Turkey-Japan International Survey Group of Anti-earthquake Measures December 19-23, 2011

A massive earthquake occurred in Van prefecture located at the east end of Turkey bordering Iran on Sunday, October 23, 2011. It happened to be one week before Mukogawa Women's University held the Opening Ceremony of “Ceramics Gallery for the Exhibition of Architecture and Culture through the Silk Road” in Koshien Hall. For the opening ceremony, the following people attended: Mr. Hideo Tamai, former Director-General of the Agency for Cultural Affairs, Prof. Dr. Şenay Yaşçın, the president of the Bahcesehir University, his wife Mrs. Elif Yaşçın, Prof. Dr. Ahmet Eyüce, the architecture division manager, Asst. Prof. Dr. Murat Dündar and Asst. Prof. Dr. H. Sezin Tanner of the department of architecture, Mr. Ayşegül Atmaca, culture and public-relations secretary, Turkish embassy, Mr. Shoji Manabe, superintendent of education of Nishinomiya, Prof. Tomoko Masuya of Institute for Oriental Culture, the University of Tokyo, Mr. Masahiko Shibatsuji and Mr. Daisuke Mitsumoto, who helped with collecting the exhibits, and Chancellor Ryo Okawara and President Naosuke Itoigawa of Mukogawa Women’s University. After the ceremony, the Bahcesehir University suggested that members from Mukogawa Women’s University and Kobe city visit Turkey for an earthquake survey and a symposium in Istanbul under the joint hosting of the university and Sisli Municipality in Istanbul. The suggestion was materialized as “Turkey-Japan International Survey Group of Anti-earthquake Measures” formed by Mukogawa Women’s University, Kobe city and the Bahcesehir University.

The participants from Japan were as follows: Prof. Dr. Shigeyuki Okazaki (president of Architecture department of Mukogawa Women’s University, president of Institute of Turkish Culture Studies, the emeritus professor of Kyoto University; manager of the team), Mr. Eiji Tarumi (adviser of Hyogo Branch of Architects & Building Engineers Association, former head of Kobe Housing Bureau: in charge of housing reconstruction, anti-earthquake refurbishment, city planning administration, city planning (land readjustment.)), Mr. Toshiyuki Onoda (Kobe citizen co-op representative director, former head of Kobe city fire department: civilian disaster prevention organization (disaster prevention and welfare community), firefighting in general, earthquake fire, fire prevention), Mr. Takuya Nagae (Senior research scientist of the Hyogo seismic technology research center of National Research Institute for Disaster Prevention: Seismic technology) and Mr. Yoshihiro Hayasi (former Kobe Crisis Management Office chief examiner, Kobe industrial development office secretary, Kobe Convention & Visitors Association director, former head of Kobe Crisis Management Office: Safe city-planning and life reconstruction, lessons of the Kobe earthquake and the East Japan great earthquake). A press conference was held at Kobe City Office prior to departure. And then Japan and Turkey deepened exchanges in the area of anti-earthquake measures in Sisli, the Municipality of Istanbul, Van prefecture, Van city, and Erciş city between December 19 and 22, 2011.
Leaving Kansai International Airport in the early morning on Monday, December 19, 2011, we arrived at Istanbul/Atatürk International Airport after a flight of about 12 hours. We had an official meeting at Sisli Municipality from 3 p.m. to 5 p.m. Then, we paid a courtesy visit to Mr. Enver Yücel, chairman of the board of directors of the Bahcesehir University and Prof. Dr. Şenay Yalçın, president of the Bahcesehir University. Following the visit a welcome dinner party was held at the university.
The members of the team as shown below met at the lobby of the Atatürk International Airport at 7 a.m. Tuesday December 20, 2011 and left for Van on a plane. Members: The Japanese group, and the Turkish group (Prof. Dr. Ahmet Eyüce, dean of Architecture School of the Bahcesehir University; Asst. Prof. Dr. Murat Dündar, associate dean; staff from Sisli Municipality and so on.) In Van, the Bahcesehir University Van school staff and others welcomed us. We inspected the city affected by the earthquake such as a site of collapsed hospital or a leaning medium-rise collective housing, etc. by bus. We visited Van city mayor at a temporary government building and heard the situation of damage, and exchanged views with the mayor. Then we visited the collapsed hospital where a Japanese doctor, Mr. Miyazaki, suffered damage, a public facility the reconstruction of which was being planned with a support of the Sisli Municipality, etc. We also visited Disaster Coordination Center, a center of volunteer engineers in Van city in the evening, and exchanged opinions of a methodology of detailed and specialized analysis of earthquake, measures of recovery and reconstruction etc. We visited governor of Van Province after sunset at a temporary government building of the Van Province crowded with many people. The governor who has once visited Kobe provided us with overview of the damage of disaster of entire Van Province, reconstruction assistance, governmental aid etc. before we exchanged opinions. After that, dinner party was held at the hotel on the Van Lake and where citizen of Van city, Sisli Municipality, and people from the Bahcesehir University participated. We stayed at the hotel. At the breakfast hour of the next morning, we found a number of rescue team members in the uniform of the same model, whom we thought to be counterparts of Japanese fire brigade members, were staying at the hotel, which was a sole hotel unaffected by the earthquake.
Left: A camp along the main road in the Van city.
Right: A leaning collective housing on the brink of collapse. We were told since the building was built on the basis of a dry riverbed the damage had been that much larger.

Left: This type of ceramic block is used everywhere. We had never witnessed that the wall of concrete being housed in the frame of RC structure under construction.
Right: Interview with mayor of Van in the temporary government building on December 20, 2011. Citizens were in a state of panic. The fire broke out in 20 places, when there were only six fire trucks in the city. Although there were 65 fire trucks in Kobe, it was not enough for extinguishing fire.

Left: Mr. Idris Canbay, a volunteer engineer in Van city in the front. Upon entering a disorderly office in the cemetery led by a staff we found many people there. The desks were insufficient for the size of staff. They started activity at the beginning of this month. They could not begin any practical activities until one month after the disaster. They are engaged in planning of the transportation route of relief supplies, reconstruction work, damage survey, budget management etc. We heard that it is the committee which citizens started by their own power. Van is the greatest town in east Anatolia with a nominal population of 400,000. Someone says it must be 600,000 or 700,000, but none can tell exact number. The population was 100,000 in 1990. According to an Iranian oil system engineer, with whom we shared the breakfast
table in a hotel in Istanbul some days, Van functions as the doorway to Iran. A surge of population caused a housing problem. Some take refuge in the urban environment of Van for fear of terrorist attack. There are a large number of illegal buildings. It is said 50,000 out of 90,000 buildings in Van were illegal ones before the earthquake. There is a problem with collapsed unauthorized residences. Eight buildings collapsed in the 1st earthquake and 21 in the 2nd earthquake. Eighty-three are being demolished. No buildings are inhabited. They are too scary to live in.

Right: Mr. Baris Denizer, a staff sitting at the desk, interrupted. He said he had once worked for Taisei Corporation for five years as an engineer of the tunneling work of the Bosphorus. He explained using a self-produced animation. He showed precious data, such as video commentary of the earthquake belt in Turkey, results of a survey of various areas, and the building where Mr. Miyazaki was killed in the earthquake. Then, I got Mr. Nagae, an ant earthquake design specialist to sit beside him. Then, we demonstrated an experiment of Mr. Nagae's E-defense. Mr. Denizer accompanied us to Erciû next day. He asked Mr. Nagae a lot of questions about the structural problem involved in repair work. Returning to Van city he showed us around a public building whose first floor had been ruined. When he said goodbye, we asked him to read a paper in the international conference scheduled to be held in July. We told him that Mr. Nagae would also present a paper in July and that Mr. Denizer’s paper would make a precious report. The outline of his explanation was as follows: the earthquake belt in Turkey was discovered in 2002; the 2nd earthquake that was destructive was of an epicentral earthquake of magnitude 5.6 on the Richter scale, and it occurred 20 days after the preceding 1st earthquake; incidentally, the first one was a rolling earthquake; it was 3 seconds after the occurrence of the 2nd earthquake that the building in which Mr. Miyazaki stayed collapsed. Incidentally, the earthquake of Kobe was of magnitude 7.6 on the Richter scale and was an epicentral earthquake. In that sense his DVD data is precious for us.

Left: Interview with governor of Van in the evening of December 20, 2011. Although it was after sunset, the prefectural office building was in serious congestion with overwhelming number of people including police and apparent soldiers. Governor's talk is summarized as follows:

600,000 people were stricken by the earthquake; the stricken area covers 21,000 square kilometers (We heard it covered 120 or 130 kilometers); It was aftershocks which amounted to 7000 times that troubled disaster victims the most; they have distributed 75,000 units of tents; government has a provision of 45,000 units of tents; they have 11,000 units of container houses in reserve; they placed priority on allocating the container houses to rural areas; the target number of containers to be procured is 22,000 units; there are 400 engineers; they aim at the completion of permanent houses in next summer; a tent village requires 200,000 meals a day; container dwellers are suffering from want of food; medical staff comes from the neighboring areas taking turns every ten days; schools are closed for the moment; schools will start again on January 20; there are many nomads in the outskirts of Van, and, as food cost, 400 Turkish liras per head for cows and horses and 60 Turkish liras for small domestic animals have been subsidized (then-exchange rate was 45yen for 1 Turkish lira.); 50,000 people are using neighboring public buildings as hotel accommodations; he has visited Kobe once, and unlike Kobe Van has frigid climate.

Right: Commemoration photography after the dinner at the hotel.

Left: Many rescue workers in red vest stayed at the hotel in Van. Seeing many men in red wear in the dining-room the next morning we asked who they were and learned they were members of time-honored Turkish volunteer group comparable to Japanese fire brigade. I wished if only Mr. Miyazaki should have been staying here. And I wondered, at the same time, this hotel might be too expensive for general public to stay in.

Right: The mosque in Erciû city whose pair of minarets were broken.
In the early morning of Wednesday, December 21, 2011, we went up north along Lake Van in a microbus to visit Erciş city on the north coast of the lake. We paid a courtesy visit to mayor of Erciş at the temporary government building, and exchanged views on anti-earthquake measures. Then, we inspected damaged areas in the city and container houses led by municipal personnel. After that, we returned to Van city down the lake, and after inspecting a public building the first floor of which had been damaged, we headed for the airport.

Left: Interview with mayor Erciş in the temporary government building. I wondered why public facilities or schools had been so seriously affected. The mayor was soft-mannered and talked calmly and orderly. He said that a ground survey was required here first. The earthquake has been occurring here every 30 years. Although there are as many as 84 villages here, death toll from this earthquake counts only three. Rest of the casualty occurred in the city area. Many were killed in a collapse of a cafeteria. They are taking measures according to the report by the professional team from the prefecture. Although the drawings of buildings are reserved, many of which are of illegal buildings and date back over 30 years. They have sent drawings to the Public Prosecutor's Office, and survey is in progress. Twenty units of 3- or 4-story buildings collapsed. The buildings built within the past ten years have seldom collapsed. After the interview, one of the city personnel showed us around the city in our bus. I asked who helped disaster victims. He answered that a specialist came over by plane to help them. No fire occurred. The hospital collapsed and they were rescued by the ambulances and helicopters which came from the neighboring communities. According to a member from Kobe, the pace of constructing 2,000 units of container houses within two months after the disaster exceeds that of Kobe. The mayor emphasized the fact that relief was progressing by direct order of the prime minister himself. The situation was special in that they have frigid winter and large families. We inspected a village of 2,500 container houses in a bus. Another village of the same scale was being constructed.

Right: Children of a village of 2,500 units of container houses. A room of 1 meter wide with a toilet bowl and a basin is located next to the entrance. A room about 2 meters square with two beds overlapping in L-shape is located on the right. There is a room with a sink and a sofa on the left. Women and children gathered from nowhere.

Left: Friendly people like people of the country in Japan invited me into the container.

Right: Erciş city container village of 2,500 houses. The door to each container house aligns on either side and the passage of service is on the other side. It is likely to get hot here in summer.
Left: The village and the fields are enclosed with birch trees. The city guide said the leaves grew thick in summer and the village seems as if it has disappeared in the green background. It must be so. I would like to come back someday and see the scenery by all means. It is also the scenery which people have nurtured.  
Right: A tent village in the Erciṣ city.

Left: As one leaves Erciṣ city, beautiful scenery of the Lake Van continues before him. There is no river to flow into the lake. We occasionally came across shepherds leading a flock of sheep. We also passed by tracks of the army which carried fully equipped tanks, and had inspection of the army several times. It was exactly the border region amid the continued tension.  

Left: We returned from Erciṣ city to Van city, and inspected damaged Waterworks Bureau building. There was no wall on the first floor of the extended annex buildings. The building has lost connections at the L-shaped corner.  
Right: The lecture meeting started in the Bahcesehir University. From the left: Murat, Okazaki, mayor of the Sisli Municipality, the Enver chairman of the board of directors, president, and, vice president. Many television stations came. First, the president showed the photograph of tile presentation in Mukogawa Women's University, and made a complimentary address. The mayor introduced that Sisli Municipality offered a lot of assistance quickly. The Enver chairman of the board of directors greeted at the end, and presented the souvenirs.
In the afternoon on Thursday, December 22, 2011, we held a symposium “Earthquake – Municipal Works and Kobe” in the Bahcesehir University. Mayor of the Sisli Municipality, chairman of the board of directors of the Bahcesehir University, president, vice president, and others made greetings, and then each member of Japanese team gave a lecture and joined the discussion. After the meeting, we were invited to the dinner at the home of consul general Mr. Hayashi, and reported the extent of the damage caused by the Van earthquake to Mr. and Mrs. Hayashi. Mr. and Mrs. Hayashi introduced us the fact about the Sisli Municipality, namely, it is a business area that represents Istanbul and the center of culture and commerce.