JAPANESE UNIVERSITY CAMPUSES AS DIALOGUING ENCLAVES: SIX EXAMPLES

CAMPUS UNIVERSITARIOS JAPONESES COMO ENCLAVES DIALOGANTES: SEIS EJEMPLOS

Pietro Vecchi, Ken-ichi Suzuki

Nagoya City University. Nagoya, Japan. pietrovecchi4@gmail.com; ken@sda.nagoya-cu.ac.jp.

Abstract: *The problem addressed in this study is: how can university campuses in Japan, which have always been characterised by separation from the context and by closed boundaries, become open to surrounding society without losing their nature of ´different´ places, destined to the community of students and teachers? After introducing the particularity of Japanese university spaces, we reported various theoretical positions concerning either the closed or open nature of campuses, and the importance given to the educational role of the community. Then, we analysed six campuses that embody the position which most respond to the initial question: that of university community ´in dialogue´ with the surrounding society. Selected campuses are those of: Saitama Prefectural University, Future University Hakodate, Nagoya Zōkei University, Sapporo City University, Okinawa Christian University, Okinawa University. Analysis of planning concepts has been supported by interviews with the designers of five of them: Yamamoto Riken and Makishi Yoshikazu. The noted planning solutions which could respond to the initial problem are: small scale; centrality of common spaces; physical or visual yet open campus ´thresholds´; recognisability of campus environment; educational facilities shared between different faculties.*

Keywords: *University campus; Japan; community; architecture for education; Riken Yamamoto.*

Resumen: *El problema abordado en este estudio es cómo pueden los campus universitarios de Japón, caracterizados por la separación del contexto y por fronteras cerradas, abrirse a la sociedad circundante sin perder la naturaleza ´diferenciada´ de los lugares destinados a la comunidad de estudiantes y profesores. En primer lugar se presenta la particularidad de los espacios universitarios japoneses y se explican varias posiciones teóricas sobre la naturaleza cerrada o abierta de los campus y la importancia concedida al papel educativo de la comunidad. A continuación se analizan seis campus que encarnan la teoría que responde a la pregunta inicial: la de la comunidad universitaria ´en diálogo´ con la sociedad circundante. Los campus seleccionados son: Saitama Prefectural University, Future University Hakodate, Nagoya Zōkei University, Sapporo City University, Okinawa Christian University, Okinawa University. El análisis de los conceptos de planificación se apoya en entrevistas con los proyectistas de cinco de ellos: Yamamoto Riken y Makishi Yoshikazu. Finalmente se concluye con la posibilidad de que las soluciones de planificación que responden al problema inicial sean: la pequeña escala; la centralidad de los espacios comunes; los ´umbrales´ físicos o visuales pero abiertos del campus; el reconocimiento del entorno del campus; y instalaciones educativas compartidas entre diferentes facultades.*

Palabras clave: *Campus Universitarios; Japón; comunidad; arquitectura para la educación; Riken Yamamoto.*

CONTEXT OF THE STUDY: JAPANESE UNIVERSITY SPACE PARTICULARITY

Recently, Architectural Institute of Japan published a collection of studies concerning the future of university campuses, whose programmatic title is *Creating a Campus like a Town, while using the Town like a Campus*.[1] The problem outlined there is the following: "Traditionally, university campuses, both because of their nature of sacred place of the knowing and of their physical environment, are something similar to [extraterritorial] concession areas divided from the surrounding environment".[2] To understand such statement, it may be useful to introduce briefly the nature of Japanese university space and its differences with the West.

In Japan, the word *campus* describes a well-defined typology which is necessarily composed by a controlled-access site comprehending both facilities and open spaces, and it is subjected to many regulations. Despite the strictness of such definition, nearly any Japanese university possesses at least one proper campus. When the authors tried to build a database

of all Japanese university spaces, they counted 681 campuses for 600 universities, a huge number compared to European countries.[3] These are distributed in the Country as shown **(FIG. 01)**.

Historical background

When Japan started creating western model-based universities after the Meiji Restoration (1868), government modelled university system after Germany's one; university space model choice, instead, is the result of several influences through the centuries.[4] Prototype of modern campuses are the first eight so-called national *number schools*, characterized by plural buildings disposed symmetrically within former samurai residences.[5] Under the direction of the two chief architects of the Ministry of Education, Hanroku Yamaguchi and Kuru Masamichi, the model initially adopted was that of France's *grandes écoles*, monumental and urban; and later, starting with the enormous Hokkaidō University campus of 1903, university

University Governance	Total n. of «counted» campuses
National	107
Local public	79
Private	495
Total	**681**

34 Hokkaidō

5 Okinawa

5 Fukui 7 Ishikawa 5 Toyama

7 Aomori
4 Akita 4 Iwate
8 Yamagata 17 Miyagi
15 Niigata 6 Tochigi
7 Fukushima 7 Ibaraki
7 Gunma 28 Saitama
12 Nagano
8 Gifu
26 Chiba
117 Tōkyō
44 Aichi 37 Kanagawa
4 Mie 7 Yamanashi
11 Nara
12 Shizuoka
4 Wakayama

41 Ōsaka
26 Kyōto 8 Shiga
35 Hyōgo
2 Shimane
2 Tottori
9 Yamaguchi
17 Okayama 14 Hiroshima

Shikoku

5 Tokushima	5 Kagawa
4 Ehime	3 Kōchi

Kyūshū

26 Fukuoka	10 Nagasaki	4 Ōita
2 Saga	6 Kumamoto	8 Miyazaki	6 Kagoshima

Legend:
X Prefecture name — number of «counted» campuses

FIG. 01

500 m

Campus name	Area and prefecture	Foundation year
1. Kagoshima Univ. Koorimoto Campus	233,630 m² Kagoshima	1908
2. Aichi Prefectural Univ. of Fine Arts and Music	409,343 m² Aichi	1966
3. Kobe College and Kansai Gakuin Univ. Seiwa Campus	141,267 m² Hyōgo	1933
4. Hosei University Ichigaya Campus	28,995 m² Tōkyō	1936

FIG. 02

space typology was gradually brought closer to USA's campuses, more informal, green and peripheric.[6] *Criteria for the institution of universities* (1956) confirmed also in the Post-War period the status of the campus as the sole allowed typology, by setting the minimum land amount as 10 m² per student. The same law prescribed also that, besides classrooms, research rooms and library, a self-learning space and a leisure space had to be provided as minimum requirements.[7] The following law *Kōgyō-tō seigen* limited the establishment of new universities within the more central areas of Tōkyō and Ōsaka from the end of the 1950s until 2002. This led to the post-war countryside typology, influenced by the contemporary England's *New Universities*, reinterpreted in a more frugal and reduced scale.[8] This historical movement of campuses from city centre to remote areas is now changing its direction: in fact, from 2002, with the abolition of *Kōgyō-tō seigen*, 66 out of 80 campus relocations or new constructions in the Tōkyō metropolitan area were directed into the central city zone.[9]

Relation between campus architecture and university government type
Japanese universities are of three funding typologies: national public (previously depending on the central government, and, since 2003, on semi-autonomous *national university corporations*); local public (depending on municipal or prefectural government); and private. 74% of university students attend private institutions, which are extremely numerous and, on average, smaller in scale.[10] Even though each of the 47 Japanese prefectures houses at least one national university, their campuses assets and aspect show a clear uniformity, with a standardized spatial layout organized roughly in faculty zones, equipped with homogeneous buildings and in absence of a strong centre. This uniformity can be explained by the strong control conducted by the Ministry of Education (MEXT) **(FIG. 02, NO. 1)**.[11] Local public universities, especially those appeared after the 1980s, were often founded as part of local policies to realize regional education poles. For this reason, campus planning is commonly entrusted to single designers, hence obtaining stronger architectural images **(FIG. 02, NO. 2)**.

Since private universities are extremely numerous and variegate, there is not a specific characteristic that is capable of summarizing them. However, the aim of the institution often reflects clearly in their architectural shape. For example, women's universities or religious universities are evidently more separated from the surroundings and centred around a plaza or court **(FIG. 02, NO. 3)**. The richest and most ancient private institutions are often characterized by their prolongated presence in the most central urban areas, because their growth in such a consolidated environment forces them to periodic demolition and reconstruction of taller buildings **(FIG. 02, NO. 4)**.

THE PROBLEM ADDRESSED IN THIS STUDY: THE *ENCLAVE* NATURE OF JAPANESE CAMPUSES IS CHANGING

Apart from their layout differences, the majority of the depicted campus types is characterized by the same physical separation from the surroundings: they are enclosed in material fences and are only accessible through punctual gates; furthermore, 35% of campuses stand on hillside sites.[12] The *ideal community* embodied by USA campuses has always "preferred open and expansive schools that look confidentially outward to the world".[13] Instead, Japanese campuses are still rather separated from their context, causing critics of the *status quo* to refer to them as *closed utopias* or more commonly as *ivory towers* meant to train the tomorrow dominant class in absence of external influences.[14] The post-war era of the *utopianist campus* described by Muthesius, remote and special *enclaves* where it was possible to live a sort of Anglo-Saxon *collegiate life*, is now coming to an end.[15] Ministry of Education is now looking to

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USA, and Japanese scholars are studying old European models of *centro universitario*, as Bologna, Salamanca, Sorbonne, drawing as a result that campuses must now open their boundaries and become public spaces which carry on the task of *contribution to society*.[16] Already practiced strategies are: Satellite Campuses, which are single buildings placed in the most central urban areas; possibility of public use of campus facilities, parks and roads; university-industry collaborative research facilities. The ideal tendency appears to be that of mixing completely urban and academic environment.

However, it is necessary to question whether this melting with the city is applicable or not to Japanese education, which has traditionally been characterised by a strong community identity of students and teachers. As Campos and Luceño observed, "the university community can see its limits dissolved, expanding its scope towards the urban fabric".[17] In fact, a sudden change in campus permeability in order to obtain a *cultural contamination* as in Bologna University, in Japan would necessarily bring a loss of such identity, in a similar way to the phenomenon of gentrification.[18]

For this reason, the aim of this study is to investigate how Japanese university campuses can reach the desired openness without giving up their *genius loci* and community identity. In order to do so, we will first briefly introduce various scholars' positions regarding the concept and role of university community and its relationship with society. Then, we will display six chosen examples of campuses which we believe can provide a valid response to the above issues. This study is based on the authors' previous research, on the analysis of the contemporary debate that is taking place in Japanese academia, and, in particular, on interviews with prized architects Yamamoto Riken and Makishi Yoshikazu, who not only testified their design intentions, but also helped in understanding such debate from an original point of view.

POSITIONS REGARDING 'UNIVERSITY COMMUNITY'

The heart of the problem referred to in the previous paragraph is the relation between *university community* and *surrounding society*, or, in other words, the conception of the campus as a *private*, *public* or *common* place. We here define *university community* as the positive relationship between one university's students, teachers and personnel, who share the final purpose of education. In Japan, the places where this relationship happens are mainly: indoor or outdoor common spaces, *gakusei kaikan* (buildings for extracurricular activities), professor's offices, research rooms, cafeteria, library, learning commons, sport facilities. Being students' residences normally placed outside the campus boundaries, gates also naturally became the place for students' morning gatherings, acquiring a symbolic value.

Japanese private universities put great emphasis on the importance of common spaces for students' community. For example, according to Tanioka Fumiko, the characteristics of a *student-centred campus* are the central position of court and student services, and the possibility of student access to any of its parts: "Only [this kind of] student-centred type campus deserves the name of community".[19] Such a community idea is primarily defined by its inner relationship, rather than by its function.

On the other hand, national universities consider university communities as subordinated to a vaster purpose. For example, USA-educated architect and professor Kurata Naomichi states: "Universities are one of the main communities that constitute the regional society".[20] In a similar way, the future strategies for higher education discussed by the Central Education Council in 2018 state that university must become "the core of regional society".[21] Those national guidelines admittedly inspired the adoption, in masterplan strategies of many public campuses,

of newly designed industry-university collaboration research facilities, reorganization of campus boundaries, citizen free-access facilities, etc. On the other hand, it is noticeable that national university campuses often dedicate only the most hidden and narrow areas of their sites to students' services facilities.[22]

As it can be noticed, Japanese *private* and *national* ideas of *university communities* and their aim appear to be different. Regarding this, architect and university rector Yamamoto Riken asserted: "Starting point of Japanese universities and European universities is different. In Japan, the actor who initially started to form universities was the state government. (...) Government developed super-elite universities as Tōkyō University, Kyōto University and so on; they trained the super-elite from all over Japan and those became the future bureaucrats. (...) For this reason, they are born as gated communities. This is why they have no relationship with their surroundings. Instead, those universities that trained a reality that wasn't the super-elite, and tried to form people who are active into the society, were private universities, that were born later. (...) Their aim is different and so is their structure".[23]

Regarding this, then why, on one hand, do Japanese private universities seem to consider campus as an enclosed *common-but-not-public* space, and, on the other hand, national universities, which are supposed to be built for the elite, are now putting more emphasis on the *contribution to society* role of the campus? According to Yamamoto, *contribution to society* is not being intended as a relationship between university and local community, but rather as a call to universities to participate in the effort towards national interests.[24]

From the reported opinions, it seems that there is an architectural dilemma: should we keep a protected and autonomous environment (university community separated from city community) or should we eliminate the barriers and differences between campus and surroundings (university community functional to regional society)?

Reasonably, there is a third option, that of strengthening commonality and community identity while opening to the outside (university community *in dialogue* with city community); it can be described by the following words of the Education scholar Satō Manabu: "A good school architecture must have a strong concept, which is linked to the formation of a community. The keys of that are publicness and commonality".[25] The third option is the more respondent to the object of this study: in the following paragraphs, we will analyse six cases of campus planning which appear to embody it.

CASE STUDIES

The first three examples considered are designed by the previously cited architect Yamamoto Riken, born in 1945. Saitama Prefectural University campus has been completed in 1999, and Future University Hakodate campus in 2000. In 2019 Yamamoto has been appointed to be the new rector of Nagoya Zōkei University, and he is currently directing the construction of its new Nagoya campus, due to open in 2022 **(FIG. 03, NO. 1, 2, 3)**. The fourth example is designed by Seike Kiyoshi (1918-2005) and its colleague Okuyama Kenji. It is Sapporo City University Geijutsu no Mori campus, built from 1986 to 1991 **(FIG. 03, NO. 4)**.[26] The fifth and sixth examples are designed by Makishi Yoshikazu, an Okinawan architect born in 1943. They are Okinawa Christian University campus (1985-87) and Okinawa University campus (buildings completed gradually in 1985, 1989, 1999 and 2010). **(FIG. 03, NO. 5, 6)**.

To answer the question on why these six campuses could represent a possible solution to the above described *third option*, it is necessary to consider them according to the following common topics.
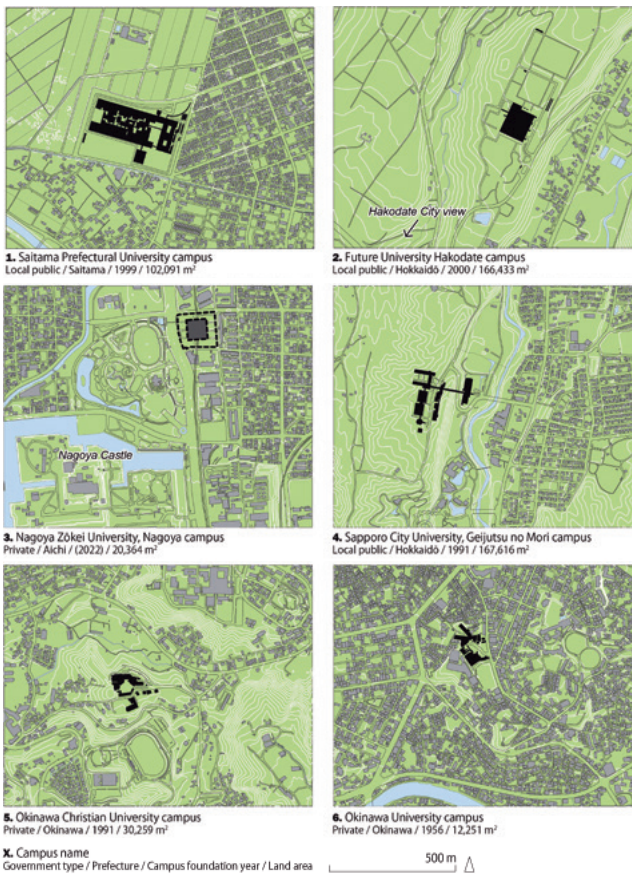
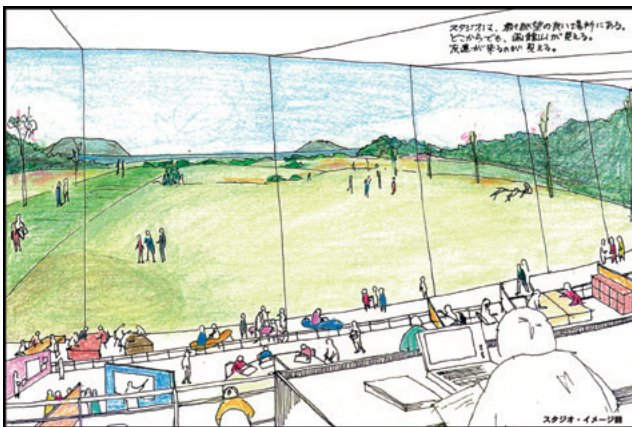1. Saitama Prefectural University campus
Local public / Saitama / 1999 / 102,091 m²

2. Future University Hakodate campus
Local public / Hokkaidō / 2000 / 166,433 m²

Hakodate City view

Nagoya Castle

3. Nagoya Zōkei University, Nagoya campus
Private / Aichi / (2022) / 20,364 m²

4. Sapporo City University, Geijutsu no Mori campus
Local public / Hokkaidō / 1991 / 167,616 m²

5. Okinawa Christian University campus
Private / Okinawa / 1991 / 30,259 m²

6. Okinawa University campus
Private / Okinawa / 1956 / 12,251 m²

X. Campus name
Government type / Prefecture / Campus foundation year / Land area

500 m

FIG. 03

FIG. 04

FIG. 05

Campus site position and surroundings

Two of these campuses are sited in Japan's extreme north, and two on its extreme south. Especially, since the northern ones, number 2 and 4, are local public universities, the ambitiousness of their architecture can be explained as a mean of the local government to attract the young generations' university choice, in spite of their remoteness from the main metropolises.

The only two campuses which are completely surrounded by an established urban environment are number 3 and 6. Numbers 1, 2 and 4 stand in the border between urbanized and non-urbanized areas, which is an extremely common campus position in Japan.[27] This allows planners to distinguish between a front (a more public zone, adjacent to the urban settlement), and a back (a more private and recollected zone). Number 6, Okinawa Christian University, instead, was established in what was, at the time, a solitary hill outside the city of Naha: "The surroundings were open fields."[28]

Campus scale

None of the six considered campuses overpass 170,000 m² of land area, which is the minimum amount of land that a normal national university campus possesses. Number 3, 5 and 6, which are private universities, are among the narrowest campuses in Japan. Local public universities can have access to local government's terrain, hence to a greater availability of land than private ones; however, in number 1, 2 and 4, which are local public universities, buildings are grouped close to each other, causing most part of the land to be empty. Number 4, Sapporo City University campus, is characterized by a forest left to its natural state through the building arrangement. Therefore, a first consideration is that it is plausible that the following described characteristics were made possible by the limited scale, that, in some cases, was chosen on purpose.

Architectural configuration and balance between commonality and publicness

All of the three campuses designed by Yamamoto (number 1, 2, 3), are single megastructures "where there is always the consciousness of being under one roof, also in an abstract meaning".[29] "As an architect, I feel the necessity of creating campuses where everybody shares the same space. Another issue is which kind of relationship between such space and the outside have to be built, (…) and I think that design of such relationship is a particularity of my architecture office. Basically, in the buildings that I design anybody is free to enter".[30]

Saitama Prefectural University campus is a single structure composed by two 4-storey longitudinal blocks which enclose an 80 meters wide single-storey Media Gallery, dotted by a labyrinth of small courts, giving the overall impression of a traditional campus' negative image **(FIG. 04)**. On the deck floor above the Media Gallery is a garden which can be freely accessed by citizens; even so, "if you enter here, the space is totally different from the surroundings. [In this project] we chose a way to do which makes people say: 'I entered in Saitama Prefectural University', a place where the rules, the behaviour or attitudes are different from outside".[31]

The same design philosophy is brought also in number 2 and 3 campuses: in Future University Hakodate a single box-shaped building of 100 per 100 meters is adapted through section adjustments on a gentle slope, at the centre of a green site of 160,000 m², from which a scenic view of Hakodate city and its gulf is possible **(FIG. 05)**. The slope allows a staggered placement of labs and research rooms, in front of which a single giant-scale space consents the free choice of places for learning activities. All the surfaces directed to the campus entrance and the city, from room partitions to the exterior box façade, are transparent: "People from outside
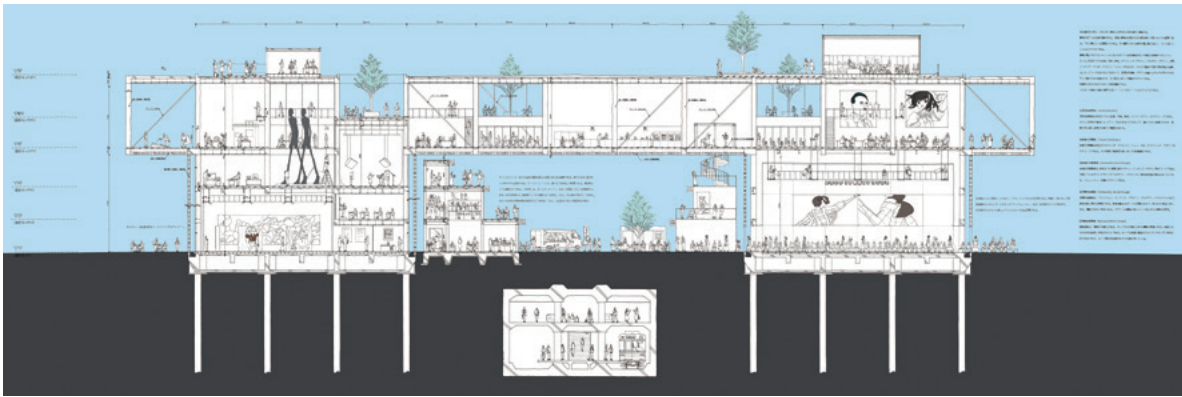
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FIG. 06

FIG. 07

can see what professors are teaching, and, if they are interested, they can enter to assist".[32]

Nagoya Zōkei University's site is very near to the main monument of the city, Nagoya Castle. Since subway runs under its axis, construction in the central strip is limited; but the architect managed to take advantage of this limitation by creating there a public passage called Art Arena, the centrepiece of the new campus (FIG. 06).[33] Art Arena is surrounded on the ground floor by the most public services, such as the library, the gym, shops, students' galleries, the multipurpose hall. The squared upper floor covers the whole area and contains the learning sites, organized again in a single room space.

Seike and Okuyama's Sapporo City University site is characterized by a harsh topography, with an upper and lower level dramatically divided by a long and narrow hill. Thus, designers "placed the library and the gym in the [lower] approach level, with the intention of realizing openness through setting facilities for citizens and their lifelong-learning";[34] in the upper level, instead, are all the educational facilities, the *gakusei kaikan*, and the administration. The latter ones are hence hidden by the hill, but a 150m long suspended passage called Skyway unites the two levels, inviting for sure visitors to reach the more hidden and private area through this scenic solution (FIG. 07). The more private facilities are not placed around an outdoor court or plaza because of the northern climate of Hokkaidō where the campus is located; however, the indoor common spaces «occupy 40.5% of the total area», while the average in high schools is 18.5% and in universities is 25%.[35]

Makishi's Okinawa Christian University concrete architecture appears as a fortress from the outside, with tall buildings which densely occupy the whole site; on the inner side, instead, buildings open towards a central circular grass plaza (FIG. 08). The sense of circularity and recollection around this void is enhanced by the external corridors that run all around it, gradually rising to the axially positioned chapel. Inspiration for this plaza are traditional Okinawan assembly rooms with their front court for people's common prayers, *gusuku* castles, the court of the Shuri Castle and even San Pietro square.[36] Despite the closed environment, the entire square and the access road from the east is designed in such a way as to give a glimpse of the curious interior and entice one to enter. Furthermore, "there is no gate and anyone can enter inside the court".[37]

Okinawa University campus is the result of many construction eras. The first campus built in 1956 was too narrow and the only three buildings

were considered too small for the 3000 students;[38] therefore, "the Ministry of Education ordered that the building and land area should be enlarged, otherwise the institution would have been dissolved".[39] Due to the limited budget, architect Makishi completed the substitution of the old facilities and the new constructions one by one, in a span of 25 years. Furthermore, due to the gradual and difficult purchase of new areas surrounding the original site, the current campus boundaries extend on the two sides of a public street, which, enriched by a grass plaza, became the central axis to which all the buildings face (FIG. 09). This has made necessary an open dialogue with the local community, which freely uses this crossing. Despite the confused construction history, the peculiarity of the façades provides the necessary awareness of spatial difference to the casual visitor. The plaza and the various semi-external spaces set at the ground floor of each building enable students' gatherings and common activities: music/dance societies can practice there even in rainy days, and "of these spaces, the one nearest to the main approach has been used several times as public sit-in demonstration place".[40]

In summary, all of the six examples are designed to be different environments from the surroundings, and not to be melted with the city. They maintain their spatial identity through the single couverture (number 1, 2 and 3), the hidden or semi-hidden disposition of the facilities (number 4 and 5), or simply through the particularity of the architectural style (number 6). Within this recollected space, indoor or outdoor common spaces are central. Physical barriers still exist, but the access is not controlled in 5 of them (number 1, 2, 3, 5, and 6).

Visits from the exterior are encouraged by two main mechanisms: visual relationship (number 2, 4 and 5, which are those campuses which maintain a distance from the urbanized area) and incorporation of public roads, parks, public facilities or plazas (number 1, 3, 4 and 6, which are those campuses englobed in, or adjacent to, urbanized areas). Particularly, being number 1, 4 and 6 located in peripherical areas of Japan, where urban services are scarce and citizen dispose of few free-gathering places, campuses themselves compensate for this lack.

Considerations on the environment for student community
All of these campuses feature a place for students' extracurricular activities (clubs); the smallest campuses (number 3, 5 and 6) had to renounce to outdoor sports facilities, but gym is maintained. Also, great emphasis is given to unspecific purpose common areas, as mentioned above. However, the main innovation consists in a characteristic that is

FIG. 08   FIG. 09

common to all of the displayed campuses, that is, the absence of division between different faculties members, or, in other words, the shared use of the totality of classrooms, research rooms and common facilities.

The clearest example is Saitama Prefectural University, which have curriculums in Nursing and Social Welfare. Because "teaching medical techniques and health care methods is of course important, but establishing a relationship between the health care and welfare system and everyday life is even more vital",[41] students and teachers of the two faculties are encouraged to share the above-mentioned Media Gallery.

In a similar way to Yamamoto Riken, Makishi Yoshikazu asserted during the interview: "What I especially cared about Okinawa Christian University campus plan is that there are two faculties, English and Pedagogy, and a Ministry of Education-style campus would be composed by a building for English faculty and one for Pedagogy faculty, connected by some corridor; however, I decided to act differently. I gave breath to this campus: the 800 students from both faculties can freely go around the [circular] corridor, and, while walking, they can look at the nature and talk to each other (...) **(FIG. 10)**. For example, if English students spend time only with other English students, they won't get to know the world. Instead, if they are mixed with Pedagogy students, they would influence each other".[42]

In addition, students' community is inserted in the surrounding community, but in a different way from the official *contribution to regional*

society concept, as Yamamoto Riken expressed with the following words: "I think that what matters in university is self-government. I think it is important to have self-government made by students and teachers, but nowadays, in Japan, administration by the state is very strong. Students who oppose the state are not brought up and this is stronger now than it used to be. What I tried to do in [Hotakubo] Housing was to bring inside a collective housing a sort of self-government (...), as in Italian *comune*. (...) And I think that the university of the future must become something that is united with its *comune*. In Vietnam or in Korea there are communities similar to *comune* too, and universities are made within those. Depending on the community, the method of making universities would be different".[43]

CONCLUSIONS

It is evident that the above introduced campus examples could not represent the most exhaustive response to the need of better universities in Japan: their scale is rather small and the presence of a single designer is a fortunate condition, relatively rare in the richness of Japanese university space scenario. Also, the reported planners' ideals have their material counterpart in the remote and depopulated Japanese areas need to stem the exodus of students towards larger cities; for this reason, geographic competition can also be interpreted as one of the motors of such conspicuous design investments. However, they are successful architectural planning which represent a concretization of the above-reported *third option*, that of a student community not elitist nor abstract, but well defined and still open, dialoguing with the larger society. Hence, we can draw the following conclusions.

The small scale was a favourable condition to the formation of the university community, mainly because it allows designers to individuate a strong and central common space, hierarchically dominant on the specific functions.

The location of the campus and the surrounding environment modify the mechanism of student-citizen dialogue: in urban areas, the mechanism works through making university spaces freely available to citizens; in rural areas, through visual connection and curiosity. In both cases, citizens are aware of entering a different environment, with a specific identity, that each designer concretized in three-dimensional solutions: Yamamoto's *one roof*, Seike's *skyway*, Makishi's *circular environment*.

The shared use of all campus facilities by all students, irrespective of faculty affiliation, is not only a means of increasing awareness of community, but also an educational manifesto, aimed at the need for universality in human knowledge.
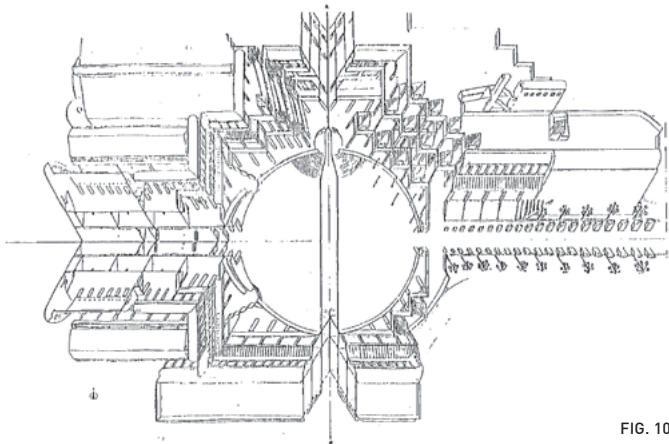

FIG. 10

In synthesis, a peculiar or separated campus environment is not an objection to the "openness to the context" auspicated by the global academia, which is already realized in the West, but still to be fully accomplished in Japan.[44] This is because a specific and somehow delimited community represents the place of individual growth and, when dialogue with the context, it gives birth to the students' sense of solidarity towards the nearest and furthest society. As the Italian educator Giovanni Riva wrote: "The dimension of "accompaniment" of education is a "sine qua non" of education itself. Only then does education bring to the forefront the problem of solidarity, telling us that it is in the self".[45]

ACKNOWLEDGMENT

Notes and bibliographic references

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2   Kurata Naomichi, "Kyanpasu saisei no dezain to wa," in *Creating a campus like a Town*, 13 (translation by the authors). In Japanese, names are written in surname-first name order (ex: Andō Tadao). Since 2020, it has become standard to maintain this order in foreign writings as well.

3   Authors' database, to be published. The data doesn't comprehend single building sites, university hospitals, sport facilities campuses, agriculture faculty campuses. Only universities possessing at least one proper campus are counted.

4   Kikata Junne, "Historical development of 'Campus' and 'College Town' – Japan's experience in the modern world," in *Creating a campus like a Town*, 24.

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6   Kikata, "Historical development," 24-25.

7   "Criteria for the institution of universities," MEXT, Act no. 28, 1956.10.22, accessed April 22, 2021, art. 34 and 35, https://www.mext.go.jp/b_menu/shingi/chousa/koutou/053/gijiroku/__icsFiles/afieldfile/2012/10/30/1325943_02_3_1.pdf.

8   See Stefan Muthesius, *The postwar university. Utopianist Campus and College* (Yale: Yale University Press, 2000), 257 and Kikata. "Historical development," 26.

9   Sumida Shogo and Saio Naoko, "Private university campus' overcrowding caused by returning to the downtown area tendency," *Acts of the Architectural Institute of Japan general convention*, 2018 (July 2018): 685-688.

10 "Reiwa moto nendo gakkō kihon chōsa (sokuhōchi) no kōhyō ni tsuite," MEXT, 2019.8.8., accessed April 22, 2021. https://www.mext.go.jp/component/b_menu/other/__icsFiles/afieldfile/2019/08/08/1419592_1.pdf 2. (2019 data).

11 In large part of the researches about campus planning only national universities are considered, and Ministry of Education often publishes its guidelines basing on these researches. See, for example, "Kongo no "daigaku-zō" no arikata ni kan suru chōsa kenkyū: kōchi – kōsha," Monbukagakushō Kōtōkyōiku-kyoku, 2007, accessed April 16, 2021, https://www.mext.go.jp/a_menu/koutou/itaku/08090305/002.html. In addition, the constant changes of scale and faculties during the years weakened the unity of campus planning. See Tsunekawa Kazuhisa, "Growth and renewal of campuses like as cities," in *Creating a campus like a Town, while using the Town like a Campus*, 62-63.

12 238 out of 681 considered campus sites present a difference of altitude higher than 5 m. Authors' database, to be published.

13 Paul Venable Turner, *Campus. An American planning tradition,* (Cambridge, MA: The MIT Press, 1984), 305.

14 "Today, utopias with the higher degree of completeness are those realized in places with controlled conditions, as university campuses, theme park, shopping malls". Maki Fumihiko, *Tadayou modanizumu*, (Tokyo: Sayusha, 2013), cited in Tsunekawa, "Growth and renewal," 62. See also *Ibid.*, 63 (translation by the authors).

15 Muthesius, *The postwar university*, 14-21 and 34-35.

16 *Centro universitario* is defined by Giancarlo de Carlo as the typology of university space where facilities are scattered through the city historical centre. See Giancarlo De Carlo, "Università e territorio," in *Gli spiriti dell'architettura*, ed. Livio Sichirollo (Rome: Editori Riuniti, 1999), 251-253.

17 Pablo Campos and Laura Luceño, "Architecture, education and city: towards the optimisation of communities of learning through the educational campus paradigm in the 21st Century," *Global Journal of Engineering Education - GJEE*, vol. 22, no.2 (2020), 107.

18 From an interview with vice rector of Bologna University Riccardo Gulli, September 24, 2020.

19 Tanioka Kuniko, "Daigaku komyuniti to kyanpasu," in *Campus management handbook*, ed. Architectural Institute of Japan (Tokyo: Nihon Kenchiku Gakkai, 2004), 71 (translation by the authors).

20 Kurata, "Kyanpasu saisei no dezain to wa," 13 (translation by the authors).

21 "Kongo no kōtō-kyōiku no shōraizō no teiji ni muketa chūkan matome," Chūō Kyōiku Shingikai Daigaku-bunkakai Shōrai kōsō Bukai, 2018.6.28, accessed May 3, 2021, https://www.mext.go.jp/b_menu/shingi/chukyo/chukyo4/houkoku/__icsFiles/afieldfile/2018/07/03/1406578_01.pdf, 10 (translation by the authors).

22 See, for example, Nagoya University campus, where faculty deans decided to build *gakusei kaikan* far from each faculty building. Pietro Vecchi and Suzuki Kenichi, "The *gakusei kaikan* buildings in post-war period Japanese university campuses - Examples of Japanese students' activities buildings in university campuses - part 2", *Acts of the Architectural Institute of Japan Tokai Area convention*, 58 (February 2020): 399. Engineering or Agriculture-based national campuses, especially, have insufficient students' services. Kim Jongseok, Miyamoto Fumihito, Shimizu Hideki, "The difference in floor area of welfare facilities per student on the national university campuses," *Journal of Architectural Planning and Environmental Engineering – AIJ*, no. 469 (1995.3.): 97. Of course, there are national university exceptions with more central services, like Tsukuba University and Ryūkyū University.

23 From the authors' interview with Yamamoto Riken, April 13, 2021. Authors' database.

24 *Ibid*.

25 Satō Manabu, "Correspondence between education and educational space", *Kenchiku Zasshi*, May 2020, 17 (translation by the authors). We translated "kōkyōsei" with *publicness*, and "kyōdōsei" with *commonality*.

26 This campus was initially built for Sapporo City Specialized College (a non-university post-secondary course school), and it changed its use to the present one in 2006.

27 Authors' database, to be published. Of the 681 analyzed campuses, 138 stand in completely non-urban areas, 306 in urban areas, and 237 on the border between urban and non-urban areas.

28 From the authors' interview with Makishi Yoshikazu, April 21, 2021. Authors' database.

29 Yamamoto, interview 2021.04.13. (Translation by the authors).

30 *Ibid*.

31 *Ibid*.

32 *Ibid*.

33 The declared design references are Milan's Galleria Vittorio Emanuele II, Paris' *passages*, Moscow's GUM. *Ibid*.

34 Okuyama Kenji, "Report on the method of planning and design for newly established college of the Sapporo School of the Arts," *AIJ Journal of Technology and Design*, no. 7 (February 1999): 131 (translation by the authors).

35 *Ibid.*, 132.

36 Makishi Yoshikazu, "The background of the design of Okinawa Christian Junior College," *Okinawa Kirisutokyō Tanki Daigaku Kiyō*, 19 (December 1990): 18-20.

37 Makishi, interview.

38 About Okinawa University previous architecture, see Makishi Yoshikazu, "Okinawa Daigaku no shin-honkan sekkei ni atatte," *Okinawa Times*, August 21, 2008.

39 Makishi, interview.

40 *Ibid*.

41 Wilhelm Klauser and Yamamoto Riken, *Riken Yamamoto* (Basel: Birkhäuser Publisher, 1999), 104.

42 Makishi, interview (translation by the authors).

43 Yamamoto, interview (translation by the authors).

44 See Campos and Luceño, "Architecture, education and city", 106.

45 Giovanni Riva, *La comunità educante* (Reggio Emilia: ODN, 1994), 10 (translation by the authors).

Figures

FIG. 01. Distribution of Japanese university campuses (see note 3). © Vecchi Pietro, Suzuki Kenichi, 2021. Authors' database.

FIG. 02. Comparison between examples of different government type university campuses. Top left: national; top right: local public; bottom: private. © Vecchi Pietro, Suzuki Kenichi, 2021. Map data: © Geospatial Information Authority of Japan.

FIG. 03. Case study campuses planimetry and basic information. © Vecchi Pietro, Suzuki Kenichi, 2021. Map data: © Geospatial Information Authority of Japan.

FIG. 04. Saitama Prefectural University campus, aerial view. Image data: © Google, ©2008 ZENRIN © Landsat/Copernicus.

FIG. 05. Future University Hakodate campus: sketch showing the view towards outside. The caption reads: "The studio is in the position with the best view. From everywhere Hakodate is visible. Coming friends are visible" (translation by the authors). © Riken Yamamoto Design Factory.

FIG. 06. Nagoya Zōkei University Nagoya campus: section sketch. © Riken Yamamoto Design Factory.

FIG. 07. Sapporo City Specialized College: view from the main access with the beginning of the 150m long Skyway. © Kaku Satoru, 2021.

FIG. 08. Okinawa Christian University campus, aerial view. Image data: © Google, ©2008 ZENRIN, © SIO, © NOAA, © U.S. Navy, © NGA, GEBCO.

FIG. 09. Okinawa University: aerial view. Image data: © Google, ©2008 ZENRIN, © Landsat/Copernicus.

FIG. 10. Okinawa Christian University: study drawing which mixes plan, section and axonometric. © Makishi Yoshikazu. Makishi Yoshikazu, "The background of the design of Okinawa Christian Junior College," *Okinawa Kirisutokyō Tanki Daigaku Kiyō*, 19 (December 1990): 18.

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Pietro Vecchi

Architect, born in Reggio Emilia (Italy) in 1991. Graduated from the master course of Sapienza University Faculty of Architecture in 2017, he moved to Japan in 2018 and entered the PhD course of Nagoya City University Graduate School of Design and Architecture in 2020, where is currently researching about Japanese university campus planning particularity and significance. His fields of study are architecture for education and history of the Post-war architecture. He is member of Tonalestate Forum cultural committee from 2021.

Ken-ichi Suzuki

Architect, born in Aichi (Japan) in 1957. Graduated in 1981 from Nagoya University Faculty of Engineering Architecture Course, he obtained Master Degree in 1986, and PhD (Engineering) in 1992. After working in an architecture studio, he became in 1996 associate professor at Nagoya City University Faculty of Design and Architecture, and professor in 2006. His fields of study are healthcare art and architectural planning of buildings for education (in particular, participated school design). He has been in charge of Nagoya University and Nagoya City University campus planning. Among his writings, *Kodomotachi no kenchiku dezain (The architectural design of children)*. Tokyo: Nōsangyoson Bunka Kyōkai, 2006.