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# Intercultural Understanding

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## PREFACE

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### Dr. Shigeyuki OKAZAKI / 岡崎 甚幸

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This year, in an effort to extend chieftaincy, ISIS (Islamic State of Iraq and Syria) occupied many cities in Iraq and Syria, killing two Japanese and declaring that Japanese citizens might now be targeted in terrorist attacks. This has made travel to Turkey hazardous.

Therefore, we participated in the “3rd International Conference on Archi-Cultural Interactions through the Silk Road” (March 25-27, 2015), held at the Bahçeşehir University in Istanbul, via video conference.

Although the opening ceremony began in the evening in Istanbul, it was at the midnight here in Japan, because of a seven hour time difference between the two countries. I spoke the opening ceremony. And over the course of three days, all of our staffs joined the conference at night following a full day of teaching and studying, in order to present their papers.

The video conference system is, in general, effective for the exchange of architecture design practices and lectures, but not between two countries with a seven hour time difference. The next conference; “The 4th International Conference on Archi-Cultural Interactions through the Silk Road”, will be held at our university at the end of June 2016.

The Inter Cultural Studies of Architecture (ICSA) in Japan commenced as usual; 10 Bahçeşehir University students and Vice-Dean Murat Dundar visited our Department of Architecture at Mukogawa Women's University on June 24, 2014.

今年、シリアでは ISIS が多くの都市を占拠し、支配地域を拡大した。その ISIS が日本人二人を殺害した。そして今後、日本人をテロの標的にすると宣言した。

そのため、イスタンブールのバフチェシヒル大学で開催 (2015/3/25-27) された第3回「シルクロードを通して見た建築と文化」国際会議に、こちらはテレビ会議形式で参加した。

開会式はイスタンブールの夕刻から始まった。時差が7時間なので、こちらでは真夜中から始まった。真夜中の国際会議で開会式の挨拶をした。先生方の論文発表も、昼間にこちらの授業や設計演習をこなして夜中に行われた。これが三日間続いた。

テレビ会議システムは建築設計演習や授業の交換に利用すると有効であるが、トルコとの間の交流は時差が大きな問題である。第4回は2016年の6月、第2回に続いて、また本学で開催する予定である。

例年の通り ICSA in Japan 2014 を開催した。トルコ・バフチェシヒル大学建築デザイン学部の学生10人とムラト副学部長が6/24(火)に来日した。3、4年生のスタジオで武庫川女子大学建築学科の学生と机を並べて設計演習やフィールドワークに励んだ。

During this period, Dean and Prof. Dr. Sema Soygeniş of the Faculty of Architecture and Design of Bahçeşehir University joined the ICSA in Japan. She participated in the Jury of Design Program for third-year students and the Jury for fourth-year students, and gave the lecture “Architecture and the city: memory walks in Istanbul”.

The ICSA in Istanbul was also conducted as usual; 13 students from the Master Course visited Bahçeşehir University from October 9 through October 25 with Associate Professor Sugiura and Assistant Hongo. Not only Istanbul and its surrounding ancient cities; such as Bursa and Edirne, but also southern Greek cities; such as Bergama and Ephesus, were visited.

Six archeologists concerned with the protection of cultural properties and administration on three from the Kyrgyz Republic and three from the Islamic Republic of Afghanistan visited our Department of Architecture on July 10.

Activities of the Architecture Major and the Architecture Department, such as design practices in the studio, architecture projects by students and faculty, and the laboratories for structural and environmental experiments, were introduced. Lectures on the culture and traditional architecture of each country were presented and a courtesy visit paid to Chancellor Okawara.

The next day, in Kyoto, the huge timber framework of Goei Hall in the East Honganji Temple, the renovation site of a town-house, and some sites of the Important Preservation Districts for Groups of Traditional Buildings were visited.

Dr. Mehrdad Hejazi, Associate Professor of Civil Engineering at the University of Isfahan (located in Isfahan, the old capital of Iran, as Kyoto is of Japan), visited Mukogawa Women’s University’s Department of Architecture on September 1. After exploring the campus and meeting with Chancellor Okawara, he visited the world’s largest 3-D full-scale earthquake testing facility, E-Defense, at the Hyogo Earthquake Engineering Research Center (in Miki-city) of the National Research Institute for Earth Science and Disaster Prevention. He expressed his hopes for international exchange with Mukogawa Women’s

その間、7月24日（木）より、トルコ・バフチェシヒル大学建築デザイン学部のセマ学部長が来学した。各学年の講評会に参加し、講演「Architecture and the city: memory walks in Istanbul（建築と都市：イスタンブールの記憶を巡る）」を行った。

今年も ICSA in Istanbul で本学の大学院修士1年生、13人がトルコのバフチェシヒル大学を訪問した。イスタンブールおよびその周辺の古都ブルサやエディルネの他に、ギリシャの遺跡が多いバルガマやエフェソスを訪問した。

7月10日キルギス共和国から3人、アフガニスタン・イスラーム共和国から3人の文化財保護に関わる考古学者や行政担当者がそれぞれ来学した。

彼らは建築学専攻・建築学科の設計演習風景や作品、構造実験室などを見学した。その後、本専攻・建築学科学生および ICSA in JAPAN で来日中のバフチェシヒル大学建築学科学生と教員に対して、それぞれの国の文化と建築について講演を行った。理事長を表敬訪問した。

次の日、京都市の、東本願寺の御影堂の屋根裏の巨大な軸組、京町家の改修現場、重要伝統的建造物群保存地区などを案内した。

9月1日、イランの古都イスファハーンにあるイスファハーン大学工学部土木工学科のメハダット・ヘジャーズィー准教授が建築学科を見学後、理事長を表敬訪問。その後、本人の希望で（独）防災科学技術研究所・兵庫耐震工学研究センター（三木市）の世界最大規模の実大3次元震動破壊実験施設 E-ディフェンスを案内した。本学との交流を希望している。

University.

The Institute of Turkish Culture Studies (ITCS) organizes several seminars each year at Koshien Hall with themes related to studies of the culture, history and architecture of the countries surrounding the Silk Road, where the histories of the rise and fall of intercommunicating cultures have been repeated since ancient times. However, in modern history, many of these accounts are apt to be forgotten. The Silk Road should not be understood as merely a simple method of trade.

This year the ITCS shared the following three remarkable seminars. The first seminar, held on Friday, December 19 was entitled “Garden as a paradise in the arid region: an observation based on architecture of Persian origin” by Dr. Naoko Fukami (Adjunct Researcher, the Organization for Islamic Area Studies of Waseda University)

The second seminar, “Hellenism the opening to a new and diverse world” by Dr. Kosaku Maeda (Professor Emeritus of Wako University), was held on Thursday, February 19.

The third seminar, held on Friday, March 6, was “Archaeology in Jerusalem—its developments and tasks”, by Dr. Tomotoshi Sugimoto (Professor of Keio University’s Faculty of Letters).

トルコ文化研究センターは、甲子園会館で毎年、数回の研究会を主催する。そのテーマはシルクロードとそれを取り巻く国々の文化や歴史や建築に関するものである。この広大な地域には、人類の諸文化の成立、それらの交流、衰退からなる壮大な栄枯盛衰の歴史が古代からあった。しかしそれらの多くは現代の世界史においては忘れられがちな歴史である。シルクロードを単なる交易の道と理解するべきではない。

今年は3回の研究会を開催した。いずれも興味深い内容のものであった。第1回は、12月19日(金)に、講師：深見奈緒子氏(早稲田大学イスラーム地域研究機構 招聘研究員)による「乾燥地域における天国としての庭園 —ペルシア系建築から考える」であった。

第2回は2月19日(木)に、講師：前田耕作氏(和光大学名誉教授)による「新しい多様性の世界を開くヘレニズム」であった。

第3回は3月6日(金)に、講師：杉本智俊氏(慶應義塾大学文学部教授)による「エルサレムの考古学—その成果と課題」であった。



# The New Mode of Housing Production: Gated Communities in İstanbul

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**Keywords:** Gated Communities, globalization, İstanbul, social-spatial transformation, the new life style, 1980s.

**Abstract:** The city of İstanbul is undergoing rapid socio-spatial transformation due to globalization and neoliberal policies. These policies lead to social segregation by creating unequal income distribution and employment opportunities. This rapid transformation is changing housing demand and supply. Urban elites flee from the chaos and insecurity of the city and start to move into gated communities (GCs) located in the urban periphery. These gated communities are the newest form of housing production in İstanbul. The main reasons for upper income groups to choose to live in GCs are prestige and privacy, while the new lifestyle offered by these projects is more important for the middle income groups. Security is a principle reason for every income group's choice to live in GCs. The local and international housing market continues to produce GCs that advertise security, a new lifestyle and prestige. GCs are determining İstanbul's peripheral urban development and sprawl pattern. Therefore, the inner dynamics of GCs need to be studied to develop optimum planning policies. This study examines the development of GCs in İstanbul, the new lifestyle they offer and their effects on planning.

## 1. Introduction

Gated communities (GCs) emerged as part of the suburbanization process in the US and spread around the world. A variety of spatial, social and economic definitions of gated communities can be found in the literature. They are generally defined as housing areas where entry is controlled and public spaces are privatized (Blakely & Snyder, 1997; Low, 2003). These communities are also considered a stance against increasing risk and uncertainty in urban areas, not only due to crime rates, but also due to rising economic inequality, ethnic diversity and heterogeneity (Gooblar, 2002). Contemporary gated communities are products of the quest for an ideal society in the socio-spatial context (Blakely & Snyder, 1997). From another point of view, gated communities are areas where people take collective responsibility to behave according to shared codes that are characterized by legal agreements (Atkinson & Blandy, 2005). According to Foldvary (1994) gated communities are economically efficient forms of housing development because they allow the private housing market to provide public services.

Synthesizing these definitions, gated communities can be defined as housing developments that:

- are physically enclosed (with walls, fences, bars, natural landscape elements, etc.),
- are managed by private governances,
- offer privatized public spaces,
- limit public access,
- offer a new lifestyle,

- stimulate real estate speculation.

The gated community phenomenon is based on an effort to create a special society in a spatially limited, private area. "Gated" defines the physical form of the space, while "community" indicates a special, organized society. However, it is not possible to talk about a real community in gated communities (Blandy & Lister, 2005). Usually, there is only social cohesion within the walls due to the obligation to obey the private governance's rules. Private governance, as opposed to public management, can evaluate complaints and enforce sanctions immediately. Private governances are considered efficient urban and economic structures for facilitating access to the public system and taking the burden off from local governments in areas where collective consumption good is supplied at optimum quality through the housing market (Foldvary; 1994, Grant, 2005; McKenzie, 1994; Webster, 2002). In GCs there is real shared ownership of property. The shared ownership structure includes public facilities and services as well as the housing itself. This collective ownership structure in economic terms refers to club goods or the club realm. This domain is neither completely private nor entirely public. This is how the concept of "club realm" emerged alongside the traditional concepts of public realm and private realm. Club goods and the club realm serve a certain group, and that group pays for these goods or services and determines how they are served (Manzi & Smith-Bowers, 2005). In short, everything happens under club membership.

Gated communities are areas of clear social and spatial segregation. Atkinson (2010) defines three levels of urban segregation:

- "Incubation" defines the traditional urban fabric where the distinction between rich and poor is not clear. When gated communities are located in a high-income neighborhood the segregation cannot be read clearly.
- "Insulation" defines income level and ethnicity based segregation. Urban gentrification occurs at this level of segregation.
- "Incarceration" typifies GCs.

According to him, when social inequality increases, social insulation increases, too, and when social inequality reaches a climax, people incarcerate themselves in housing areas (Atkinson, 2010).

GCs are criticized by many scholars for socially and spatially segregating the rich and the poor and causing stratification in society (Caldeira, 1996; Davis, 1998; Atkinson, 2010; Manzi & Smith-Bowers, 2005; Giglia, 2003; Roitman, 2005; Low, 2008; Gooblar, 2002; Grant, 2005). Society's major problems today are weak social integration, low levels of connectivity, social clashes and the resulting social segregation. The social effect of walls, which are the effective means of this segregation in GCs, is even greater than their physical effect (Roitman, 2005).

Examining old gated community structures can help us understand current GCs. Looking back at the history of gated communities we can consider ancient settlements surrounded by walls—fortress cities—as the first gated communities in history. Some of the oldest cities known, such as Ur and Jericho are surrounded by walls (Dupuis & Thorns, 2008). The fortified structure of ancient city states (e.g., Troy), the Forbidden City in China (Wu, 2005), the walled structures of the traditional urban fabric in the Arab world (Glasze & Alkhayyal, 2002), medieval cities (San Gimignano, Carcassone, etc.) and colonial cities (Blakely & Snyder, 1997) are all historical forms of the gated community. Thus, throughout history, walled areas have been symbols of control over space, territory and power. While fortified territories symbolized the usual security measures for the monarchs of antiquity and feudal aristocrats in the Middle Ages, today they are symbols of economic power (Luymes, 1997).

Contemporary gated communities are considered to be an extension of the suburbanization trend (Blakely & Snyder, 1997). In the postindustrial period, employment and capital were spread throughout metropolitan areas, and as a result locating housing areas far from urban centers became a necessity (Harvey, 2010). The first examples of contemporary gated communities were planned settlements that allowed wealthy social groups in the US to escape the negative aspects of the industrializing cities. Towards the end of the 1960s gated communities for retirees, and later resorts and country clubs emerged. Since the 1970s middle class suburban communities have begun to be gated (Blakely & Snyder, 1997).

We can define contemporary GCs as a global housing form. Especially since the 1980s, the globalization of capital and accompanying neoliberal policies have led to the social and spatial transformation of cities (Glasze & Alkhayyal, 2002; Keyder, 2006; Atkinson, 2010; Luymes, 1997; Low 2003). In the atmosphere of inequality created by this social and spatial transformation, cities became chaotic and uncertain spaces. Inequality and inadequate public services mobilized the housing market towards the production of privately governed housing areas. The housing market promoted both the new global lifestyle and security services due to fear of crime. Thus GCs are products of the globalized world (Aydın -Yönet, 2011, Fig 1).

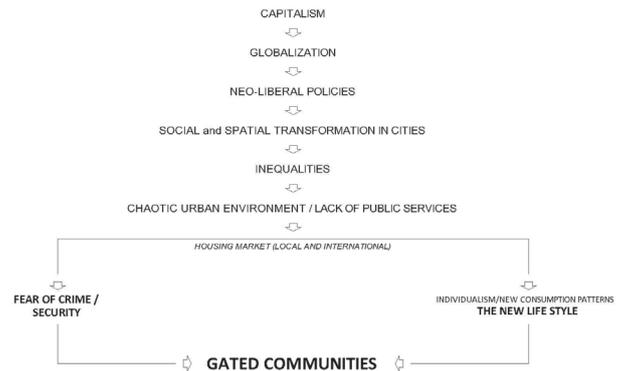


Figure 1. The emergence of gated communities

Blakely and Snyder (1997) group gated communities into the categories of lifestyle communities, prestige communities and security zones. Lifestyle communities have recreation-based segregation, while the purpose of prestige communities' segregation is ensuring and increasing real estate value. Security zones segregate themselves for safety. The design of lifestyle communities is aimed at providing services, while "prestige" communities are designed for homogeneity and stability. Security zone communities are designed to eliminate crime.

The statistics on the rapidly increasing numbers of GCs worldwide are striking. Blakely and Snyder (1997) point out that gated communities constitute one-fifth of all the housing developments in the US. By 1995, 4 million, by 1997, 8 million and by 1998, 16 million Americans were living in gated communities. According to 1997 data, there are 3 million dwellings in a total of 20,000 GCs (Low, 2008). The number of privately governed neighborhood structures has increased rapidly in the US during the last fifty years. One in six, meaning 50 million people, live in privately governed housing areas (Rich 2003). In England, 50% of the housing produced by the biggest development firm in London is in the form of gated communities (Gooblar, 2002).

The local adaptation of the global city varies by region. Therefore, it is impossible to talk about a single type of GC in the globalized world. Although the main motives behind GCs around the world are similar, local internal dynamics differ. Therefore, GCs vary from one continent, one country, one city and even one neighborhood to another.

It is possible to categorize the driving forces behind these developments in the US as developers, local governments and residents (McKenzie, 2005).

1. Developers aim to increase their profits by developing higher density housing due to increasing land values.
2. Local governments aim to increase their tax revenues while minimizing public expenditures.
3. Many upper and middle income groups who have lost faith in local governments and fear crime seek privatized housing areas with security systems, homogeneous populations and private governance.

The reasons demand for GCs is increasing include rising fear of crime, urban violence, and an atmosphere of insecurity in chaotic metropolises (Gooblar, 2002; Blakely & Snyder, 1997; Low, 2003; McKenzie, 1994; Manzi & Smith-Bowers, 2005; Grant, 2005; Caldeira, 1996) as well as new lifestyle and consumption patterns driven by globalization that prioritize self interest (Caldeira, 1996; Keyder, 2006; Öncü, 1999).

This study examines the development of İstanbul's gated communities, the new lifestyle they offer and their effects on planning. The section on their development describes the political, economic and social forces that led to the emergence of gated communities. The social and spatial effects of globalization on İstanbul are also examined in the context of gated communities. The section on lifestyle addresses the internal dynamics that determine gated community lifestyles and the reasons and effects of choosing these lifestyles. The final section evaluates the effects of gated communities on urban planning.

## 2. Gated Communities in İstanbul

Gated communities are among the most visible examples of İstanbul's spatial and social transformation by globalization. They will be examined in detail in this section.

### 2.1. DEVELOPMENT

Developments in communication and transportation technologies have diminished the significance of distances and national borders are losing their importance. These are two effects of globalization. With globalization: "Capitalism as a common lifestyle became widespread, and international capital expanded its hegemony over the biosphere" (Keleş 2008: p. 57). The flow of international capital into İstanbul dates to the post-1980 period.

Since the 1980s rising oil prices and the development of transportation and communication networks have replaced industry with the service sector, allowing new sectors to enter the scene in İstanbul. Electronics, communications, service and real estate sectors took the place of electricity and oil. This is how the mechanical industrial system was replaced by an electronic industrial system (Hacısalıhoğlu, 2000; Keyder, 2006). İstanbul entered the globalization process as a city where flows of money, capital, people, ideas and information intensified (Keyder, 2006). Since the 1980s the changes that Turkey went through made İstanbul a finance center. These changes were all led by globalization and neoliberal socioeconomic policies. The neoliberal globalization of İstanbul is one where the state, developers and international actors took part in the political and economic imposition of the global urban on the local. Foreign firms which avoided investing in Turkey during the national development period began to invest in Turkey after the state began making liberal pronouncements (Keyder, 2006). These firms mostly targeted İstanbul. This post-1980 period was when private capital real estate investment gained momentum. Real estate investments made the private sector influential in the planning of urban space and in public life (Bilgin, 2006). Another important reason for spatial transformation in this period was the ambition to offer the historical riches of İstanbul to the global tourism industry (Öncü, 1999).

Keleş (2008) mentions that the worldwide liberalization of commerce has a significant effect on cities, and that public service is rapidly changing in the globalized world. In this new order, public services were no longer necessarily offered by public institutions and were privatized. In this context, the notion of public interest began to indicate not the interests of the society, but the interests of individuals, private entrepreneurs and capital owners. With the global industry looking out only for its own interests as a result of the reduced influence of the public sector (depreciation of the nation state structure), inequality and injustice in urban İstanbul flourished (Keleş, 2008; Hacısalıhoğlu, 2000). According to Keleş (2008), the ambition of globalization

to create world cities filled them with five-star hotels, skyscrapers and big business and trade centers, while the urban and environmental values that would have hindered these developments were ignored. In the process of becoming a globalized world city, İstanbul is filling up with modern office buildings, five-star hotels, shopping malls, high-income GCs and luxury consumption areas that offer world famous brands. The avenues in the high-income districts now reflect globalization (Keyder, 2006). These were all factors that diverted real estate investments towards the housing sector, which is considered the most profitable investment in an inflationary environment. Therefore, the number of large construction firms rapidly increased (Keyder, 2006; Bilgin, 2006). Despite the fact that economic planners see the housing sector as an inefficient and unfavorable investment for sustaining economic development (Keleş, 2008), housing is considered to be a consumption good or an investment tool in Turkey. At this point income level is the fundamental determinant of demand for housing.

İstanbul's transformation into a service sector center in the 1980s accelerated spatial transformation. Due to inadequate physical infrastructure in the city center (insufficient road network for the traffic volume, insufficient parking and public transport services, etc.), decentralization of the central business district towards the periphery was one of the most important consequences of İstanbul's transformation into a service sector center (Dökmeci et al., 1993). The globalized city is a city of value added services, and İstanbul has a developing service sector in the fields of marketing, accounting and management, telecommunication, banking and finance, transportation, insurance, computers and data processing, legal services, consulting, advertising, design, engineering and more (Keyder, 2006). As one of the provinces with the highest rate of urban population increase (35%) between 1990 and 2000, İstanbul's 6-7% annual population increase in urbanization brings 150,000 people to the city every year (Keleş, 2008). İstanbul's population in 2000 was 10,018,735, while in 2013 official records reported it to be 14,160,467 (TÜİK, 2013). This means a population increase of approximately 4 million over 13 years. The negative effects of this rapid urbanization lowered the quality of life in the city. Especially the 1990s was a period when high-income groups in İstanbul sought to meet their demand for global standards of quality of life in GCs located in the periphery (Öncü, 1999; Pınarcıoğlu & Işık 2009; Bali, 2009; Keyder, 2006; Hacısalıhoğlu, 2000). With this exodus from the city center, the number of gated communities in the urban periphery began to rise rapidly. Between 1990 and 2000, the population density in İstanbul's periphery increased by 73.2% (Berköz, 2010).

According to many researchers, there is a strong correlation between the consumption centered lifestyle adopted by the rising middle classes, or the new urban elite, and the ever increasing number of GCs in İstanbul. Today, globalization imposes a new lifestyle by means of media and communication tools and the type of housing that corresponds to this consumption centered lifestyle is gated communities. Gated communities promise a life that is safe, privileged, prestigious, different, healthy, comfortable, clean, confined and disconnected from the city and its others (Bilgin, 2006; Keyder, 2006; Kurtuluş, 2005; Öncü, 1999; Erkip, 2003; Bali, 2009; Hacısalıhoğlu, 2000).

Consumption centered global culture threatens the continuity of local cultures, and its assimilation of cultures homogenizes the spaces it produces (Hacısalıhoğlu, 2000). İstanbul's GCs, malls, office buildings, hotels and other new developments are very similar to examples from anywhere in the world. These spaces are considered to be indicators of globalization. In İstanbul, old neighborhoods are being replaced with GCs, old urban subcenters are being replaced with malls

and the old central business district is being replaced with high rise office buildings. The current development of shopping malls, where the global and the local merges, as alternatives to city subcenters (Erkip, 2003) explains their increasing number near GC developments.

Consumption culture turns certain meanings and values into purchasable products using the media. According to Öncü (1999), one of the most important consequences of the cultural dynamics of recent years has been the adoption of a mythology of the ideal home by the upper and middle-income groups in Istanbul. The apartment block that once symbolized the modern lifestyle has been replaced with the ideal home which offers a homogenous life in sterile spaces with a dreamland scenario—in other words, GCs. Since the 1950s, it has been a status indicator to be living on the Bosphorus coast. Today GCs located in the periphery or in the center more commonly symbolize status (Öncü, 1999). In the early 1990s, the wealthy lived on the coast, the poor lived in the periphery, and middle-income groups occupied the areas in between (Pınarcıoğlu & Işık, 2009). However, the movement of urban elites towards peripheral GCs has dramatically rearranged this picture. Perhaps the most obvious proof that GCs are considered a status symbol is the fact that GC residents in Istanbul give the name of their GC, rather than their neighborhood, when asked for their address (Eren & Dolmacı, 2006).

The income inequality and employment opportunities created by post-1980 neoliberalization were accompanied by social segregation. The distinctive social and physical dynamism, the continuous structural production and destruction of Istanbul differentiated its response to globalization from that of Western cities. Istanbul's geographical location, its polycentric structure and its division into three sections (the Asian side and the two European sections divided by the Golden Horn, Dökmeci & Berköz, 1994) influenced its style of segregation. Pınarcıoğlu and Işık (2009) discussed segregation based on poverty. Poor people rapidly recognized the advantages of the informal economy and the real estate market and adapted to them rather than juts sitting by and watching. This is an important factor in understanding Istanbul's distinctive social dynamics. Segregation in Istanbul is socioeconomic, and ethnicity is not an important factor. Economic, social and spatial transformation in Istanbul together with GCs began to define a new urban context oriented towards segregation. The society was divided into two by the increasing inequality of consumption opportunities, the lifestyles and consumption patterns of these two groups were segregated spatially and this distance is still growing (Keyder 2006; Kurtuluş, 2005; Pınarcıoğlu & Işık, 2009; Hacısalihoğlu, 2000; Erder, 2006). The segregation in housing areas became even more visible with GCs. According to Kurtuluş (2005-2011) gated communities, socially and spatially separated from their surroundings, are a disconnected and alienating setup. GCs are located next to each other, but are not connected to each other. This creates a fragmental urban structure. The rapid increase in the number of gated communities leads to the emergence of an introverted new social class that does not relate to the city, does not care to know or perceive the city, that is and that isolates itself from the city (Erder, 2006).

In the post-1980 period, big capital has replaced small entrepreneurs and property developers. When small developers and illegal housing production failed to meet the demand for housing, large scale housing development projects were launched (Tekeli, 2000). With the new Mass Housing Law in 1984, the private sector was encouraged to participate in housing production (Keleş, 2008). This type of housing was produced by both the state and the private sector. However, state initiatives

targeted middle-income groups, while the private sector targeted upper- income groups to achieve higher profit levels.

The production of gated communities in the urban periphery for upper-income groups by local and international private developers gained momentum in the 1990s (Keyder, 2006).

## 2.2. THE NEW LIFE STYLE

The first gated communities in Istanbul were villas built for upper-income married couples with children (Fig 2). These communities were characterized by a lifestyle that focused on prestige, privacy and quality, rather than security (Geniş, 2007).



Figure 2. Kemer Country (retrieved from study tour presentation of A. T. Altiner, ENHR 2010, İstanbul)

The alternative to these for upper-income singles and couples without children was gated towers in the center of the city. Gated tower residents were offered secretarial, food, cleaning and laundry services as if they were living in a five-star hotel (Bali, 2009). According to Ünsal-Gülmez (2008) the users of Istanbul's gated towers ("rezidans" in Turkish) are mostly high level professionals. They tend to be single, very busy and visit Istanbul often (mostly for work). They are businessmen, industrialists, senior executives and newlywed couples (Fig 3). The companies that build gated towers define their potential customers or tenants as "financiers, brokers, architects, civil engineers, famous businessmen and artists who work more than 12 hours a day" (Bali, 2009; p.122).



Figure 3. Polat Tower (retrieved on 20.02.2015, <http://www.polattower.com/tr/sanalur>)

In recent years, the trend of living in gated communities has begun to include middle-income groups as well (Aydın-Yönet 2009; Aydın-Yönet & Yirmibeşoğlu, 2009; Görgülü, 2011). Gated communities established on smaller plots with denser

development consisting of apartment blocks are proliferating and have become more accessible for these groups (Fig 4). Thus, peripheral gated communities consisting of high density apartment blocks for middle-income residents started to be developed. Research shows that security is a major concern in the gated communities of this type (Aydın-Yönet 2009; Aydın-Yönet & Yirmibeşoğlu, 2009). Studies reveal that the main notions that are used to promote these projects are security, fear of crime, amenities, a privileged (although fictive) lifestyle, belonging, privacy and prestige (status).



Figure 4. Avrupa Konutları I (photograph by N. Aydın Yönet, 2009)

Pelin Tan (2008) mentions that, as the number of GCs in İstanbul increases, the concepts of public space, privatization, urban community, security, identity and citizenship have taken on new meanings, and belonging to the city has been replaced by belonging to the GC. Bali (2009) defines belonging to GCs as belonging to a lifestyle, rather than to a place, and calls it “town citizenship.” According to him these developments try to construct a social club atmosphere where the members live in a world of privileges.

Social and spatial segregation play an important role in the lifestyle offered by gated communities. Fridin-Özgür (2006) identifies the most important reasons for moving into GCs as security, well kept landscapes and prestige. The lifestyle here is family-centered. GCs are significantly disconnected from the rest of the city. Although their residents do not want to relate to the surrounding neighborhood, in the end they are forced to do so to obtain services such as housecleaning and baby sitting. The weakness of neighborly relations and residents’ unwillingness to participate in management and collective activities lead to a dearth of community life in GCs. This study, in which spatial and social segregation was demonstrated clearly, education and income levels were found to be the main components of segregation. The disapproval of income group diversity found among the households in the İstanbul sample, with pretenses such as security or communication difficulties, supports the claim that there is a demand for living in a homogenous income group (Ünsal-Gülmez & Ulusu-Uraz, 2010). Economic homogeneity characterizes the GCs in İstanbul.

The activities and facilities offered in gated communities focus on women and children (Erder, 2006). Metropolitan women prefer to live in gated communities for reasons such as security, feeling of freedom, reduced fear of crime, escape from the moralistic pressures of neighbors, saving time and having more time for themselves, their children, spouse and home (Aydın-Yönet, 2010). Women face a variety of difficulties in public space. These include insufficient street lighting, insecurity on public transportation, poorly built sidewalks (hard to walk with strollers, etc.) and planning approaches that try to reduce commuting times, but disregard the way stations (Oguz &

Atatimur, 2008). These factors are eliminated in GCs. The changing economic, social and cultural structure leads to changes in family structures. Today, the number of women who live alone and the number of single mothers are increasing (Çetin, 2007). Gated communities are highly favored by women who live alone (especially single mothers) due to the facilities and feeling of security they provide. Gated communities offer many advantages, especially to career women who are in the working mothers group. However, mothers who are educated and have a profession but are not working due to economic crises are being pushed towards living in these disconnected housing areas, and this is another dimension of this subject. In the case of İstanbul, the fact that the urban planning approach ignores women and forces them out to these communities leads us to question whether this is really a solution (Aydın-Yönet, 2010).

Looking at the factors of security and fear of crime as the driving forces of GC development in İstanbul, we find that the media is promulgating anxiety and paranoia. Aydın-Yönet and Yirmibeşoğlu (2009) conducted studies that show that there is no significant relationship between gated community density and crime rates in İstanbul. On the contrary, they claim that GCs are becoming targets for crime (Erkip, 2003) and mobilizing criminals to the periphery. The total number of GCs in İstanbul is unknown, and insufficient data limits research in this field.

According to Karasu (2008) the rate of increase in crimes against public order in İstanbul between 2000 and 2006 is 216%, and this value ranks thirteenth among the fifteen most populous cities in Turkey. According to official the Turkish Statistical Institute’s 2008 data, crimes in İstanbul made up 15.5% of the crimes in Turkey, and this ratio is fell to 12.5% in 2012 (TÜİK, 2013). Known for its very low crime rates in the ranking of the world’s metropolises, İstanbul’s crime rate is also lower than expected among Turkish cities. However, it needs to be remembered that the fear of crime develops independently from real crime (Aydın-Yönet, 2011).

The satisfaction levels of residents of gated communities in İstanbul generate even more demand for gated communities. A study by Özkan and Kozamaz (2006) shows that the top three factors of user satisfaction are high environmental quality, activities and facilities and sufficient security. In order of importance the problems indicated by users are insufficient public services (infrastructure problems), distance to the city center, increasing population and urbanization, lack of public transport, high payments for housing maintenance and infrastructure, traffic jams and weak neighborly relations.

Berköz (2010) conducted a study on the housing and environmental satisfaction of households living in upper-income group GCs consisting of single family villas in İstanbul. The results showed that the most important reasons for user satisfaction were open spaces and green areas, security and social relations.

GCs for upper-income groups market themselves for prestige and privacy (İnal-Çekiç & Gezici, 2009; Geniş, 2007; Aydın-Yönet 2009; Aydın-Yönet & Yirmibeşoğlu, 2009) while middle income group projects emphasize lifestyle (İnal-Çekiç & Gezici, 2009; Aydın-Yönet 2009; Aydın-Yönet & Yirmibeşoğlu, 2009). However, security is an indispensable for all the income groups that choose gated communities (Aydın-Yönet, 2011).

Gated communities in İstanbul can be categorized as horizontal and vertical developments (Görgülü, 2011). Levent and Gülümser (2007) elaborated this typology and described four main groups of GCs in İstanbul:

- Gated towers in the city center that appeal to upper income groups, in the form of vertical developments,

- Gated villa towns in the periphery that appeal to upper and upper-middle income groups, in the form of horizontal developments,
- Gated apartment blocks in the periphery that appeal to upper, upper-middle and middle income groups, in the form of vertical developments,
- Mixed areas in the periphery that appeal to upper, upper-middle and middle income groups.

It would be helpful to add another group to this typology to include developments that were gated after they were established.

### 2.3. THE EFFECTS ON PLANNING

Istanbul's geographical location is advantageous in terms of international connections and is an important factor in attracting global investments. The 1999 Marmara earthquake was an important turning point for Istanbul's housing market. Gated community production by local and foreign housing investors for upper, upper-middle and middle income groups kept its pace. Urban sprawl in the periphery is determined by GCs. Gated towers with their vertical neighborhood effect arose in the center of the city. Gated communities stand out as a new form of housing production in Istanbul.

First, the effects of GCs on planning should be considered in terms of site selection decisions. Site selection decisions need to be evaluated in terms of their burden on the existing infrastructure. The private governance of the township municipalities ("belde belediyesi" in Turkish) have had an encouraging rather than preventative effect on the uncontrolled increase in the number of gated communities in Istanbul's urban periphery. The powers of township municipalities have been intentionally increased by the national government (Keyder, 2006). The power to make plans independently from master plans led to an increase in the number of GCs within these municipalities in the periphery. Upper income groups' residence in peripheral GC's serves the economic interests of municipalities by reducing infrastructure expenditure, and therefore township municipalities encourage gated community developments. Moreover, new employment opportunities created by these developments have a positive effect on the surrounding neighborhoods (İnal-Çekiç & Gezici, 2009). As a result developers continue gated community production with the pretense that they are creating more livable environments, providing new employment opportunities and preventing illegal urban development (Levent & Gülümser, 2007).

The fact is that most township municipalities (according to 1997 data, 47%) are located within drinking water catchment basins (Özçevik, 1999) and private forests have been opened for development accelerated gated community production (Berköz, 2010; Özçevik, 1999; İnal-Çekiç & Gezici, 2009). GCs in Istanbul are built by cooperatives, the Housing Development Administration, local governments, private entrepreneurs and Türkiye Emlak Bankası (Berköz, 2010). Currently, the peripheral urban development of Istanbul is determined and directed by GCs.

The fact that plots of desired size and price can be easily found in the periphery drove developers to these areas, and they in turn attracted potential buyers or users here with the diversity and quality of the facilities their projects offer. Due to land scarcity and high prices in the city, central gated communities are much more expensive than peripheral ones. However, land prices in certain peripheral areas where GCs are concentrated (e.g., Gokturk, Halkali, Atasehir) have been rising in recent years.

İnal-Çekiç and Gezici's (2009) study of the Gökürk township questions site selection decisions by examining the effects of GCs on spatial development. Areas where important

GCs are located became attractive to more developers, and becoming a famous brand is a principal motivation for developers. Becoming a brand makes it much easier to get a bigger piece of the pie.

Urban transformation projects in Istanbul have a significant effect on the development of GCs. One of the pretenses for urban transformation projects is to prevent socioeconomic polarization. One method of transformation is the gated communities produced for upper and middle income groups and built in rural areas or forests. Since the year 2000, polarization increased even more due to the legalization of urban transformation and incentives given to this type of development (Ataöv & Osmay, 2007). Urban transformation projects defeated their purpose in the context of GCs.

With the help of the global capital, GC production in Istanbul targets the international market as well as the local. The more different the architectural concepts of new projects, the more expensive they are. In this sense, housing became a brand (Görgülü, 2011). An interview with architect Emre Arolat, who designed numerous GC projects in Istanbul gave important clues for evaluating GCs' architectural concepts. According to Arolat, the postmodern wave of the the 1980s affected Istanbul, and a kitsch development trend that disregarded architectural design and style emerged (Arolat, 2011). Under current conditions, the products of architecture are consumed by upper income groups. According to Arolat the most important motive for gated communities is the lack of high quality urban space. The fact that gated communities are rarely found in neighborhoods that have plentiful and well maintained public spaces supports this claim (Akyol-Altun, 2011).

Gated communities are also favored as investment tools because they offer secure real estate value. It is known that GCs' neighborhoods and their distances to the city center determine prices. It is estimated that the prices fall about 3% for each kilometer of distance from the city center. The size and number of rooms also affect prices. The variety of activities and facilities offered by the gated community increase prices, too (Altınay-Cingöz, 2010).

From the developers' point of view, GCs in Istanbul can be categorized as lifestyle communities and prestige communities. Northern sprawl towards forests and water catchment basins proximity to natural resources and minimal seismic risk (an important criterion all lead to increasing GC density in the north. However, these developments threaten natural resources and pose important problems for urban sustainability (Levent & Gülümser, 2007; İnal-Çekiç & Gezici, 2009; Berköz, 2010).

Another criticism of GCs claims that their private capital driven planning process is rendering public sphere obsolete (Bilgin, 2006; Keleş, 2008; Kurtuluş, 2005; Erder, 2006). Privatization of public spaces is undesirable for the idea of the city.

Since 2010 more than 1000 large scale GC projects have been initiated in Istanbul (Kurtuluş, 2011). This number is increasing every day, and Istanbul continues its uncontrolled growth while urban rent concerns prevent the creation of appropriate strategies.

### 3. Conclusion

Gated communities in Istanbul are socioeconomically homogeneous. Spatial homogeneity is ensured by restricting unwanted land uses in the area. This is how private governance structures are insuring real estate values.

Private governance is usually supported by local governments because it reduces public service costs. These

private governance structures are considered to be a new micro scale governance model (Giglia, 2003).

Contrary to expectations, GCs are not increasing community interactions and are actually reducing them. Gated communities in İstanbul therefore should be considered “gated residential developments” rather than “gated communities.”

Gated communities meet certain expectations by socially and spatially segregating themselves from their surroundings. Separating insiders and outsiders, life inside the gated community is predictable, safe, privileged, high quality, private and prestigious, close to nature, ordered, organized and comfortable. The social cohesion provided by the rules of the private governance ensures tranquility and serenity. The new global lifestyle desired by the new urban elite is also attained in gated communities. However, the belonging felt by residents is not to the place, but to the lifestyle.

Gated communities in İstanbul have been criticized for privatizing public spaces and sweeping away public life, for their closed structure as opposed to the open structure of the modern city, for their homogeneity as opposed to the inherent heterogeneity of the city, for mobilizing crime in the city and for causing social and spatial segregation. Gated communities are located close to nature (generally horizontal type of developments) and striving to use natural resources, which are harmed by their uncontrolled growth. Their socially segregating design has a negative effect on sustainable society, their close proximity to natural resources has a negative effect on sustainable development and their privileged services for a privileged group has a negative effect on a sustainable economy.

Housing is an economic development issue as much as a social issue. Rehabilitation of the existing housing stock by reinvesting in it and reinforcing this process with policies that encourage households to reinvest in their homes would uplift neglected sections of the city. These efforts are very important in terms of housing policies, and they could significantly reduce the need for GCs.

Appropriate policies that address GCs, which are directing urban growth in the periphery, are urgently needed. These policies need to take İstanbul’s urban identity into consideration, be based on sustainable development, revitalize the public sphere and resist urban rent speculation.

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# Changing Uses of the Middle-Class Living Room in Turkey: The Transformation of the Closed-Salon Phenomenon

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**Keywords:** change, domestic practice, domestic space, furniture, living room, material culture, middle class, salon, transformation, use

**Abstract:** Structured as a think piece, this study examines the transformation of Turkish middle-class living room practices and their material settings from the 1930s to the 2010s in accommodating the changing uses of that space. First, the spatial division between the public and private aspects of domestic interiors in the culture of the early Turkish Republic is discussed, with a focus on the change from traditional uses to more Westernized and modern functions and styles; through the review of relevant literature, the development of the living room as it reflects changes in the domestic culture of the early Turkish Republic is traced. Next, the closed-salon practice, which excludes daily routines and everyday clutter and requires a high level of cleanliness and order, is discussed as the dominant prototype. Finally, the paper analyzes the transformation of this prototype to meet the evolving role of the living room in the middle-class Turkish home.

## 1. Introduction

In many cultures, the practices of allocating domestic space and the products used in its display and maintenance evolve and are transformed together with the culture's social evolutions. Following this framework, we study home cultures in Turkey to observe the transformations of practices and of the material culture of domestic space as the country faced its new government's commitment to modernity and Westernization when it became a republic in 1923, replacing the centuries-old Ottoman Empire.

The living room is usually considered the domestic space the Turkish middle class uses to create certain impressions and display status. The Turkish living room as a Western construct dates back to the 19th century (Bozdoğan, 2008; Gürel, 2009a). By this time, the Westernization and modernization movements that were to affect many cultural practices had emerged, and they accelerated with the political changes that took place in the late 1920s and 1930s attendant to the establishment of the Turkish republic. The government promoted cultural and material practices that were considered modern to encourage the replacement of traditional practices, including conventions regarding home cultures, with Westernized ideas and culture.

The adaptation of the living room and its furniture as a showcase of Western and modern social status is connected to the social construction of Western and modern identities and lifestyles in place of traditional ones. The modern furniture units of the equally modern living room are much different from the traditional, familiar units. For many members of the Turkish middle class, though, adapting to the transformed living room as

it shifted from traditional to modern was not a quick and easy process.

Displaying this adaptation and transformation through the living room and its furniture emerged as a significant—and sometimes stressful—issue throughout middle-class households as the appearance of the Ottoman, or “pre-modern,” representations became threatening. Gradually, though, in the homes of the early Turkish Republic, Western and modern furniture came to represent the new civic identity (Bozdoğan, 2002; Gürel, 2009a). The living room and its furniture served as a showcase, indicating the occupants' social status and civic identity (Gürel, 2009a).

Because displaying the modern status was very important, extra emphasis and care were given to the living room and its contents, which were designed to create good impressions and to function as a display stage for outsiders to view. In addition, the middle-class living room was mostly isolated from daily routines and activities. Thus, a living room that remains in perfect order because it is closed to the everyday routines of the household and its practices—what is known as the *closed salon*—became a powerful prototype defining the living room throughout Turkish middle-class homes (Kılıçkiran, 2008; Özbay, 1999).

This study begins by examining the transformation of the middle-class Turkish living room through this closed-salon practice, considered a powerful and dominant custom in middle-class Turkish domestic culture, through examples from the literature. Following this discussion, the study focuses on the manifestations of the closed salon, including the connections of spatial and material elements to social transformation.

## 2. The Living Room As the Public Stage of the Home

Home is a concept that presents many possibilities. First, a home is a refuge for its household members. It is a place to get away from the outside world, to rest and relax; in that role, it accommodates many intimate, personal, and private practices. It has as well public and formal qualities that provide a stage representing the household members' identities, tastes, and lifestyles to outsiders.

Having both private and public qualities, the home is mostly defined as a place of ambiguities and paradoxes (Short, 1999). These different qualities merge to create dualities, such as formality/informality, social self/inner self, and being outside/being inside. To cope with the tensions in these dualisms, members of many cultures have deliberately created a spatial division within the home (Rechavi, 2009). In carrying out this practice of dividing the living space, some parts of the home are assigned and used for more public and formal activities and some for more private and personal needs and practices. As Rechavi (2009) explains, this division means that while some spaces are relegated to group activities or hospitality, others accommodate individual and intimate activities.

The resulting divided spaces have been defined in many different but related ways. According to Goffman (1959), places of human interaction can usually be divided into *front regions*, such as the living room and dining room, where performances actually take place, and *back regions*, such as the bedrooms and bathrooms, where preparations for such performances are made. Similar to Goffman, Korosec-Serfaty (1984) accepted a division between domestic spaces. He used the term *facade* for the more public and formal parts of a home and considered the other spaces in a home to be where a personal, nonpublic life takes place. Rechavi (2009) distinguished the two areas by calling them the *front stage* and the *back stage*. The front stage refers to spaces where the family presents or displays itself and entertains outsiders, while the back stage indicates areas of presumably greater individual control, where household members prepare and eat food, rest, and seek solitude.

In most cultures, the living room is generally accepted as the most public part—whether it's called the front stage, the front region, or the facade of the home (Attfield, 2007, p. 62; Ayata, 1988, p. 8; Bryson, 2010, p. 197; Goffman, 1959; Gürel, 2009a, 2009b; Korosec-Serfaty, 1984; Munro & Madigan, 1999, p. 108; Rechavi, 2009). Formal occasions, such as those involving hosting, serving guests, and related practices, take place in the living room, which provides a stage for the household members to display their status, showcase their tastes, and portray a certain image to the outsiders. Socially acceptable aspects of the home dweller's life are expected to be expressed in the living room (Korosec-Serfaty, 1984)—not usually considered a space where the more intimate or personal aspects of the home dweller manifest themselves (Rechavi, 2009).

Basing their study on the assumption that the living room is the domestic space used to create certain impressions, Laumann and House (1970) related social characteristics (i.e., status, social mobility, and social attitudes) to the style of the living room decor. Influenced by Goffman (1959), Laumann and House explained that the living room is where communication of social characteristics takes place and thus is the room where a connection between social identity and style would most likely be revealed.

In the context of Turkish middle-class homes, considering the living room the public space of the home is a common practice (Ayata, 1988; Gürel, 2007, 2009a, 2009b; Kılıçkiran, 2008; Özbay, 1999; Pamuk, 2006; Ulver-Sneistrup, 2008). According to Gürel (2009a), within the confines of the traditional middle-class Turkish home, it is in the living and dining areas that the social interactions among the inhabitants and their guests

take place. These spaces, which mediate between the personal and the public aspects of the home, form the location where the inhabitant's identity is portrayed to outsiders. The representative quality manifested through material culture conveys messages and symbolic meanings that reflect the inhabitant's habitus (Gürel, 2009a).

### 3. The Turkish Salon As the “Museum Living Room”

In the context of understanding the transformation and contemporary situation of the living room practices in middle-class homes in Turkey, it is important to recognize and understand the prototypical living room setting, which is excluded from everyday routines. In this concept, keeping a living room isolated from these routines, as well as maintaining cleanliness and order, was the status display standard for the household, one to be sustained throughout all the hosting performances on formal occasions. This model, which we term *salon*, is considered to be a dominant practice by authors in both literary and academic realms (Ayata, 1988; Gürel, 2007, 2009a, 2009b; Kılıçkiran, 2008; Özbay, 1999; Pamuk, 2003; Ulver-Sneistrup, 2008).

With the establishment of Turkey as a republic, Turkish society underwent a series of Westernization and modernization reforms. Republic ideology sought to distance the new nation from the Ottoman Empire (Bozdoğan, 2001). The notions of modern and Western were conflated to produce a modern mode of living, which was linked to the concept of civilization (Gürel, 2007). According to Gürel (2009a), domestic space and its material culture had a profound role in shaping modern consciousness. The material culture of living rooms, in the context of the public stage of domestic interiors, served to construct modern and Western identities (Gürel, 2009a). Living rooms, together with the furniture and objects they contained and practices they held, were spaces for the representation of modern and Western identities.

The middle-class Turkish living room as a Western construct was to be experienced with all its Western content: furniture, objects, and new cultural practices. Orhan Pamuk, the Turkish Nobel Prize Laureate in Literature, offers his memories of the living room in his childhood home in the 1950s in his memoir *Istanbul: Memories and the City* (2006). Pamuk was living in an upper middle-class home in which modern and Western identities were represented in both materiality and domestic practices. He describes the room thus:

*Not only were pianos not played but there were other things—always-locked glass sideboards stuffed with Chinese porcelain, cups, silver . . . all these things filling the living rooms of each apartment made me feel that they were displayed not for life, but for death. When we harshly sat on couches with inlaid mother-of-pearl and silver strings, our grandmother warned us, “Sit appropriately.” Living rooms were set up as little museums for visitors—some of which were imaginary—whose arrival time was uncertain, rather than as comfortable spaces where the inhabitants could pass time in peace, such was the concern for westernization. (p. 15)*

As Gürel (2009a) points out, what Pamuk calls a “museum living room,” crammed with eclectic furniture and accessories, represents living rooms of upper middle-class families in Istanbul and other major cosmopolitan cities during the 1950s.

The importance of Western and modern representation manifested itself in conspicuous, expensive, and precious furniture and objects, and it was expected that a high standard of maintenance, care, and cleanliness would be observed. To sustain this standard, which was tested by visiting outsiders, the

living room was commonly isolated from the daily routines of the household members and everyday clutter. The door of the living room was even locked, and children were kept out of this “public” space—an act considered key in defining the closed-salon practice.

A study Ayata (1988) conducted regarding the middle-class homes in Ankara presents features similar to Pamuk’s (2006) descriptions of his family’s living room (salon) and related practices, exhibiting rich descriptive data about the closed-salon practice. According to Ayata, this salon, with all its contents, served as a space dedicated to the formal occasions attended by outsiders. To attain and maintain the high standards of hosting, the living room was kept clean and in proper order at all times. This standard was so dominant throughout the domestic space that even the household members themselves were not usually allowed into the salon. All evidence of everyday routines was removed so that the salon could be preserved as a solely formal and public space.

An important element sustaining the closed-salon practice was a separate space, called a *sitting room*, that was different from the salon. Ayata (1988) notes that this space allowed for the actual living needs of the middle-class household, given that the actual “living room” was isolated from everyday routines. The sitting room thus fulfilled the need for intimate family life and everyday household practices while leaving the formal living room for guests and hosting. These family practices might include watching television, reading, having conversations, and many other cozy, everyday routines. In this private realm, no formality was involved or needed. The material characteristics of this room were usually considered rather modest and inexpensive compared to what was required for the salon. The practical uses of the objects of the private realm were especially important, whereas the objects of the salon were primarily for display.

Ayata (1988) notes the opposite qualities of the objects that belong to public and private realms, which correspond to the closed salon and the sitting room in the middle-class homes in Ankara. In the public realm, the furniture and the objects were expensive and had a low level of everyday use, whereas in the private realm they were cheap and had a high level of everyday use. Ayata describes the contents of the sitting room as simple and old objects that served informal and traditional practices; in contrast, the objects that were reserved for the closed salon were luxurious, expensive, and new, serving formal and proper practices. The household represented its modernity not only through the materiality of the salon, but also through the practices conducted in that space. Because the salon was intended to be used primarily for formal and public occasions, it functioned as a space for hosting and formal events.

In the closed salon, it is possible to observe the deep distinction between public and private realms through objects, furniture, and domestic practices. Ulver-Sneistrup (2008) interprets the closed-salon setting as living rooms that have idealized public qualities. According to this interpretation, the living room contains idealized and solely public qualities, whereas the other rooms have idealized private qualities.

Gürel’s study (2009b), in which she discusses the gender roles in the domestic space throughout the modern middle strata in the Turkey of the 1950s and 1960s, supports the presence of idealized public qualities and formal practices of the living room. According to Gürel, the living room was used to host activities that emphasized formality. A significant ritual exemplifying these practices was the “women’s reception day,” an occasion on which a housewife in the middle or upper income level hosted a circle of female friends on a certain day of the month (Gürel, 2009b). In this formal event, prestigious luxury objects like crystal glasses, silver saucers, and porcelain dishes were

expected to be used and displayed prominently (Gürel, 2009b).

Closed-salon practice emerged as a domestic phenomenon with its strict public–private distinction, isolation from the daily routines, locked door, and prominent display of status through materiality and ritual. Kılıçkiran (2008) defines this domestic setting as a model for middle-class homes. In this model, the living room is seen as the outer home; it is exempt from household use, is reserved for visitors, and is to be kept clean and neat at all times. The rest of the house, generalized as *rooms*, constitutes the “inner home,” where the largest of the rooms, the sitting room, is reserved for the daily intimate activities of the family. Kılıçkiran describes this model as a prototypical understanding of Turkish domestic space throughout middle-class homes, a view supported by a number of other local researchers (Yıldırım & Başkaya, 2006; Onur et al., 2001).

#### 4. Transformation of the Museum Living Room: Merging the Public and Private Layers

The living room practice described above, in which the daily routines of the household are excluded, has been described in many different ways, including using the terms “museum living room” (Pamuk, 2003), “idealized public living room” (Ulver-Sneistrup, 2008), “closed-door salon” (Özbay, 1999), and “powerful prototype” (Kılıçkiran, 2008).

What is the contemporary situation of this powerful prototype? How powerful is this closed-salon practice now?

According to Özbay (1999), in the contemporary environment, it is rare to find closed-door reception rooms or salons in middle- and upper middle-class houses or flats. Özbay attributes the decline of this practice to the lessened distinction between front- and back-stage activities. Another consideration is the markedly lower birth rate (Özbay, 1999): With fewer children in a family, the concern for the well-being of, and education for, all family members can increase and can be manifested in the use of household space. Consequently, keeping the living room only for visitors began to be perceived as unnecessary or irrational, and the back-stage sitting rooms began to be converted to allow children to have designated rooms, now believed necessary to personality development and individuality. Yet another important factor that opened the doors of the closed salon was the emergence in the ‘70s of TV sets as a central component of family life (Gürel, 2007; Özbay, 1999).

In agreement with Özbay (1999), Özsoy and Gökmen (2005), based on the results of their field research, support the decline of the traditional closed-salon model and practice in middle- and upper middle-class homes. They explain,

*To allocate a room for visitors is one of the customs of traditional Turkish families that is gradually disappearing in the urban lifestyle. This entails keeping one of the rooms in the dwelling clean and orderly. Studies conducted with the various income groups have shown the changing habits of the families in the urban areas and found a growing tendency to lose the traditional way of life in the urbanization process. (Özsoy & Gökmen, 2005)*

Ulver-Sneistrup (2008) conducted extensive and comparative research that incorporated in-depth interviews about ordinary status consumption of home aesthetics throughout three different cultures (Turkey, Sweden, and the United States). In this study, Ulver-Sneistrup elaborated on the phenomenon of the Turkish salon in middle-class homes in Istanbul. She found that in the homes in Istanbul that internalized the closed-salon model and practice, the division of public and private space engenders a heated debate (Ulver-Sneistrup, 2008). An emphasis on the maintenance of the divided parts that show off the public space as ideally just public and the private space as ideally just private

is highlighted:

*Through my observations, I came to know the Turkish salon as a space for only public reception—carefully decorated and consisting of predetermined objects that together constituted a proper stage for reception. A room of order in a home at its best.* (Ulver-Sneistrup, 2008)

According to Ulver-Sneistrup, the closed-salon model and practice is considered a central requirement in middle-class homes—whether it is internalized or contested. Although most middle-class homes welcome the closed-salon model and practice, some contest this prototype, using different tactics to eliminate signs of formality (Ulver-Sneistrup, 2008). The respondents, who were in their 20s and 30s and whom Ulver-Sneistrup describes as “younger”, avoided formality by banning conventional decor and social rituals in their homes. Ulver-Sneistrup interprets these young respondents as struggling against the older generation that defines itself partly through home styling and domestic practices. This rebellion against the traditions of the older generation is manifested through the intentional absence of a salon. Those who contest the closed-salon practice furnish their homes in a casual way, without display units or heavy dining room sets, replacing the artifacts representing formality with their symbolic opposites.

In her 2008 study, Ulver-Sneistrup correlates the transformation of the “museum living room” phenomenon with the change in the notion of status and consequently with the ways in which status is displayed in the living rooms of middle-class homes. Social groups that undervalue the traditional status display are considered to have a tendency to resist the ways and the tools of the previous generation that used them to conduct formal, separate rituals. Consequently, the living room is now considered a space for the daily routines of the household. In this context, isolating the living room from the daily uses of the household makes little sense.

The rebelling of the younger generation against the closed-salon practice could be interpreted as a sign that points to the coming transformation of this entrenched prototype; the content and visual analysis of recent home and decoration magazines also give support to this interpretation (Nasır, 2014). It is observed that the contemporary living room is defined by rather informal and self-oriented practices and is not devoted solely to formal occasions. The living room is generally presented as a multifunctional space available for everyday practices such as eating, studying, sitting, resting, watching television, and listening to music, as well as for the more traditional function of serving guests. Visual and content analyses support the multifunctional quality of the living room through both private and public dimensions (Nasır, 2014). The December 2011 issue of *Evim* defined the living room as “a space in which you can eat your meals, serve your guests, watch TV, read books; have individual activities or get together with your family. It is like a compact living area which serves for different functions” (p. 198).

Complementing the living room, the furniture, equipment, and decor also have multifunctional qualities.

## 5. Conclusion

Experiencing the living room as a small museum dedicated for formal occasions and solely for guests is still considered a dominant phenomenon in the context of middle-class Turkish homes (Ayata, 1988; Gürel, 2009a, 2009b; Kılıçkiran, 2008; Özbay, 1999; Ulver-Sneistrup, 2008; Yıldırım & Başkaya, 2006). This model and related practices remain valid in some social fragments even in the contemporary environment (Ulver-

Sneistrup, 2008). The living room as museum (closed-salon) phenomenon is a compelling concept that is still considered and referred to both by those who internalize the concept and by those who contest it.

It appears, however, that the closed-salon practice is losing its influence. Behind this decline, the changes in the lifestyles and transformation of the need for status display may be considered significant factors in that the cultural transformations influence the domestic practices. The perception about living room use has shifted; the living room is now considered a more informal space in which the household can conduct its daily, intimate practices. Furthermore, the meanings of *formal occasion*, *hosting*, and *socialization* have been transformed. Socializing with outsiders increasingly takes place outside the home, and women too have become more visible in the public realm. All these cultural transformations were connected to the adoption of a more informal and individualized lifestyle by the middle and upper middle classes.

The informal lifestyle has given rise to more informal living rooms, furniture, and related domestic practices. It is expected that the transformations taking place in the living room space have affected the whole of the materiality, practices, and furniture uses in the living room. The formalities associated with the closed salon have begun to be contested by users of the new generation. The struggle with the conventions and traditions of the closed salon resulted in the adoption of casual and informal styles of furnishings and practices. In this way, codes that oppose the material culture and practices that are associated with the museum living room are put into play to contest the powerful prototype.

Countering the closed-salon model and practices with the intentional elimination of the salon and all its codes is a complex response that deserves elaboration. It is interesting to note which tools, styles, units, and related practices are chosen to frame this struggle. All the materiality accompanying the contention is potentially important in regard to displaying the transformation of middle-class living rooms in Turkey.

The transformation of the living room reveals the merging of the public and the private realms in the same space. As Özbay (1999) indicates, the difference between the activities that are performed in the public and in the private realms of the domestic space has gradually decreased. Some householders have embraced spatial optimization to make use of the largest domestic space—the living room. It came to seem irrational to devote the living room *only* to formal occasions to meet the goal of creating a idealized public space.

As the living room increasingly accommodates the daily intimate practices of the household, the public realm and the private realm are converging in the living room. As shown in Table 1, in the former living room, only public practices were conducted. With the transformation of the living room, both public and private realms merge in the same space.

Table 1. Merging the Private and Public Realms

	Private Realm	Public Realm
“Closed-salon” practice	Sitting room	Living room
“Living room” practice	Living room	Living room

In this paper, it is observed that the domestic spaces are differentiated; some spaces are devoted to group activities or hospitality and others to individual and intimate activities (Rechavi, 2008). In the previous closed-salon practice, this segregation was strictly observed. With the merging of the public and the private realms, the public practices that signal the

representation and status display of the household begin to appear in the same space where the intimate and private daily routines are conducted. This merging is considered to have great potential for deeper investigations, particularly on the effects of the convergence on the uses of the objects and the furniture in the living room, in the context of understanding the transformation of the middle-class living room in Turkey.

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# Opportunities, Obstacles and Possibilities for Foreigners to Study Traditional Japanese Gardening

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**Keywords:** Japanese garden, Traditional industry, Practical training, Higher Education, International students, Mobility, License, Work permit, Professional Certificate, The Way of Tea

**Abstract:** There are many Japanese garden enthusiasts outside Japan, and some of them are interested in working in the industry and look for schools to learn the skills. The industry depends on internationalization as well. Japanese gardening, however, is usually taught first handed in apprenticeship rather than by lectures or textbooks because it requires improvised design-build procedures. There are reasons why higher education institutions cannot provide practical education in this field. International applicants therefore cannot find an authentic training opportunity and give up, or some of them are misled by an easier way. They also encounter obstacles when they apply for a work permit because this field is not recognized by the government appropriately. The language may be a barrier for some international applicants. The author suggests that higher education institutions may become a bridge between those international enthusiasts to an authentic Japanese gardening practice as seen in some successful examples.

## 1. Background

Traditional Japanese gardens are still popular worldwide, and many non-Japanese students and enthusiasts are interested in coming to Japan to study the subject. Some even wish to acquire skills to actually create gardens for themselves or professionally. Japanese practitioners usually welcome these enthusiasts from overseas, partly because they are willing to share the culture that they are proud of, and partly because the industries and its culture is endangered domestically.

How to learn Japanese gardening is sometimes misunderstood, or become confused with modern landscape architecture practice even by Japanese locals. International enthusiasts who have determined to study the subject typically look for college-level higher education institutions or vocational schools. Few of those schools, however, teach those subjects practically. *Totei-seido*, or apprenticeship, has been the main stream of learning traditional gardens in Japan. Students also try to find textbooks and manuals for the practice, but it would be very difficult to apply what is written to an actual site with different climate and materials including soil, water and plants. Even if they understand how to in theory, acquiring skills to actually do it requires years of training on site.

The apprenticeship is much more involved than studying in a classroom or doing a formal internship in modern organization. Besides the language and common cultural gaps, an apprentice must be prepared for the strict seniority system and particular manners for each industry. On a practical side, obtaining a proper visa to live in Japan and work in such field of traditional arts is often more difficult than to obtain a student visa or permit to work for large corporations or organizations.

Domestically speaking, Japanese gardening is one of the most endangered industries, suffering shortage of both successors and job opportunities. There are more demands overseas, but there are not enough practitioners to be willing to take such jobs mainly because of the language barrier. Local practitioners of each country may acquire the necessary skills perform Japanese gardening, but the path for such foreigners to study the subject and receive a training is unclear. The author often receives inquiries from those foreigners who are lost in seeking for a career of Japanese gardening.

International mobility in higher education is now being promoted by the national and regional governments, and there are a plenty of official supports since 'A Plan for 300,000 Exchange Students' was announced by the Japanese national government in 2008. International competition to obtain international students is heating up not just against U.S.A. and European countries which have been accepting foreign students for decades but also against rapidly rising China and Korea. Business and technology are no longer enough to attract international students to Japan, and culture should be the next key. Traditional Japanese arts including Japanese gardens, however, have not received enough attention with this regard.

Internationalization seems to be more systematically developed in other industries such as *Chado*, or the Way of Tea. *Chado* is an integrated form of art and discipline closely related to Japanese gardening, and there are schools such as Urasenke, which has expanded all over the world and continued to educate international students to become authentic successors and missionaries. Their educational and administrative system may give suggestions for higher education institutions who are seeking for expansion and sustainable internationalization.

## 2. Methods

The author has conducted interviews with practitioners since 2000 to confirm her own observation and the discussions heard in professional conferences. Supportive data and updated information are also collected from publications by Japanese higher education institutions and the governmental agencies. Opinions from previously published academic papers are also reviewed and quoted. The readers should note, however, that all of these opinions are common understandings in the industry that have been discussed for years: none of them are a particular researcher's personal finding or judgment. The author also added her own findings from her previous experience of teaching subjects about traditional Japanese gardens to American college students. Everything mentioned in this article is what is happening in Japan, unless otherwise noted.

Most books and papers used as reference are written in Japanese only. The author thought it would be valuable to let out such domestic trade information and share it with the international community. For readers' easier understanding, the contents are often summarized instead of being directly translated word by word.

## 3. Teaching Japanese Gardens in Higher Education

### 3.1. LANDSCAPE ARCHITECTURE EDUCATION

As of February 2015, 3 post-graduate level programs, 34 four-year undergraduate programs and graduate programs attached to them, 13 two-year undergraduate or vocational programs and 67 high school programs in landscape architecture, garden design, environmental design or horticulture in Japan are accredited toward certification exam by Registered Landscape Architects (RLA, 2015). This certification, however, is for planner or designer; therefore none of them emphasizes the training for actual construction or specialize in Japanese garden education. The national certificate for on-site implementation is called '*Zoen-ginou-shi*, or garden construction master' but the application for this certificate only requires certain years of work experience, not any education at school.

The followings are some of a few schools which offers extensive practical training for on-site implementation: Toyama International College of Crafts and Arts and Kanazawa Institute of Traditional Crafts are relatively new school established in 1996 in Hokuriku region, which emphasize training of implementation skills. Nishi Nippon Junior College in Fukuoka and Minami Kyushu University in Miyazaki, both of which are located in Kyushu Island, have been offering practical training in their landscape and garden design curriculum since 1967. Some other institutions may also provide skill training courses but assign more hours to theoretical lecture courses.

A few research institutions offer opportunities for studying history, aesthetics, philosophy and other aspects of Japanese gardens. Research Center for Japanese Garden Art and Historical Heritage (JGHH) at Kyoto University of Art & Design specialize in this subject. Tokyo National University of Fine Art and Music, has also provided opportunities to study historical heritage including Japanese gardens. International Research Center for Japanese Studies currently have a professor specializing in this subject and they may accept doctoral student studying in English. JGHH has provided an open enrollment intensive workshop in English since 1996. It may include some on-site gardening workshops, but the thirteen days spent mostly for excursions and lectures is apparently not meant for a practical or professional training.

### 3.2. MODERNIZATION OF EDUCATION

The modernization, or westernization, of Japanese higher education in general is one reason for this lack of Japanese garden education. It is similar to '*hogaku*' or traditional Japanese music is forgotten in most K-12 schools, which were established after the Meiji Restoration.

College level landscape architecture program in Japan usually teach American style planning and design, perhaps because the profession of Landscape architecture and its educational system was first established in the USA and many Japanese professors studied there: All 50 states less District of Columbia officially recognize landscape architect license, 47 of which by their practice act and three of which by their title act (ASLA, 2015). Most of the former 47 states require applicants college-level degree from accredited institutions and certain years of practical training before applying for the licensure exam. The accredited institutions need to pass the periodical reviews by American Society of Landscape Architects' national accreditation board (Suzuki, 2001).

The scale expansion of practice may be a reason for this modernization. Abe (2007) looks back the history of the Department of Landscape Architecture at Tokyo University of Agriculture, which was the first landscape architecture schools in Japan. He observes a change in their curriculum: In 1920's, there were courses such as 'Japanese Garden', 'History of Japanese Garden', 'Tea House and Tea Garden', 'History of The Way of Tea', 'Architecture', 'Architecture History' and 'Aesthetics'. In the 1945 curriculum, everything above disappeared except 'Architecture', and some large-scale planning oriented subjects such as 'Park Planning', 'National Land Planning' and 'Construction Machinery' appeared. In the 1988 program, which represents the current landscape architecture education trends in Japan, even 'architecture' is no longer a required subject. This may be indicating the trend toward specialization because of the scale expansion. Two garden related subjects, 'Garden History' and 'Garden Studies', seem to have come back, but they do not specialize in Japanese gardens.

Kyoto has the biggest concentration of historical gardens and architecture: There are 17 UNESCO cultural heritage sites, 48 national treasures architectural sites, and 292 important cultural assets sites in Kyoto Prefecture as of 2013. Kyoto University is in the middle of these historical assets, but few courses discuss such subjects at Kyoto University. An elective course called "History of Japanese Landscape Architecture" disappeared in 1996 from courses offered by Environmental Design Laboratory, and then no Japanese garden related course was available as a specialized subject until a Japanese garden historian joined the Faculty of Integrated Human Studies in 2009. The author has been offering a general education course discussing Japanese gardens since 2008 and found that some students of a variety of majors are interested in the subject for self-cultivation or internationalization purposes.

These changes in the curriculum and in students' interests reflect the trend of what the Japanese society needed in each era. It was right after the Great Earthquake in Tokyo metropolitan area in 1923 when Dr. Keiji Uehara decided to establish a Landscape Architecture School in Tokyo, the first landscape architecture school and predecessor of Department of Landscape Architecture at Tokyo University of Agriculture. He remembered that he saw the urgent need of effective land planning for a quick recovery of the city (Uehara, 1983). Another researcher suspects that the craftsmanship in traditional Japanese gardening was not easy to use for the new city and regional planning after Meiji restoration in 1868 (Minomo, 2007).

### 3.3. SHORTAGE OF PRACTICAL TRAINING

Implementation and on-going maintenance are the most essential part of Japanese gardening; therefore it is impossible to design Japanese gardens properly without knowing how to construct and take care of one. It is just like there is no composer, arranger or conductor who does not know how to play musical instruments. The difficulty for academic professors to teach such on-site skills may be another reason why traditional Japanese garden has been ignored, perhaps intentionally, in higher education. Therefore, most college-level landscape architecture program in Japan only teach history and some scientific subjects such as botany, ecology, water management and so on, and some field survey practice at best. Design studios may be offered, but they are allotted much less hours compared to how long they spent in architecture programs.

Four year colleges and graduate schools in Japan have been emphasizing classroom lectures and research, and practical or hands-on training has been left mainly up to vocational schools, with a few exceptions of six-year medical, dental, veterinary and pharmaceutical professional schools. Some new graduate level professional schools have started in Japan only for the last ten years in fields such as law, business and clinical psychology. Architecture programs are usually housed in engineering or art schools, and Landscape architecture programs are usually housed in forestry or horticulture department in agriculture schools. They have not really developed into professional schools yet. Minomo (2007) analyzed that it is difficult to make professional schools in Japanese higher education institutions because; 1) a concept of 'curriculum' is not yet established, 2) faculty members are research-oriented, 3) educational goals are not guaranteed, 4) what to teach for each professional fields is unclear. In recent years, however, the ministry of education culture sports science and technology (MEXT) has been promoting to establish the syllabus and course numbering system in Japanese higher education to follow the international standard, and so this circumstance may change soon.

Uchida et al (2003) surveyed on how landscape architecture programs in Japanese higher education institutions offer practical hands-on training on gardening. They distributed the survey to 25 four-year colleges, 7 junior colleges and 15 vocational schools. And they received answers from 11 four-year colleges, 5 junior colleges and 6 vocational schools. Among those who answered, 6 four-year colleges, 4 junior colleges and all 6 vocational schools had some kind of practical training class in their program. Among the 6 four-year colleges that had a practical training, 3 offered a training to make a supervisor or instructor, 2 offered to make a designer, but just 1 offered a training in actual construction skills to make a good craftsman. The ratio turns around with junior colleges and vocational schools: 2 junior colleges offered training to make a designer and the other 2 offered to make a good craftsman. Just 1 vocational school offered training to make a supervisor or instructor whereas 5 other schools were training students to make a good craftsman. This difference in educational emphasize can be seen in the hours they spent on practical training as well. Vocational schools in average spend 420 hours and junior colleges do 174 hours on practical training, whereas four year colleges spend the total of 70 hours on practical training (Uchida et al., 2003).

Uchida's survey also shows reasons why some higher education institutions cannot offer practical training (the parenthesis shows the number of same or similar answers): lack of site or its location problem (8), shortage of teaching staff and the human resource problems (4), students' safety concerns (3), shortage of time (2), lack of motivation (2), weather issues (2), cost (1), lack of tools (1) and lack of materials (1). On the other

hand, 40 percent of respondents think that handing down the landscaping skills is important. And 40 percents of respondents wishes to do that with a help of skilled practitioners, not just by themselves. About 35 percent of those educators, however, think it is very difficult to offer enough practical training under the current educational system (Uchida et al., 2003).

One school stated that they did not offer a practical training because it was too difficult to provide similar plant materials for all students to practice in a fair condition (Uchida, 2004). It is natural, however, that each individual plant is different; therefore they need to teach students how to make case-by-case judgments. I suspect that those professors may not really know the subject. The career path to be an academic and to be a garden artisan is so different from the beginning that few academics have enough practical experience in this field. A survey on practical experience of college educators who teach professional subjects may be wanted.

### 3.4. STUDYING JAPANESE GARDENS

Those who can read, write and speak Japanese may enter one of those junior colleges or vocational schools to acquire general landscape design and construction skills. As seen in the previous survey (Uchida et al., 2003), most of two-year institutions offer a combination of classroom teaching and practical training. None of them, however, focus on Japanese gardens.

Several educational institutions and professional organizations offer a variety of workshops specifically for traditional Japanese-style landscaping and gardening skills (Amasaki, 2007). All of them, however, are either short-term for a few days to two weeks, or only offered weekly or monthly. These short-term or occasional programs are geared toward those who are already working every day and wish to brush up their skills. There are also other classes designed for those who just wish to expand their knowledge, not to work professionally.

All these workshops are held in Japanese language only, with two exceptions: The annual two-week intensive seminar at JGHH is taught in English, and the one-day on-site workshop following the biennial International Japanese Garden Symposium offered by The Garden Society of Japan provides interpreters. To seek for a professional training from a beginning level, however, one needs to learn Japanese language first and look for a full-time training opportunity for much longer term, either in school or employment. It also requires a proper visa and financial support to live in Japan.

### 3.5. PROFESSIONAL CERTIFICATES

There is a public certification program for skilled garden construction workers, which is called '*Zoen-Ginou-Kentei*, or Landscape Construction Skill Test', the first grade to be the highest to the third grade to be the entry level. The first grade is certified by the Ministry of Health, Labor and Welfare, and the second and third grades are certified by prefectures under the ministry's supervision. For all levels, the test is for an individual examinee to construct a small Japanese-style garden with provided materials on a given site within a limited time. Such skills of actual construction, especially in Japanese-styles, are rarely taught in higher education institutions. Only 1 four-year college, 4 junior colleges and 5 vocational schools offer optional courses to prepare for this exam (Uchida et al. 2003).

Other landscape architecture related registrations include: (a) Registered Landscape Architects - certified by professional organization, started in 2003, 349 registrants as of May 2007, 611 registrants as of April 2014 (CLA, 2008, 2015); (b) *Gijutsu-shi*, or Registered Engineer (RE) in the area of construction or

environment – a national license to practice as a landscape consultant, governed by MEXT, over 30,000 registrants as of March 2008, (c) *Zoen-seko-kanri-shi*, or Landscape Construction Supervisor - a national license necessary to bid in public projects, governed by the Ministry of Land, Infrastructure, Transport and Tourism, and some other privately accredited certifications. However, none of these registration systems directly concerns Japanese garden practice, except the *Zoen Ginou-Kentei* tests skills to construct some Japanese garden elements.

#### 4. The Nature of Japanese Gardening Practice

##### 4.1. DIFFERENCE FROM LANDSCAPE ARCHITECTURE

Japanese gardens practice is design-build. The critical parts of the process are the material selection (Inoue, 2003). Educated improvisation in installation and maintenance are often necessary. These skills are only acquired by experience, and current college education in landscape architecture has little to offer.

In U.S.A., it works differently: Licensed professionals called ‘Landscape architect’ design a site, draw a plan and hand it to contractors who do the actual construction. With detailed drawings and specifications, installation may not be too difficult even for inexperienced workers. The industrialized materials and geometric design also makes a project more efficient to draw, install and maintain (Shimomura, 2006). With such conditions, American consumers regard ‘gardeners’ to be unskilled workers.

In Japan, ‘*Niwa-shi*’ means ‘garden artisan’ although it is often mistranslated as ‘gardener’. ‘*Ueki-ya*’ literary means ‘garden plant merchant’, but it also means garden artisan. When Japanese people hear these terms, they assume craftsmen who went through an intensive vocational training for years to decades. They are scientifically knowledgeable and often educated with traditional arts such as the Way of Tea and flower arrangement. Less experienced ones are called ‘*minarai*’, which means an apprentice or a trainee, typically refers to those who are experienced less than five years. ‘*Naka-narai*, or ‘journeyman’ refers to those who worked for less than ten years as a rule of thumb. They start with simple labor-intensive tasks while watching what their master and senior workers are doing. They are supposed to steal skills from them, not to be taught step-by-step. It is often said that it takes years to learn how to clean a garden properly. It is because Japanese garden sites are so complex in shape and delicate in materials.

##### 4.2. PHYSICAL TRAINING FOR JAPANESE GARDENING

In the interview about how to train new people in Japanese gardening business, Mr. Fujii, an experienced garden artisan directing over 100 staff, mentioned that his new employee would spend at least three months to learn manners starting from how to greet their colleagues and customers. Next, they would spend months learning how to clean the site and tools, how to carry heavy things effectively. And then, they learn how to choose right tools and materials, and how to use them appropriately (Yamaguchi and Fujii, 1982). Mr. Fujii also mentioned an episode of another famous garden artisan in Kyoto: He always had his new apprentice keep on crashing rocks into soil all day for three to six months. He also made young people carry water-filled buckets on a shouldering pole and irrigate his nursery, instead of letting them use a sprinkler or even a hose.

Japanese garden design looks so delicate that people often imagine that the job must be also gentle and delicate. It is in fact labor intensive. Most gardening works still has to be done by

human power because the site is usually too small complex to use cattle or a motored vehicle. Simple pruning may require a gardener to climb up the tree because ground is often too irregular to set up a stepladder. Power tools and machines are not helpful because each material has its individual shape and quality and each site has a particular condition. This is why the physical training becomes imperative.

The author interviewed an American apprentice who was working for Ueto the sixteenth, one of the most famous garden artisans in Kyoto. The apprentice was doing labor intensive works for ten hours every day or more, six days a week. He had been through such a training period for six years before he became skilled enough to work for himself in the US as a Japanese garden artisan. That apprentice already spoke Japanese fluently when he joined the company. He seemed to be a quick learner as well as an industrial trainee because six years was shorter than a usual training period in the industry. When he asked around his senior garden artisans about their experience in related arts, one of them answered that he had studied flower arrangement ‘only’ for seventeen years. (Brown, 2001. Personal communication).

##### 4.3. EXPERIENCE-BASED IMPROVISATION

It is important for a garden artisan to be knowledgeable and comfortable in related arts such as architecture, the Way of Tea and flower arrangement. In the older times in Japan, some educated people such as priests, tea masters, highly ranked samurais and imperial family members played the role of the designer or master planner. They provided a grand design to the garden artisan, and the artisan selected right materials, brought them in, and determined construction details on site.

These garden artisans often came from lower social rankings, even from the lowest discriminated classes called ‘*kawara-mono*’, which literary meant ‘riverbank residents’. They made their way up to become recognized garden artisans solely by their talent and familiarity with natural features such as rocks and water around their habitat (Shinji, 1970). Some garden artisans were so trusted that they were often allowed to plan the entire project themselves. There were also Zen priests called ‘*ishidate*’ literary meaning ‘stone setters’ who specialized in garden construction.

Japanese garden creation requires on-site judgments and improvisation. Japanese gardens deal with natural materials as they are; therefore the garden professionals often have to decide the design after they see the available material and make the best out of it. They have to make millions of case-by-case judgments on the spot and treat materials differently (Inoue, 2003). They also have to take every surrounding environment into consideration, natural or human-made, tangible or intangible. Only educated and experienced artisans are able to perform such complex tasks like conducting orchestra.

Such complex tasks cannot be explained in drawings or in a written manual. It makes no sense to teach in a classroom, either. It is just like the way a musical scores alone cannot reproduce a great piece of music. Mr. Dangi, the educational chief of Kyoto Prefecture Gardening Businesses’ Association said that “Some technique is just way too complex to explain verbally. It is typical for garden artisans to tell their apprentice just to watch, learn and practice themselves.” (Personal communication, 2008)

For example, Japanese garden artisans often carry a huge boulder that weighs several tons just by one piece of rope. They have to find the center of gravity of a boulder, but it is too complex to calculate or point out by theory. “They just need to acquire an intuition by experience” (Fujii, 1982).

## 5. Issues for International Students and Interns

### 5.1. VISA AND WORK PERMITS

The succession of such sophisticated skills in Japanese gardening is in danger. Most Japanese young people nowadays do not have enough patience for such time-consuming and hard trainings, and they would rather choose modernized college education and jobs in the office. The salary and working conditions such as work hours are not generous enough for the skill, knowledge and experience that the job requires.

The job market for the Japanese garden industry is not promising, either. Clients decreased because of the change of lifestyle and shortage of land: People tend to demolish private gardens and convert them to the site for apartments or office buildings. It is understandable because having a garden would not produce any income, but it just raises the owner's property tax. In this situation, Japan may not provide enough job opportunities. Traditional garden artisans therefore started to look for 'Japanese garden' projects outside Japan. Some of them are interested in educating foreign enthusiasts. They all know that the everyday maintenance is imperative in Japanese gardens, and it would be much more efficient if local people can do that job instead of hiring artisans all the way from Japan.

Despite the willingness of those leaders to accept and teach international apprentices, they often have to give up hiring them just because they could not obtain a proper work-permit from the Immigration. Many participants in the fifth International Japanese garden symposium mentioned in the discussion that Immigration Authorities would not admit *Hitori-oyakata*, or sole-proprietary artisans or small private companies as a qualified sponsor to accept international interns" (Toyoda et al. 2007). The author interviewed an official of the Ministry of Health, Labor and Welfare of Japan, who is currently developing a foreign workers' training program, and he said that landscaping is not considered an area to accept international interns. According to the law at that time, we should only accept foreign workers in the areas such as information technology and health care, where the job is universal (personal communication, 2008).

### 5.2. CULTURAL GAPS

In the interview with Mr. Touemon Sano the sixteenth, known as Ueto, he said that "Japanese and westerners are fundamentally different. Japanese live in a rice-making cycle, which is spring to fall, and westerners live in a wheat-making cycle, which is fall to spring" (Sano, 2004, personal communication). He also emphasized the importance of knowing the natural climate, and to know the language to really understand the culture. He has created many Japanese gardens overseas and have accepted many interns from western countries; therefore his words conveyed the difficulty he has experienced to share the idea with his colleagues from different cultures. He repeated all over his book that it was impossible to write 'methods' in textbooks and manuals (Sano, 1999)

Mr. Dangi has taught several westerners in his vocational training programs at the Kyoto Prefecture Gardening Businesses' Association. He suggested that we should provide different teaching method for different people. He said that "Westerners prefer to know theories first. If that's the case, it may be more efficient for them to study in a classroom for a couple of years at a college or some school, and find a job to receive a hands-on training. This path would allow them a time to learn the language as well. The training would be so difficult if they don't understand Japanese" (Dangi, 2008, personal communication)

The author completely agrees to Mr. Dangi's opinion, from

her own experience of teaching American students Japanese garden design. The 80 first-timer American students successfully learned the concept of Japanese design: They survived tea ceremony lessons with unfamiliar manners, a strict overnight meditation session at a Zen Temple, and many other cultural mysteries and physical hardships. They became able tolerate those 'strange' forms and rules after they understood the reasons and philosophy behind them (Suzuki, 2004).

### 5.3. A CASE IN THE WAY OF TEA

A good example of internationalization of a traditional art is found in *Chado*, or the Way of Tea. One of the leading schools for this art called *Ura-Sen-ke* has developed their school into the one and only higher education institution in Japan for this art since 1962. The program is a combination of classroom study for a half day and practical training for another half. All students live in a dormitory and eat three meals together, which somehow inherit the old tradition of apprenticeship. The international students receive the same comprehensive education as domestic students do, including the dormitory life, except they have a special classes taught in English.

In a traditional teaching of the Way of Tea, new students have to become an apprentice of a tea master of each area. As the students' skill develops, the master gives so called *Menjo*, or a license signed by the grand tea master. Apprentices climb up many steps, and eventually they will be allowed to teach their own apprentices when they reach to a certain level. In such traditional system, the education only relies on hands-on practice. Students have to repeat a certain forms again and again until they feel comfortable. Some teachers never explain anything, but just show them how to do. Such 'watch and learn' system may have worked for older generations, but it could be too difficult for young people who are used to knowledge and method based learning in a classroom. Needless to say, it should be confusing for non-Japanese students who prefer to learn by logics.

*Ura-sen-ke* family has been innovative in its history: The 11th grand tea master invented *Ryu-rei*, or a style of tea ceremony using a table and chairs, as early as in 19th century to welcome new foreign visitors at Meiji Restoration. The 13th master opened the Way of Tea for women, and the 14th master started to teach the Way of Tea to foreigners. The 15th and the previous grand tea master, *Genshitsu Sen*, is known for his international activities to spread their philosophy to the world. (Ura Senke, 2008). The 16th or present grand tea master, *Soshitsu Sen* is known for his versatile activities and creativity such as using utensils from overseas.

*Midori-kai*, or the special course exclusively for international students at the *Ura-Senke Chado School* seems to provide solutions for all three obstacles typically hinder international students from learning traditional gardens in Japan - visa, language and money: 1) The course is officially accredited full-time curriculum under the regulation by the government and they can issue an official certificate of 'authorization of resident eligibility' for international applicants to apply for a student visa; 2) Although it would be helpful for students to know conversational-level Japanese, the language would not be crucial because the classes and lessons are taught in English; 3) All international students are offered full-scholarship by the institution. The tuition and dormitory fee including three meals are waived and the 100,000 yen stipend is paid each month.

Such a privilege is only given to five people each semester; therefore the admission is competitive. Applicants have to be already active in one of overseas branches of *Ura-senke* school, and they have to be recommended by their branch to apply for *Midori-kai*. After completion of one year course, they have to go

back home and be active at the branch in order to receive another recommendation for the second year of study: They can renew up to three years. The graduates from Midori-kai have to become overseas instructors to spread the Ura-Sen-ke style tea ceremony, and they are expected to contribute as a cultural ambassador for the Way of Tea. If they fail to do so, the future applicant from the same branch may not be admitted. Since all students have such serious professional commitment, nobody ever dropped out from Midori-kai (Ura-senke International Division, 2008, personal communication).

## 6. Conclusion

Ura-Sen-ke Midori-kai shows the good example of system of teaching traditional gardens to international students most effectively and efficiently in given situations. Such system promotes internationalization without legal, verbal or financial obstacles, and provides exceptional opportunities only to those who are really committed. Japanese garden industry may want to learn from this model and go further to enable practical training under current framework.

It is difficult to learn Japanese gardening in school only, but higher education institutions may provide practical training opportunity with the following scheme: Full-time students with a student visa can work as much as 28 hours per week during the school period, and they can work full time during vacations under the current immigration law. They can work for any employer as long as they are not illegal operation or in a sex-trade. (Immigration Agency of Japan, 2015). To maintain a student visa, the immigration agency requires students to enroll at least six courses per week, which is usually an equivalent of 12 units. Higher education institutions can offer six lecture or lab courses to teach theory and/or language and allow students to spend the remaining hours to receive training under an artisan and get paid. Although the payment for 28 hours a week may not be enough to make a living and pay tuition, it would certainly help students financially besides giving them a chance for a practical training.

Optional Practical Training after graduation, as permitted in the U.S. for one year, could be valuable in terms of acquiring certain skills. Unfortunately, however, the current policy by the Ministry of Health, Labor and Welfare and the Ministry of Justice in Japan to accept foreign trainees are only for ODA, or Official Development Assistance, purpose: They only approve the technical area that may helpful for the economy and welfare of developing countries. The government eventually should, however, consider the importance of cultural exchange and preservation of our own tradition as well. In the case of Japanese gardening overseas, the culture that Japanese people have been proud to the world for such a long time is quickly decaying: They are also misdirected because of the lack of properly trained artisans on site. Concerned experts have been working on it on volunteer basis, but such individual efforts have a limit.

Financial concern is a big issue when one considers studying abroad. Even though it could not be as good as the Ura-Sen-ke's scholarship, some financial aid should be offered to acquire good students in this world competition. The government and the industries should provide more scholarship on condition that the recipient will contribute to the society in one way or other. In case of traditional gardens, the condition may be that the recipient will continue to contribute to maintain the tradition of their trade and spread the Japanese culture to the world, just like the Midori-kai's model. It is urgent to invite well-motivated apprentices for industries suffering the shortage of successors.

The same suggestion may be given to higher education institutions: Currently MEXT provides scholarship by the ODA

budget for selected international students, but the amount of the scholarship is reduced almost every year because the decreasing need of ODA. It is giving a big anxiety to the scholarship recipients. Universities in Japan also concerns their good students would be taken by other institutions such as the top American universities that offers a sufficient scholarship. Since universities in Japan do not have not yet established the self-supportive financial system like some private universities in the US, the government should keep providing good financial aid for international students for a while. The government recently spend some budget for selected university for internationalization, first as 'Global 30 Universities' from 2009 and then 'Super Global Universities' starting in 2015, but the items to spend those funds for is so limited that the money could be wasted for one-time symposium and so on. The government should consider allowing the fund to be used for scholarship or some other means to continuously attract good students to Japan. It is no longer for ODA purpose but for our own sake for academic advancement and for internationalization. It is also important for higher education institutions provide thorough supervision and follow-up for those scholarship students to make sure the citizens' tax are not just given away for no good.

Good, well-motivated and diligent international students are and giving a lot of good influence to domestic students in some Japanese universities. It is also happening in traditional arts and crafts industries. Traditional arts and crafts including Japanese gardening may be utilized as a promotional material to attract international students to Japan. Higher education institution may provide a bridge for the Japanese garden apprenticeship applicants to obtain the legal status to live and work in Japan, and the apprenticeship may support the students financially. It will help all three parties; students, higher education institutions and the Japanese garden industry.

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# Investigation of Environmental Factors Influencing the Deterioration of Nikka Stone in Koshien Hall

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**Keywords:** Nikka Stone deterioration, field survey, algal contamination, detachment, salt efflorescence, freezing and thawing

**Abstract:** Environmental factors influencing the deterioration of Nikka Stone used in Koshien Hall were investigated through field surveys of current conditions. The main results obtained were as follows:

1. Deterioration of Nikka Stone used in Koshien Hall was classified into three categories: algal contamination, detachment, and salt efflorescence.
2. There are several possible causes of detachment, including freezing/thawing cycles caused by high stone-water content and high concentration of evaporation from the surface of water from the surroundings, salt efflorescence, and so on.
3. Small quantities of rainfall and sunshine can contribute to algal growth.

## 1. Introduction

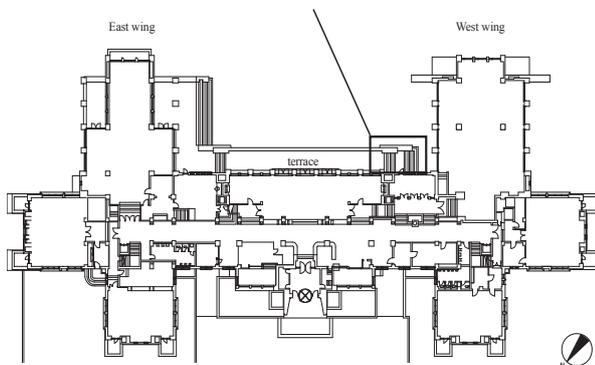
Koshien Hall (formerly Koshien Hotel), built more than 80 years ago, is listed as a Heritage of Industrial Modernization site and Important Cultural Properties. It is used as the campus of the Department of Architecture of Mukogawa Women's University. One of the characteristics of Koshien Hall is that a tuff, referred to as Nikka Stone, was used on the exterior of the building. It is said that architect Arata Endo used Nikka Stone to decorate the exterior and interior because it is soft and easy to carve (Miyake, 2009).

Koshien Hall has been renovated several times and the

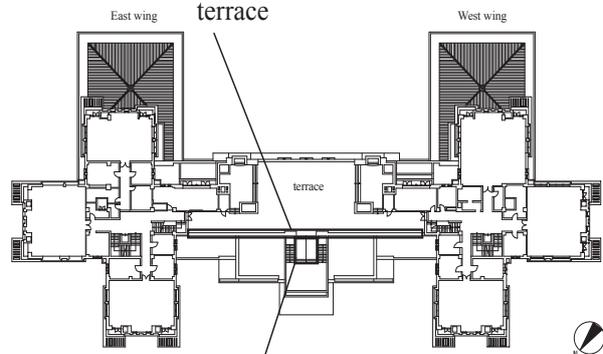
Nikka Stone has also been replaced and repaired<sup>1</sup>. However, much of this stone has deteriorated, especially on the exterior. Although the stone has undergone marked deterioration and has been replaced with a new stone, it is becoming difficult to obtain a new stone given that many Nikka Stone quarries have ceased to operate. Existing materials must therefore be maintained in use for many years, instead of being replaced.

There are generally several factors contributing to stone deterioration, such as rainwater, solar radiation, and temperature variation (ex. Ogura et.al., 2011, Miyauchi et.al., 2008, and Nakamura et.al., 2008). In order to maintain existing materials in use for extended periods, it is important to minimize the

Point A: West stairway of the terrace at the south side in front of the lobby in 1F



Point C: Crest table on the north side of the 3F roof terrace



Point B: Center stairs on the 2F roof terrace

Figure 1. Plan of Koshien Hall and points of the observation (left: 1F plan, right: 3F plan)

influence of deterioration factors.

In order to prolong the lifetime of Nikka Stone, this study quantitatively and qualitatively describes the environmental factors contributing to deterioration of Nikka Stone, proposing a strategy for its conservation. In the first stage of this study, the current condition of Nikka Stone was investigated. Special attention was paid to quantitative analysis of the impacts of water content, reflected solar radiation, and nocturnal radiation. The ultimate goal of this study is to contribute to the establishment of a conservation and maintenance program using traditional architecture.

## 2. Characteristics of Nikka Stone

### 2.1. GENERAL CHARACTERISTICS

The Nikka Stone used in Koshien Hall was produced in Kanagasoma-machi, Komatsu (Ishikawa Prefecture). Nikka Stone is a volcanic tuff, which has lower specific gravity, higher water absorption, and lower compressive strength than granite and andesite (Kishitani, 1987). The tuff is also characterized by high burning resistance and low heat conductance. Compared to Oya Stone (another tuff), Nikka Stone is dense and has high burning resistance (Yoshioka et al., 1982).

### 2.2. WATER CONTENT

Most stone deterioration is caused by the presence of water (Figure 2) and materials with high water absorption capacities tend to maintain water to a greater degree. Water-related characteristics are thus important factors in this study.

The maximum water content of the Nikka Stone used in Koshien Hall was measured and the process of water absorption was observed<sup>2</sup>. Results indicate that water on the surface of the stone moves quickly while water inside the stone moves slowly. Water content saturated at around 23%.

## 3. Current Condition of Nikka Stone

### 3.1. RELATIONSHIP BETWEEN ENVIRONMENTAL FACTORS AND TYPE OF STONE DETERIORATION

Phenomena affecting Nikka Stone at present include detachment, flaking, powdering, and cracking caused by the decay of components; these lead to changes, such as hardening of the stones (Nakamura et al., 2012 and Young et al., 2004). There are also several types of detachment caused by changes in stone

water content, by high or low temperatures and humidity conditions, and by stone freezing and thawing due to changes in surrounding environmental conditions. Scaling or salt efflorescence on the stone surface represents another type of deterioration. This leads to other features of stone decay, such as powdering. These phenomena are caused by existing source material and cycling of wetting and drying conditions.

Biological deterioration is also considered in this study. Flaking, powdering, pitting, and stone color changes are known to be caused by bacterial or fungal growth (Caneva et al. (ed.), 2009). Algae and lichen lead to surface contamination and encrustations, contributing to a change in image from that conceived of by architects. In addition, growth of moss and higher plants causes physical damage to stones. Biological growth occurs under conditions of minimal light and with the persistence of moisture.

This chapter reports observation results of deterioration conditions of Nikka Stone in Koshien Hall. Chapter 4 reports on measurement of solar radiation, nocturnal radiation, and rainfall (the environmental factors shown in Figure 2) and the consequent moisture conditions of stones; the relationship between environmental factors and type of stone deterioration is examined in Chapter 5.

### 3.2. TYPES OF DETERIORATION

In order to understand the relationship between stone deterioration and environmental factors, the current degree of deterioration of Nikka Stone was investigated visually and classified into several types (Table 1). Additionally, current environmental conditions causing deterioration were investigated. The typical deterioration observed at points A (the west stairway of the terrace at the south side in front of the lobby in 1F), B (the center stairs on the 2F roof terrace), and C (the crest table on the north side of the 3F roof terrace) in Figure 1 were analyzed in detail in section 3.3.

After investigating the entire building, deterioration was classified into three types: algal contamination, detachment, and salt efflorescence (Table 1).

#### (1) Algal contamination

Marked algal growth was observed on the floor stones on the surrounding of West Hall (Figure 3a). Here, most of the Nikka Stone was covered by moss. The ends of the eaves on the west side exterior wall of the West Wing and east side exterior wall of the East Wing were darkened by algae, while the crest tables of the barony wall under the eaves were not darkened (Figure 3b). There are a number of water trace lines caused by algae and dust on the eaves on each south side (Figure 3c).

The results of the environmental survey indicate algal contamination in shadowed areas without direct solar radiation and in places where water persists for long periods of time.

#### (2) Detachment

Several types of detachment were observed. Large detachment tends to occur on horizontal surfaces, such as the stairs of the 2F roof terrace (point B, Table 1) and the crest table on the north side of the 3F roof terrace (point C, Table 1). Fine detachment, such as flaking, was observed on the surface of the outside floor on the east and west sides of the West Hall (Figure 3a), on the exterior steps at the front entrance, on the stairway of the terrace at the south side in front of the lobby in 1F (point A, Table 1 and Figure 3d), and in other locations. Algae were not observed on these flaking areas. Detachment with salt efflorescence was observed on the lower side of the pillars on the south side terrace of the 1F lobby (Figure 3a) and in other

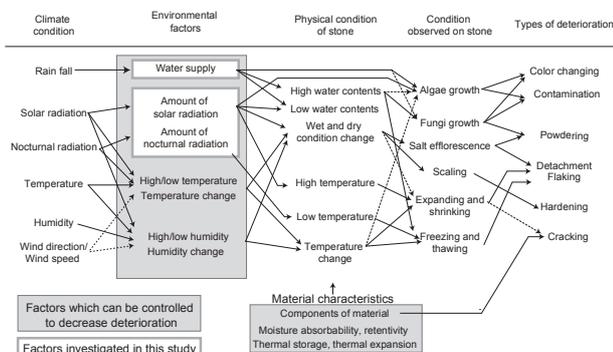


Figure 2. Relationship between environmental factors and type of stone deterioration

locations.

Several factors are thought to cause detachment, such as freezing and thawing, salt efflorescence, and others.

### (3) Salt efflorescence

Salt efflorescence appeared in small limited areas, such as on the lower parts of pillars on the south terrace of 1F (Figure 3e) and on baseboards under the entrance doors of 3F (Figure 3f). The causes of salt efflorescence include repeated cycling of dry and wet conditions, i.e., changes in moisture content of materials and temperature changes in the presence of salt.

### 3.3. DETAILS OF DETERIORATION AT POINTS A, B, AND C

In order to quantify deterioration and contributing environmental factors, detailed investigations (including measurement of sky view factors, water content, and observation of surface conditions of Nikka Stone) were carried out at points A, B, and C (shown in Figure 1). These results are shown in Figure 4.

#### (1) Point A

Fine detachment flaking was observed only on the north side of the upper stairs (Figure 3d, Figure 4: the inner side of the dotted line at area I of point A). The flaking area comprised approximately 1/3 of total area. Other areas were in good condition. Water repellent materials had been applied to the surface of the Nikka Stone here in 2009<sup>1</sup>. Even now, water films are observed during rain; the effect of the water repellent thus remains. Visual observations confirmed that there is no salt efflorescence.

#### (2) Point B

Steps: Algal contamination and detachment of several sizes were observed. Nikka Stone was significantly darkened by thick algal growth (Figure 3g). Compared to the top stairs in area I of point B in Figure 4, there was much more algal growth on the second, third, and lower stairs. In addition, large detachment was observed in area II; one instance was about 15 cm wide and more than 5 mm thick.

Crest table: Algal contamination and detachment were observed. Algal growth was less extensive than on the steps. There were several instances of small detachment compared to the steps, some of which had been repaired with mortar. The crest tables of III and III' in Figure 4 were replaced with new materials in 2013 because of serious deterioration.

#### (3) Point C

Algal contamination was observed. This was extensive in the area near the west and east buildings and was less extensive at the center. Although detachment is now rarely observed, many spots had been repaired with mortar and resin. Algal growth was observed in the chinks between the original stone and mortar.

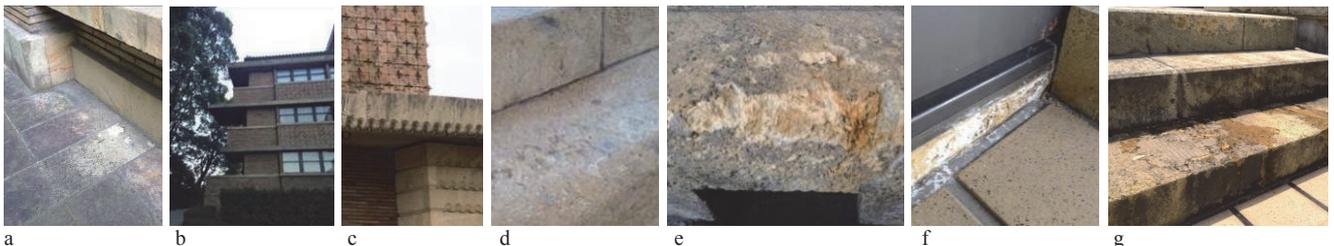
### 4. Detailed Investigation of Environmental Factors Influencing Deterioration

Environmental observations were carried out at places where typical deterioration was observed during the preliminary investigation (shown in Figures 1 and 4, points A, B, and C). The main types of deterioration observed at these points were detachment and algal contamination.

The relationship between environmental factors and deterioration is shown in Figure 2. The environmental factors

Table 1. Current state of deterioration in Koshien Hall

Type of deterioration	Condition	Features of the place where deterioration was observed.	Notes
Algal contamination		Places where rain water drips. For example, the end of the eaves in both wings, the east side wall of the west wing, steps and crest table in the roof terrace.	- Algal contamination was observed in places where rain drip was significant. - Abundant algal growth was seen in places shaded from direct solar radiation by other buildings and trees.
Detachment		Exterior wall at the front entrance, steps on the south side terrace of the West Hall, lower side of the pillars on the south side terrace of the 1F lobby, steps of roof terrace in 2F, etc.	- There are several types of detachments depending on the area. - Compared with contamination of algae, areas of detachments are limited. - Salts efflorescence was observed on the lower part of the pillars on the south terrace in front of the West Hall at the same time.
Salt efflorescence		Lower part of pillars on the south terrace of 1F, baseboards in the 2F roof terrace, baseboards under the entrance doors of 3F, etc.	The salts were identified as sodium sulfate, which causes serious deterioration of porous materials. Salt efflorescence was observed where water penetrates easily.



a) Algal contamination and detachment at the floor stone, b) Algal growth in the west side of West Hall, c) darken trace of the eaves, d) flaking on the stairway of the terrace at the south side in front of the lobby in 1F, e) detachment with salt efflorescence on the lower side of the pillars, f) salt efflorescence on the baseboards under the entrance doors, g) detachment and algal growth at the center stairs on the 2F roof terrace, point B.

Figure 3. Deterioration conditions

leading to algal contamination are thought to be high water supply and resulting high water content of materials, lack of dry conditions, and solar radiation for plant photosynthesis. However, large quantities of solar radiation in fact prevent algal growth. Detachment can be caused by freezing and thawing of water contained in materials, expansion and shrinkage of materials, and salt efflorescence, among other factors. All of these are affected by the presence of water, temperature conditions, wetting and drying cycles, and other such influences.

In order to elucidate the relationship between the effect of these environmental factors and deterioration, sky view factors and material water content before and after rain were observed.

Sky view factors, calculated from fish eye photos (Futagami and Uno, 2011), show the ratio of the sky area that is not shadowed by surrounding buildings, trees, or other features to the whole sky. Using these factors, we can quantitatively calculate the influence of solar radiation (especially diffused solar radiation) and of nocturnal radiation that leads to a decrease in stone temperature. High sky view factors equate to high influence of both solar radiation and nocturnal radiation. In addition, the influence of direct solar radiation was accounted for in the sky view photos.

The water content of stone is a consequence of environmental conditions, such as water supply, amount of solar radiation, temperature changes. The presence of water causes contamination by biological growth, detachment by freezing and thawing, and salt efflorescence.

Freezing and thawing occur easily under conditions of low stone temperature resulting from low air temperature and high nocturnal radiation. The same measurements as for observation of algal growth were therefore conducted, and sky view factors and material water content before and after rain were observed. In addition, the total days when freezing could occur were counted.

#### 4.1. CLIMATE OF NISHINOMIYA CITY

Nishinomiya city is located in a warm-temperature region. Table 2 shows the number of days when outdoor temperature was lower than 0°C and 4°C, respectively in Nishinomiya city. When considering nocturnal radiation, freezing and thawing can occur when air temperature is higher than 0°C, because surface temperature becomes lower than air temperature. Maximum nocturnal radiation is about 93W when the whole sky was clear (without clouds) (Hokoi et. al., 2002), leading to surface temperature decreases at 4°C. When there is large nocturnal radiation under clear sky conditions, even if the outdoor air temperature is 0–4 °C, the surface temperature can be below 0°C.

Table 2. Number of days below 0 and 4°C in Nishinomiya city

Year	0°C	4°C
Dec. 2004-March 2005	8	60
Dec. 2005-March 2006	11	80
Dec. 2006-March 2007	0	51
Dec. 2007-March 2008	4	59
Dec. 2008-March 2009	1	51
Dec. 2009-March 2010	4	53
Dec. 2010-March 2011	8	76
Dec. 2011-March 2012	1	71
Dec. 2012-March 2013	9	77
Dec. 2013-March 2014	3	61

\* The data obtained the website in Japan Meteorological Agency.

According to meteorological data for the last decade, the number of days when temperature was lower than 0°C (Table 2) was 4.9 days per year on average, with 63.9 days when the temperature was lower than 4°C. It is therefore clear that there is high potential for freezing and thawing of materials.

#### 4.2. INFLUENCE OF ENVIRONMENTAL FACTORS

##### 4.2.1. Nocturnal radiation, solar radiation, and rain

In order to quantify the influence of nocturnal radiation and solar radiation, sky view factors were measured at three points. Figure 5 shows the ratio of sky view factors. The following are sky view factor conditions at each point.

##### (1) Point A

Sky view factors were low (between 10–17 %) and part of the zenith was covered by an eave. Rain therefore rarely fell on the steps and there was less solar and nocturnal radiation.

##### (2) Point B

The sky view factor was high (between 42–69 %). Rainfall, solar radiation, and nocturnal radiation were therefore high.

##### (3) Point C

The sky view factor was high (between 72–74 % at the center and between 26–36 % at the west and east sides). A lot of rain therefore fell here, and solar radiation and nocturnal radiation were high. Closer to the sides of the west and east buildings, the sky view factor was lower because of the presence of a large tree on the north side of the west part of the building.

##### 4.2.2. Water content of materials

The measurement of material water content was carried out after 12 sunny days without rain (for dry stone conditions), and after rain (for wet stone conditions) <sup>2</sup>. Figure 6 shows the results obtained. The contrasting color density shows the degree of water content. From the results, the following observations are clear:

##### (1) Point A

Water content was low (around 8–15 % before rain and around 10–18 % after rain) everywhere; in particular, the water content of places under eaves was relatively lower, even after rain.

##### (2) Point B

The water content was around 15–18 % (before rain) and 15–21 % (after rain) at the top stair, while that of steps below the second step was 15–30 % (before rain) and 19–32 % (after rain). The water content of the lower side is obviously high, and in area II was over 23% (saturated conditions). These points were thus wet all the time.

##### (3) Point C

Water content was low everywhere, at 2–12 % before rain and 3–14 % after rain. It should be noted that, even when there was significant rain, this location dried out quickly.

##### 4.2.3. Observation of drying process after rain

In order to consider the relationship between degree of deterioration and environmental factors, especially related to water, the drying process was investigated after rain (Figure 6).

## (1) Point A

Only places under the eaves do not receive much rain and their water content was slightly lower than that in other areas.

## (2) Point B

Steps: The areas of color change induced by water increased a few days after rain at the lower part of the steps. On the third step from the bottom, the area of color change induced by water did not disappear by ten days after a rain event.

Crest tables: The stones were moist, but no holes with water or wet stains were observed.

## (3) Point C

There were several gullies with little water. However, color change of the stone surface could not be clearly distinguished because of algal contamination.

## 5. Relationship between Current Deterioration and Environment

## (1) Point A

Fine detachment, such as flaking, was observed on the north side of the upper stairs. There was no salt efflorescence noted via visual observation.

Areas with detachment damage at area I in point A in Figure 4 were shadowed from rain. It is therefore thought that the water supply from the surface is small and that water may originate from neighboring rain-exposed stones. Although these areas have low sky view factors compared to other areas of B or C, the south side is open and the area is influenced by direct solar radiation at noon. When there is a water source, which should be from the back side of the stone, constant evaporation from the surface of the stone under the eave should occur. Additionally, water repellent would prevent evaporation from the surface, while evaporation would be concentrated and would continue in deteriorated areas without water repellent.

Factors contributing to detachment damage at point A should therefore be increasing temperature, drying caused by solar radiation, concentrating evaporation on the surface along with water supplied from nearby stones, and wetting/drying cycles. The effect of water repellent on salt efflorescence requires more detailed investigation and experimentation.

## (2) Point B

Steps: Detachment and algal contamination were mainly observed. Water content was high and area II in Figure 6 was always wet. Because wetness appears and spreads a few days after a rain event and continues for several days, water supply is too excessive to be explained by rainfall onto the surface. Since there are wide 3F roof terraces without roofs on the upper side of point B, the rain water falling to the 3F terrace can seep through the mortar joints to the lower steps. After the surface of the terrace has dried, water might remain under the tiled floor of the 3F roof terrace and flow to the back side of the stone on the steps. This may be the source of water leading to the high water content of the steps. Water supply is substantial and persists for days.

Because of this constant water supply and high sky view factors, freezing and thawing occur and damage the stone. However the high heat capacity of Nikka Stone that absorbs solar radiation during daytime works to maintain heat and can buffer the decrease in surface temperature. These effects should be carefully simulated. High water content also causes substantial algal growth. It is therefore better if water supply is decreased.

Crest tables: Detachment (of several sizes) within the stones, which are filled with mortar, are the main causes of deterioration. This area has high sky view factors and slightly low water

content. Slightly high water content was measured after rain only on the north side of the crest table stone in III and III'.

Except at the two latter locations, some halls have been filled with mortar, which tends to have low water penetration and low water content. Although rainfall on the stone is high, it drains immediately afterwards and the upper portions dry out (except in III and III'). In order to prevent algal contamination, use of water repellent can therefore be effective. However, some water remains on the surface in the small hall, and water content can be high, causing freezing and thawing damage; the surface should therefore be smoothed with a material like mortar or resin.

Because III and III' stones are laid at a lower position than other stones, rainwater flows on to them and persists for a long period of time. In addition, in parts of III and III' that were replaced with new material last year, the stone surface is not covered by mortar or resin and water can easily penetrate. These parts receive substantial water from the upper side, so waterproofing should be applied to the surface and to the back part. There is currently no detachment; however, there is a high possibility of deterioration caused by freezing-thawing occurring in future.

## (3) Point C

Algal contamination and detachment were mainly observed. Because the condition of the central area is the same as in upper areas of point B with high sky view factors and low water content, freezing and thawing may be the main cause of deterioration.

Algal contamination is significant near the building, especially on the west side, because of the presence of a large tree on the north side. It is thought that algal growth is influenced by both rain and by limited solar radiation. To counter this, in addition to a surface repellent, controlling tree growth to adjust solar radiation can be effective at reducing algal growth.

This location could be influenced by repeated drying and wetting cycles. Water content on the west side was slightly higher than on the east side, because there are large trees on the north side.

## 6. Conclusion

In this paper, the influence of environmental factors on the deterioration of Nikka Stone in Koshien Hall was investigated and three areas where typical deterioration was observed were investigated in detail. The main results are as follows:

- 1) Deterioration of Nikka Stone was classified into three types: algal contamination, detachment, and salt efflorescence.
- 2) The cause of detachment on the west stairway of the terrace at the south side in front of the lobby in 1F was presumed to be the concentration of evaporation on the surface, with water supply from surrounding stones that have been wet by rain.
- 3) Deterioration on the steps of the central stairs on 2F roof terrace was due to algal contamination and freezing-thawing caused by continual wet conditions. From circumstantial evidence, the water can be presumed to have been supplied from the back side terrace. The management of water supply from this area in 3F should therefore be considered.
- 4) The deterioration of the crest tables on the 3F roof terrace was due to algal contamination and detachment. Detachment can be caused by freezing and thawing influenced by high sky view factors and rain. Algal growth was caused by high sky view factors and significant rainfall. Application of waterproof materials on the surface to prevent water penetration should be effective. In addition, controlling the growth of trees to increase solar radiation is also effective in decreasing algae on the crest tables besides the building.

These results indicate that detachment damage is larger and more serious than damage due to algal contamination. Management to prevent detachment by controlling water supply is urgently needed.

More detailed investigations also need to be conducted to elucidate the mechanisms of deterioration, to evaluate the effectiveness of water proofing materials and mortars for conservation, and to determine management strategies for water drainage.

### Acknowledgements

The information on past conservation works conducted in Koshien Hall was provided by Mr. T. Nishikawa at Nakaseki Co., Ltd. and Ms. H. Miyazaki at the Administrative Affairs Division of Koshien Hall. The drawings of Koshien Hall in Figures 1, 4, 5, and 6 were provided by Prof. H. Tembata at the Department of Architecture, Mukogawa Women's University.

### Notes

1. Past preservation of Koshien Hall: In 1966 and again in 1990, preservation actions were carried out in the entire building. There is no information about the preservation in 1966. In 1990, the Nikka Stone steps on the 3F roof terrace and the central steps of the 2F rooftop (point B, Table 1) were replaced. Consolidation and waterproofing of the Nikka Stone were conducted in 2009. A report about the conservation of the Nikka Stone in Koshien Hall by Nakaseki Co., Ltd. was referred.
2. The TDR TRIME-FM3 and a surface probe by Tohoku Electronic Industrial Co.,Ltd. is used for measurement.

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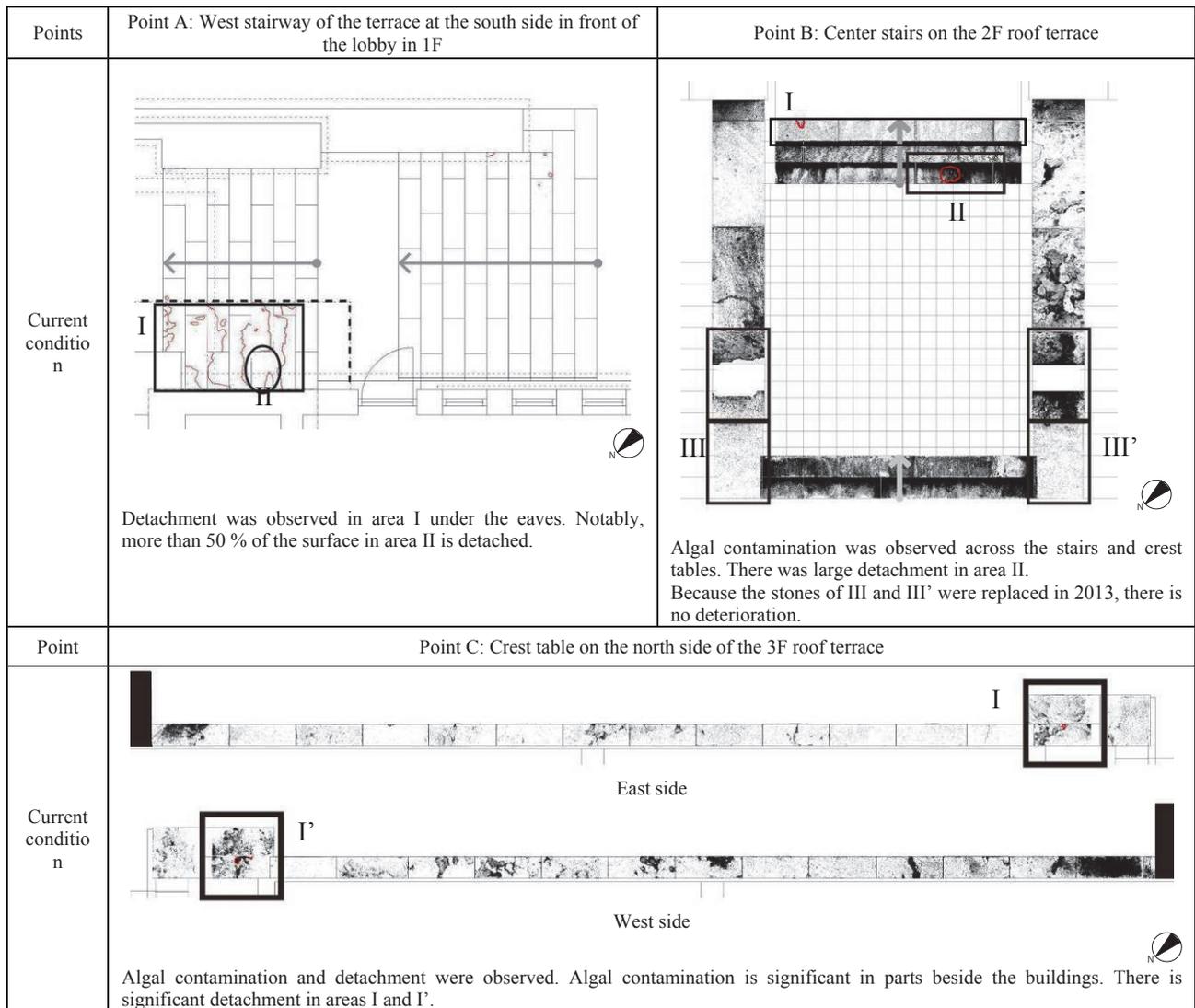


Figure 4. Current conditions in areas of typical deterioration at points A, B, and C

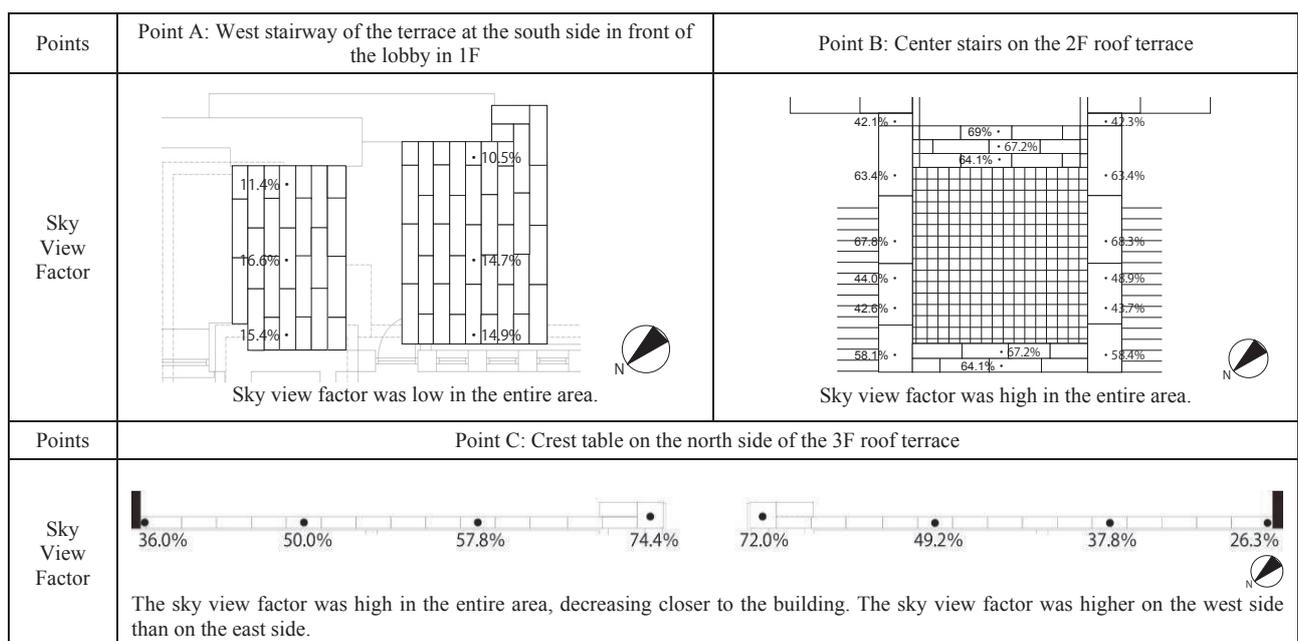


Figure 5. Sky view factor in areas of typical deterioration at points A, B, and C

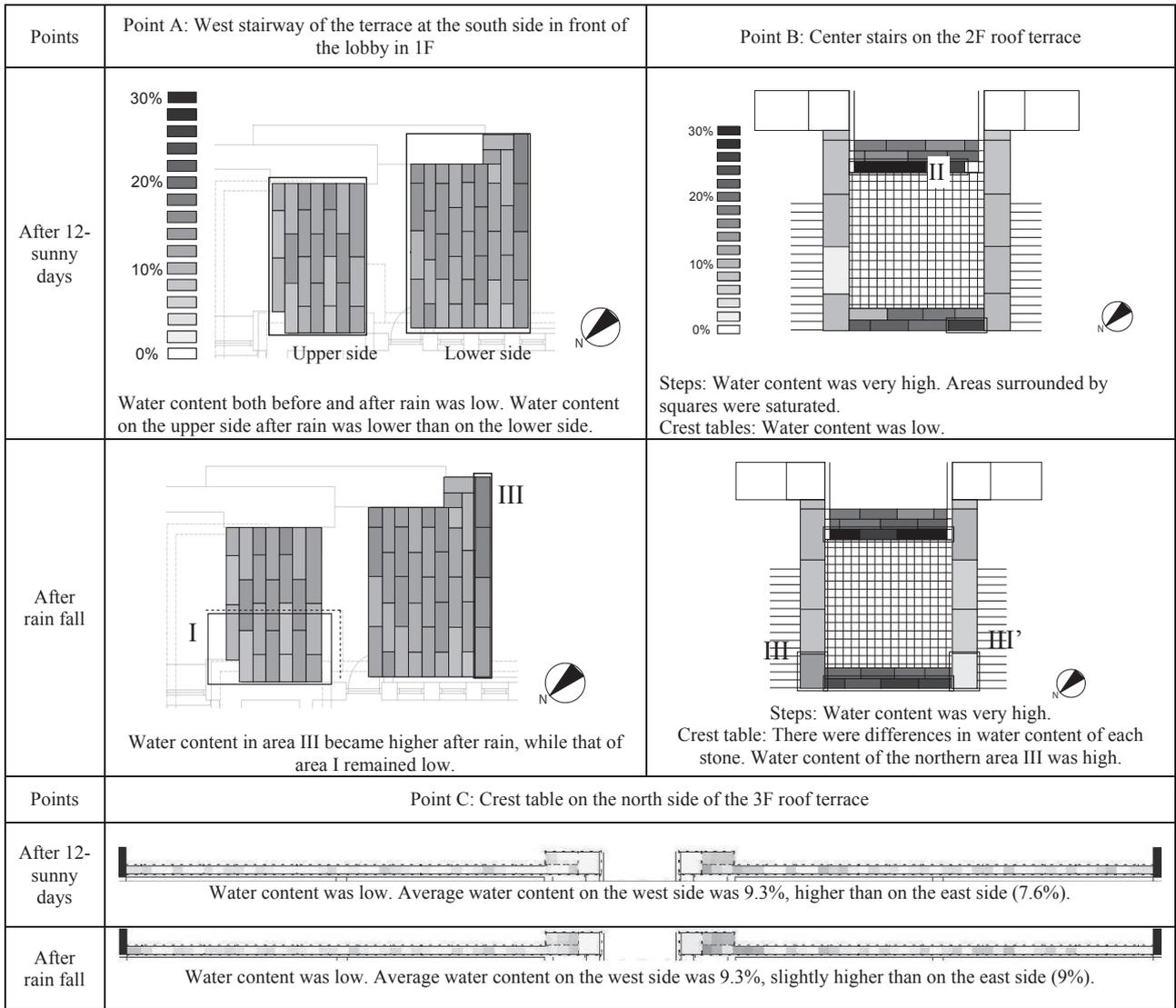


Figure 6. Water content in cases of typical deterioration at points A, B, and C

## **ACTIVITY REPORTS OF THE INSTITUTE OF TURKISH CULTURE STUDIES**

### **Inter Cultural Studies of Architecture (ICSA) in Japan 2014**

In accordance with the general exchange agreement between Mukogawa Women's University (MWU) and Bahçeşehir University (BAU), students and professors from BAU's Faculty of Architecture and Design joined us at Koshien Hall and the Architecture Studio on MWU's Kami-Koshien Campus from June 24 to July 31, 2014.

BAU students tackled third- and fourth-year MWU student design projects. By participating in this program, they gained knowledge, learned techniques, and increased their awareness of architectural design. They also joined basic design studios of first-year MWU students and had the opportunity to experience traditional Japanese culture, such as Ikebana (Japanese flower arrangement under Ryuho Sasaoka, headmaster of the Ikebana Misho-ryu Sasaoka in Kyoto) and woodworking (with Sadahide Kanda, a master carpenter in Hyogo). They also participated in fieldwork on Saturdays, exploring the cities and architecture of Japan, such as Amanohashidate or the Itsukushima Shrine.

#### Participants

Professors: Associate Professor Murat Dündar

Students: Bahar Kübra Şimşek , Beyza Demir, Buse Keleş, Büşranur Özkaya, Cansu Sabancı, Elif Ayar, Elif Nihan Yüksel, Ezgi Şişman, İzel Çelik, Leyla Ağayeva

#### **1. Greetings**

##### 1.1. Welcome Party: June 26

Ten students and one teacher from Bahçeşehir University were greeted by the students and teachers of Mukogawa Women's University. Prof. Dr. Shigeyuki Okazaki (Chair, Department of Architecture, MWU) and Assoc. Prof. Dr. Murat Dündar (Vice-Dean, Faculty of Architecture and Design, BAU) spoke and the BAU students and teacher introduced themselves. Following this, MWU graduate students gave a welcome speech in Turkish, and MWU undergraduate students gave a speech in English.



Greeting in Turkish by Prof. Shigeyuki Okazaki



Greeting in Japanese by Assoc. Prof. Murat Dündar .



MWU students gathering for welcome party.



Each BAU student gave a self-introduction in Japanese.



MWU graduate school student greeted the visitors in Turkish ( a bamboo tree ornament for Tanabata festival is seen on the right).



MWU undergraduate students greeting in English.

### 1.2. Courtesy Call on Chancellor Ryo Okawara and President Naosuke Itoigawa of MWU: July 4

The BAU students and Assoc. Prof. Dr. Murat Dündar visited MWU’s Central Campus and paid a courtesy call on MWU’s Chancellor Ryo Okawara and President Naosuke Itoigawa to be greeted with words of encouragement. Then, led by Prof. Shigeyuki Okazaki, they visited the Interdisciplinary Research Center and the Health Science Building designed by Prof. Okazaki. They also visited MWU Junior and Senior High School Art Center.



Meeting with Chancellor Ryo Okawara and President Naosuke Itoigawa.



Each visiting student made a self-introduction in Japanese.



A commemorative photograph with Chancellor Ohgawara and President Itoigawa



Visit to the Interdisciplinary Research Center



Looking over the view of Central Campus on top of the Health Science Building



Viewing the MWU Junior and Senior High School Art Center.

## 2. Design Classes

### 2.1. Architectural Design Studio III: Rebuilding Hanshin Koshien Station with a Membrane-Structured Roof: June 27 to July 26

Three of the BAU students tackled the same project as MWU's third-year students in their studio. They addressed how to safely move a large number of passengers and how to make membrane roofing for the platforms. The students visited Hanshin Koshien Station after a baseball game. They then created membrane roof models, drew perspectives, and planned layouts, elevations, and sections. They also received advice from teachers and Akihiro Noguchi, a membrane expert from Taiyo Kogyo Corp., and used this advice to improve their initial ideas. Lastly, they made their final submissions and presented them to the final-jury.



Teachers explaining to the students how to create tensional forces on a membrane.



Conversing with teachers.



Presentation at the inter-jury.



Conversing with a teacher.



Presentation at the inter-jury.



Studying a membrane-structured roof.



Studying a plan of station.



Presentation at the final-jury.



Presentation at the final-jury.



Dr. Mamoru Kawaguchi, Honorary Professor at Hosei University, commenting during the final-jury.



Presentation at the final-jury.



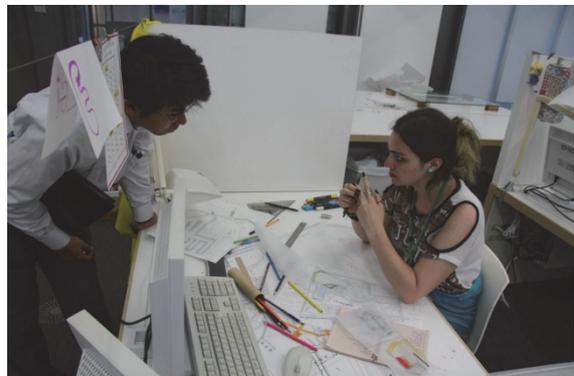
Prof. Dr. Sema Soygeniş, Dean at Faculty of Architecture and Design, BAU, commenting at the end of the final-jury.

## 2.2. Architectural Design Studio V: Waterfront Paradise : June 26 to July 29

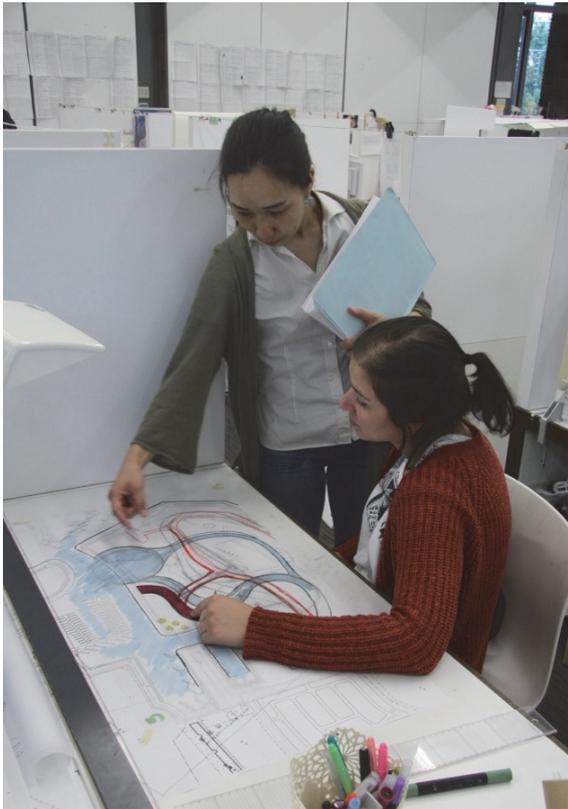
The remaining seven BAU students tackled the same project as MWU's fourth-year students in their studio, specifically, to design a pleasant urban space for the Shioashiya Area, which is reclaimed ground in Ashiya City. They made models, drew perspectives, and planned layouts, elevations, and sections. They also received advice from teachers, which they used to improve their initial ideas. Lastly, they made their final submissions and presented them to the final-jury.



Visiting the Shioashiya Area, which is reclaimed ground in Ashiya City.



Conversing with a teacher.



Conversing with a teacher.



Presentation at the inter-jury.



Presentation at the inter-jury.



Conversing with a teacher.



Presentation at the final-jury.



Presentation at the final-jury.



Presentation at the final-jury.



Presentation at the final-jury.



Presentation at the final-jury.



Prof. Dr. Sema Soygeniş commenting on a presentation by an MWU student.



A BAU student commenting on a presentation by an MWU student.

### 2.3. Basic Design Studio

To deepen their understanding of Japanese culture, the BAU students studied Ikebana (Japanese flower arrangement) and woodworking with the first-year MWU students.

#### 2.3.1. Ikebana: June 26, July 1 and 3

On June 27 and July 3, the students experienced Ikebana under Headmaster Ryuho Sasaoka (Ikebana Misho-ryu Sasaoka, part-time MWU lecturer). On July 1, they collaborated with MWU students, making and presenting large-size Ikebana arrangements.

#### 2.3.2. Woodwork: July 10 and 15

The students used a plane and woodworked under Master Carpenter Sadahide Kanda, a part-time MWU lecturer, increasing their understanding of traditional Japanese carpentry techniques.



Headmaster Ryuho Sasaoka instructing the BAU students in Ikebana



An Ikebana lesson.



Large-size Ikebana arrangement lesson.



BAU students woodworking.



BAU students woodworking.

### 3. Fieldwork

#### 3.1. Architecture of Membrane Structure and Ichijo-ji Temple: June 28

Before designing a train station with a membrane structure, the BAU students and MWU third-year students listened to a lecture by Akihiro Noguchi (engineer at Taiyo Kogyo Corp.) on the history of membrane structures, and their materials, mechanical properties, construction techniques, and examples. They next visited the Rest House on Okura Beach in Akashi City to see an example of a suspended membrane structure. They then moved on to Ichijo-ji Temple in Kasai City. The pagoda, completed in 1171, is a Japanese National Treasure constructed in the Wayo architectural style (Japanese style).



Visiting the Rest House on Okura Beach in Akashi City.



Visiting Ichijo-ji Temple in Kasai City.

### 3.2. Omihachiman in Shiga: June 28

The students visited Omihachiman, and saw the Hachiman-bori area, which has been preserved as a national important preservation district for the area's historic buildings and canals.



Visiting the Hachiman-bori area in Omihachiman.



Sketching in the Hachiman-bori area.

### 3.3. Funaya of Ine and Amanohashidate in Kyoto: July 5

The students visited Ine and Amanohashidate with MWU fourth-year students and saw Funaya (houses with unique boat garages) in Ine from the sea and land. After that, they moved to Amanohashidate which is one of Japan's three most famous scenic places. They went to Kasamatsu Park by cable car and experienced the fantastic misty view with the sea spray.



Seeing funaya from marine taxi



When the sky and the earth are viewed upside down, Amanohashidate resembles a bridge across the sky.

### 3.4. Itsukushima Shrine and Hiroshima Peace Memorial Park, Hiroshima: July 12

The students visited Miyajima Island, one of Japan's three most famous scenic places, with the fourth-year MWU students. After arriving by ferry, they walked to the Itsukushima Shrine along a beachfront road, visited many buildings within the shrine, and viewed the mountain range over the O-torii (the Grand Gate). After that, they visited Hiroshima Peace Memorial Park.



Visiting the Itsukushima Shrine.



Visiting the Itsukushima Shrine.



Visiting Hiroshima Peace Memorial Park.



Visiting Hiroshima Peace Memorial Park.

### 4. Lecture by Prof. Dr. Sema Soygeniř, Completion Ceremony and Farewell Party: July 29

Prof. Dr. Sema Soygeniř (Dean, Faculty of Architecture and Design, BAU) came to Japan on July 24 and took part in juries. As part of the international exchange program, we held a lecture by her entitled "Architecture and the city: memory walks in Istanbul". In the lecture, she gave suggestions on how to walk around in Istanbul from the point of view of its urban characteristics, and how to enjoy staying there. She suggested that it is important for us to take into consideration the two aspects of the city, i.e. the architecture and the urban planning, in order to retain the specific feature of the locality in the modern era of expanding globalization. After the Q and A session between the audience and the lecturer, Prof. Okazaki presented a souvenir to her to conclude the lecture.

Following the lecture presentation, we held a completion ceremony and a farewell party for the students who are going home on July 31 completing the program, ICSA in Japan 2014. The ceremony began with the message by Prof. Shigeyuki Okazaki followed by the presentation of the certificate of completion of the ICSA 2014 to the ten students from Turkey. In return, Prof. Sema Soygeniř and representatives of the BAU students expressed the words of appreciation for the help given in the 40-

day program. Then MWU students handed presents to each BAU student, Prof. Sema Soygeniş and Assoc. Prof. Murat Dündar on behalf of whole students of the MWU architectural department. Finally we took a commemorative photograph and ended the party having a fond farewell with them.



Lecture by Prof. Dr. Sema Soygeniş



Ms. Elif Ayar and Ms. İzel Çelik as giving words of appreciation on behalf of the BAU students.



Certificate of completion being given to each of BAU students by Prof. Dr. Shigeyuki Okazaki.



MWU students handed presents to Prof. Dr. Sema Soygeniş and Assoc. Prof. Dr. Murat Dündar.



The commemorative photograph

(Reported by Toshitomo Suzuki)

## **Six Young Specialists of Cultural Properties Preservation from the Kyrgyz Republic and the Islamic Republic of Afghanistan Visited MWU's Department of Architecture and Architecture Major**

**Date : July 10, 2014**

Six young specialists from the Kyrgyz Republic and the Islamic Republic of Afghanistan, three persons from each country, visited MWU. They came to Japan to have an induction course for half a month on “the maintenance of historical sites” and “the display” as part of the project "Protection of Cultural Heritage in the Kyrgyz Republic and Central Asia" conducted under the auspices of Japan Center for International Cooperation in Conservation, an organization of National Research Institute for Cultural Properties, Tokyo. They visited MWU's Department of Architecture and Architecture Major housed in the Koshien Hall, which makes a case example of a utilization of cultural asset.

They first paid a courtesy call on Chancellor Okawara before visiting the Department of Architecture and the Architecture Major. They were given an explanation by Prof. Okazaki, head of the department and the architecture major, about a planned design of the Bamiyan Museum & Culture Center for People as well as that of the Petra Museum.

In the afternoon, an interchange meeting was held at the Koshien Hall with the attendance of all the students. There was an explication of the project and an introduction of the young specialists from Kyrgyz and Afghanistan by the persons from the organizer, National Research Institute for Cultural Properties, Tokyo. Then the specialists gave presentations to introduce the natural and cultural aspects of the Kyrgyz Republic and the Islamic Republic of Afghanistan. We got deeply interested in the various topics such as the mountains where gods are believed to live alike that of Japan, life of nomads who live in the tent and the collections of the National Museums.

After the meeting, the specialists observed the classes such as Practice in Building Materials, Architectural Design Studio and Basic Design Studio, which included various items: fabrication of ‘ger’ with the push-up construction method, that of the vault space with the scissors construction method, a proposed plan designed by students on the stone cave garden planned for the Bamiyan Museum & Culture Center for People. Then, they left the Koshien Hall.

(Reported by Kazuhiko Yanagisawa)



Interchange meeting at the Koshien Hall



Visit to Department of Architecture and Architecture Major: vault space by the scissors construction method

## **Dean Sema of the Faculty of Architecture and Design, Bahçeşehir University, Turkey, and the Family Paid a Courtesy Call on the Chancellor and the President**

**Date : July 28, 2014**

Dean Sema of the Faculty of Architecture and Design, Bahçeşehir University, Turkey, and the family visited Japan. They paid a courtesy call on the Chancellor and the President on July 28. Prof. Sema Soygeniş, an alumna of University at Buffalo, is playing an active part as an architect like her husband and Prof. Murat Soygeniş, once Dean of the Faculty of Architecture at Yıldız Technical University.

Both parties exchanged gratitude for the reciprocal efforts in the study-abroad programs of ICOSA in Japan by MWU and ICOSA in Istanbul by BAU, as well as the foundations of Institute of Turkish Culture Studies at MWU and Institute of Japanese Culture Studies at BAU, co-establishment and administration of the international conference “Archi-Cultural Translations through the Silk Road”. Then we exchanged ideas to bring about further substantial and fruitful exchange for the both universities in the future.

(Reported by Kazuhiko Yanagisawa)



Dean Sema and family paid a courtesy call

## **Dr. Mehrdad Hejazi, Associate Professor at University of Isfahan, Iran, Visited MWU**

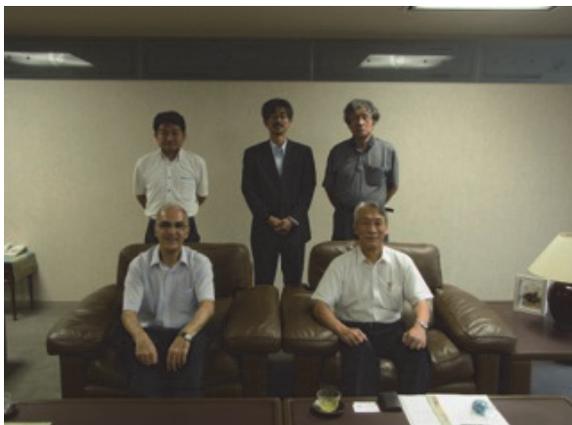
**Date : September 1, 2014**

Dr. Mehrdad Hejazi, Associate Professor at University of Isfahan, Iran, visited Department of Architecture in Mukogawa Women's University (MWU) on September 1, 2014. Dr. Hejazi is the leading expert who researches Iranian architecture and structure, and plans to rebuild the Bam Citadel, severely damaged by the 2003 Bam Earthquake. He also researches on earthquake-proof measures suitable to Iranian architecture. This time, he visited Japan to exchange information to promote international collaboration in conservation of cultural heritage between Japan and Iran.

In the morning, Dr. Hejazi made a courtesy call on Chancellor Okawara, after having a look around the Koshien Hall and Architectural Studio in the Kami-koshien Campus. He expressed his impression, saying "the curriculum offered by the architectural department in MWU is well organized to combine architectural design and structural, environmental engineering. The environment of the campus as well as the design studio and structural, environmental laboratories are excellent. I strongly wish to promote the exchange of faculties and students between MWU and University of Isfahan." He added also, "I was really surprised to see valuable exhibition displayed in the Silk-Road Galleries in the Institute of Turkish Culture Studies."

In the afternoon, Dr. Hejazi visited the world-largest 3-D full-scale earthquake testing facility, E-Defense, in the Hyogo Earthquake Engineering Research Center in the National Research Institute for Earth Science and Disaster Prevention, Japan. Renovation work was being conducted and the shake-table and splices could be seen. Also, full-scale specimens including RC school building tested previously could be observed. Dr. Hejazi was very delighted to realize a field trip to the E-Defense, which he had wished for a long time.

(Reported by Hiroyuki Tagawa)



Courtesy call on Chancellor Okawara



Field trip to E-Defense

## **Inter Cultural Studies of Architecture (ICSA) in Istanbul 2014**

On April 26, 2013, the Architecture Major (Master's Program) and the Department of Architecture of MWU was certified by JABEE as an authorized Architectural Education Program for the first time in Japan. As a result our 6-year Master's Program of Architecture Major, Department of Architecture was formally certificated as a program that corresponds to the international standard for education, UNESCO-UIA Charter for Architectural Education. Our program aims to nurture perceptive architects with insights into the life and culture both of their own society and of the world, thus able to work internationally.

As part of such education, we started overseas practical training program in 2010 under the general exchange agreement signed in December 2008 between Bahcesehir University (BAU), Turkey, and MWU. Graduate school students (architecture major, in the Master's program) led by faculty members visited BAU for about two weeks to experience conservation-related practical training as coursework. This year a similar course was given to fourteen master program students in the first grade from October 9(Thu) to 25(Sat), 2014 as part of the curriculum 'Practice in Architectural Design I' and 'Internship in Building Conservation'.

### ◆Participants

Professors: Noritoshi Sugiura and Yuna Hongo

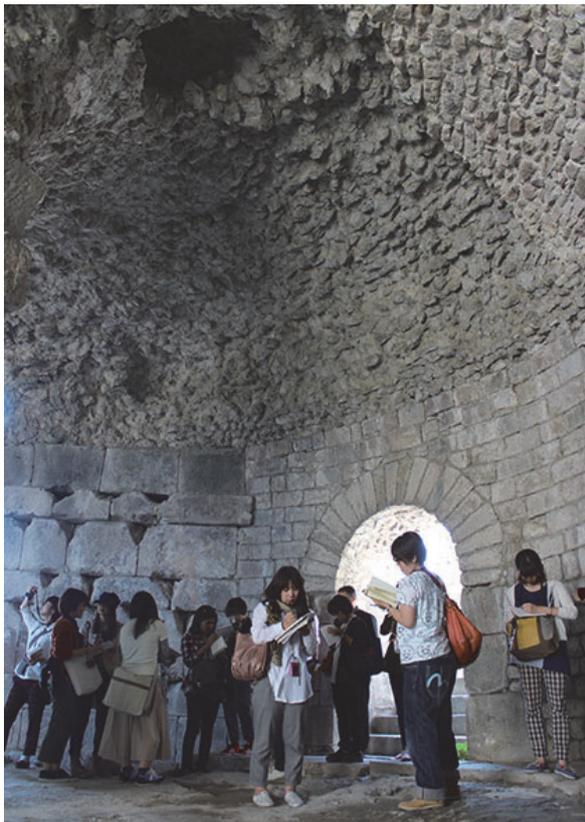
Students: Mimiko Kijima, Mihoko Sawaragi, Rurika Sukeno, Saki Takeda, Yuna Tanaka, Saya Nakano, Yuka Nakamura, Tomomi Nishino, Akiko Honda, Kurumi Honda, Saya Matsuo, Yuriko Murakami, Shiori Yonamine

### ◆Schedule

October 9	Departure for Turkey
October 10	Visit to Bergama ruins
October 11	Visit to Ephesus ruins and Şirince village
October 12	Visit to Ayasofya, Basilica Cistern and Hippodrome
October 13	Preservation and restoration practice at KUDEB, visit to Süleymaniye Camii and courtesy call to Bahçeşehir University
October 14	Practical training of preservation and restoration work in Yıldız Palace
October 15	Practical training of preservation and restoration in Dolmabahçe Palace, tour of the palace and courtesy call to Chairman of the Board and Dean of Bahçeşehir University
October 16	Visit to Edirne
October 17	Visit to Topkapı Palace, Grand Bazaar, Sultanahmet Camii in the Historic Areas of Istanbul
October 18	Visit to the large-scaled wooden structure at Büyükdada
October 19	Visit to Cumalıkızık and Bursa
October 20	İznik tile manufacturing experience and visit to the historic wooden house in Sölöz
October 21	Visit to Eyüp, Eminönü and Galata / Istanbul
October 22	Preservation and restoration practical training in Üsküdar
October 23	Preparation for holding the sketch exhibition, visit to Chora Church and Bosphorus Tour
October 24	Visit to Istanbul Archaeological Museum, lunch with president of Bahçeşehir University, sketch exhibition
	Departure from Istanbul Ataturk Airport for Japan
October 25	Arrival at Kansai International Airport

**October 9-10** ”Departure for Turkey and Visit to Bergama ruins”

We left Kansai International Airport in the evening on October 9. We arrived at Adnan Menderes International Airport in İzmir early in the morning on October 10 via Istanbul Atatürk Airport where we changed to the domestic flight. The overseas practical training course starts with the visit to the sites of ancient cities of the Alexandrian and the Roman periods that flourished on the Aegean coast. To begin with, we moved northward in a bus from İzmir to Bergama. In Bergama, led by a Japanese speaking local guide, we visited Asklepieion, or the site of a Roman medical facility, Bergama’s archaeological museum, and Acropolis, the ruin of the Pergamon built atop the hill. Listening to the guide, we got the idea of lively and fulfilling lives of the ancient people.



We visited Asklepieion situated in the precincts around the temple dedicated to Asklepios, the deity of medicine. It functioned as a hospital in the Roman period.



Souvenir shot at the Temple of Trajan



The open-air theater on the steep slope with a capacity of 10 thousands spectators

**October 11** ” Visit to Ephesus ruins and Şirince village”

We visited the largest collections of ruins of Roman cities in Aegean Sea area, Ephesus, and the traditional Turkish settlement of the mountain tribe. After going southward for 1.5 hours in a bus from the hotel at İzmir we arrived at Selçuk, the base for the Ephesus tour. We started with the church of Virgin Mary (Meryemana) in the Mt. Bülbül in the south. Virgin Mary is said to have spent her last years there being looked after by John the Apostle. Then we continued to Ephesus ruins to observe and sketch the site of large-scaled bath, the open-air theater, the temple, the large public toilets the central pedestal of which also functioned as a concert stage, the library, the marble-paved street where Cleopatra is said to have also bent her steps, and the gymnastic space. One is overwhelmed by the

scale of every site. We thought of the cornucopia in the lives of ancient people for a while. We also visited the site of the cave church at the cave of seven sleeping men located next to the Ephesus ruins. The legend tells a miracle that seven Christians, fleeing from persecution took shelter in the cave church, fell into asleep and awoke to find that 200 years has passed. After lunch at the restaurant we visited the traditional settlement of Şirince in the hill district located 15 minutes away by bus from Selçuk. The traditional houses with red roofs and plaster coating cuddle up as if to stich the hill side. It was a tranquil and beautiful sight. We strolled and made sketches along the narrow, bumpy, sloped and complex stone-paved road.



Village of Şirince  
Traditional wooden houses characterized by red roofs and plaster coating cuddle up on the hill side.



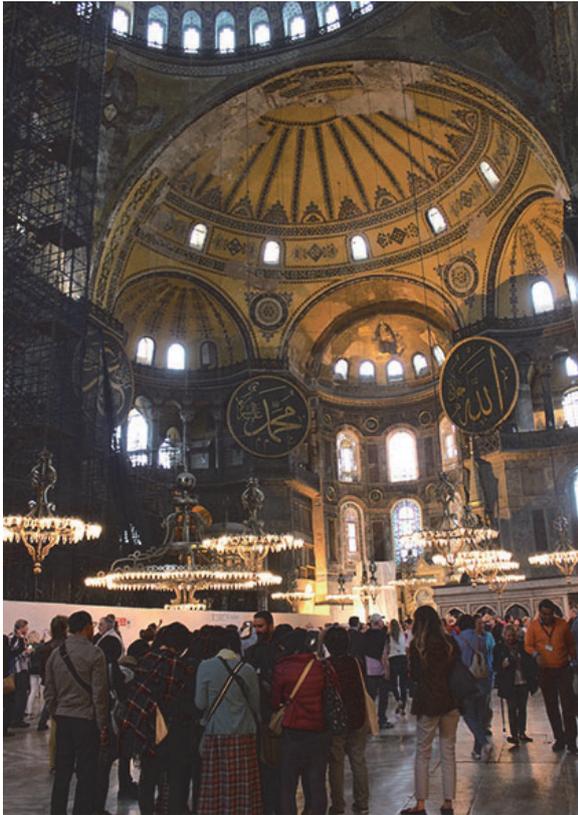
Ephesus: Celsus library



Ephesus: Open-air theater  
It was amazing that the voice uttered on the stage well reached to the distant, and upper spectator's seat

## October 12 " Visit to Ayasofya, Basilica Cistern and Hippodrome"

We traveled from İzmir to Istanbul in the morning by airplane. In the afternoon we visited one of the historical districts in Istanbul, Sultanahmet. First we observed the magnum opus of the Byzantine architecture Ayasofya which has a large dome with 31 m in diameter. Then we visited Basilica Cistern with the forest of 336 pillars of marble to support the dome's ceiling. Finally we visited the site of the arena for chariot racing constructed in the early 3<sup>rd</sup> century, Hippodrome. The students and the graduates of the Bahçeşehir University also joined us with whom we deepened exchanges.



Ayasofia  
Students having a detailed explanation of its history and the construction method



Basilica Cistern



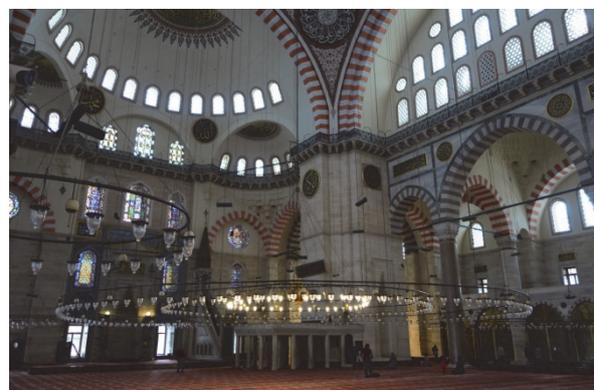
Hippodrome

**October 13** ” Preservation and restoration practice at KUDEB, visit to Süleymaniye Camii and courtesy call to Bahçeşehir University”

We had a practical course at the atelier of KUDEB, a municipal organization of Istanbul which mainly engaged in the preservation and restoration of wooden structure. Having had a briefing on KUDEB we moved to the bottega to observe a model framing of the actually restored structure, a restored door of the house from 130 years ago, a replica of the door from Süleymaniye Camii, a replica of residential ceiling, wooden lattice to be installed on the window etc. After lunch, we visited the work of master architect of Ottoman architecture Sinan, Süleymaniye Camii, and made sketches of it.



KUDEB  
Restoration of the house door from 130 years ago being explained



Süleymaniye Camii  
The characteristics of the interior design, significance of adopting the dome, how to pray in the Camii etc., were explained.

Then we visited Bahçeşehir University for the courtesy call to President Şenay. Vice president Ali, Vice president Elif, President Süheyla of affiliated BAU Berlin were also present and we received words of welcome from each of them. Then we took a Commemorative photograph on the rooftop terrace before sketching the sight of the Bosphorus at dusk.



Courtesy call to the President Şenay  
Two BU vice presidents and the president of the affiliated university in Berlin,BAU, were also present



A souvenir shot taken on the rooftop terrace

#### **October 14** ” Practical training of preservation and restoration work in Yıldız Palace”

The students had a practical training at the bottega in Yıldız Palace. The bottega covers the restoration work for Yıldız Palace and all the national palaces in Turkey. We observed all types of restoration works of such items as cloth covering of chairs, furniture finishing, improvement of wooden part of furniture, carving for furniture, textile, ceramics, curtain, baskets and mat of rush, carpet, leaf gold finish, wooden fixture, floor marquetry and metal works. We also visited the bottega which specializes in the manufacture of blades for the tools for use in whole bottega in Yıldız Palace. We have realized that many specialists are involved to maintain the palace and continue astounding hard-working efforts day and night, and that their work is based on the process of highly scientific survey and the workers’ respect of the traditional techniques before all.



Bottega for furniture finish  
Students observing the finish painting applying Gomalak, a type of traditional lacquer extracted from insect



Curtain repair work bottega  
Students observing the delicate work to restore the curtain from over 100 years ago

#### **October 15** ” Practical training of preservation and restoration in Dolmabahçe Palace, tour of the palace and courtesy call to Mr. Envel, Chairman of the Board, and Dean Sema”

We visited the bottega in Dolmabahçe Palace. Alike in Yıldız Palace we visited the day before, Dolmabahçe Palace has plural bottega in its compound to maintain objects of craft or art work and the building. We observed the bottega for restoration of picture frames, stucco, lighting fixtures, stonework, books, porcelain stoves etc. Then we visited the Halem (private residential area) in Dolmabahçe Palace and Selamlık (public presentation room for administration and ceremony). We observed the furniture, walls, floors and art frames being reminded of the experience and the explanation we heard the previous day at the bottega in Yıldız Palace. All students were overwhelmed by the grandeur and great flamboyance of the grand hall of Selamlık we saw at the end of the day's tour.

After the course we made a courtesy call to Board Chairman Envel and Dean of Architectural Design Sema at the Bahçeşehir University. Then we fully enjoyed the sight of the Bosphorus under the sky at sunset.



Visit to the bottega for art frame restoration  
The staff explained how to repair the chipped part or how to apply the gold leaf over the art frame.



Bottega for books restoration  
The staff explained how to repair the leaves. We were told that the Japanese paper is used in the process.



We made a courtesy call to Chairman of the Board Envel at the Bahçeşehir University: seeing Mr.Envel on the rooftop terrace.



Courtesy call to Dean Sema of the architectural design faculty

## October 16 " Visit to Edirne "

We visited Edirne located near the borders with Greece and Bulgaria. This city was called Hadrianopolis or Adrianople. It was once the capital of Ottoman Empire. After the capital was transferred to Istanbul, it still played an important role as the second capital. We visited various places including Selimiye Camii, which is said to be the magnum opus of the Ottoman architect Sinan, and Bayezid II Külliye Health Museum characterized by the space for music therapy, which is a perfect example of restoration work. We also visited Eski Camii, or the oldest of Camii in Edirne and Uç Serefeli Camii, one of the first mosques with a large dome constructed in the Ottoman Empire days.



Selimiye Camii  
The large dome (43m tall, 31m in diameter) rivals that of Ayasofya in Istanbul.



Courtyard of Bayezid II Külliye Health Museum



Uç Serefeli Camii  
One of the first Camii capped with a large dome built by the Ottoman Empire.

**October 17** ” Visit to Topcapı Palace, Grand Bazaar, Sultanahmet Camii in the Historic Areas of Istanbul”

In the Historic Areas of Istanbul we visited Topcapı Palace, where the sultans of Ottoman Empire resided for a span of 400years until mid-19th centry, and its Halem whose beauty is adorned by the exquisit İznik tiles. Then we visited the Grand Bazaar, which is teemed with 4,400 shops, and Sultanahmet Camii. Students made sketches of each place. Finally we spent prenty of time sketching views of Sultanahmet Camii or Ayasofya as seen from the Sultanahmet Park.



Topcapı Palace  
Bagdad köşkü, the beautiful interior space enclosed by the İznik tiles and the stained glass



Topcapı Palace  
Students listening to an explanation about the Halem



Grand Bazaar  
The bazaar of narrow complicated roads with teeming 4,400 shops



Sultanahmet Camii  
The superb dome adorned by İznik tiles

### October 18 ” Visit to the large-scaled wooden structure at Büyükada”

We visited Büyükada Greek Orphanage, a large-scaled wooden structure. Büyükada is the largest of the Prince’s Islands in Sea of Marmara. The island is situated to the southeast of the center of Istanbul in 1 or 2 hours’ distance by boat from Kabataş in the New City District. Private use of the car on the island is prohibited in principle, and one has to move on foot, by bicycle or a horse-drawn carriage.

On arriving at the harbor of Büyükada we had lunch of mackerel sandwich, a specialty of Istanbul, at a nearby restaurant. Then we took the horse-drawn carriage to the hill top. We walked for a while before we reached the Greek Orphanage, one of the world’s largest wooden structures built in 1898. The structure is 6-storied with the total floor area of 20,000m<sup>2</sup>. Originally it was designed as a hotel, but it was never used as such but as an orphanage. Today it has become a ruin with nobody to use it. There have been arguments in vain for many years whether or not it should be restored and the structure is let decay without any objective plans of reservation. It was designed by an Austrian architect, but it adopted elements of traditional Turkish house such as cumba ( bay window) and badadi (mural infilling) in every part. Checking out such designs students made sketches of the building.



Private use of the car is not allowed in Büyükada and we took a horse-drawn carriage to the hill top.



Making sketches of the Greek Orphanage carefully checking the ubiquitous elements of traditional Turkish house design

## October 19 ” Visit to Cumalıkızık and Bursa”

Today we visited Bursa, the first capital of Ottoman Empire, and its outskirts, Cumalıkızık village. Either site was registered as precious assets of world heritage in 2014. The vice president of Bahçeşehir University and his wife accompanied us. First, we visited a traditional settlement of Cumalıkızık, which dates from 700 years ago. ‘Cumalık’ comes from Friday (Cuma), namely, people of neighborhood village used to gather in the mosque in this village every Friday. This village has come to draw attention in the past decade. It sees many reservation and restoration works of the buildings today. Students learned characteristics of the designs and the construction methods of the Turkish houses walking along the mazy stone-paved streets. Then we moved to downtown Bursa to visit the caravansary Koza Hanı, Ulu Camii ,or ‘big’ Camii, Yeşil Türbe, or ‘green tomb’ where Mehmet I rests and Yeşil Camii, which means ‘green Camii’



Cumalıkızık  
Students sketching the streetscape



Ulu Camii  
The fountain in the center creates agreeable water splash to our ears.



Koza Hanı  
‘Hani’ was a shopping center of those days. At one time, it was also used as caravanserai (caravansary).



Interior view of Yeşil Türbe, which means ‘green tomb’: a mausoleum where Ahmet I and his family sleep.

## October 20 ” İznik tile manufacturing experience and visit to the historic wooden house in Sölöz”

Today we visited an atelier in İznik to observe the tile manufacturing and to practice the tile decoration.

The technique of manufacturing İznik tile has come to virtually extinct coincidentally with the decline of Ottoman Empire. Then around 1985, a movement to revive it was started. It was the very atelier

called İznik Çini Eşref & Seyhan Eroğlu, which we visited today, that led the movement. The atelier was founded by the parents of present presidents (three daughters). The atelier is said to have greatly contributed to revival of İznik tile. The atelier has maintained traditional techniques in manufacturing the tile. At first, at the atelier on the 1<sup>st</sup> floor, we were given the brief explanation of the manufacturing process from preparation of potter's clay to final baking in a kiln. Then we watched the painting process at the atelier on the 2<sup>nd</sup> floor. Then the students worked on the painting onto the square tile the design of tulips or ships. In the cozy atmosphere, students had a good time being concentrated in the work.

After lunch, we visited Ayasofya Camii, whose restoration was completed in 2011. Then we left İznik for Istanbul. On our way we stopped over at a town called Sölöz to observe large-scaled traditional wooden house which is said to have been built over 150 years ago. We observed the structure carefully and made sketches of it before we went up the hill to have a bird's-eye view of the areas surrounding Sölöz.



Atelier of İznik tile

Traced underglaze is gone over with black paint. When the line-drawing has been completed it is colored with cobalt blue, Turkey blue or İznik red. Students could concentrate in the work with delight and ... with cups of chai.



We visited the large-scaled four-storied wooden house in Sölöz which is said to have been built over 150 years ago. The basal structure adopts the traditional Turkish construction method with the masonry of natural stone at the lower wall, and as for the upper wall, brick was filled in the gaps between the wooden frames and the stone. A large-scaled structure like this is very rare indeed.

## October 21 " Visit to Eyüp, Eminönü and Galata / Istanbul"

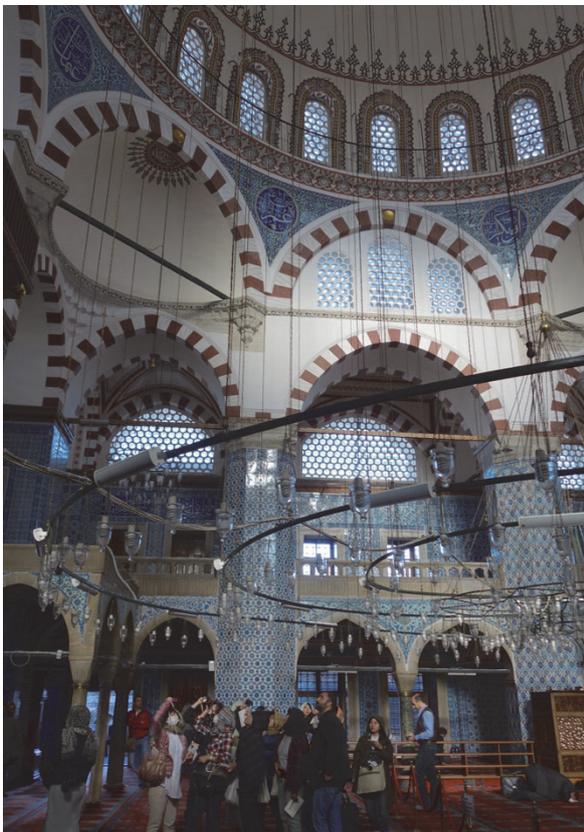
We visited Eyüp, Eminönü, Galata in Istanbul. We took a ferry from the pier of Beşiktaş for Eyüp via Üsküdar. In Üsküdar, in the waiting time for the connecting boat we visited Mihrimah Sultan Camii, which architect Sinan built, and the attached hospital. On arriving at Eyüp, we visited the sacred ground of Muslim, Eyüp Sultan Camii. Then we took the ropeway to visit Pirre Loti, which is renowned for the exquisite view of the Golden Horn seen from there. Students made sketches of the town of Istanbul seen from the café. In Eminönü, we visited several places such as Rüstempaşa Camii known for its beautiful İznik tiles, Egyptian Bazaar, Yeni Camii at the foot of Galata Bridge. At Yeni Camii Turkish students joined us. To visit Galata Tower from Yeni Camii, we took the Tünel, a subway which is the second oldest subway next to that of London and the shortest in the world. After sketching Galata Tower, we mounted the tower and fully enjoyed the beautiful sight of Istanbul in the changing light from evening to night. Finally we visited Istiklal Street, one of the downtowns in Istanbul.



Eyüp Sultan Camii, Muslims' sacred ground



Bird's-eye view of Istanbul along the shores of the Golden Horn seen from the viewing platform at Pirre Loti



Interior of Rüstempaşa Camii with beautiful İznik tiles



Yeni Camii



Istanbul in evening twilight seen from Galata Tower

### **October 22** ” Preservation and restoration practical training in Üsküdar”

We had a practical training course in Üsküdar. Üsküdar is a district on Asian side known for many old buildings. Thanks to the kind arrangement of the Üsküdar ward office we could visit several case examples of restoration conducted by the “KUDEB in Üsküdar” including the wooden mosque from 100 years ago, the mosque built in the 18<sup>th</sup> century, the residence built by the same architect that designed Dolmabahçe Palace. We acquired first-hand knowledge of the wide-ranging and organized efforts to preserve and restore the houses, mosques, palaces etc., through the visit to actual places such

as this visit to Üsküdar, past visits to bottega for restoration work at KUDEB in Istanbul as well as that of the Yıldız Palace or Dolmabahçe Palace.

Prior to the visit to the sites we visited the headman of ward. He gave us necklaces with a design of Kız Kulesi (tower of maiden), the symbol of Üsküdar for a keepsake.

We also visited a new mosque in Üsküdar designed by a modern architect. The design is said to have provoked active debates over its pros and cons. We had a glimpse of modern architects seeking the way of being of future mosque construction.



We met the headman of the ward in the garden of the Convention Center.



We visited a wooden mosque built 100 years ago, Abdullah Ağa Camii. The 2<sup>nd</sup> floor is a place for worship for women: it is enclosed by traditional Turkish lattice.



We visited the new mosque Şakirin Camii which has RC structure designed by a modern architect. It was completed in May 2009.



We visited Bulhan Felek residence built by the same architect who designed Dolmabahçe Palace: a house of traditional Turkish style.

## October 23 ” Preparation for holding the sketch exhibition, visit to Chora Church and Bosphorus Tour”

In the morning we spent preparing for the sketch exhibition in the drafting room of the Bahçeşehir University. After lunch we visited Chora Church to observe exquisite mosaics and frescos. Then we took part in the Bosphorus Tour. We have had our fill of the sights unique to Istanbul: the landscape woven by the burdant hills, traditional wooden houses or palaces situated along the seashore and houses clustered on the slope of the hills. We returned to the Bahçeşehir University to see the staff in charge of international exchange to receive the brief on Bahçeşehir University’s overseas campus and about affiliated universities in Berlin and Washington DC. There is one day left before this practical training course is completed. A sketch exhibition is going to be held tomorrow to conclude the course.



Preparation for the sketch exhibition in the drafting room of Bahçeşehir University



Bosphorus Tour  
Traditional wooden houses, palaces and clusters of houses are seen on the seashore or hillside.



Students eagerly observing the exquisite mosaics and frescos in Chora Church.

**October 24-25** ” Visit to Istanbul Archaeological Museum, lunch with president of Bahçeşehir University, sketch exhibition and departure for home”

In the morning on October 24, we visited Istanbul Archaeological Museum and Tile museum. Then we had lunch at the restaurant on campus with President Şenay, Vice president Elif and Dean Sema. President Şenay suggested that we won't be contented with just a two weeks' experience and that we keep in touch with the Turkish faculty staff and friends hereafter. He also said that we should think great deal of this encounter even after we have graduated and started working.

In the evening, we held the sketch exhibition as the closing event of the ICSA in Istanbul 2014. The exhibition had many visitors including President Şenay, faculty staffs and students. Exhibition started with the brief explanation, in English, by our faculty staff about our faculty of architecture and its curriculum and ICSA program. Then students introduced, also in English, the activities they have done in the course and the impression of it. After the presentation, participants communed together freely watching the exhibits. We had opinions of various participants. After staying a while in a fond farewell with the faculty staffs and students who had taken care of us, we left for Atatürk Airport. On our way to the airport we dropped in at a science and technology-related exhibition (joint auspices of Bahçeşehir University and a German enterprise) at a large shopping center before we departed for home.

After 11 hours' flight all members arrived at the Kansai International Airport in good spirits in the evening of October 25. It has been a fulfilling overseas practical training blessed with good weather all through the 17-day period.



At the Istanbul Archaeological Museum



At the Tile Museum



Having lunch in the restaurants on campus with President Şenay, Vice president Elif and Dean Sema



Sketch Exhibition  
Students introduced, in English, what they have experienced in the present practical training course and the impression of it.



Sketch Exhibition  
After the presentation with slides projection, students had a pleasant talk freely watching the exhibits.



Visit to the exhibition of science and technology at the event hall of a large-scaled shopping center

(Reported by Noritoshi Sugiura)

## ITCS Seminar # 01

### *Garden as a Paradise in the Arid Region: An Observation Based on Architecture of Persian Origin*

**Date :** Friday, December 19, 2014, 17:00~19:00

**Venue :** K-222, Koshien Hall

**Lecturer :** Dr. Naoko Fukami (Adjunct Researcher, Organization for Islamic Area Studies, Waseda University, Japan)

The first seminar of Institute of Turkish Culture Studies 2014 was held at the Koshien Hall on December 19 (Fri.), 2014, inviting Dr. Naoko Fukami, researcher at Waseda University, to give a lecture titled “Garden as a Paradise in the Arid Region: An Observation Based on Architecture of Persian Origin”.

She first introduced the characteristics of the oriental garden in the pre-Islamic period such as that of ancient Mesopotamia, ancient Egypt, Achaemenid Empire (Persia) and Sasanian Empire (Persia). Then, the characteristics of the Islamic garden in the early Arab world, and the same of nomads and Persia were explained. After an explanation of the concept of the ‘paradise’, she illustrated a transition of enclosed gardens of the ancient Orient, ancient Persia, ancient Mediterranean area, Judaism, Christianity or Islam. Also the feature of architecture of the Persian style was explained. She concluded the lecture with the commentary on the differences of perspectives of nature or that of gardens nurtured by the two contrastive climates, i.e. arid region and wet region, in comparison of Persia and Japan.

The seminar turned out to have been an ideal opportunity to encourage audiences to think about the interrelations between the man-made environment (architecture, city plan, garden), natural environment and gods or Utopia.

(Reported by Kazuhiko Yanagisawa)



The lecture at K-222



Dr. Fukami as giving the lecture

## ITCS Seminar # 02

### *Hellenism the Opening to a New and Diverse World*

**Date :** Thursday, February 19, 2015, 13:30~15:30  
**Venue :** K-222, Koshien Hall  
**Lecturer :** Dr. Kosaku Maeda (Professor Emeritus at Wako University, Japan)

The second seminar of the Institute of Turkish Culture Studies 2014 was held at the Koshien Hall on February 19 (Thu.), 2015, inviting Dr. Kosaku Maeda, professor emeritus at Wako University, to give a lecture titled “Hellenism the Opening to a New and Diverse World”.

He began by asking the audience what was meant by Hellenism before he explained the definition of the era of ‘Hellenism’ and a conclusion given by a German historian J.G.Droysen i.e. ‘an amalgamation of cultures of Greek and Orient’. Then he introduced the accomplishment of Alexander the Great, or the promoter of the Hellenism, illustrating the route of his expedition which spanned far wider areas than before him. He also explained the changes in the Hellenic countries in the period after Alexander focusing on the ruins of Ai-Khanoum, a city of the Greco-Bactrian Kingdom in central Asia. At Ai-Khanoum where routes of traffic crossed there was a junction of different people with their various goods, ideas, religions and cultures. Dr. Maeda introduced various Hellenic characteristics as seen in the ruins such as the theatre, gymnasium, epitaph in Greek and coins using many graphics and pictures. Hellenism has seen a transformation of Greek culture influenced by the Persian and Buddhism cultures giving rise to a multitude of varying forms. This was an expression of diversity in coexistence which becomes more and more significant in the modern world where there are so many collisions between different cultures.

It was a valuable seminar giving a glimpse of a huge sphere of cross cultural exchange along the Silk Road.

(Reported by Kazuhiko Yanagisawa)



The lecture at K-222



Dr. Maeda as giving the lecture

## ITCS Seminar # 03

### *Archaeology in Jerusalem: Its Developments and Tasks*

**Date :** Friday, March 6, 2015, 13:30~15:30

**Venue :** K-222, Koshien Hall

**Lecturer :** Dr. Tomotoshi Sugimoto (Professor, Faculty of Letters, Keio University, Japan)

The third seminar of the Institute of Turkish Culture Studies 2014 was held at the Koshien Hall on March 6 (Fri.), 2015, inviting Dr. Tomotoshi Sugimoto, professor at Keio University, to give a lecture titled “Archaeology in Jerusalem: Its Developments and Tasks”

The lecture began with the case of an excavation of the ‘City of David’. Dr. Sugimoto’s explanation ranged from an episode in the discovery of the ‘House of David’, features of the Canaanite defensive construction and water facilities, excavation of ruins at Khirbet Qeiyafa, foundation of the nation by Solomon with features of the temples, palace buildings to housing construction of those days. He then explained the relation between the nomads and the building of the nation of Israel by David.

Next, he discussed the identification of the ‘Tomb of Jesus’. There are three possible ‘Tomb of Jesus’, and he elaborately explained the possibilities of each case based on facts. He further presented the major changes in attitudes to life and death in the light of the style of construction of tombs, which varies across the ages.

The audience appreciated the comprehensible explanation with ample pictures and figures. It was an evocative and interesting seminar to illustrate the relations between the archaeological and the Biblical world.

(Reported by Kazuhiko Yanagisawa)



The lecture at K-222



Dr. Sugimoto as giving the lecture

### **3rd International Conference on Archi-Cultural Interactions through the Silk Road at Bahçeşehir University, Turkey (Video Conference at Koshien Hall, MWU)**

**Date : March 25 -27, 2015**

The 3rd International Conference on Archi-Cultural Interactions through the Silk Road, sponsored by iaSU (International Association of SILKROAD UNIVERSITIES) and Bahçeşehir University (BAU), and co-sponsored by our university, was held at BAU on March 25-27, 2015. The iaSU, an international university union, promotes exchange between the universities of various regions along the "Silk Road." Our university and BAU, which are located at opposite ends of the Silk Road, organized the conference.

Keynote speaker Prof. Shigeyuki Okazaki, Head of the Department of Architecture and Director of the Institute of Turkish Culture Studies at Mukogawa Women's University, and four teachers from the Department of Architecture were scheduled to travel to Turkey to participate in the conference. However, the current Middle East situation did not allow for travel to Turkey, so our university participated via a video conferencing system set up in Koshien Hall. With this system, not only Prof. Okazaki and the four teachers, but additional teachers from the department and staff of the Institute of Turkish Culture Studies were able to participate in the conference. Because the time difference between Japan and Turkey is seven hours, the conference started at midnight Japanese time.

The opening ceremony was held on 25<sup>th</sup> March. Prof. Murat Dünder, Chair of the Steering Committee, Prof. Sema Soygeniş, Dean of the Faculty of Architecture and Design at BAU, Prof. Shigeyuki Okazaki, Head of the Department of Architecture and Director of the Institute of Turkish Culture Studies of Mukogawa Women's University, Prof. Şenay Yalçın, President of BAU, and Mr. Enver Yücel, Chair of the Board of Trustees of BAU, gave opening speeches. Prof. Süha Özkan, Founder and President of the World Architecture Community, presented a keynote speech entitled "A Stretch of Silk Road."

The general research presentations were delivered on 26<sup>th</sup> and 27<sup>th</sup> March. International researchers from Turkey, Japan, and all over the world gathered and presented their studies on architecture, urban design, landscape, and more for the countries of the Silk Road and active discussions commenced. The four members of our university also gave presentations. On the 27<sup>th</sup>, Prof. Okazaki delivered a keynote speech entitled "Intercultural Coexistence," which was followed by the closing ceremony and a successful end to the conference.

The next Archi-Cultural Interactions through the Silk Road conference will be held in 2016 at our university.

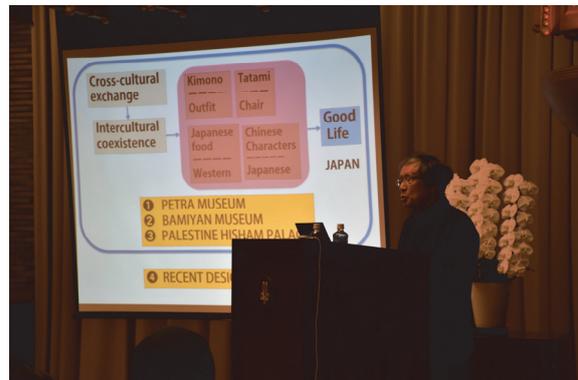
(Reported by Kazuhiko Yanagisawa and Tomoko Uno)



Teachers participating in the opening ceremony from the West Hall of Koshien Hall using a video conferencing system.



Presentation by researcher of ITCS, MWU



Keynote speech by Prof. Okazaki



Closing ceremony



Closing ceremony: The participants from Turkey and Japan celebrated the closing of the successful conference via video.

## Annual Events Apr. 2014- Mar. 2015

Date	Events
June 24-July 31, 2014	Inter Cultural Studies of Architecture (ICSA) in Japan 2014
July 10, 2014	Six young specialists of cultural properties preservation from the Kyrgyz Republic and the Islamic Republic of Afghanistan visited MWU's Department of Architecture and Architecture Major.
July 24-30, 2014	Dean Sema of the Faculty of Architecture and Design, Bahçeşehir University, Turkey, and the family visited MWU.
September 1, 2014	Dr. Mehrdad Hejazi, Associate Professor at University of Isfahan, Iran, visited MWU.
October 9-25, 2014	Inter Cultural Studies of Architecture (ICSA) in Istanbul 2014
December 19, 2014	ITCS Seminar #01 (FY2014) "Garden as a paradise in the arid region: an observation based on architecture of Persian origin" (Dr. Naoko Fukami, Adjunct Researcher, Organization for Islamic Area Studies, Waseda University, Japan)
February 19, 2015	ITCS Seminar #02 (FY2014) "Hellenism the opening to a new and diverse world" (Dr. Kosaku Maeda, Professor Emeritus at Wako University, Japan)
March 6, 2015	ITCS Seminar #03 (FY2014) "Archaeology in Jerusalem—its developments and tasks" (Dr. Tomotoshi Sugimoto, Professor, Keio University, Japan)
March 25-27, 2015	3rd International Conference on Archi-Cultural Interactions through the Silk Road at Bahçeşehir University, Turkey

## OUTLINE OF THE INSTITUTE OF TURKISH CULTURE STUDIES

### Organization

Position	Affiliation	Title	Name
Director	Department of Architecture	Professor	Shigeyuki Okazaki
		Professor	Jun Sakakihara
		Professor	Yusei Tazaki
		Professor	Sanae Fukumoto
		Professor	Kazuhiko Yanagisawa
		Associate Professor	Fumie Ooi
		Associate Professor	Noritoshi Sugiura
		Associate Professor	Toshitomo Suzuki
		Associate Professor	Hiroyuki Tagawa
Researcher	Department of Architecture	Lecturer	Akira Tanaka
		Lecturer	Hideaki Tembata
		Lecturer	Keisuke Inomata
		Lecturer	Tomoko Uno
		Lecturer	Junko Morimoto
		Assistant Professor	Aya Yamaguchi
		Visiting Professor	Mamoru Kawaguchi
		Visiting Professor	Kunihiko Honjo
	Institute of Turkish Culture Studies	Professor	Shushi Sugiura
Visiting Researcher	Bahçeşehir University (Turkey) Faculty of Architecture and Design	Associate Professor	Murat Dündar
Assistant	Institute of Turkish Culture Studies	Assistant	Yuna Hongo
Secretariat	Secretariat Division of School of Human Environmental Sciences	Chief Clerk	Miyuki Nakaichi

### Reviewers on *Intercultural Understanding*

Name	Title and Affiliation
Yasushi Asami	Professor, The University of Tokyo, Japan
Kunio Kato	Professor Emeritus at Kyoto University, Japan
Mamoru Kawaguchi	Professor Emeritus at Hosei University, Japan
Mitsuo Takada	Professor, Kyoto University, Japan
Shuichi Hokoï	Professor, Kyoto University, Japan
Kosaku Maeda	Professor Emeritus at Wako University, Japan
Minako Mizuno Yamanlar	Representative of NPO The Japanese-Turkish Friendship Association, Japan
Kazuya Yamauchi	Head, Regional Environment Section, Japan Center for International Cooperation in Conservation, National Research Institute for Cultural Properties, Tokyo, Japan
Hironobu Yoshida	Professor Emeritus at Kyoto University, Japan
Murat Dündar	Associate Professor, Bahçeşehir University, Turkey
Murat Şahin	Associate Professor, Özyeğin University, Turkey
Shigeyuki Okazaki	Professor, Mukogawa Women's University, Japan
Kazuhiko Yanagisawa	Professor, Mukogawa Women's University, Japan

## **Rules and Regulations of the Institute of Turkish Culture Studies (ITCS) at Mukogawa Women's University**

### **(Establishment)**

**Article 1** Mukogawa Women's University (hereinafter referred to as "the University") locates the Institute of Turkish Culture Studies (hereinafter "the Institute") in the University.

(2) The Institute shall be operated under the administration of the department of architecture (of the University) for the time being.

### **(Objective)**

**Article 2** The objective of The Institute is as follows:

(i) to conduct comparative studies on life, technology and culture centered around architecture of Japan and Turkey, as the east and the west starting points of the Silk Road, and to clarify the cultural base common to both countries beyond the differences in history, climate and so forth between the two countries.

(ii) to conduct, developing above-mentioned aims, extensive studies on life, technology and culture centered around architecture of neighboring Silk Road countries and to clarify similarities among them and contribute to new mutual understandings and contribute to the peace and prosperity of the Silk Road region through such understandings.

(iii) to support international exchange of students mainly in the field of human environment and conduct international education activity of architecture and human environment based on the achievements of the studies mentioned in (i) and (ii).

(iv) to discuss internationally the achievements of research and education referred to in the preceding three items and to introduce (*or* transmit) it to the world in various ways at every occasion, and to share common values with the people around the world.

### **(Operation)**

**Article 3** The operations of the Institute to achieve the above-mentioned objectives are as follows:

(i) to conduct studies in cooperation with the Research Center of Japanese Culture Studies at Bahcesehir University, Istanbul

(ii) to hold an international workshop "Inter Cultural Studies of Architecture in Japan (ICSA in Japan)" where architecture and human environment students of the world centered around Turkey are invited every year in principle, to support the similar workshop "Inter Cultural Studies of Architecture in Istanbul" which is held at the Research Center of Japanese Culture Studies at Bahcesehir University and to send teachers and students of the University centered around the department of architecture for the research and education activities.

(iii) to hold seminars, introduce the research achievements, exhibit and hold lectures, concerning life, technology and culture centered around architecture, where researchers, business persons and residents who belong to the field of studies conducted by the Institute are invited.

(iv) to hold permanent and special exhibitions on life, technology and culture of neighboring Silk Road countries centered around Turkey.

(v) to conduct public relations activities such as publication of the research and educational achievements of the Institute, symposium and so forth.

(vi) other operations required to accomplish the aims mentioned in the preceding article.

### **(Organization)**

**Article 4** The Institute may have research departments with respect to differences in research fields to perform relevant activities.

**(Director)**

**Article 5** The Institute shall install a director.

- (2) The chancellor appoints a director from among professors
- (3) The director shall be appointed for a period of two years and may be reappointed
- (4) The director handles the operations of the Institute under the president's direction

**(Vice Director and Head of Research Department)**

**Article 6** The Institute may install a vice director and heads of research in each department referred to in article 4.

- (2) The chancellor appoints a vice director and heads of research department from among the faculty. The latter position may be substituted by adjunct teaching staff.
- (3) The vice director assists the director and engages in the administrative operations
- (4) The vice director fills in for the director under the director's direction
- (5) Each head controls his research department and engages in the research under the director's direction .

**(Senior Researcher)**

**Article 7** The Institute may install senior researchers with the chancellor's approval.

- (2) The director appoints senior researchers from among researchers.
- (3) The senior researchers assist their heads and engage in the research.

**(Researcher)**

**Article 8** The Institute shall install researchers required.

- (2) Teachers at Bahcesehir University may be appointed as researchers
- (3) The researchers engage in research under the director's direction.

**(Temporary Researcher)**

**Article 9** The Institute may install temporary researchers as the need arises.

- (2) The president appoints temporary researchers upon recommendation of the director
- (3) The period of the appointment shall be less than one year and it may be renewed when necessary.
- (4) The temporary researchers engage in the specific research or joint research.

**(Assistant)**

**Article 10** The Institute may install assistants.

- (2) The assistants assist research under the director's direction.

**(Steering Committee)**

**Article 11** The University shall have the steering committee of the Institute (hereinafter "the steering committee") to deliberate the basic policy concerning the operation of the Institute.

- (2) The steering committee shall consist of the director and a few members chosen from among the vice director, the heads of research departments, the senior researchers and researchers.
- (3) The president appoints the members of the steering committee.
- (4) The director shall be the chairperson of the steering committee.
- (5) The chairperson shall convene and lead the steering committee.
- (6) The member shall be appointed for a period of two years and may be reappointed. When a vacancy arises, the successor's term of office shall be the predecessor's remaining term.
- (7) The details on the steering committee shall be otherwise laid down.

**(Secretariat)**

**Article 12** The Institute shall install a secretariat.

(2) The secretariat shall consist of a few members and the chief clerk of School of Human Environmental Sciences shall be the chief of the secretariat

(3) The members of the secretariat handle clerical works under the guidance and supervision of the chief clerk under the director's direction.

**(Supplementary Rules and Directions)**

**Article 13** In addition to what is provided in this rules and directions, the necessary matters concerning the administrative operations of the Institute shall be prescribed by the director.

**(Modification or Elimination of the Rules and Regulations)**

**Article 14** Modification or elimination of the rules shall be implemented with the chancellor's prior approval.

**Supplementary Provisions**

(1) The rules and regulations shall be enforced starting on July 29, 2009.

(2) In the period from the day the rules and regulations is enforced until March 31, 2011, the term of the appointed directors and members of the steering committee shall begin on the day when they are appointed and end on March 31, 2011 notwithstanding the provisions of Article 5, paragraph(3) and Article 11, paragraph(6).



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