Koyasan. "Neighborly relations" may appear to be unimportant to residents, but the explanation for this is probably that residents think neighborly relations are already good enough. This is supported by the common identification of neighborly relations as one of the good things about living in Koyasan (See Fig.15.). The author assumes that this is why the issue seems to be of low priority.

4.2 Townscape of Koyasan

(1) Beautiful things and unattractive things in Koyasan (Fig.10.)

When asked about the beautiful things that can be found in Koyasan, residents were much more likely than visitors to name temples, trees and plants, public toilets, traditional shops, light poles, benches and parking lots etc. In interpreting this data, it should be noted that the public toilets, light poles, benches and parking lots were recently renovated. Both residents and visitors commonly identified traditional houses as a beautiful aspect of Koyasan, but visitors were less likely than residents to identify traditional shops as beautiful. And about 20% of both groups identified monks as beautiful. These opinions should be considered in planning for the future townscape of Koyasan. Furthermore, the color of buildings should take into consideration the color of monks' clothing because a lot of monks venture through the town (See Fig.4.).

When asked about the unattractive things in Koyasan, residents were much more likely than visitors to name parked cars, vending machines, signboards, street stalls, streets etc. Most of these are recent additions to the townscape. It appears that residents' opinions on whether certain elements of city infrastructure are beautiful or unattractive depends heavily on how recently these elements were installed or renovated. Waterways and streets, for example, have not been renovated recently, and residents tend to regard them as unattractive, while visitors, who are unaware of their age, see them as beautiful. Both groups tend to identify modern shops and houses as unattractive.

(2) Opinions about the townscape of Koyasan (Fig.11.)

Among both residents and visitors, the most common response to our question about whether the townscape of Koyasan should be improved was that "[the issue] is so serious that it should be addressed by the whole town"; visitors were somewhat more likely to select this response than residents were. Many more residents than visitors responded that "[the issue] is important, but practical and economic concerns take priority over beauty". This difference is significant. The response that "[the issue] has been sufficiently addressed already and further efforts at improvement are not necessary" was not common among either group. Both groups thus recognize that the townscape of Koyasan still has some problems.

(3) Beautiful scenic views in Koyasan (Fig.12.)

This question was only for residents. They were
asked to identify the beautiful types of scenic views in Koyasan. Many residents identified natural scenery such as forests, trees, and mountains as well as views of old temples, while only a few identified scenes containing rows of traditional houses and scenes containing houses where residents of the town live. This corresponds with the results of the question on the appearance of Koyasan's traditional houses: residents typically think that the temples and scenic views containing temples are beautiful, in part because of their long history, while the traditional houses and scenic views containing them are not beautiful, in part because almost all of them were rebuilt recently. This contrasts with the residents' strong approval of more recent city infrastructure projects such as the parking lots and light poles mentioned above (See Fig.10.).

Key public viewpoints should be decided and their townscape should be preserved.

(4) Future directions for the townscape of Koyasan (Fig.13.)
This question was also only for residents, defined strictly as people who live in Koyasan but work elsewhere including people who don't work, and as people who work in Koyasan including people who live elsewhere. Considering those who live in Koyasan separately from those who work there, people who live in Koyasan were more likely to agree that "[the townscape] is fine as it is" or that "it should be unified into rows of traditional houses", while people who work in Koyasan were more likely to agree that "[Koyasan] should continue to develop as a townscape in which traditional and modern buildings are mixed". Such people apparently think that modern buildings are needed in order to promote commerce and business. Few people in either group thought that "[Koyasan] should develop a modern townscape".

(5) Protecting the townscape of Koyasan (Fig.14.)
Respondents were asked: "What can you do to protect the townscape of Koyasan?" This question was only for visitors. The most popular response was "taking garbage home", followed by "coming [to visit Koyasan] again" and "using public transportation". Few visitors chose "living in this town" or "working in this town", showing that most visitors do not wish to relocate to Koyasan. Economical accommodation for those visitors staying for a long period of time is needed. Moreover, it should be easy for those living in Japan wanting to move to Koyasan or those migrating from other countries to use vacant houses. Residents should aid and support work, study, child rearing, etc., so that new residents can live easily.

4.3 Town of Koyasan
(1) Good and bad aspects of living in Koyasan (Fig.15.)
When asked about the good aspects of living in Koyasan, residents were significantly more likely than visitors to identify Koyasan's natural environment and neighborly relations and the "sense of relief" they get from being there. When asked about the bad aspects of living in Koyasan, residents were more likely than visitors to identify the insufficient availability of shopping, amusements, work, public transportation and accessibility for the aged. Although these results are not surprising, the significant difference between residents’ and visitors’ responses to this question reveals that residents perceive serious problems with Koyasan. It is necessary to improve these negatively perceived aspects of town life. Shopping and town-mobility should be promoted, and shops, public facilities as well as transportation should be readily available for not only visitors but also residents. In contrast, many residents identified work as a good aspect of living in Koyasan. Moreover, residents identify the neighborly relations as a good aspect but the suitability for child rearing as a bad aspect.

In order to know the town well, buildings such as temples, houses, shops, museums, and the town hall should be opened entirely on special Open Days.

(2) Koyasan in the future (Fig.15.)
Respondents were asked: "How do you think Koyasan should be in the future?" Visitors were most likely to answer either that "it should develop as a town of temples" or that "it is fine as it is". Residents, on the other hand, were more likely to answer that "it should develop as a sightseeing and commercial town". Residents probably expect that Koyasan will develop as a town of temples regardless of their questionnaire responses, but hope that Koyasan will add some commercial development to increase economic activity and opportunities for employment. Cars should be excluded so that pedestrians will be a priority, and the main shopping streets ought to have transit-malls or community-roads so that shopping can be enjoyed safely.
5. Discussion

5.1 Preservation of Traditional Houses
Residents do not think that the traditional houses in Koyasan are beautiful, but visitors think that they are very beautiful. Conversely, visitors do not think that the traditional shops in Koyasan are beautiful, but residents think that they are. According to residents, the traditional houses in Koyasan are more convenient, more spacious, and cooler in the summer than visitors think they are, but they are not easily accessible to the aged or very secure in protecting against rain and snow. Moreover, traditional houses get very cold in the winter, and it is expensive to improve and maintain them. Residents tend to think that fire safety, harmony with the townscape, and accessibility for the aged are important things to consider when rebuilding or renovating a traditional house. These concerns appear to be characteristic of Koyasan. Residents tend to be less concerned with property values, their buildings' contribution to the town, compliance with regulations and neighborly relations; this is also peculiar to Koyasan. Concern for property values is low probably because most traditional houses are leased or rented. Concern for compliance with regulations is low probably because buildings that do not comply can be seen in Koyasan today. Residents need to recognize that beautiful buildings have high property values, that the town as a whole becomes more beautiful when individual buildings are beautified, and that a town with a beautiful townscape is valuable in itself. Furthermore, although neighborly relations are perceived to be fine as they are, they must be taken into consideration to improve community formation and to produce a beautiful townscape. It is necessary to advance the development of laws that allow the town to take advantage of its best qualities and to promote town-planning schemes with which residents will want to cooperate. Systems of assistance for beautifying and improvement of their traditional houses are also needed using sightseeing income.

5.2 Townscape of Koyasan
Although both residents and visitors think that the issue of beautifying Koyasan's townscape is so serious that it should be addressed by the whole town, only about 50% of residents personally intend to do something to improve the townscape, while 40% of residents intend to do nothing. The explanation for this discrepancy can be found not only in the high cost of repairs and renovations but also in a peculiar characteristic of Koyasan: namely, the fact that most houses in Koyasan are leased or rented. Most of the houses and land within the town are in fact owned by the temples. For this reason, residents cannot renovate or change the appearance of their houses however they wish. Thus if Koyasan's traditional houses are to be beautified, not only their residents but also their owners must be brought on board and convinced of the importance of beautifying individual houses as well as the townscape.

Traditional houses are an important element of the townscape of Koyasan. Residents typically think that townscapes containing temples or natural scenery (trees, forests, mountains, etc.) are beautiful, while townscapes containing rows of traditional houses or houses in which the people of Koyasan live are not. Presumably, residents think that townscapes containing rows of traditional houses are not beautiful because they think that Koyasan's traditional houses themselves are not beautiful, as mentioned above. Visitors, however, think that both the traditional houses themselves and townscapes containing them are beautiful. Now that this is known, residents must be educated about the importance of traditional houses as well as temples to their town, so that the residents themselves will come to admire and preserve their traditional houses, thus beautifying the townscape of Koyasan.

In other respects, too, the opinions of residents on what is beautiful differ from those of visitors: residents tend to think that the public lavatories, benches, and street lights, all of which were recently renovated, are beautiful, but visitors tend not to think so. Conversely, residents tend to think that the waterways and streets, which have not been recently renovated, are not beautiful, but many visitors think that they are. If Koyasan is to develop a townscape that satisfies everyone, including residents and visitors, it will be necessary to consider the needs and opinions of both groups.

Some residents answered that they were not interested in the townscape or that they did not know what they should do to improve it. These obstacles can be overcome through raising awareness of the issue and providing examples of good steps to take. Moreover, some residents answered that the government should take responsibility for beautifying the town, so it may be useful to consider a partnership with a government office that could offer assistance to residents interested in improving their homes.

5.3 Koyasan in the Future
Residents tend to hope that Koyasan will develop in the future as a town of sightseeing and commerce. Particularly those who do business in Koyasan hope that the town will develop with a mixture of traditional and modern buildings. This shows that the residents not only expect the town to continue developing as a town of temples, but also hope that the town will become a better place to live as more jobs, amusements, and
places to shop become available and as employment sufficient to enable a good living remains within reach. Residents also hope that the future townscape will allow for houses with effective climate control that are accessible to the aged, suitable for child-rearing, and easy to maintain. Given that many residents expressed an intention to give priority to practical and economic concerns rather than the beauty of their houses, town planners must find ways to combine beautification with practical improvements such as weatherproofing.

6. Conclusions
(1) Several peculiar characteristics of Koyasan have influenced the opinions of respondents. Three types of characteristics are particularly influential.

1) Geographical and climatic characteristics: the town of Koyasan is located on the top of a mountain where it receives much rain and snow.

2) Architectural and urban structure characteristics: Japanese traditional houses are arranged in continuous rows. In Koyasan, old temples are scattered among the houses all over the town. Most of the houses and temples are constructed of wood.

3) Ownership characteristics: most traditional houses are leased or rented from temples.

(2) This research shows that not only temples, but also traditional houses are important for Koyasan. However, it is difficult for residents to renovate or build new houses because of the peculiar ownership characteristics. Currently, many visitors from in and outside the country walk around the town, while many residents who cannot relate to the activities of temples live in the town. In order to be a sustainable town, Koyasan has to change from a religiously governed town to a residential town. It is important for the town government to help, so that temples and residents can discuss impartially. Temples and residents have to cooperate and help in developing the town.

(3) Although there is a new townscape act, not only traditional houses, but also temples and public facilities must obey this act. The consciousness of legal compliance must be raised equally in the whole town. Moreover, not only the building users but also owners must take responsibility for legal compliance.

(4) The survey showed that it is difficult for residents to live in Koyasan due to its severe climate. A reason for this is that the quality of traditional houses leased or rented by religious organizations might be low. It is necessary not only to take townscape into consideration, but also to build high quality and long-lasting houses. In order to make Koyasan robust and give residents a stimulus, newly designed buildings should also be built.

(5) Although the survey results were able to show the visitors' view of the town, a system which can show visitors' opinions occasionally should be created. Moreover, it is important for visitors to be able to experience not only temple activities in a pilgrimage lodge, but also everyday life in Koyasan in a traditional house, so that they can understand the town.

(6) It is necessary to educate the next generation who will inherit the town about the importance of townscape and the town's history. Children living in the town should positively participate in planning activities, so that they can familiarize themselves with the town. Koyasan used to be a school trip destination for many schools, but no longer is. The town government should make an effort to encourage these school trips, as well as change the town to an educational place for children and a model town. This was Koyasan's original role.

Acknowledgements
The author expresses appreciation to all the people who answered or distributed the questionnaire, and to the town community union and the town government of Koyasan.

References