

## A Note on Accessory Buildings of Farmhouses - An Example of the Sendai Plain

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## A Note on Accessory Buildings of Farmhouses An Example of the Sendai Plain

Tadashi SUGIURA

Regional diversity in rural house styles in Japan gives tourists a deep impression and makes them aware of the differences of landscape elements. Japanese rural house, especially farmhouse, is usually called *Minka* that literally means people's dwelling or folk dwelling and has been studied by many scholars including geographers from wide range speculations. A few works written in English contribute to the understanding of various aspects in Japanese rural settlements and houses besides a number of reports in Japanese. For instance, R.B. Hall (1931) observed some rural settlement forms in Japan and identified four common rural house types, the Yamato, the Satsuma, the Echigo and the Tokachi house type, and later Midori Nishi (1967) and Sugimoto (1972) discussed the wide regional variations in rural house forms and types in Japan.<sup>1)</sup>

It is noticeable that Japanese farmhouse commonly consists of the main house and several attached buildings, so to say accessory buildings or auxiliary buildings. The main house is principally the dwelling part, the accessory buildings are used as indoor workshop or storing space which may be considered to be important functional spaces in a farmhouse. To understand the dynamic and functional aspects of farmhouses, the accessory buildings are as significant as the main house. Hitherto many scholars interested in *Minka* have dealt only the main house form, but a few authors inferred valuable mentions on the attached buildings. One of the most noteworthy examples in geography was offered by Jinjiro Sato (1962) who observed the wide regionality in Japanese farmhouses' building arrangements, and also Chihoko Shimokobe (1962) accounted for the separation of various building spaces in farmhouse from the architectural viewpoint. Sugimoto's excellent work (1969) on Japanese *Minka* and some articles in the branch of settlement geography, such as by Iwata (1954) and Yamamoto (1957), have been helpful to the problem concerned, and the present author (1973) examined also the conditions of accessory buildings in some settlements in *Miyazaki-machi*, Miyagi Prefecture, northern Japan.

In this short paper, the author took up the Sendai Plain and its environs for his study area and tried to survey the accessory building styles and especially their arrangements in the premises in order to make clear some features of Japanese farmhouses.

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1) Some noteworthy works in French were published; Pezen-Massabuau (1966a, b) and Ogawa (1970).

### 1 Outline of the study area and farmhouses in it

The Sendai Plain, the study area for this paper, extends between the Kitakami and Abukuma mountains in the east central Tohoku District. It is a coastal plain formed by the deposits of the Kitakami, Naruse, Natori, Abukuma and other streams. As for the land-use in this plain, the agricultural land, especially the paddy field, occupied the widest area and many rural settlements depending on rice cultivation are scattered upon the plain. All of this plain was under the rule of the *Sendai-han* (a feudal clan) in Edo Period.

Several settlements were chosen from four districts as examples for this study, *i.e.* Asahi and Kitanagashida in *Miyazaki-machi*, Furuuchi, Hatazawa and Oino-kawara in *Izumi-shi*, Kase, Yakata, Shinzan and others in *Rifu-machi* and Kasano in *Yamamoto-machi* (Fig. 1). Asahi and Kitanagashida in the northwest margin of the Sendai Plain can be regarded as relatively pure agricultural settlements. *Izumi-shi* and *Rifu-machi* are both close to Sendai and has formerly pure rural character but nowadays are changing rapidly under the urban influences. Kasano, a seaside village on a sand levee, never depend on fishing, but is rather a ordinary farming village.

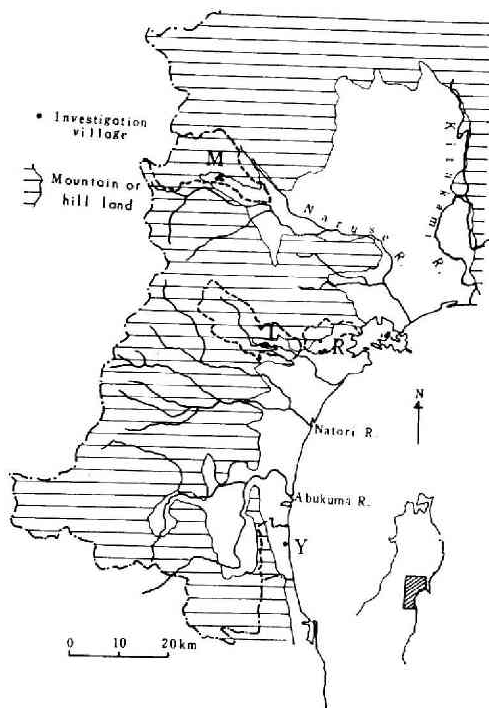


Fig. 1 Location of the investigation villages  
M: Miyazaki-machi I: Izumi-shi R: Rifu-machi Y: Yamamoto-machi

As regards the understanding of farmhouse forms in this area we are indebted to Ogura's acknowledged work (1955) on "*Minka* in Tohoku", above mentioned Sugimoto's work (1969) and so on. The traditional thatched roof is commonly the *Yosemune* (hipped roof) type, but the newly-built houses have the tiled or galvanized iron roof of the *irimoya* (gabled and hipped roof) or *kirizuma* (gabled roof) type. Regarding house plan, the *hiroma* type that is characterized by a spacious room and a floor fireplace (Sugimoto, 1972) is widely spread in all parts of this plain, but the *yotsuma* (four-rooms) type, the most standard type of Japanese farmhouse plan, is also found in this area.

The style of farmhouse yard is the so-called open type (Sato 1962). The house, sheds, drying yard and gardens are not so enclosed within one wall as seen in, for instance, the Yamato Basin. Although in Kasano Village the author observed a few examples of the half-closed type, the great many other houses are not sheltered by walls or constructions other than *yashikimori*, the shelter belt of trees.

A characteristic feature in this region is that each farmhouse has comparatively many accessory buildings, although in northeastern Japan the buildings in a farmhouse lot are believed to be small in number. The number of accessory buildings in a farmhouse lot averages 3~4 in any district (Table 1). Generally speaking, the houses of wealthy or upper class farmers have more accessory buildings and various functions are more dispersed to each construction (Sato 1962, Sugiura 1973). Several houses in each village have more than ten constructions in their premises.

Table 1 Some conditions in accessory buildings in each district

District	Number of farmhouses	Mean number of accessory buildings ( ): including ones joined with the main house	Number of <i>Koya</i> separated from the main house ( ): ratio to number of farmhouses	Number of <i>Koya</i> joined with the main house ( ): the same as left
Miyazaki-machi	39	4.33(4.64)	22(56.4%)	2( 5.1%)
Izumi-shi	46	4.98(5.26)	23(50.0 )	6(13.0 )
Rifu-machi	29	3.86(4.24)	19(65.5 )	5(17.2 )
Yamamoto-machi	55	3.1F(3.69)	25(45.5 )	18(32.7 )

## 2 Accessory buildings — their kinds and functions

Commonly seen in this region are the following kinds; *Naya*, *Sagyōba*, *Umayā* (*Maya*), *Kura* and other storages, Toilet, Bath, etc.

The term *Naya* means in the strict sense a temporary storage for harvests and serves usually also for storing the farming implements and miscellaneous things.

*Sagyōba* (*Sagyōsha*) is a workshop for farming and is in many cases used also as a storage area. Such workhouses as *Sagyōba* and *Naya* are called popularly *Koya*, literally a small house, and are commonly seen in many farmhouses. *Koya* is in many cases two-storied house, its ground floor space is used as *Naya* and *Sagyōba* and the second floor space as a storage area for straw and other things. Some authors pointed out that such large two-storied workhouses were constructed in many places in Tohoku after World War II (Sato 1962, Shimokobe 1962). These newly-built workhouses have commonly *kirizuma* iron roof, occasionally mansard roof and are concealed by wooden walls or modern siding. It is noteworthy that the workhouses (*Koya*) joined with the main house are seen besides separated ones. Such a type of *Koya*, according to my observation, is widespread in Iwate Prefecture, in place of former L-shaped houses (*Magariya*), and also distributed commonly in each village discussed in this paper (Table 1). In Kasano Village it is called locally *Nagaya*. In the above case the cooking sections of the house form the connecting link between workhouse and living quarters.

*Umaya* (*Maya*) is literally a stable for horses. Recently it became to be used for cattles because of rapid decreasing of horses. Two basic types are found in Japanese stables, i.e. *Uchimaya*, the stable enclosed within the main house, and *Sotomaya*, the outdoor stable. The latter is subdivided into two types: one connected with the main house and the other separated completely. In Tohoku, *Uchimaya* is common in wider area adapted to cold and snowy climate, *Sotomaya* is found in relatively limited area, Miyagi Prefecture and the coastal zone of Fukushima prefecture (Ebisawa 1966). The completely separated type of *Sotomaya* is common in the sampled villages except *Miyazaki-machi* which abounds in *Uchimaya* type farmhouses.

The storehouse elaborately constructed is called *Kura*. According to wall materials *Kura* is divided into *Tsuchigura* with mud and straw walls, *Ishigura* with stone walls and *Itagura* with timber walls. In Sendai Plain *Itagura* is popularly seen in ordinary farmhouses and makes a characteristic feature in this region. *Tsuchigura* and *Ishigura* belong to relatively wealthy farmers and serve as a sort of status symbol. They are also prepared against fire. The farmhouse generally has a number of other storage spaces for manifold purposes. Such spaces are locally called in various names; for examples of this region, *Kigoya* for firewood, *Waragoya* for straw, *Hasagoya* (*Hazagoya*) for stakes used at drying rice plants, *Nukagoya* for chaff, *Misogoya* or *Misogura* for *miso* (Japanese bean paste) and other casks, etc. They are frequently separately built in this region, but occasionally included to the main house or other accessory buildings.

The outdoor toilet and bath have been seen from old times in this region and today they are still common, although those situated within the main house

are increasing particularly in the newly-built farmhouses. For dwellers of such newly-built houses both indoor and outdoor toilet are available when the old outdoor toilet remains. Sometimes the toilet is attached to the bath, but commonly it is attached to other larger buildings, such as *Sagyōba* or *Naya*. In many cases bath is built separately from other buildings in order to reduce the danger of fire.

Some other kinds of accessory buildings are found in this region besides the above-mentioned; fertilizer pit, pigsty, henhouse, separated kitchen (*Kamaya* and *Mizuya*), garage, detached cabin and housed gate (*Nagayamon*) which is exclusively seen in the old Sendai-*han*'s domain in Tohoku (Honda 1958).

### 3 Arrangement pattern of buildings in farmhouse lot

The location of accessory buildings in farmhouse premises and their relative direction to the main house were reported by such authors as Sato (1962) and Honda (1958) especially on the relationship to local wind or *Kasō*, folk belief on direction of houses. In order to grasp the generality of concerned villages, direction diagrams of each accessory building are compared (Fig. 2). From this diagram it is recognized that the regional differences are not so great. *Sagyōba* or *Naya* is located usually to the east or southeast of the main house, but rarely to the west. *Umayya* is similarly oriented, but never to the west. Toilet is situated mainly to the east with some range, bath to the southeast or east and *Kura* to the south or southwest whose examples are too small in number. It is very difficult to explain clearly these orientations because perhaps many factors have

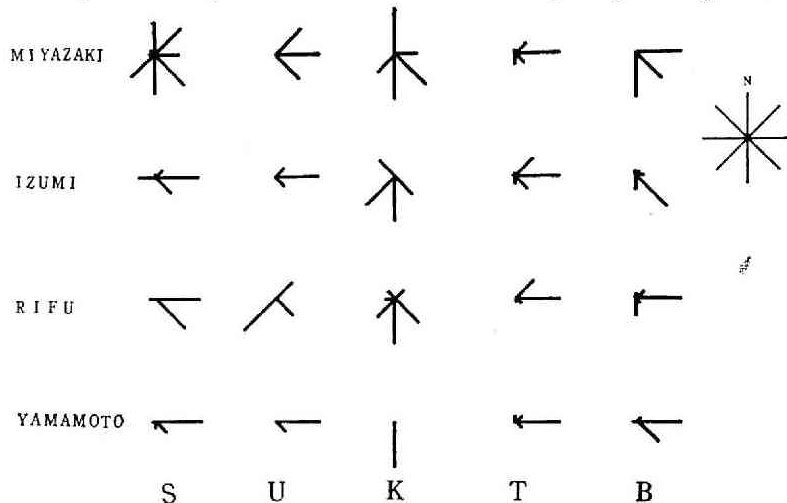


Fig. 2 Direction diagrams of each accessory building  
S: *Sagyōba* or *Naya* U: *Umayya* K: *Kura* T: Toilet B: Bath

effected such a traditional behavior. A suggestion may be brought from the main house plan. Namely in the sampled villages the *domaniwa*, the dirt-floored hall for cooking and working, and the entrance are customarily situated on the east side, and accordingly the accessory buildings used daily are built on the same side close to the entrance. The correspondence to local wind direction, for instance the prevention against the northwest monsoon in winter, is ambiguous in this region. *Kasō* is not ignored at building; for instance the direction northeast known as the *Kimon* (devil's gate) is considered unlucky in Japan and this belief may have influenced the location of *Kura* and bath.

In Japanese rural settlements the main house and accessory buildings are arranged regularly and form characteristic patterns. The types of building arrangement in farmhouse lot were already classified by Ogura (1955) and Honda (1958). Making reference to their classifications, the author tried to present a new classification based on his investigation as follows (Table 2).

Type I: Parallel arrangement of buildings, including two subtypes I-a (a row) and I-b (two rows). Accessory buildings are situated usually on one side of the main house. If the *domaniwa* is dextral *i.e.* on the east, they are located also to the east. And the daily used buildings, such as *Sagyōba*, *Naya*, toilet, bath *etc.* are located closer to the main house and others farther (Fig. 3). This type is frequently seen in the case of not so many attached buildings, or in the case of long and narrow farmhouse lot.

Type II: L-shaped and  $\pi$ -shaped arrangements. Accessory buildings are arranged in a row at the right angle to the main house and on the same side of *domaniwa* (Type II-a, II-b). If they are large in number, the rest is located in front of the main house (II-c) or on the opposite side of the *domaniwa* (II-d). In

Table 2 Number of houses classified into each type  
( ): percentage

Type	District	Miyazaki-machi	Rifu-machi	Izumi-shi	Yamamoto-machi
Type I	a	5	1	5	14
	b	5	2	5	2
Type II	a	2	6	6	17
	b		2	1	4
	c	4	1		6
	d		5	5	5
Type III		9(23.1)	5(17.2)	6(13.0)	3(5.5)
miscellaneous or irregular		14(35.9)	7(24.1)	17(36.9)	7(12.8)

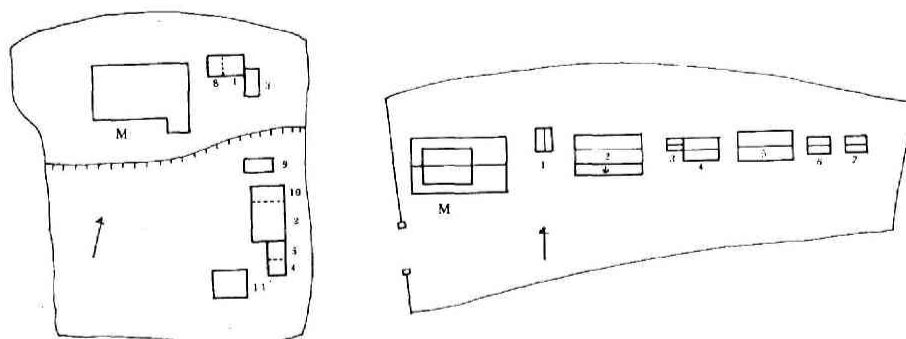


Fig. 3 Ground plan of farmhouses right: Kasano Village left: Yakata Village  
 M: Main house 1: Bath 2: Work house 3: Toilet 4: Storage for straw 5: St. for firewood, etc. 6: St. for chaff 7: St. for straw and others 8: St. for *miso* 9: Henhouse 10: St. 11: *Kura*

this type also the frequently used buildings are located close to the main house (Fig. 3).

Type III: Accessory buildings are surrounding the front garden or the main house.

The number of farmhouses classified into each type is shown in Table 2. From the Table 2 and on-the-spot observation the author can point out that the regularity in building arrangement differs from village to village. Regular arrangements are prevailing in Rifu-*machi* and Kasano Village, but in Izumi-*shi* and Miyazaki-*machi* in contrast miscellaneous or irregular arrangements are common. The main reason for this is considered that the former villages have an agglomeration structure and their individual farmhouse lots are comparatively narrow, but the latter villages have relatively dispersed farmhouses.

#### 4 Conclusion

Many accessory buildings are usually attached to farmhouses in the Sendai Plain and various functions are differentiated to each construction. Such a style of farmhouses is distinguishable from the general aspects in Tohoku that the bigger main house without many other accessory residence facilities are rather common. Such regional differences are considered to be brought about primarily by physical conditions. Namely the climate of Tohoku is generally chilly or snowy, therefore various functions of farmhouse are agglomerated in the main house, but it is not so snowy in the Sendai Plain compared with other regions in Tohoku. Of course, it is not enough to explain completely. Subtly observing, although it is more snowy in Miyazaki-*machi* than Yamamoto-*machi*, farmhouses in the former have more buildings than the latter. It may be necessary to consider other factors,



*i.e.* social and economic conditions, traditions, local customs *etc.*

In order to clarify various problems on the composition of farmhouse buildings, it is further necessary to analyse the function and kind of accessory buildings in relation to each farmer's economic and social conditions. In this paper the author will only give some morphological analyses on them.

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