Shinjō City and Two Small Towns ; A Study of Inner Structures of Local Towns.

Reiko FUJIMOTO

1. Sites of city and towns — Introduction The origin of Shinjō City is a castle-town developed in the spring zone of the Sasuno Fan, and the municipal system was put into effect in 1949. The total population is 31,000, and only 19,000 are agglomerated in the urbanized area. Since feudal days it has been the centre of the Shinjō basin and its sphere of influence reaches all around the basin. For instance, the bust-traffic has developed radially with Shinjō as its centre, and the features are also seen from the number of commuters by railway and the "isochron" line by bus. (Fig.1)

Fig.1 Traffic pattern around Shinjō

Kaneyama is a town along Ushū highway 16 km north of Shinjō, and is at the centre of the Kaneyama Fan. Its population is 2,600, but the whole administrative section contains 10,300 population. Mamurogawa, 8 km southwest of Kaneyama and with a population of 2,100 (6,370 in the whole administrative section) is a town situated in the central part of the drainage area of the Sake River. These two towns in the northern part of the basin seem as if they were the sub-centres of Shinjō City which is situated slightly south from the centre of the basin.

2. Analysis of their inner structures.

Houses In order to study the expansion of the built-up area, the days when the houses were built or rebuilt are divided into the following four stages; before 1925, 1926-1945 (pre-War), 1946-1949 (post-War) and 1950-1952. In Fig.2 the percentage in each stage is seen concerning such divided blocks as Shinjō I-XI, Kaneyama

Fig.2 Number and age of building
(Dotted part : built-up area)

I-III and Mamurogawa I-III. In the case of Shinjô, the Blocks X, VI, V, II, I, IV, VII, XI along the highway of Ushû, and Block VIII which lies between the site of the castle and the former blocks seem to be old parts. The triangular Block IX between the highway and the railway made expansion before the War, and Block III combining the station with the central area developed markedly after the War. In Kaneyama, Block III already expanded before War, and after War expansion can only be seen in Block Is. Mamurogawa has made a heavy expansion. The area around Block In, especially Blocks II and III have recently and presumably developed since the construction of the railway. This fact makes a remarkable contrast to the case of Kaneyama situated far from the railway.

Table 1

	Block	MAMUROGAWA				KANEYAMA				
		In	Is	II	III	In	Is	II	III	IV
roof type (main streets 1953)	modernized	2.1%	16.1%	5.8%	0 %	2.0%	0 %	0 %	0 %	%
	Hirairi	29.1	19.4	7.7	29.0	7.8	11.8	22.7	4.3	
	Tsumairi	65.0	61.1	81.0	68.5	74.5	79.0	71.0	87.0	
	hip	4.2	3.2	5.8	2.6	15.6	8.9	6.8	8.7	
house trait (Whole Urban tract 1952)	mortar-walled	0	2.0	0	0	0	0	0	0	0
	dozo-zukuri	0	0	0	0	3.7	0	5.4	0	0
	(roofed with)	1.7	0	0	0	17.2	9.7	5.4	4.5	35.7
	thatch	48.2	28.0	87.4	70.1	70.7	84.0	59.4	95.5	64.3
	ceder barks & Shingls	45.0	46.0	12.5	29.6	7.5	6.4	27.0	0	0
	galvanized iron Kawara (tile)	5.2	14.0	0	0	0.7	0	2.7	0	0

SHINJÔ										
I	II	III	IV	V	VI	VII	VIII	IX	X	XI
	26.5%	20.3%	4.1%	11.4%	1.3%	5.4%	%	%	%	2.2%
	19.6	44.5	27.0	17.8	11.5	21.7				10.7
	48.0	33.0	68.8	59.5	80.0	45.6				56.0
	5.9	13.0	0	10.1	7.8	27.2				32.0
11.7	2.8	1.2	10	1.5	0	0	*0.5	*0	*0	*0
11.6	0	00.8	60.0	3.1	5.5	0	0.5	0	0	0
0	0	0	1.3	2.6	13.9	12.5	15.8	2.2	11.0	25.6
11.6	21.0	32.5	25.2	42.0	44.4	39.1	25.6	32.5	38.7	54.3
55.0	60.0	55.5	25.2	41.0	33.4	47.0	54.0	61.0	44.5	18.5
10.5	16.7	10.0	7.7	17.0	2.8	1.6	3.8	4.3	5.1	1.4

* Sampling method (20%)

Next, the types of houses are shown in Table. 1. On the whole, Tsumairi-houses⁽¹⁾ are generally seen along the highway, and Hirairi-houses⁽²⁾ are widely distributed in the post-War developed area. In the central area, Hirairi-houses and mortar-walled-ones⁽³⁾ are seen. Cedar bark and galvanized roofing are common. In Kaneyama, the centre is almost obscure, and the houses are roofed with cedar barks⁽³⁾, and Tsumairi-houses are prevalent. This town looks just like a farm-village and seem as if it were sleeping, there being little traffic in the streets. In Shinjô, "Dozo-zukuri"⁽⁴⁾ and Kawara (tiled-roofs) are widely seen as well as modern stores with mortar-walls in the commercial I and II, and these areas still retain some antique calmness. Block III is thought to be the recently developed portion of the centre and old-fashioned shops can hardly be seen. The street of XI is rich in thatched-roofs and is full of countrified colouring.⁽⁵⁾

Mamurogawa has modern-looking houses in the centre and many Hirairi-houses. Above mentioned rapid development is seen with ample vividness in street-scenery of this town.

Factories In Kaneyama, there are 1 furniture factory and 4 lumbering factories. In Mamurogawa, 2 lumbering factories on the east side of the station and 2 breweries on the back sides of streets are seen. In Shinjô, on the other hand, much more factories can be seen. Most of them—especially factories relating lumbering, — are concentrated in the Blocks IX and VII near the station. To the east of the station there are two large ceramic factories, favoured by location, transportation and material-clay at the mountain-foot

-
- (1) Generally speaking, many "Tsumairi-houses" are observed in the street village in the Tôhoku region. And as the urban function grows active, "Hirairi-houses" tend to increase in number.

Yoshiro TOMITA : An Old Post Town "Masuda-machi, Natori-gun". Ann. Tohoku Geogr. Assoc. Vol. 2 No. 2-3 (1) 1949. pp. 59-62.

- (2) Most of their front parts facing the streets are walled with mortar and their outward appearances from the streets are modern.
- (3) Yoshijiro Ono : House Types in "Sai-hoku" Area. Ann. Tohoku Geogr. Assoc. Vol.9 No.1 1953. pp. 15-20.
- (4) Dozo-zukuri, an old-fashioned fire-proof house, is the oldest and the houses roofed with Kawara (tiles) are almost as old as Dozo-zukuri in age, both standing for traditional shops of old standing.
- (5) Yôshio WATANABE : The Urban Region of Sendai : A Study of Urban Concentric Zoning in its Actual Pattern. Science Reports of the Tohoku Univ., 7th Series (Geogr.) No.2, 1953. pp.30-52.

Fig.3 Distribution of factories in Shinjô

but in 2 Blocks of IX and XI with less house-density and making development recently, such a continuity in value is broken to some degree, though there is some traffic in the tracts of land along the new road by the municipal project.

3. Differences between cities and towns—Conclusion

As previously shown, Shinjô is eminently full of urban character comparing with Mamurogawa and Kaneyama. Further, Mamurogawa has the character of town while Kaneyama has no centre and has no urban character.

The differentiation of shopping-streets is evident in Shinjô having the whole basin as its hinterland, but in Kaneyama and Mamurogawa, shopping streets are simple, and also the specialization of shops are remarkably in low grade and

2 km east of the city. Besides, there are 1 factory of medicine (M), 1 of matting (C) and 1 of printing (P) (Fig.3). As for the dwelling places of the employees of the 3 large factories, only 3% of them are the commuters and nearly 15% of them are living in the neighbouring country.

Land value. We can scarcely see trades of land in Mamurogawa and Kaneyama. The case of Shinjô is shown in Fig.4. The lands of the highest value lie in Blocks I, II and in some portions of III. The distribution of values agree well with that of shopping-street type as will be seen later, showing areal or linear reduction continuously from the centre towards peripheral parts in the built-up area,

Fig.4 Distribution of land value and shopping-street types

they are only the large agricultural village and have no function of subcentres of the basin at all. The above discussion is understood more clearly by the consideration of shopping-streets.⁽⁶⁾ The shopping-streets of Shinjō have A_{IV} -type

Fig5. Types of shopping-streets in Shinjō and the Arrangement of their Types in the Schema (see No.2 of this series)

(Central shopping street) in Block 1, showing clearly the city-centre. (Fig.5) B_I -type (Pre-central shopping street) is seen adjacent to this and B_V -type (Shopping street for hinterland) is on both sides. Such a distribution shows the completeness of the differentiation of shopping-streets. But shopping-streets of B_I -type in II, III areas and B_V -type in IV, V areas have many shops belonging to d -group, different from other cities. (Fig.5) This fact seems to show the strong influence of the outside villages. On the other hand, Mamurogawa and Kaneyama have small number of shops (Mamurogawa 58, Kaneyama 35, referred to the main streets having the shop-ratio of more than 50%) and the differentiation of shopping-streets has not been noticed as yet. Moreover the shopping-streets of the two towns show a different character from that of the urban shopping-streets, and it seems inappropriate to classify them into types of shopping-streets under the same standard as in the case of cities.

(6) Reiko FUJIMOTO : The Shopping Street—As an Element of City Structure in North Japan : Its Type, its Pattern and its Arrangement. Sci. Rep. Tōhoku Univ., 7th Series (Geogr.) No.2, 1953. pp. 19-29