

Archi-Cultural Translations through the Silk Road

**2nd International Conference, Mukogawa Women's University, Nishinomiya, Japan,
July 14-16, 2012, Proceedings**

Edited by iaSU2012 JAPAN Publication Committee



Mukogawa Women's University Press

This proceedings includes 2 invited talk extended abstracts and 71 refereed extended abstracts submitted to the 2nd International Conference on Archi-Cultural Translations through the Silk Road (iaSU2012 JAPAN), held on July 14-16, 2012, at Kami-Koshien Campus of Mukogawa Women's University, Nishinomiya, Japan. Copyright remains with the author(s).

First published 2012 by Mukogawa Women's University Press

Mukogawa Women's University Press

6-46 Ikebiraki-cho, Nishinomiya, Hyogo, 663-8558, Japan

No part of this publication may be reproduced in any form or by any means without permission from the copyright owner. For more information regarding permission, write to iaSU2012 JAPAN Publication Committee (itcs@mukogawa-u.ac.jp).

The publication committee and its publisher accept no responsibility for any information, opinion or statement presented in the extended abstracts, which are the responsibility of the authors. Authors are responsible for securing permissions to reprint copyrighted material. Any fees required to secure copyright permissions or use of figures are the responsibility of the authors. The publication committee and its publisher accept no liability whatsoever for any loss or damage sustained by any reader as a result of his or her action upon any information, opinion or statement presented in the extended abstracts.

Printed in Japan

ISBN 978-4-9906255-1-1

CONTENTS

Preface	viii
<i>Ryo Okawara</i>	

Invited talks

001	ADVANCED SEISMIC DESIGN OF BUILDINGS FOR THE RESILIENT CITY	002
<i>Akira Wada, Nobuyuki Mori</i>		
002	TRACING THE ORIGIN OF JAPANESE PAGODAS ALONG THE SILK ROAD	008
<i>Koji Miyazaki</i>		

1. Cross-cultural interaction along the Silk Road

101	THE ORGANIZATION OF LONG-DISTANCE TRADE AND ITS INFLUENCE ON THE SETTLEMENT TYPOLOGY IN ANATOLIA IN THE OTTOMAN SOCIETY	015
<i>Sezin Tanriover, Hüseyin Tanriover</i>		
102	CUBOCTAHEDRON AS A POTENTIAL EVIDENCE OF THE “CULTURAL BRIDGE” BETWEEN KYOTO AND KAYSERI	020
<i>Hakan Hisarligil</i>		
103	TRANSITIONS AND USAGE OF SAWS IN THE EURASIAN CONTINENT: THE COMPARATIVE HISTORY OF THE DEVELOPMENT OF TECHNIQUES AND TOOLS TO CREATE WOODEN ARCHITECTURE	026
<i>Marcelo Nishiyama, Akira Watanabe</i>		
104	CULTURAL EXCHANGE IN THE HISTORY OF ARCHITECTURE	030
<i>Uzushi Nakamura</i>		
105	HIEROPHANIC INFLUENCES ON TIMURID ARCHITECTURE ALONG THE SILK ROAD	036
<i>Elena Paskaleva</i>		
106	ARCHI-CULTURAL PARALLEL OF PERSIAN AND TURKISH BAZAAR ALONG THE SILK ROAD CASE STUDIES: REY, TABRIZ AND ISTANBUL BAZAAR	042
<i>Mohammad Reza Pourjafar, Ghodsieh Samani, Ali pourjafar, Razieh Hoorshenas</i>		
107	INVESTIGATING THE SUSTAINABLE CITY INDICATORS THROUGH PROMOTING PHYSICAL SECURITY IN THE MARGINS OF THE SILK ROAD (CASE STUDY: YAZD CITY)	048
<i>Zahra Sadat Saeideh Zarabadi, Taimaz Iarimian, Mohsen Foruzanfar</i>		
108	SYMBIOSIS BETWEEN MAN AND NATURE: JAPANESE INFLUENCE ON LANDSCAPE ARCHITECTURE OF ISLAMABAD	053
<i>Abdul Rehman</i>		
109	THE CROSS-CULTURAL INTERACTION BETWEEN THE ART OF GARDEN OF OLD CITIES OF IRAN AND INDIA ALONG THE SILK ROAD	057
<i>Mohammad Reza Pourjafar, Mohammadjavad Mahdavinejad, Mostafa Shamshirband*, Saeed Farmahin Farahani, Razieh Hoorshenas</i>		
<i>*Presenting author</i>		

2. Regional characteristics and individuality of living space

201	STUDY OF SENSE OF DEPTH IN THE VIEW OF ENTSU-JI TEMPLE GARDEN	064
	<i>Noritoshi Sugiura, Miyuki Ami</i>	
202	ICE SHELL - CONTEMPORARY 'KAMAKURA'	070
	<i>Tsutomu Kokawa, Koji Watanabe, Tohru Watanabe</i>	
203	ARCHITECTURAL THEORETICAL EXAMINATIONS OF TYPICAL JAPANESE SPATIAL CHARACTERISTICS IN INTERIOR SPACES OF KYO-MACHIYA TOWNHOUSES	076
	<i>Takahiko Otani</i>	
204	THE INFLUENCE OF IRANIAN ISLAMIC ARCHITECTURE ON TRADITIONAL HOUSES OF KASHAN ...	081
	<i>Atefeh Zand Karimi, Bahareh Hosseini</i>	
205	HISTORICAL STUDY OF SITTING IN JAPAN: WITH "SEIZA" AS MAIN TOPIC	087
	<i>Yusei Tazaki</i>	
206	A PHENOMENOLOGICAL APPROACH TO FOLDINGS AS SPATIO-TEMPORAL CONTINUITY THROUGH THE MOTIFS OF TURKISH FOLK SONGS AND TURKISH RUGS	093
	<i>Beyhan Bolak Hisarligil</i>	
207	CONCEPT OF 'SACRED SPACE' IN TRADITIONAL TURKISH ARCHITECTURE	099
	<i>Murat Dündar</i>	
208	TYPICAL MOUNTAIN IMAGE OF TURKISH STUDENTS BASED ON LANDSCAPE MONTAGE TECHNIQUE: THROUGH COMPARISON WITH JAPANESE STUDENTS	105
	<i>Kazuhiko Yanagisawa, Shigeyuki Okazaki, Murat Dündar</i>	
209	STUDY ON PREFERENCE OF TOURISTS ON THE LANDSCAPE OF FLOWERING CHERRY TREES AT YOSHINOYAMA, NARA PREFECTURE, JAPAN	111
	<i>Junichi Imanishi, Yosuke Harada, Yoshihiko Iida, Ryo Higashiguchi, Yukihiro Morimoto</i>	
210	STUDY ON FORMS OF HISTORICAL WEIRS IN JAPAN AS LANDSCAPE ELEMENTS	115
	<i>Shuichi Murakami</i>	
211	BELBAR, FROM LIMITATIONS TO OPPORTUNITIES DISCOVERING THE NATURAL POTENTIALS	121
	<i>Atyeh Ashtari, Faranak Khas Ahmadi, Paya Salem, Mona Tajeddini</i>	
212	SPATIAL COMPOSITION OF THREE INTERMOUNTAIN SETTLEMENTS LOCATED ON SLOPES IN NORTHERN AND CENTRAL TURKEY	127
	<i>Toshitomo Suzuki, Shigeyuki Okazaki</i>	
213	RELATIONSHIPS BETWEEN FENG-SHUI AND LANDSCAPES OF CHANGAN AND HEIJO-KYO	133
	<i>Hideaki Tembata, Shigeyuki Okazaki</i>	
214	"THE IMAGE OF THE WORLD" OF THE TRADITIONAL LIVING SPACES IN JAPAN: COMPARING TO THE ONE OF THE DESERT CIVILIZATIONS	139
	<i>Takashi Doi</i>	
215	VILLAGE HABITATIONS OF HOWRAMANAT VALLEY, IRAN	145
	<i>Majid Ziaei</i>	

3. Modernization, globalization and urbanization

301	TRENDS OF URBAN DEVELOPMENT PLANS IN HISTORIC AREA IN EAST ASIA	152
	<i>Nobuya Ueda, Shigeki Sugita</i>	

302	STUDY ON REVITALIZATION OF HOUSING COMPLEXES THROUGH UTILIZATION OF OPEN SPACES BASED ON RESIDENTS' ACTIVITIES	158
	<i>Shigeaki Takeda</i>	
303	A SILK ROAD BLUEPRINT:RELIGIOUS KINSHIP AND STATE CONSTRUCTION PROJECTS IN THE DEVELOPMENT OF A NORTHWESTERN CHINESE BORDERLAND, 1912-1946	163
	<i>Tristan G. Brown</i>	
304	APPEARANCE OF SLUMS, SIDE EFFECT OF DEVELOPMENT	168
	<i>Amir Shahrad</i>	
305	CROSS CULTURAL EDUCATION IN ARCHITECTURE: FINDINGS FROM TEACHING INTERNATIONAL STUDENTS TRADITIONAL JAPANESE ARCHITECTURE AND GARDENS	173
	<i>Arno Suzuki</i>	
306	A PSYCHOLOGICAL ANALYSIS OF THE SOCIAL PROBLEMS ARISING FROM MODERNIZATION, GLOBALIZATION AND URBANIZATION	179
	<i>Mari Aoki</i>	
307	ISTANBUL FIRES IN THE 19 TH CENTURY: AN ANALYSIS ON ARCHITECTURE AND URBAN PATTERN	182
	<i>Pınar Sunar, Zeynep Ceylanlı</i>	
308	ANARCHIST DESIGN	186
	<i>Fatemeh Ziaei</i>	

4. Science and technology that underpin culture

401	THERMAL ENVIRONMENT IN AJANTA CAVES	191
	<i>Tomoko Uno, Yoshiko Shimazdu</i>	
402	RESEARCH OF ANTI-FREEZING FOR THE BUDDHIST IMAGE CARVED ON TUFF CLIFF BY CLOSING SHELTER	197
	<i>Masayuki Morii</i>	
403	AIR CONDITIONING IN IRAN DESERT	201
	<i>Mohsen Ziaee, Ahmad Fakhar</i>	
404	CHARLES CORREA'S HOUSING LANGUAGE	207
	<i>Belinda Torus</i>	
405	THEORETICAL AND HISTORICAL PERSPECTIVES IN DESIGN, INNOVATION AND POLICIES	213
	<i>E. Tezel</i>	
406	NATURAL VENTILATION AROUND OPEN GROUND FLOORS WITH PILOTIS IN HIGH-RISE RESIDENTIAL BUILDINGS IN TROPICAL AREAS: HARMONIZATION OF MODERN AND TRADITIONAL HOUSING IN TROPICAL AREAS	219
	<i>Abdul Razak Sopian, Noor Hanita Abdul Majid, Shuichi Hokoi*</i>	
	<i>*Presenting author</i>	
407	EVOLUTION OF TIMBER CONSTRUCTION IN TURKEY	225
	<i>Görün Arun</i>	
408	FLYING A 100m-LONG JUMBO KOINOBORI	231
	<i>Mamoru Kawaguchi</i>	
409	SEISMIC RETROFIT OF HIGH-RISE BUILDING WITH DEFORMATION-DEPENDENT OIL DAMPERS ...	236
	<i>Osamu Hosozawa, Yuichi Kimura, Hideshi Aono</i>	

410	SEISMIC PERFORMANCE AND REINFORCEMENT OF JAPANESE HIGH-RISE BUILDINGS FACING SUBDUCTION EARTHQUAKE: E-DEFENSE SHAKE TABLE TESTS	240
	<i>Takuya Nagae, Masayoshi Nakashima</i>	
411	THE 2011 VAN EARTHQUAKES OCURRED IN TURKEY	245
	<i>Baris Denizer, Takuya Nagae</i>	

5. Sustainability and global environment

501	SUSTAINABLE SOCIETY: ENERGY SAVING CONSTRUCTION	251
	<i>Shushi Sugiura</i>	
502	NATURE AS A SOURCE OF SUSTAINABLE DESIGN IN ARCHITECTURE OF ORIENTAL COUNTRIES (CASE STUDY: TRADITIONAL ARCHITECTURE OF IRAN)	257
	<i>Shaghayegh Afrasiabian, Mohammadjavad Mahdavinejad, Negar Badri</i>	
503	ROLE OF CULTURE IN SUSTAINABLE ARCHITECTURE	262
	<i>Sinem Kultur</i>	
504	OYA PROJECT OF SYNCHRONIZED CAVE COMPLEX: UNDERGROUND REVITALIZATION PLAN UTILIZING ABANDONED MINES	268
	<i>Itsuo Kamiya</i>	
505	SUSTAINABLE BIODIVERSITY AND COMMUNITY DESIGN IN HYOGO JAPAN	274
	<i>Mayumi Hayashi</i>	
506	AKSARAY SULTANHAN CARAVANSERAI: A STUDY OF CULTURAL INTERACTIONS AND SUSTAINABILITY ALONG THE SILK ROAD	277
	<i>F. Yesim Gurani, Tulay Ozdemir Canbolat</i>	
507	PERSIAN GARDENS ARE SUSTAINABLE GARDENS: SCRUTINIZE THE SUSTAINABILITY FEATURES IN PERSIAN GARDENS	280
	<i>Hirbod Norouzian Pour, Mehri Motahari Rad, Samane Motaghi Pische</i>	

6. Religion and art

601	A STUDY OF THE LANDSCAPE AT THE WANG RIVER VILLA THROUGH ANALYSIS OF THE POEM "DEER PARK" BY WANG WEI	287
	<i>Akira Tanaka</i>	
602	THE STUDY ON THE SOUNDSCAPE OF THREE JAPANESE GARDENS	293
	<i>Haruyoshi Sowa</i>	
603	BUDDHIST ATTITUDE TOWARDS CULTURE AND OTHER RELIGIONS	296
	<i>Rev. Satyananda Sraman</i>	
604	STUDYING THE GRAPHICAL STRUCTURE ALTAR INSCRIPTIONS AND AROUND NEYRIZ GREAT MOSQUE	302
	<i>Azam Monazzah, Mohamad Khazaei*</i>	
	<i>*Presenting author</i>	
605	A STUDY ON THE ORNAMENT OF THE FORMER KOSHIEH HOTEL: ARATA ENDO'S PHILOSOPHY ON ARCHITECTURAL BEAUTY AND ITS DEVELOPMENT THROUGH ORNAMENT	306
	<i>Jun Sakakihara</i>	
606	A STUDY OF THE SIGNIFICANT INFLUENCE BY SHIN-BUDDHISM TO THE TRULY ORIGINAL JAPANESE CRAFTS DESIGN	312
	<i>Satoru Kiyosawa</i>	

607	A BREIF SURVEY ON THE PRINCIPLES OF IRANIAN ISLAMIC ARCHITECTURE	318
	<i>Bahareh Hosseini, Atefe Zand Karimi</i>	
608	ORIGINALITY OF CENTRAL COLUMN IN JAPANESE PAGODA	324
	<i>Fumie Ooi</i>	
609	AN ARTUQID BUILDING: DUNAYSIR GREAT MOSQUE	330
	<i>Hilâl Aktur</i>	
610	CONSISTENCY THROUGH DIVERSITY IN TRADITIONAL ARCHITECTURE OF ORIENTAL COUNTRIES IN CASE OF IRAN, JAME MOSQUE OF QAZVIN	336
	<i>Mohammadjavad Mahdavejad, Nickta Pilbala*, Mostafa Shamshirband, Saeed Farmahin Farahani</i> *Presenting author	
611	MOUNTAINS PAINTED IN CHRISTIAN PAINTINGS IN THE MONASTERY OF HOSIOS LOUKAS	342
	<i>Keisuke Inomata, Shigeyuki Okazaki</i>	
612	1 SILK PATH / 2 NAKAGAWA-MACHI MOUNTAIN PATH: 1 TO 2 COMPARISON CONTROVERSIES	348
	<i>Bojan Milan Koncarevic</i>	
613	LINKING ROUTES FROM THE SILK ROAD THROUGH NEPAL – THE ANCIENT PASSAGE THROUGH MUSTANG AND ITS IMPORTANCE AS A BUDDHIST CULTURAL LANDSCAPE	354
	<i>Susanne von der Heide</i>	
614	TURKMEN RUG MOTIFS IN RENAISSANCE PAINTINGS: REFLECTIONS ON THE JOURNEY OF TURKMEN MOTIFS FROM EAST TO WEST	360
	<i>Mahnaz Shayestehfar, Mohammad Khazaie, Rezvan Khazaie, Erfan Khazaie</i>	
615	ZEYNEL BEY TOMB: THE UNIQUE PERSIAN TOMB IN ANATOLIAN PLATEAU	365
	<i>Ashkan Mansouri, Mustafa Çağhan keskin</i>	

7. Case studies on cultural formation

701	BEHAVIOR OF STUDENTS IN A NEW TYPE OF JUNIOR HIGH SCHOOL IN JAPAN	372
	<i>Satoshi Matsushita</i>	
702	THE SPIRITUAL JOURNEY: A STUDY OF THE SPATIAL ATTRIBUTES FOUND BETWEEN CAR PARK AND INNER SHRINE	378
	<i>Luke Chalmers</i>	
703	CARAVANSARIES: THE ARCHITECTURAL TREASURES OF SILK ROAD AND THE CASE OF KAYSERI-SULTANHANI	384
	<i>Gonca Büyükmihçi</i>	
704	AN EXAMINATION OF THE USE OF THE CARAVANSERAI AT CAPPADOCIA ON THE SILK ROAD; SARUHAN CARAVANSERAI	390
	<i>Z. Ozlem PARLAK BICER, Fusun KOCATURK</i>	
705	RESEARCH FOR LAND USE PROCESSING OF TEA PLANTATIONS IN A MOUNTAINOUS REGION	395
	<i>Shinya Kimura, Shuichi Murakami</i>	
706	A DELEUZEAN INTERPRETATION OF URBAN MORPHOLOGICAL TRANSFORMATION	401
	<i>Saeid Nazari Adli, Mohsen Mohamadzadeh</i>	

iaSU2012 JAPAN Committees	407
--	-----

Financial Supporters	409
-----------------------------------	-----

Preface

As the Chancellor of Mukogawa Women's University, I am delighted with, and proud of, holding the 2nd International Conference on Archi-Cultural Translations through the Silk Road hosted by the International Association of Silk Road Universities (iaSU), at our university.

The iaSU was established in March 2011, at the proposal of Envel Yucel, the Chairman Board of Trustees of Bahcesehir University, Turkey, principally by Bahcesehir University and Mukogawa Women's University, Japan, located respectively on the west and east of the Silk Road. The iaSU's mission is to promote extensive academic studies on life, technology and culture centered around architecture of countries on the Silk Road, to clarify commonality among them, and thus contribute to renewed mutual understanding and eventual peace and prosperity of the Silk Road region.

The 1st International conference on Archi-Cultural Translations through the Silk Road was held at Bahcesehir University in Istanbul from March 16 to 18, 2011, by iaSU and Bahcesehir University co-hosted by our university. Researchers from 12 countries of the world, including Turkey and Japan, participated in this conference and presented their studies on architecture, city, landscape, and environmental art etc. with active discussions as well. This conference achieved a great success.

We are truly glad that many papers were submitted to the 2nd International Conference from 14 countries worldwide, including the ones from Turkey and Japan. We hope that through this international conference, academic exchanges in the Silk Road region are spread to, and deepened in, many more universities and research institutes.

We would be sincerely delighted and honored to have you in our conference.

Kindest regards,

July 2012

Ryo Okawara
Chairman of the Board, Mukogawa Gakuin School Corporation
Chancellor, Mukogawa Women's University