

Characteristics and Values as a Source of the “UMANOSUKE FUNAKI ARCHIVES”

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Abstract—Umanosuke Funaki (hereafter, Funaki) is a Japanese architectural engineer who worked in Saga, from the late Meiji era to the beginning of the Showa era. He learned architecture at a local technical high school and designed many buildings in Saga after his independence. His representative works are Saga Public Hall, Takatori's home, Funaki's own house, etc., but it is particularly well known that he was a designer of the enlargement of the old Koga Bank Head Office (hereafter, K Bank). The documents regarding Funaki's professional activities are in present archived at Saga University. The contents are widely including design drawings, design documents, photographs, diaries etc. Although the K Bank among these documents and the report was reported by Kyushu Institute of Design in 2002, the other documents remained unfiled without studying. We named the documents "UMANOSUKE FUNAKI ARCHIVES (hereafter, the UF Archives)," and tried to show its characteristics and values as a research source in this paper. It is so rare that quantities of documents on local engineers are kept in archives like this. Moreover, the architectural engineers who worked especially in Saga in this period have neither been surveyed nor been reported yet, although many researchers have researched also on local architectural engineers of all over Japan and their documents have been archived. The UF archives is very valuable not only to clarify the career of Funaki, but also to know the development of the architecture in Saga at that time.

Index Terms—architectural engineer, modernization, Saga

I. INTRODUCTION

A. Background

The time when the documents regarding Funaki who was a local architectural engineer of Japan became focused on was in 1994 the preservation and repairing construction of K Bank (see Fig.1) started. Prof. Dr. Masaaki Miyamoto (hereafter Miyamoto) who was a past Professor at Kyushu Institute of Design conducted a supervision of the construction and revealed that Funaki was a designer of expansion on the K Bank. Although the documents of Funaki had been kept at his House, almost all of the documents were handed to Prof. Miyamoto considering future's research. He wrote papers

“Preservation repairing construction report of the old Koga Bank and old Koga home [1]” and “Consideration on architectural activities of architect Umanosuke Funaki of Saga (1): Architectural history of the head office of old Koga Bank [2].” In those papers, however, he did not entirely analyze the contents of the documents.

The studies of local architecture in Japan have begun from around 1980s. Sawamura et al. discussed centrality and locality of architectural culture in Japan at a discussion meeting of Japan Institute of Architecture [3]. Miyamoto and Yamamoto summarized the discussion and pointed out necessity to discuss not only centrality and locality but also center and region [4].

Then, Sugawara reports on architectural activities of a local engineer who works in Mie prefecture [5]. Irimoto and Sugawara continuously studied local architecture in Mie to reveal modernization of architecture in local area [6]. Nagai and Okada studied on the historical materials used by a carpenter in a local area of Japan [7]. Hirooka introduced architecture of local architect Kameoka in the similar way to this paper [8] and said that the Taisho era and the beginning of the Showa era in Japan were the periods when the engineers who graduated from a technical high school started building activity in the area on behalf of the carpenters. This is because techniques of architectural engineer, building tools, and transportation of building materials became westernized and rather bettered after the Meiji Restoration, and gradually spread to local areas. Documents of the architectural engineer of this time are crucial to know the development of the local architecture.

In this meaning, Funaki became independent and established his own architectural design office at the beginning of the Taisho era, so his independence was in the earliest stage of development of architecture in Saga Prefecture. Therefore, the documents of Funaki are regarded as the valuable ones to know a part of the establishment process of modern architecture in Saga.

Kimura et al. studied the Sutemi Horiguchi collection in Meiji University and clarified its contents and meanings [9]. The methodology of their study was very helpful for our study to especially arrange and analyze the documents. So, all the documents of Funaki were transferred to Saga University in 2009 for archives and

continuous surveys. We named the documents "UMANOSUKE FUNAKI ARCHIVES" and herewith try to show its contents and values.



Figure 1. Old Koga Bank Head Office.

B. Personal History of Umanosuke Funaki

Table I shows the personal history of Funaki, which we have made referring to the reference [1]. He was born at Kiyama village in Saga of Japan in 1889. He entered Saga Prefectural Saga Technical High School (hereafter, ST high school) in 1904 and learned the basics of architecture. After having worked in Saga Prefectural Government Office for several years, he established Funaki Komusho (Funaki construction co.) at Akamatsu-cho in Saga. The exact year he established is unknown, but it is supposed that he started the business already at the beginning of the Taisho era because specifications made by Funaki Komusho in November of 1913 are left in the UF Archives.

According to the book titled "Reimei [10]" of the ST high school publication, he also worked as a president of Saga General Construction Association other than as an architectural engineer. He participated in an activity of revival of the architecture course of the school department he graduated from, and contributed to the architectural education of Saga. He died at the age of seventy-five years old in 1964.

II. METHODOLOGY

First we decide method of categorization. According to the previous studies, they mainly take two methods of documents analysis as follows: One is categorized by building type such as school, temple, shrine, general building, house, etc., and another is categorized by document type such as construction document, painting, rubbed copy, letter, etc. In this paper, we use categorization by document type.

The research methods are to check the following items for one document, building type, document name, data of document, existence of Funaki's seal or signature, condition of document and document size. In the case of photographs, letters and publications, we added place, sender and publication year, etc. respectively. The UF archives was classified into 4, ex. drawings and estimates, private documents, publications and others, and besides it made sub classification in the category. We count documents which are independent as one item. In case of

booklets including drawings and contracts comprised of several pages, we also count them as one item.

TABLE I. PERSONAL HISTORY OF FUNAKI

Year	Jp Year	History	Architectural work
1889	Meiji 22	Funaki was born in Kiyama village, Miyaki-gun, Saga Prefecture	
1900	Meiji 37	Enters Saga Technical High School	
1903	Meiji 40	Works at Saga Prefectural Government Office as a temporary employee	
1904	Meiji 41	Completes Saga Technical High School	
1905	Meiji 42	Marries in October	
1908	Meiji 45		Kanzaki branch office of Koga Bank
1913	Taisho 2	Establishes Funaki construction co.	A warehouse of Kanzaki Association
1916	Taisho 5		Koga Bank Funaki's own house
1926	Taisho 15		Saga Public Hall Ryutai Temple
1929	Showa 4		Takatori's home Ryukoku Junior High School
1930	Showa 5	Participates in an activity of his old high school	
1935	Showa 10	Works as a president at Saga General Construction Association	
1937	Showa 12		Library of Saga Senior High School
1938	Showa 13		Chotoku Temple
1940	Showa 15	Works as a member of a municipal assembly (12th)	
1964	Showa 39	Death (75 years old)	

Then, we check the following things in each document: building type, document name, data of document, existence of Funaki's seal or signature, condition of document and document size. In case of photographs, letters and publications, we add place, sender and publication year, etc. respectively.

III. RESULTS

A. The Details of the "UMANOSUKE FUNAKI ARCHIVES"

Fig. 2 shows the result of the categorized items, so that the categories are I. architectural documents, II. private documents, III. collection of publications, and IV. other documents. The total number of the documents is 756. The characteristics of the UF archives are covered almost the term when Funaki actively worked as an architectural engineer. The term that the UF Archives were made is 54 years from 1898 to 1952 and included the documents over his public and private. In addition, the documents such as his assignments and textbooks when he was a student are left.

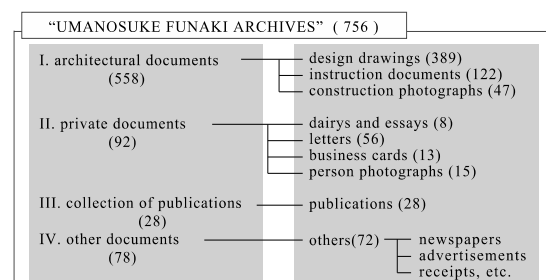


Figure 2. Categorization of "UMANOSUKE HUNAKI ARCHIVES."

B. Architectural Documents

We name the documents regarding his activities and achievements of architecture from the technical high school “architectural documents.” The total number is 588 and it account for 74% of the whole. They include his original design drawings, written estimates, construction photographs.

The number of the design drawings is 389, including simple image sketches like esquisse. Material of them is all paper. The detail of the materials is as followings: 227 blueprint drawings, 92 Japanese papers, 70 other papers which include kent papers, tracing papers and graph papers, etc. The building types are widely including shrines, schools, banks, factories, and houses. There are only 17 design drawings with the drawn date, and the others are without the drawn date. The oldest date is April of 1907 and the newest date is March of 1938. In addition, we can find that the drawings of Saga Shrine and Mitagawa Elementary School are not works of Funaki because they have signatures of other companies in the drawings respectively.

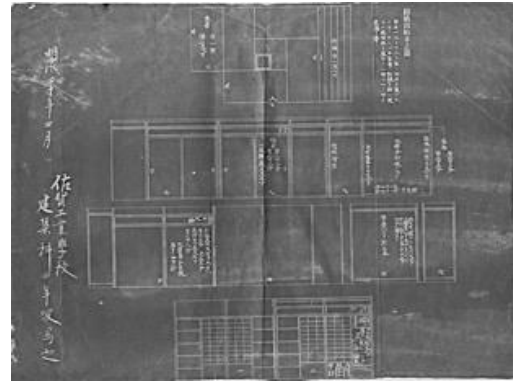
Fig. 3 is an example of the drawings with a mark of school year and name of Funaki. There are several notes on methods of drawing in the figure. This is one of design assignments when he was a ST high school student. Moreover, there are some sketches of details of Western-style architecture left as shown in Fig. 4, so this fact indicates that they had classes of Western architecture in the school.

Next, we name the documents such as written estimates, contracts, and specifications “instruction documents.” The total number is 122. Among them, the specifications printing of the Funaki Komusho is 64 as shown in Fig. 5. This figure is a specification of the Saga women's society kindergarten on August 1, 1945. The contents show that the construction materials and its price are written in detail.

We found out that he concerned a lot of architectures based in Saga and he also worked in Nagasaki prefecture next to Saga because of the specifications of the Nagasaki Prefectural junior high school are left.

C. Private Documents

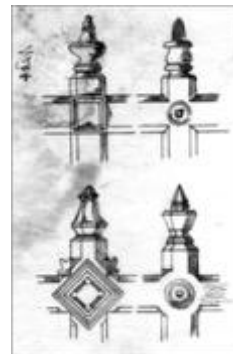
We name the documents related to Funaki himself “private documents.” The total number is 92. They are, e.g., diaries, essays, letters handwritten by Funaki himself, personal photographs as shown in Fig. 6. There are 7 diaries. The details are as followings: 3 lecture notebooks in his school days, 1 business notebook about Saga Prefectural Government Office, 1 record book exchange of letters with his customer in around 1929 and 2 other notebooks. The number of the letters is 56, material of them is 33 postcards and 23 envelopes. Particularly, a lot of letters from 1938 to 1940 are left. The number of the person photographs is 15, including group photographs in his school days and Funaki Komusho workers, etc.



At the left side of the figure written: April, Meiji 40 year, ST high school, Department of Architecture, 4th grade.

In the figure, there are several notes on drawings, although they are unrecognizable.

Figure 3. An example of design assignments.



(a) Sketch of an ornament.



(b) Sketches of ornaments of handrail.

Figure 4. Examples of sketches of the western architecture.



From the right written: August 1, Showa 2 year. Saga women's society kindergarten, Design documents of building construction. Funaki Umanosuke, Akamatsu-machi, Saga-city. Funaki construction co., Part of construction, breakdown, school building window glass door, 12 pieces, 48 yen, etc.

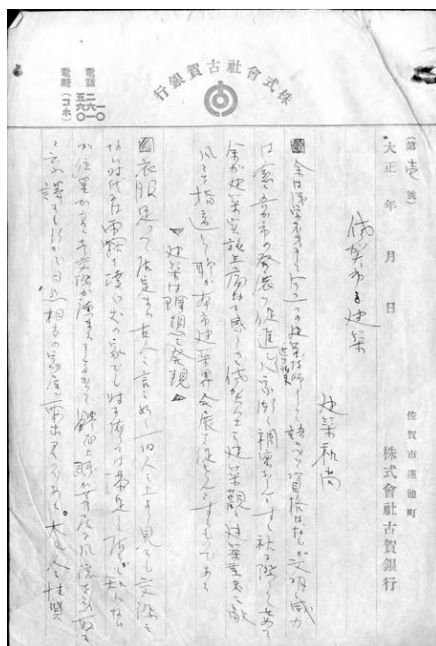
Figure 5. An example of contracts.

The essay titled “The architecture of Saga city” shown in Fig. 7 is in particular important because his thought of architecture is openly written in it. It shows that Funaki was pessimistic about the architectural level of Saga at that time. Additionally, we could also confirm the description about the bid system of those days.



This is a photograph of ST high school. Funaki is 4th person from the right, in the third row from the front.

Figure 6. An example of photographs.



From the right written: Taisho, Hasuikemachi, Saga-city, Koga bank co. The architecture of Saga-city, I have no right to tell as an architectural engineer because I have little knowledge and am also talentless, however, our city develops by power of civilization and houses will be built densely in the near future. I try to promote development of buildings in Saga city by pointing out both the idea of architecture of citizens and different feeling of architectural engineers in Saga city.

Figure 7. Essay "The architecture of Saga-city."

D. Collection of Publication

Most of publications are books about architecture. The total number is 28, including the magazines such as the one titled *Visual Architecture* [11]. The oldest publication year is May, 1875 [12] and the newest one is December, 1956 [13]. There are not only Japanese books but also foreign books such as the one titled *Inexpensive Bungalows* as shown in Fig.8. In addition, we could find some textbooks [14] which Funaki used when he was a student, because they were written Funaki's signature and school name. The books he wrote cannot be found.



Figure 8. An example of publication.

E. Other Documents

"Other documents" includes newspapers, stock certificates, advertisements, many receipts etc., the total number is 78. Fig. 9 is a statement of the Oma drapery in Saga city when he bought a cutter shirt and a tie. This is not related to Funaki's architectural activity directly.



From the right written: Hasuikemachi, Saga-city. Estimation from Ohma, Tel. 101 • 555, Transfar Fukuoka 292, to Umanosue Funaki, March 31. Balance of last month 2.51 yen, cutter shirt 2.50 yen, tie 1.80 yen. I certificate as mentioned above.

Figure 9. Examples of other documents.

IV. CONCLUSIONS

The "UMANOSUKE FUNAKI ARCHIVES" includes 756 documents. The categories are I. architectural documents, II. private documents, III. collection of publications, IV. other documents. The UF archives cover almost the term when Funaki actively worked as an architectural engineer. The term the UF Archives were made is 54 years from 1898 to 1952 and included the documents over his public and private. The architectural documents account for 74% of the whole.

The documents such as his assignments and textbooks when he was a student are left except for the design drawings and the estimates. Those documents can also let us know about the architectural education at that time. In addition, his essay which titled "The architecture of Saga city" says how he considered about architecture of Saga. Therefore, the "UMANOSUKE FUNAKI ARCHIVES" is very valuable not only to clarify the career of Funaki, but also to suppose an actual condition of local architectural engineers who lived and worked in the modernization of Japan.

ACKNOWLEDGMENT

The authors appropriate Funaki family because they provided us the valuable documents of Umanosuke Funaki.

APPENDIX A. FUNAKI'S WORKS AND THE NUMBER OF DOCUMENTS.

No.	Year	JP Year	Architectural work	Number of documents				
				Architectural documents		Private documents	Photographs	Other documents
				Number	Documents type			
1	1908	Meiji 45	Saga Bank Yanagawa Branch		S	1		
2	1913	Taisho 2	Kanzaki cooperative warehouse	1	ES	1		
3	1914	Taisho 3	Koga Bank Wakatsu Branch	1	ES	1		
4	1914	Taisho 3	Koga Bank Kanzaki Branch	1	S	1	2	
5	1915	Taisho 4	Okukawasansomitsuki-do	1	S	1		
6	1916	Taisho 5	Old Koga Bank			1		1
7	1916	Taisho 5	Funaki's own house				13	
8	1917	Taisho 6	Fukagawa Shipyard Foundry	7	P, R, D		4	
9	1917	Taisho 6	Kojo Temples	4	P, CS, E, RP, A, C, S	2		
10	1918	Taisho 7	Japan Electric Iron Foundry	6	P, CS, D, ES	3		
11	1920	Taisho 9	Tamagawa Noodle-making Factory	3	P, CS, ES	1		
12	1922	Taisho 11	Teikokujitsugyo Bank Iizuka Branch	2	S	2		
13	1923	Taisho 12	Shinjo Temple					1
14	1923	Taisho 12	Saga Senior High School swimming pool	3	CS, ES	1		1
15	1924	Taisho 13	Prince Nabeshima bronze statue pedestal	1	C	2	3	
16	1924	Taisho 13	Takakise Elementary School	12	P, CS, E, RP, D, A, S	1		
17	1925	Taisho 14	Ryukoku Junior High School	3		8	2	
18	1925	Taisho 14	Joko Temple	3	P, E, ES	2		
19	1926	Taisho 15	Ryutai Temple	3	P, E, D, ES	3	8	
20	1926	Taisho 15	Saga Public Hall	4	P, E, RP, D, ES, S	5		
21	1926	Taisho 15	Nishibi Bank	2	P, ES	1		
22	1926	Taisho 15	Daimaru Grand Hall	1	ES	1		
23	1927	Showa 2	Enryu Temple	1	ES			1
24	1927	Showa 2	Kyoho Temple	1	ES	1		
25	1927	Showa 2	Saga Women's Association Kindergarten	1	S	1		
26	1927	Showa 2	Kishima Officers House	6	P, CS, E, C	3		
27	1928	Showa 3	Saga Children Hospital	1	P	1		
28	1928	Showa 3	Isahaya Agricultural School	1	D	1		
29	1928	Showa 3	Omachi Substation	1	ES	1		
30	1928	Showa 3	Saga Kindergarten Hoan-sho	1	ES	1		
31	1928	Showa 3	Furuyu hot spring			1		1
32	1929	Showa 4	Takatori's home	28	P, CS, E, D, ES, C, S	4		
33	1931	Showa 6	Ryukoku Junior High School auditorium	15	P, CS, E, RP, D, ES, S	2		
34	1934	Showa 9	South Ariake village Agricultural warehouse	3	P, E, RP, S	1		
35	1936	Showa 11	Saga Senior High School covered gymnasium	3	P, D, ES	2		
36	1936	Showa 11	Shigeru Nakashima's house	2	P, E, RP, C	1		
37	1936	Showa 11	Nakashima Otolaryngology Hospital	5	P, E, RP, C	1		
38	1937	Showa 12	Mizukamisanmanju Temple	2	ES, S	2		
39	1937	Showa 12	Saga Senior High School library	6	P, CS, E, D	1		
40	1938	Showa 13	Chotoku Temple	5	P, RP, S	1		
41	Unknown		Fukuchi village Industries warehouse	1	E	1		
42	Unknown		Horie Shrine	1	P, E	1		
43	Unknown		Nishigomon house	1	A			

Legend

A: Arrangement chart
P: Plan
RP: Roof plan
E: Elevation
CS: Cross Section
D: Detail

ES: Estimate Sheet
C: Contract
S: Specification

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