



Studies of Building layout and ground use in the early days of Japan Women's College: Campus design for private colleges in a modernizing Japan

Suzuki, Maho

Japan Women's University, Japan, research fellow

E-mail: suzukimah@fc.jwu.ac.jp

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ABSTRACT

This paper reveals the influence of urban and social contexts on the early building layout of Japan Women's College (JWC), one of the first women's colleges in Japan.

According to the unpublished plans, the main building and other major structures, at the first stage, formed a three-sided quadrangle with site-wide organization, which was similar to contemporary National colleges. This impressive design, however, disappeared in the final plan. Although the school is the largest in student number and in campus ground size compared to other contemporary private colleges at its establishment, the subdivided land acquired in the private land market forced JWC to give up the organic composition of buildings. Under the framework of donation-based finance, it needed to start construction quickly for further support from the public, which prevented the school from acquiring enough time to adjust land ownership. These constitute the major differences with national schools. The founder's emphasis on the physical exercises, which reflected the public interest in physical strength of mothers in the time of wars, gave preference to securing sufficient open space over the order of buildings.

Key Words: Campus Design, Private College, Female Education, Urban Context, Modern Japan

I . Introduction

Among the studies on the spatial organization of Japanese universities, one by Seo is very much comprehensive. In it, ninety-five examples are analyzed and categorized by composition and factors. As to spatial composition, Seo discovers seven types: “street-axis,” “building-axis,” “square connection,” “square dispersion,” “building connection,” “street area-nonaxis,” and “mixture-nonaxis” (Table 1). Japan Women’s College (*Nihon Joshi Daigakko*, JWC, hereafter), established in 1901, one of the first private women’s colleges in Japan, which this paper focuses on, is categorized in the last type, where buildings of various functions are pushed into a small site.¹⁾ Gonoiet al. also mention that the JWC campus lacked formality compared to two other women’s universities with long histories, Ochanomizu Women’s and Nara Women’s universities, because the latter two were state run and required “dignity.”²⁾

<Table 1> Campus Categorization by SEO (1991). Definitions are summarized by the author.

category name	major feature	definition	
A street-axis	coordinated by an axis	the main street works as an axis to organize whole building layout	4.2%
B building-axis		the centers of the major buildings are on a single axis	13.7%
C-I square connection	coordinated by open space	groups of buildings each of which forms a square are connected in a regular way	6.3%
C-II square dispersion		buildings form squares, but no clear relationship to each other	12.6%
D building connection	a block of buildings form an area	all buildings in an area are connected	15.8%

1) Seo, K. (1991). A study in space organization and modification of university campuses in Japan. *Journal of Architecture and Planning* (430), 65-76.

2) Gono, N., Motooka, N. & Nagasawa, N. (2016). The development of the campus planning of Ochanomizu University. *Summaries of Technical Papers of Annual Meeting, Architectural Institute of Japan*. 2016, F-1, 285-286.

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category name	major feature	definition	
E-I street area - non axis	the layout is less organized	there are areas circumscribed by campus streets, but no clear organization	14.7%
E- II mixture - non axis		no comprehensive strategy	32.6%

Formality is a convenient concept to compare campus designs, but numerous campuses (47 % of 95) in Japan are categorized by Seo into the street area-nonaxis and the mixture-nonaxis categories. Therefore, simply analyzing final forms is not enough to understand the reality. By examining the campuses of Meiji national schools, Miyamoto shows that their design included some variations, changing from closed or semiclosed quadrangles (a building complex enclosing a court) to parallel lines of buildings to consider daylighting of classrooms³. In addition, many of mixture-nonaxis campuses are private ones established in the pre-WWII era, which means there could have been many changes and additions. Therefore, more research on old private universities should be added to existing ones⁴ so as to know the possible design philosophy in the struggling years of Japanese higher education.

JWC has recently been proven to have had unbuilt plans with campus-wide formal organization (Figures 3 and 4) in comparison with the implemented ones (Figures 1, 2, and 5), which means the architect was forced to compromise before its completion. I would mention as possible influencing factors architectural trends, social and educational needs, and urban contexts. Through the examination of drawings and pictures, land conveyance records, school histories of other private and national school in addition to JWC's, and a contemporary map, this paper reveals the reasoning behind the early building layout and positions of JWC as part of the history of campus design of modernizing Japan.

3) Miyamoto, M. (1989). *Nihon No Daigaku Kyanpasu Seiritsu Shi (A History of Formation of the University Campus in Japan)*. Fukuoka: Kyushu University Press.

4) Kimura, T., & Yamada, K. (1990) A study on the restoration of school houses in the Omiya Campus, of the Ryukoku University. *Journal of Architecture, Planning, Environment and Engineering*. 410 (0), 143 153; Okawa, M., Marumo, H. & Morita, Y. (1992) Relationship between the process of campus development and the spatial composition: through comparison of the open space utilization model and site expansion model. *Papers on City Planning* (27), 697 702; Akao, K., Goto, H., Miyake S., & Yoneyama, I. (1999) A Study on the Forming Process of Landscape in Waseda University, Nishiwaseda Campus. *Journal of Architecture, Planning, Environment and Engineering*. 64 (519), 187 194; Sugiura, K., & Itoh, H. (2011) A study on restoration of spatial composition of the Mejiro campus of Gakushuin in the Meiji era. *Journal of Architecture, Planning, Environment and Engineering*. 76 (668), 1971 1979.

II . Circumstances behind the Establishment of JWC Which Could Influence the Campus Design

After the Meiji Restoration in 1868, the Japanese government hastened to introduce a modern social system and promote science and industry to catch up with the Western countries. They started to establish a nation-wide educational system. As for higher education, the government incorporated several existing schools into the University of Tokyo in 1877, and renamed it as Imperial University of Tokyo in 1886. Another Imperial university was founded in Kyoto in 1897. There also were several state-run professional training colleges, including Tokyo Higher Normal (1875), Sapporo Agricultural (1876, which later became University of Hokkaido), and Tokyo Vocational (1881, which later became Tokyo Institute of Technology) schools. Private higher schools simultaneously sprung up: Keio Gijuku (as a school of Western studies in 1858, as a professional training one in 70s, and as a college in 1890), Tokyo College (1882, which later became Waseda University) in Tokyo, and Doshisha (1875) in Kyoto.⁵⁾ None of these universities and colleges, either national or private, however, accepted women, except for the Women's Higher Normal School (1875, which later became Ochanomizu Women's University). Therefore, institutions open to female students had long been awaited, and against this background, Japan Women's College was founded in 1901 in Mejiro, Tokyo, by Zinzo Naruse (1858-1919).

1. Size of the school, compared with contemporary examples

JWC started with one hundred eighty-five students in college-level three courses (Home Economics, English, and Japanese), thirty-seven in the English preparatory course, and two hundred eighty-eight in the affiliated girls' high school with 1,664-m² buildings in the 15,474-m² campus. This is relatively large by the standard of contemporary private higher educational institutions. There were two other first private women's colleges: one was Women's English (later Tsuda-Juku Women's) School, and another was Tokyo Women's Medical School; both were established in 1900.⁶⁾ The

5) There existed other major private schools, including Hosei (est. 1880), Meiji (1881), Rikkyo (1883), Aoyama Gakuin (1894) in Tokyo, and Kansai (1886) in Osaka, Kwansai Gakuin (1889) in Hyogo prefecture by the establishment of JWC. Doshisha, Rikkyo, Aoyama and Kwansai Gakuin were Christian missionary schools, and others were aimed to train law practitioners. Tokyo College and Keio Gijuku are would-be university, latter of which had a long, complicated history since pre-Meiji era. The author picks Doshisha representing Christian missionary schools and Tokyo College as university-oriented ones when comparing contemporary examples in the following section.

6) There's another first women's college, Aoyama Jo-gakuin (Aoyama Women's School), which was a girls' high school

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former school started with ten students renting a two-story wooden house. The number of students reached to 50 in 1903 and they bought a former girl's high school in the 2,363-m² campus. The latter school also started within the founder's clinic with only four students. When the number of students reached to thirty-three in 1903, they bought an existing school building and its site of 1,507.4-m² (Table 2).

In comparison with the ones for male students, JWC was still large enough: Tokyo college, for example, had a 5,000-m² site for eighty students in the founding year, and took twenty years to reach 21,000-m² for 1,093 students. Doshisha had over forty students less than a year since its establishment. It reserved an approximately 19,200-m² campus at that time, but as separate 4 blocks. Although small if compared with national schools (Figure 9), JWC had a large campus site equivalent to existing private colleges for male students.

<Table 2> Campus sizes of major private schools.⁷⁾

name of school	founding year	nuber of students		campus areas(m ²)	buidilng areas (m ²)	recorded year	college students	campus areas (m ²)	building areas (m ²)
		high school, and etc.	college level						
Doshisha English	1875	-	8	19,192.39	two wooden buildings	1905	26	unclear	unclear

but set an "Additional Course" for graduates in 1894, and in 1903, the upper course was designated as one of the first women's colleges under the Specialized School Act along with JWC and English Women's School. Its campus, however, was huge, owned and shared by Aoyama Gakuin, so this paper omits Aoyama Women's from the comparison. See Aoyama Gakuin (1964), *Aoyama-gakuinKujunen-shi (90-year History of the University)*. Tokyo: The University. pp. 30-40, 73-74, 96-98.

Tokyo Women's Medical School was originally intended to be a vocational one rather than a college, but it has only allowed women throughout its history, so is discussed here with other two women's colleges.

- 7) Doshisha Shashi Shiryo Henshu-jo (Committee of compiling historic materials for the school history. (1979). *Doshisha Hyakunen Shi (100-year History of Doshisha)*. Complete History part 1. Tokyo: The University. pp. 81, 467, 569; WasedaDaigaku (Waseda University). (1978). *WasedaDaigakuHyakunen Shi (One Hundred History of Waseda University)* vol. 1. pp. 432, 765, 1024; Tsuda JukuDaigaku (Tsuda Juku University) (1960). *The 60-year History of Tsuda JukuDaigaku*. Tokyo: The University. pp. 70 79; Tokyo Joshi IkaDaigakuHyaku-nen Shi hensaniin-kai (Committee of compiling the 100-year history of Tokyo Women's Medical University), ed. (2000) *Tokyo Joshi IkaDaigakuHyaku-nen Shi (100-year History of The University)*. Tokyo: The University. pp. 13-17; Ninhon Joshi Daigakko. (1942). *Nihon Joshi DaigakkoYonju-nen Shi (The 40-year History of Japan Women's College)*. Tokyo: JWC. p. 82.

name of school	founding year	nuber of students		campus areas(m ²)	buidilng areas (m ²)	recorded year	college students	campus areas (m ²)	building areas (m ²)
		high school, and etc.	college level						
Tokyo College	1882	2	80	4,958.68	1,342.15	1901	1093	21,028.10	3,660.00
Women's English	1900	6	4	renting a two-story house		1903	over 50	2,363.40	519.80
Tokyo Women's Medical	1900	-	4	within the founder's clinic		1903	33	1,507.40	231.00
Japan Women's College	1901	288	185	15,474.00	1,664.40	1903	632	18,249.60	2,255.50

2. Strategy against the public skepticism

The possible reasons for Mr. Naruse making the school large could be many, such as educational methods, curriculum, and affiliated school system. However, the most significant influence could have been his strategy for establishment.

Naruse, who was aware of the prevailing mood of conservatism against higher education for women, understood the need to establish trustworthiness in the new school to appeal to the public. In his statement, "The Aim of Founding of JWC" (1896), Naruse revealed his ideas on school finance: As early private higher schools had easily failed because of the lack of the fundamental property, he set 300,000 yen as fundamental assets to build, among which 200,000 yen was for buildings and equipment, and 100,000 yen for the fund; he would not start building until donations reached 100,000 yen. After a three-year fundraising campaign, he achieved this first goal in June 1900 after being donated a campus site in Mejiro. He then started construction in September of the same year.⁸⁾ Other schools started with somehow smaller money, Doshisha with 5,500 yen (5,000 dollars), Tokyo college with 10,000 yen, Women's English also with 10,000 (in three years),⁹⁾ so Naruse was most

8) Nihon Joshi Daigakko. (1942), Op. Cit., pp. 66-67

9) The fund of Doshisha was from American Board of Commissioners for Foreign Missions, Tokyo college from its founder's private money, and Women's English also from the founder's Christian network in the United States. As for Tokyo Women's Medical, the founder borrowed money and payed it back from her earnings in her clinic. In contrast to Naruse, the female founders felt urgent about the improvements of the status of women through economic

prepared for a grand opening.

3. Nationally influential standing

The difference also stemmed from the JWC's standing in the view of its supporters. Although Naruse was from a lower-class Samurai family, he had a chance to study in the United States after teaching as a pastor, and was the schoolmaster of an esteemed girls' high school in Osaka when starting the campaign for a women's college. He was able to see the Osaka prefectural governor Tadalatsu Utsumi, and the governor saw to it that Naruse saw the Prime Minister Hirobumi Ito, who shared the home country with the governor and Naruse. The Prime Minister provided Naruse with a great network in the government and the industrial circles. The governor also introduced him to philanthropists in Western Japan, such as Asako Hirooka, the wife of the owner of Kajima bank in Osaka and daughter of the financier Mitsui family. The campus site, in fact, was a gift from the Mitsuis; therefore, choice of the site is owed to them (discussed later). Naruse's Christian network also led him to other great figures, such as Shigenobu Okuma, the founder of Tokyo College, and Eiichi Shibusawa, the banker and industrialist. Naruse invited some of these elites as founding committee members, and also asked them for the first sums of donation so that other people could feel the school was worth donating to.

Naruse never meant for the new school to be a conformist educational institution, but a supporter's vision changed the school's outlook: he was advised by Mr. Shibusawa that the school had to be located in Tokyo, not in Osaka, to be influential nationwide. Naruse gradually changed his mind, and JWC was realized in Tokyo.¹⁰ In this process, he could have thought that he had to show dignity and excellence, even in the appearance of the campus.

In summary, the JWC's founder Naruse raised the largest funds among the contemporary private colleges to ensure that the school remained unshaken by the negative sentiments towards female education. The supporters wished the school to be a national model of higher education for women. As a result, the school could and tried to explore a great campus design.

independence. However, this idea was too radical to the male-centered establishment, so Miss Tsuda was said to be cautious about a public campaign for donation, fearing intervention in her educational policy. See Tsuda Juku Daigaku, Op. Cit., pp. 71, 78-79, Tokyo Joshi Ika Daigaku Hyaku-nen Shi Hensen In-kai, Op. Cit., pp. 14-16, Doshisha, Op. Cit., p. 80, Waseda Daigaku (1978), Op. Cit., p. 446.

10) Ninhon Joshi Daigakko. (1942), Op. Cit., pp. 58-63.

III. The Process of Realization of the Campus

1. Order of five plans based on the time they were drawn

This section discusses the process of realizing the campus design.

As mentioned earlier, there exist several layout plans in the early years of JWC campus. Some of them are dated, but others have unknown dates. No reference was made to the unbuilt plans or the reason for changes in the writings of Naruse or the school history. In order to determine the date of drawing, I compare features of these plans, supplementing further information from descriptions appearing in published books.

Those whose dates of manufacture are clear and whose buildings were certainly constructed include Figure 1 and 2: Figure 1 is from *Nihon Joshi Daigakko Ichiran (The Catalogue of JWC)* published by the school in 1902, which is an introductory brochure showing this plan and a list of buildings, in addition to some description on the 1901 status of the campus. Figure 2 is from another book published by the school around 1910, also showing the layout plan and a list of buildings.

Among newly discovered drawings (Figures 3, 4, and 5), Figure 5 is most likely one of the realized plans because the location of the central building and others at the northern edge match those of Figure 1 and 2. According to the text appearing in *The catalogue of JWC*, “college building,” shown in south west part of Figure 1, had not been built at the establishment of the school. No such building exists in Figure 5 either; therefore, this plan is determined as being drawn sometime between the establishment of the college and 1902, which means that it is the earliest among the realized ones.

No buildings in other two, figures 3 and 4, match with any realized ones; therefore, these are presumed to be proposals prior to the implemented ones. Figure 4, however, has a boundary in the northeastern part, which is also seen in Figures 1 and 5. As this feature is not seen, Figure 3 is considered to be the farthest from reality. Therefore, among unbuilt plans, Figure 3 is determined to be drawn first, with Figure 4 coming after it.

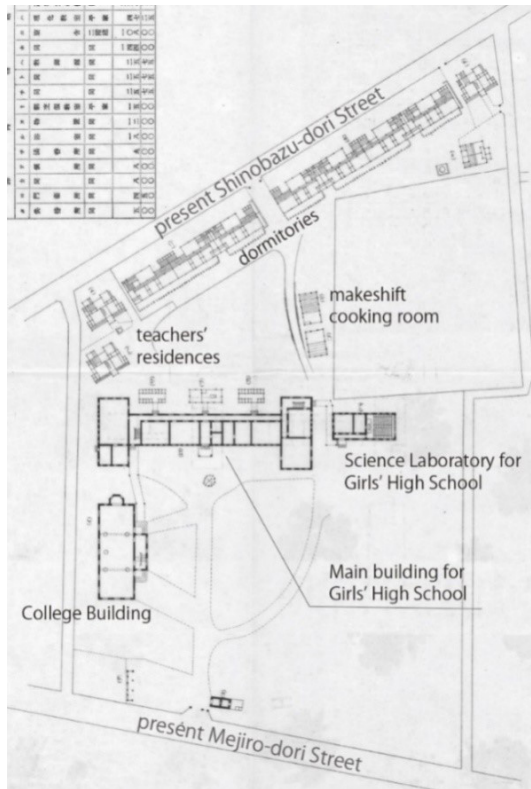
2. Features of the first plan and changes away from it

In order to clarify differences, the organization and buildings of each plan are analyzed in this section.

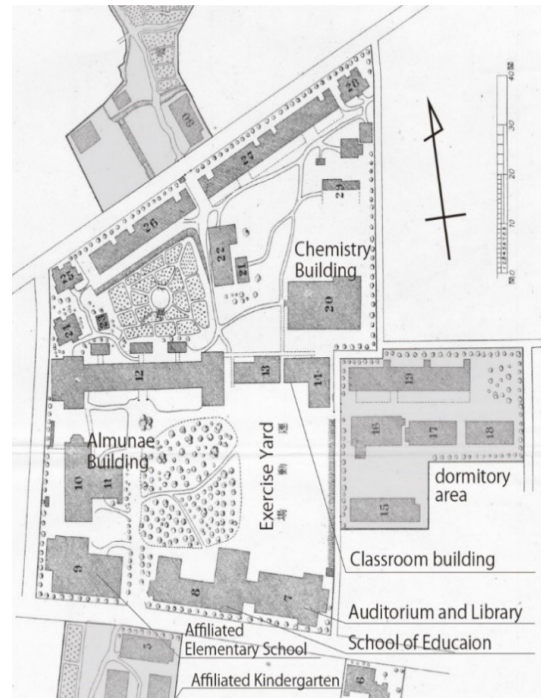
In Figure 3, the first proposal, has a campus-wide organization: a tree-lined main street is created, running from south to north and dividing the campus into two. The complexes of buildings face each other across this street, whose centers are set on the same axis. This area should be the center

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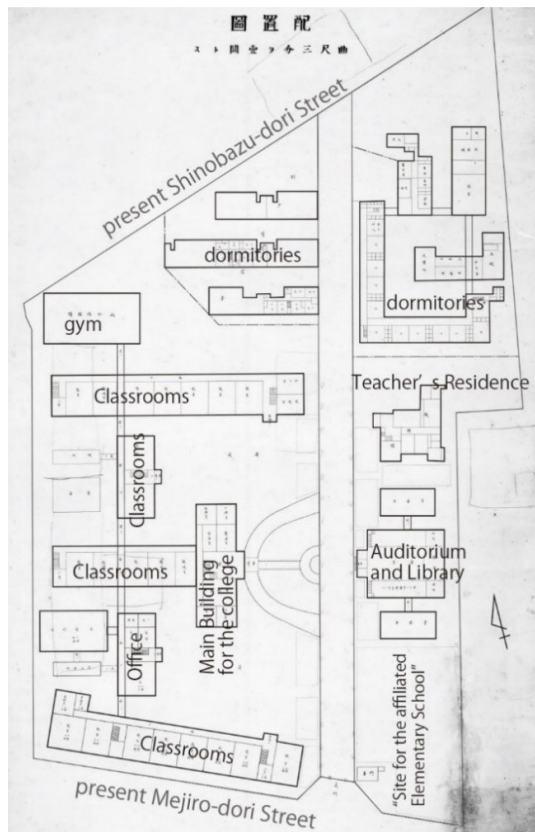
of the campus, as there is a formal entrance with a carriage porch on the left, and a handsome auditorium on the right. The composition of buildings on the left is distinctive and can be called “three-sided quadrangle” in architectural terms. This type of quadrangle was constructed for national universities since early Meiji. Another characteristic is sunlit classrooms with side corridors in the north, as is the case with dormitory buildings, where most of buildings are long rectangles in an east-west direction. This is another feature it holds in common with national schools, although it was a recent trend, as “classrooms with side corridor in the north” were officially recommended in *Gakko Kenchiku-zu Setsumei Oyobi Sekkei Taiyo (Explanations of Model Plan and a Summary of Design Points for School Buildings)* published in 1899 by the Ministry of Education. This was basically for elementary, middle, and normal schools, but it was also recommended to other types of schools and was actually incorporated into the designs of state-run Higher Schools (preparatory



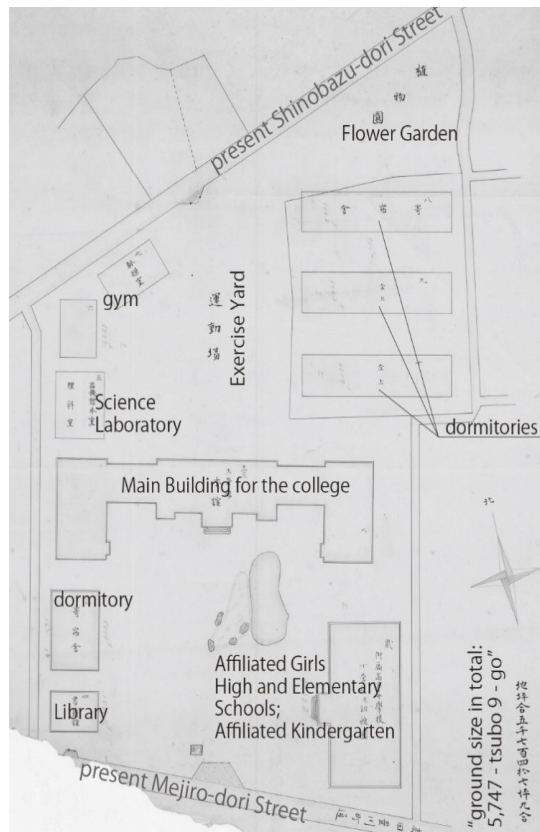
[Fig. 1] Campus in 1902. From Nihon Joshi Daigakko. (1902). *Nihon Joshi Daigakko Ichiran*. Descriptions are added by the author, based on the table of buildings shown above.



[Fig. 2] Status of campus around 1910, from Nihon Joshi Daigakko. (c. 1910). *Nihon Joshi Daigakko No Kako, Genzai, Oyobi Sono Shorai*. Descriptions, based on the building list shown within this map and translated, are added by the author.



[Fig. 3] Presumed first plan (unbuilt). Joshi DaigakkoHaichi-zu, Kane-jaku San-bu Wo I-kkenTosu. Descriptions, originally written within this map and translated, are added by the author. Lines are also made thicker by her.

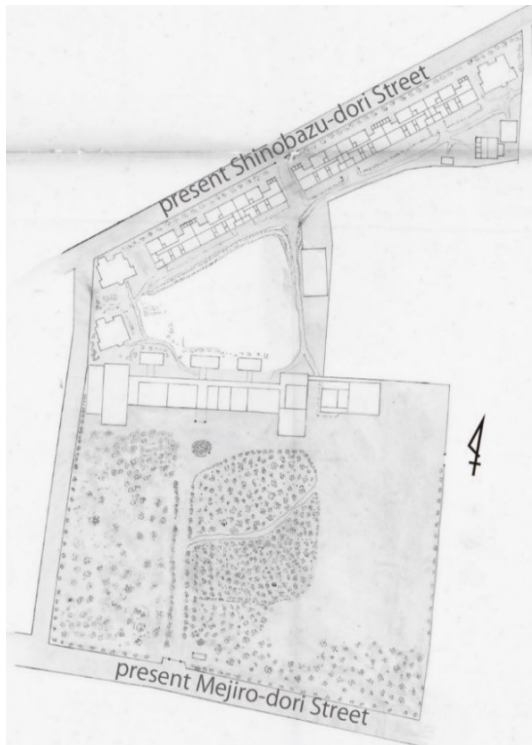


[Fig. 4] Presumed second plan (unbuilt). Unnamed map with descriptions, "Ji tsubo awasete 5,747 tsubo 9 go," and etc. Descriptions, originally written within this map and translated, added by the author.

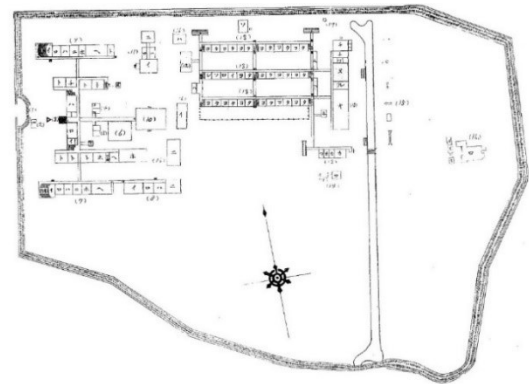
schools for Imperial Universities) (Figure6).¹¹⁾ Narusebriefly mentioned in his speech in the opening ceremony that MasamichiKuru, the chief architect of Ministry of Education, and the one who authored the book above, volunteered to design JWC buildings. Therefore, it is safe to say JWC's first plan was under the stronginfluence of the national school architecture.

In the second plan (Figure 4), however, the main street disappears and is never seen fromthen on. The main building, a shallow three-sided quadrangle facing the south, appears totryto be dominant in

11) Originally mentioned in Sugeno, M. & Sato, Y. *Nihon No GakkoKenchiku (The School Architecture in Japan)* (1973). Tokyo: Bunkyo News Sha, cited in Miyamoto, Op. Cit., pp. 92-93.



[Fig. 5] Status of campus presumably in 1901. Unnamed map. Descriptions are added by the author.



[Fig. 6] Building layout in the campus of the Sixth Higher School in 1909. One of the state-run higher schools designed by Ministry of Education, located in Okayama city. From *Dai-roku Koto Gakko* (1909) *Dai-roku Koto Gakko Ichiran*.p. 58.

the site, extending one end to another; however, this ends up dividing the campus into two, and has no control over other buildings through an axis.

One assumed reason for the main street disappearing is the topography of the school site. The campus ground is sloping and is highest at the center, gradually lowering to the north (Figure 7). With such topography, the north wing of the quadrangle in Figure 3 could have been built on a different level from the other part of the complex. Therefore, the architect might have realized this inconvenience and gave up the east-facing quadrangle and the north-south street.

3. What the boundary means

Another characteristic of Figure 4 is the existence of the circumscribed area, into which three



[Fig. 7] A picture, probably taken from the lowest part of the campus looking up to the back of the main building, sometime right after the establishment, as no flower garden is seen. From unpagged plate section in Nishina, S. (1936). *Naruse-sensei Kinen Cho*.

dormitory buildings are pushed, and the layout rule is different from the ones in the back. Considering the fact that this area remained blank until 1902, I attempted to focus on land ownership as an explanation.

According to the school history, the campus site was a gift from the Mitsui family. However, the Mitsuis were not the exclusive owner of the entire ground. The land conveyance record says that the main site used to be composed of seven lots, 18-1, 18-2, and lots ranging from 19 to 23 of *Takada-tokyokawa-cho* (Figure 8). Among them, lot 18-1, formerly a crop field, and lot 19, a residential site, were owned, more precisely, by the Mitsui Bank, which purchased the land from Kenkichi Hayashi in 1890.¹²⁾ The actual conveyance time to JWC turns out to be 1906, five years after the establishment. The status of conveyance is also “purchase,” which could mean JWC received money from the family and bought the land from the bank.

The lots from 20 to 23, two of which are crop fields, one residential, and another forested, turned out to be formerly owned by Bunjiro Kariya, who is someone who lived in another section of this

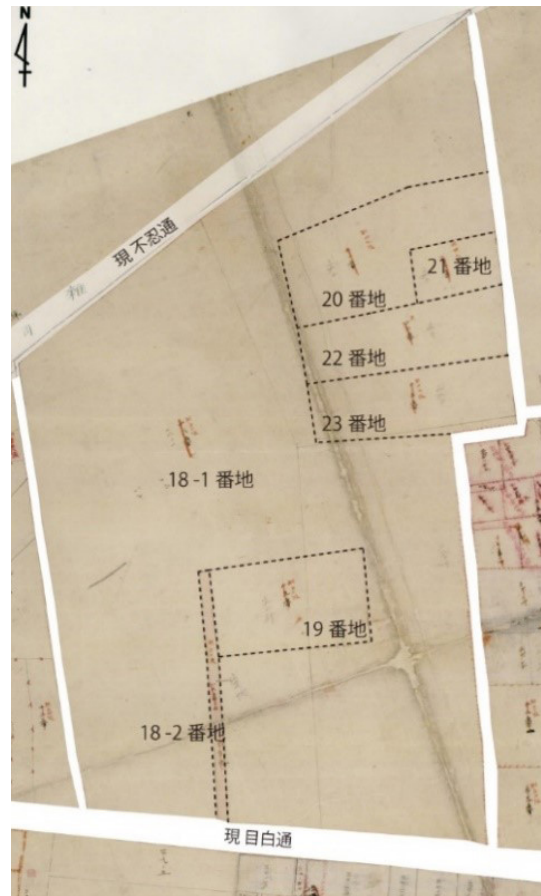
12) This “purchase” is mentioned by Kunio Suzuki, a specialist on the history of Mitsui family’s business activities, as a kind of foreclosure at the debt default of Hayashi. He gave a presentation in JWU in 2017 on the art collection of Kashima bank, and mentioned that the Hayashi’s name was on the foreclosure list. Presentation data retrieved June 1, 2019, from the World Wide Web: https://llc.jwu.ac.jp/vodkouza/2017v1-01/2017v-01_suzuki.pdf. However, varying ownership of seven lots had already been mentioned by the author. See Suzuki, M., Op. Cit., pp. 48-49.

area. JWC also “purchased” these from Mr. Kariya in 1906.

Both sets of lots, one from the bank and another from Mr. Kariya, did not have a different status in 1900 when Naruse started construction; that is to say, conveyances were not completed at all. However, treatment would be expected to differ between lots that were promised to be donated by a founding committee, and ones that had to be bought from an uninvolved person. In the 1910 plan (Figure 2), the only building in the former Kariya lots is the Chemistry Building, which is known to be built in 1908. This is evidence that Naruse was not actually able to start construction in these lots until the purchase process was officially completed. Mr. Kuru might not have heard about these circumstances when working on the first proposal and had to move the dormitories outside of these seven lots at the final stage of planning because of the serious delay of the purchase, under the condition that the school needed dormitories by the day of establishment.

4. Changes in the main building

The realized main building in Figure 5 is similar to the one in Figure 4, but slid westward. This change was caused by another problem related to land acquisition: there is a strip of land in the southern part of lot 18-1, called 18-2, which is recorded in the conveyance record as being owned by the City of Tokyo as “street,” and the school did not officially purchase this lot until 1921. The school had to leave this land intact, and perhaps tried to utilize it as an approach street. Therefore, the main building was forced to be set in the place where the center of the building and the street matched with each other. This also made the main building smaller than in Figure 4. Although the main building was nicely designed, it was unable to rule the layout anymore.



[Fig. 8] A sheet of Washi Kozu (Old cadastral map) depicting the areas corresponding to the main site of JWC. The orientation and descriptions are added by the author.

IV. Fail in the Grand Campus Design: Comparison with Other schools and Consideration

In the speech at the opening ceremony, Naruse revealed a near-future construction plan of an auditorium, an exercise yard, a college building, a library, and additional dormitory buildings.¹³⁾ By 1910, the school added a flower garden (1902), a classroom building and an exercise yard (1903), a teahouse (1904), an alumnae building (1905; an addition to the college building), an elementary school building, and a brick complex of library, auditorium, and classrooms (1906), Chemistry Building (1908) (Figure 2). Impressive site-wide organization which was once envisaged in JWC, however, was never realized. The site was divided into two, each of which created a vague territory enclosed by small buildings with no interaction with each other.

1. Campus ground that is actually a patchwork of lots acquired in the private land market

This is mainly due to the land contour and ownership, as discussed above. Many of campus sites for national schools, even if they are located in denselyhabited parts of Tokyo, are vast ones that succeeded from predecessor great residential estates of the *Daimyo* feudal lords, both of which were forfeited by the Meiji government. Examples of the former include Higher Normal School from *Shoheiko* and Tokyo Vocational school from Asakusa Bunko, both of which are a kind of academic institute run by the Shogunate. Examples of the latter are the Hongo campus of the University of Tokyo (since 1876) from the *Kaga* Domain, and the First-Higher school from the *Mito* Domain.¹⁴⁾ Most of the private schools, however, acquired campus sites in the private market. The campus ground of Tokyo College, for example, was bought by the founder Lord Okuma in 1882, and he and the school purchased the surrounding hilly tea fields year by year,¹⁵⁾ which made it difficult for the school to achieve unity in terms of building arrangements (Figure 9).¹⁶⁾ JWC apparently secured the

13) Naruse, J. (1901) *Nihon Joshi Daigakkokaiko no ji* (Speech at the opening of JWC), reprinted in Naruse Jinzo Chosaku Shu Henshu In-kai (Committee of Compilating the Book), ed. (1975). *Naruse Jinzo Chosaku Shu (The Writings by Jinzo Naruse)*. vol. 2. Tokyo: JWU. p. 263.

14) Miyamoto, Op. Cit., p. 15

15) Waseda Daigaku (1978), Op. Cit., p. 765, Waseda Daigaku (1981). *Waseda Daigaku Hyakunen Shi*. vol. 2. Tokyo: Waseda University Press. p. 1008

The land Tokyo College received is sometimes said to be the residential estate of *Takamatsu* Domain, but it is the second house of lord Okuma that occupied the old estate, bought in 1874.

16) Akao et al. show the changing process of spatial organization of Waseda's main campus. See Akao, Goto, Miyake

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largest site at the establishment of the school, but it was a patchwork of lots, which was virtually no different from acquisition and building process of Tokyo College. Acquiring campus sites in the private land market complicated the campus plan, because lands had already been subdivided, even when they were located in sporadically habituated areas.

2. Quick construction for further support

Even if a national school had to purchase tracts of land in the private market, it was able to take time: Gakushuin middle and high schools, run by the Imperial Household Ministry, moved to a suburban site close to JWC in 1908, by purchasing crop fields, farmers' estates, and unofficial Samurai estates, all of which were privately owned at that time. However, this never blocked its well-organized layout (Figure 9), designed also by Mr. Kuru, because the relocation had been planned since 1896 and suspended temporarily.¹⁷⁾ Even so, a state-run school is unshakable and could afford to wait until the moment was right.

JWC, on the other hand, decided to start construction right after the first financial goal was achieved with the land-gift promise. The founding committees were said to discuss that they would give a final push to the campaign by showing the actual building process.¹⁸⁾ This shows the fragility of the donation-based private schools, which need to take considerable measures to persuade the volatile public. They had no time to adjust or settle land ownership issues.

3. Open space for exercises in the time of wars

In addition, there are circumstances unique to the age. JWC needed a vast exercisyard, as Naruse incorporated physical exercises as one of the most important educational methods in his school to foster not only healthy minds, but also healthy mothers to bear physically strong citizens.¹⁹⁾ Existing research has revealed the public interest in women's physical education increased considerably in the context of increasing firsthand contact with Westerners and increased military strength.²⁰⁾ In the limited campus site, an expanse of open space took priority over the formality of building layout. The

&Yoneyama, Op. Cit.

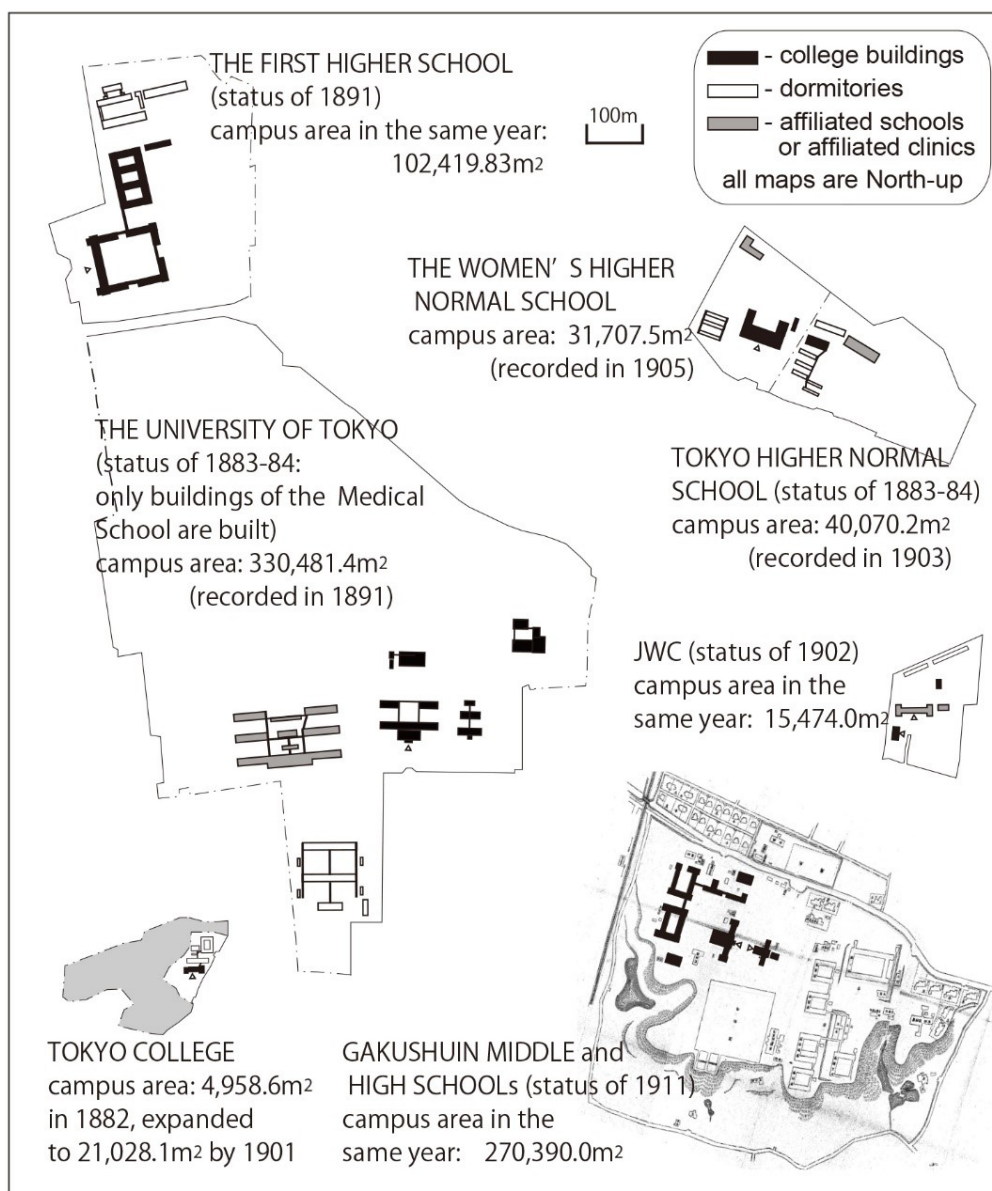
17) Sugiura & Ito, Op. Cit., pp. 1972-1973

18) Nihon Joshi Daigakko (1942), Op. Cit., p. 66

19) Naruse, J. (1896). *Joshi Kyoiku (Education of Women)*, reprinted in Naruse Jinzo Chosaku Shu Henshu In kai (Committee of compiling the book), ed. (1974) *Naruse Jinzo Chosaku Shu (Writings by Jinzo Naruse)*. vol. 1. Tokyo: JWU. pp. 120-122.

20) Kasuga & Tomozoe, Op. Cit.

exercise yard, in fact, was set in the center of the campus of JWC (Figure 2).



[Fig. 9] Same scale comparison of campuses in Tokyo²¹⁾

21) Shapes of the campus areas are based mainly on Miyamoto., Op. Cit., and Sanbo honbu Rikugun bu Sokuryo kyoku (Survey Office, Department of the Army General Staff). Gosenbun no ichi Tokyo zusokuryo genzu (Original Drawings for Surveyance, Map of Tokyo 1883 84 in 1:5000), except for Gakushuin and Tokyo College, from Gakushuin. (1911). *Gakushuin Ichiran (Catalogue of Gakushuin), from April Meiji 44 to March Meiji 45*. Tokyo: The school.; and

V. Conclusion

Urban contexts, which include the sloping land contour and campus grounds with plural ownership, compelled JWC to give up the organic composition of buildings, which national schools normally possessed. Under the donation-based financing structure, it needed to keep the attention of supporters and the public through the quick realization of the campus, which prevented the school from taking enough time to adjust land ownership before construction. The founder's emphasis on the physical exercises, which reflected the spirit of time, gave preference to sufficient open space over building order.

Ethical considerations

Ethical issues (including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancy) have been completely observed by authors.

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Conflict of Interests

The authors have no conflict of interests to declare.

WasedaDaigaku. (1978). Op. Cit. The size of campus area is from each school's catalogue except for The First Higher School, from Miyamoto., Op. Cit. and Tokyo College, from WasedaDaigaku. (1981). Op. Cit.

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