PROCEEDINGS
INTERNATIONAL CONFERENCE

Local Wisdom in Global Era
Enhancing the locality in Architecture, Housing and Urban Environment

21-22 JANUARY 2011
DUTA WACANA CHRISTIAN UNIVERSITY
YOGYAKARTA - INDONESIA

Organised by:
Department of Architecture
Faculty of Architecture and Design
Duta Wacana Christian University
INTRODUCTION

The incongruous impact of globalization towards the existence of indigenous and national resource has gained international interest. Efforts to restore the quality of the threatened environment for the living have raised concerns on finding local strategies to understand and manage the impact world widely. Unfortunately, the most common answer to this situation cannot be done only by a single discipline. In term of design, it is not enough to give solution to the problems unless we deal with the uniqueness of the social, economic, and cultural context of the local community in each country.

One of spatial characteristics of urban areas in developing countries is the emergence of slum areas and squatter settlements which are only seen partly in the urban development. These settlements are occupied by the poor working in informal sectors around the city centre. These people demonstrate great ingenuity in developing their residential neighbourhoods, organizing open spaces and constructing their houses, even though the government views them as illegal. To view the poor not as a problem requires honest and good motivation. This International Conference explores new paradigms which focuses on enhancing and fostering local knowledge and wisdom for sustainable developments in Architecture, Housing, Urban Design as well as Urban and Regional Planning.

AIM AND SCOPE

The Conference discusses and critically examines the phenomena occurred in Architecture, Housing, and Urban Developments within developing countries. Sub-themes might be related, but not limited, to the following topics:

A. Indigenous Architecture as a Basic Architectural Design
   - The use of Local and Recycled Materials
   - Innovative Building Construction
   - Traditions and Vernacular Architecture
   - Sustainable Design and Construction
   - Indigenous Strategy for Disaster Preparedness

B. Informal Settlements as a Basic Development for Housing Improvement
   - Self-sufficient Built Environment
   - Pro-poor Housing Policy, Planning and Efficiency
   - Parametric Computational Tools for Sustainability
   - Total Participatory and Advocacy Development Planning

C. Harmony with Nature for Sustainable Urban Development
   - Assessment for Sustainable Urban Planning and Design
   - Man-made and Natural Environment in Harmony
   - Sustainable Urban Greenery
   - Appropriate Technology for Sustainable Built Environment
FOREWORD

It is an honour for Department of Architecture, Faculty of Architecture and Design, Duta Wacana Christian University (DWCU) at Yogyakarta, Indonesia; to be the host of CIB International Conference on Local Wisdom in Global Era. The Conference being run by the collaboration among Faculty of Architecture and Design DWCU, Institute of Technology 10 November Surabaya (ITS), International Council for Research and Innovation in Building and Construction (W110 CIB), and Nusantara Urban Research Institute (NURI). The theme “Enhancing the Locality in Architecture, Housing, and Urban Environment” provides papers and presentations on a wide range of topics indicating the breadth and scope for both research and teaching within the area of architecture and the built environment.

Actually this Conference would be held on November 26-27, 2010. Due to the eruption of Merapi Volcano since October 26, 2010; especially the most dangerous eruption on November 05, 2010; the Conference has been rescheduled to January 21-22, 2011. We thank you for your kind commitment to this Conference.

These proceedings have been prepared from the papers provided by more than 60 presenters accepted from approximate 135 abstracts from about 10 countries. Finally, on behalf of the Department of Architecture, Faculty of Architecture and Design (formerly Department of Architecture, Faculty of Engineering) we thank you to all contributors to the Conference: CIB, ITS, NURI, the members of Steering Committee and Organizing Committee as well, International Reviewers, all presenters and participants, and last but not least to all members of Duta Wacana Christian University for their generous supports. Without them, this Conference would not be possible.

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# TABLE OF CONTENTS

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**Foreword**  
**Introduction**  
**Aim and Scope**  
**Steering Committee**  
**Organizing Committee**  
**Reviewer Team**  
**Table of Contents**

Introduction from the Secretary General of CIB  

## 1. Keynote Speakers

1.1 Sri Sultan Hamengku Buwono X (Governor of Yogyakarta Special Province, Indonesia)

1.2 Suharso Monoarfa (Indonesian State Minister for Public Housing)

## 2. Featured Speakers

2.1 Wardah Hafidz (Urban Poor Consortium, Indonesia)

2.2 Prof. Dr.-Ing. Eckhart Ribbeck (University of Stuttgart, Germany)

2.3 Dr. Amira Osman (Council for Scientific and Industrial Research, CSIR, Pretoria, South Africa) and Ahmed Abdalla (Faculty of Architecture, University of Khartoum, Sudan)

2.4 Prof. Liana Arrieta de Bustillos and Jose Bufanda (Centroccidental University Lisandro Alvarado Barquisimeto, Venezuela, South America)

2.5 Assoc. Prof. Dr. Ir. Johannes Widodo (National University of Singapore Singapore)

2.6 Prof. Dr. Ir. Atyanto Dharoko, M.Phil. (Vice Rector IV of Gadjah Mada University, Yogyakarta, Indonesia)

2.7 Assoc. Prof. Dr. Julaihi Wahid (University Sains Malaysia, Malaysia)

2.8 Dr.-Ing. Ir. Paulus Bawole, MIP (Duta Wacana Christian University, Yogyakarta, Indonesia)

## 3. Parallel Session’s Speakers

3.1 A. Indigenous Architecture as a Basic Architectural Design

3.1.1 A Potency Of A Local Material To Achieve A Creativity  
- Aulia Fikriarini Muchlis, Ernaning Setiyowati (UIN Maliki, Malang, Indonesia)

3.1.2 Malay Decorative in Modern Building Architectural  
- Yohannes Firzal (University of Riau, Indonesia)

3.1.3 Traditional Architecture Formers as Character City Face Jogjakarta  
- Indartoyo (Trisakti University, Jakarta, Indonesia)

3.1.4 The Influence of Norms “Pasang” on Settlement Environment  
Ammatoa Kajang, South Sulawesi

<p>| 1 | 1 | 2 | 5 | 10 | 22 | 29 | 34 | 45 | A | A-1 | A-10 | A-16 | A-25 | v |</p>
<table>
<thead>
<tr>
<th>Anecdote of Bengal Vernacular Spaces</th>
<th>A-37</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ashik Vaskor Mannan, Sudipta Barua (American International University–Bangladesh [AIUB])</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Climatic Responsive Space in Melayu Pontianak House: A Preliminary Study</th>
<th>A-47</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Tri Wibowo CAESARIADI, Emilya KALSUM (Tanjungpura University, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architectural And Physical Characteristics Of Indigenous Limas’ Houses In South Sumatra</th>
<th>A-56</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ari Siswanto, Azizah Salim Binti Syed Salim, Nur Dalilah Dahlan, Ahmad Hariza (Sriwijaya University, Palembang, Indonesia; and Universiti Putra Malaysia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vernacular Architecture In Jakarta And Surroundings</th>
<th>A-64</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Agung Wahyudi (Gunadarma University, Jakarta, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Aesthetics Interpretation through Experience in Place at Umah Balinese Architecture</th>
<th>A-73</th>
</tr>
</thead>
<tbody>
<tr>
<td>- A. A. Ayu Oka Saraswati, Josef Prijotomo, Purwanita Setijanti (Udayana University, Denpasar, Indonesia; and Institute of Technology Sepuluh Nopember, Surabaya, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>An Inquiry Into The Usage of Recycled Waste Materials by Urban Poor to Provide Affordable Housing</th>
<th>A-79</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Anand Mata (CEPT University, Ahmedabad, India)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accommodating Temporality</th>
<th>A-88</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Yenny Gunawan, ST., MA. (Parahyangan Catholic University, Bandung; and Visiting Lecturer at Pelita Harapan University, Karawaci, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Architectural Education In Papua: To Emerge The Local Indigenous Architecture In Built Environment</th>
<th>A-95</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Alfini Baharuddin (Jayapura University of Science and Technology, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sustainability of the Traditional Form of Batak House in Samosir Island</th>
<th>A-102</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Dr.-Ing. Himasari HANAN (Bandung Institute of Tecnology, Bandung, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tobong Roof Tile Architecture and Female Labors in Wirun Village, Regency of Sukoharjo</th>
<th>A-110</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Harmilyanti Sulistyani (Indonesian Art Institute, Surakarta, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Understanding Space Based on the Symbol of Batang Garing on Dayak Ngaju House</th>
<th>A-118</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Indrabakti Sangalang, ST, MT, Prof. Ir. Endang Titi Sunarti Darjosanjoto, M.Arch, PhD, Ir. Muhammad Faqih, MSA, PhD (Palangka Raya University; and Institute of Technology 10 Nopember Surabaya, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Recycle-Material Block From Repulped Paper For Wall of Low-Rise Building</th>
<th>A-127</th>
</tr>
</thead>
<tbody>
<tr>
<td>- V. Totok Noerwasito (Institute of Technology 10 Nopember Surabaya, Indonesia)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preliminary Study on The Thermal Environment of The Flores’s</th>
<th>A-135</th>
</tr>
</thead>
<tbody>
<tr>
<td>vi</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>vi</th>
</tr>
</thead>
</table>
3.1.18 Pacitan: City without Local Wisdom for Tsunami Hazard
-Fadly Usman, Agus Suharyanto, Keisuke Murakami (Brawijaya University, Malang, Indonesia; and University of Miyazaki, Japan)

3.1.19 Spatial Perception Strategy in Orientation Design
-Bertha Bintari, ST, MT, MAID (Duta Wacana Christian University, Yogyakarta, Indonesia)

3.1.20 Sustainable Design and Construction in the Javanese Architecture
-Mohamad Muqoffa (Sebelas Maret University, Surakarta, Indonesia)

3.1.21 The Spirit of Revitalization Vernacular Architecture: Response to Declining Environmental Quality
- Priyo Pratikno (Duta Wacana Christian University, Yogyakarta, Indonesia)

3.1.22 Theoretical Understanding and Analysis Model on Disaster Preparedness and Post-Disaster Spatial Transformation of the Indonesian Indigenous Culture of Dwelling
-Gregorius Sri Wuryanto, M.Arch.(Duta Wacana Christian University, Yogyakarta, Indonesia)

3.1.23 Space for the Dead
-Jeanny Dhewayani (Duta Wacana Christian University, Yogyakarta, Indonesia)

3.1.24 In search of "Mamminasata Style": Model for the Application of Local Architectural Characteristics for Contemporary Designs Based on Shape Grammar
- Ria Wikantari, Ph.D., Mochsen Sir, Syarif Beddu, Waluya Hadi, Baharuddin Hamzah, Ph.D. (Hasanuddin University, Makassar, Indonesia)

3.1.25 The Concept of Banua in Mandailing Architecture
- Cut Nur'aini, Achmad Djunaedi, Sudaryono, T. Yoyok W. Subroto (ITM Medan, Indonesia; and Gadjah Mada University, Yogyakarta, Indonesia)

3.1.26 Sustainable Incremental House with Modular Construction
-Eunike Kristi Julistiono (Petra Christian University, Surabaya, Indonesia)

3.1.27 "One Kampung One Public Facility" as an Initial Phase of Kampung Oriented Development: Studio’S Considerations
- Dr.Eng. Muhammad Sani Roychansyah (Gadjah Mada University, Indonesia)

3.1.28 Local Architecture Image of Sawai Bay in Central Maluku
- Hestin Mulyandari, Muhammad Zein Kelanohon (University of Technology Yogyakarta, Indonesia)

3.1.29 Morphological On Local Wisdom Coastal Community Settlement as a Product Vernacular Architecture
- Ahda Mulyati Muluk, Prof. Nindyo Soewarno, M.Phil., Ph.D (Tadulako University, Palu, Sulawesi, Indonesia; and Gadjah Mada University, Yogyakarta, Indonesia)

3.1.30 Use of Recycled Aggregates from Construction and Demolition (C&D) Waste for Building Construction in Dar es Salaam, Tanzania
-Mwita Sabaia, Prof. Jos Lichtenbergb, Dr. Emilia Egmond, Dr.
3.2 B. Informal Settlement as a Basic Development for Housing Improvement

3.2.1 ‘Participatory Research’ Approach in the Structuring Activity of Tourism Village of ‘Jelekong’ - Bandung Regency
- Udjianto Pawitro (National Institute of Technology – Itenas, Bandung, Indonesia)

3.2.2 Semendo Traditional Settlement as One of Vernacular Architecture Case Study: Pulau Panggung Village, Muara Enim, South Sumatra
- Tutur Lussetyowati (Sriwijaya University, Palembang, Indonesia)

3.2.3 Housing Development on the Urban Fringe Areas with case study at Semarang City-Indonesia
- Bambang Setioko, Joesron, A.S (Diponegoro University, Semarang, Indonesia)

3.2.4 Morpho-Ecological Strategy in Architectural Design Process
- Dr.Eng. Firza Utama S. (BINUS University, Jakarta, Indonesia)

3.2.5 Informal Settlements Housing Improvement and Family Income in Caracas, Venezuela
- Jean Martin Caldieron (Florida Atlantic University, USA)

3.2.6 The Future of Informal Settlements: A Reflection of Government’s Effort
- Rulli Pratiwi Setiawan (Sepuluh Nopember Institute of Technology, Surabaya, Indonesia)

3.2.7 Characteristic of Slums in Denpasar City, Bali
- I Made Adhika (Udayana University, Denpasar, Indonesia)

3.2.8 The Impact of Adequate and Reachable House for Migrants on Urban Social Stability
- Wisnu Sasongko, ST., MT., Gunawan Prayitno, SP., MT. (Brawijaya University, Malang, Indonesia)

3.2.9 Housing Model for Low Income People in Palembang City Based on Housing Preference and Affordability
- Wienty Triyuly (Sriwijaya University, Palembang, Indonesia)

3.2.10 Analyzing The Core Components of Urban Planning Base on Local Knowledge Diversifications of Local Knowledge in Urban Planning
- Noriss K. HAMMAH, Kamaria DOLA (Ph.D.) (University Putra Malaysia)

3.2.11 Issues of Service Charges of Stratified Residential Buildings in Malaysia and The Role of Cob
- Rohaya, Ghani, Mastura, Jaafar @Mustapha (Universiti Sains Malaysia, Penang, Malaysia)

3.2.12 Sustainability Model of Flats For Low-Income Communities Development
- DR. Setyo S. Moersidik, Setia Damayanti (Cand. DR) (University of Indonesia, Jakarta, Indonesia)

3.2.13 Community Participation in Conservation of Traditional House in Kotagede
- Punto Wijayanto (Gajah Mada University, Yogyakarta, Indonesia)
3.2.14 Cultural Ladscape Characteristic Identification of The Code B-95 Riverbank, Yogyakarta  
- Luhur Sapto Pamungkas, Endah Tisnawati (Yogyakarta University of Technology, Yogyakarta, Indonesia)

3.3 C. Harmony with Nature for Sustainable Urban Development
3.3.1 Settlement Pattern of ‘Using’ Ethnic Community in Kemiren Village Banyuwangi  
- Prof. Antariksa, Nindya Sari, Tri Kurnia Hadi Muktining Nur (Brawijaya University, Malang, Indonesia)

3.3.2 Greenhouse Effect in the Housing Area with Modern Minimalist Style Home Design  
- Ir. Unik Praptiningrum Wardhono, MM (University of 17 Agustus 1945, Surabaya, Indonesia)

3.3.3 The Influence of Postmodernism in Urban Planning and Design in Indonesia.  
- A. Rudyanto Soesilo (Soegijapranata Catholic University, Semarang, Indonesia)

3.3.4 Conflicts Between The Economic Space and Natural Landscape  
- Wahyu Utami, Prof. Ir. Atyanto Dharoko, M. Phil., Ph. D, Ir. Ikaputra, M. Eng., Ph. D, Dr. Ir. Laretna Trisnantari, M. Arch. (Gadjah Mada University, Yogyakarta, Indonesia)

3.3.5 Urban Settlement and Its Environment; A Case Study of Menteng Atas, Jakarta - Indonesia  
- Danto Sukmajati (Mercu Buana University, Jakarta, Indonesia)

3.3.6 Empowerment of Informal Settlements Related to the Character of Community Capacity  
- Winny Astuti, Ph. D., Ana Hardiana, Dyah Widi Astuti (Sebelas Maret University Surakarta, Indonesia)

3.3.7 Application of Social Relationship in Vernacular Architecture  
- Ema Yunita Titisari, Noviani Suryasari (Brawijaya University, Malang, Indonesia)

3.3.8 Traditional Architecture as a Tourism Asset  
- Syaiful Muazir (Tanjungpura University, Pontianak, Indonesia)

3.3.9 Concept of Integrated Surakarta Urban Center Using Urban Heritage Role  
- Soedwiwahjono (Sebelas Maret University, Surakarta, Indonesia)

3.3.10 Enhancement of Ecological Wisdom of Vernacular Architecture Into Global Ethic  
- Ir. Marcus Gartiwa., MT (University Of Langlangbuana, Bandung, Indonesia)

3.3.11 Architecture, Community, and Social Capital: Contribution of Environment Order and Spatial Behaviour to Social Capital of Housing Resident Community  
- M. Syaom Barliana, Diah Cahyani Permana Sari (Indonesia University of Education (UPI), Bandung, Indonesia)

3.3.12 Understanding of Harmony in Lakon Wayang  
- Johannes Adiyanto, Josef Prijotomo, Galih Widjil Pangarsa (Institute
Coastal Area And Its Potentiality to Provide Thermal Comfort to the City Of Makassar
- Juhana Said, Iwan Sudrajat (Bandung Institute of Technology, Indonesia)

- Nyuk Hien WONG, Nabanita Islam, Marcel Ignatius, Steve Kardinal Jusuf (National University of Singapore, Singapore)

- Tommy S.S. Eisenring, Batara Surya (Pepabri University of Makassar; and “45” University of Makassar, Indonesia)

Local Wisdom in “Wetland Architecture”
- Bani Noor Muchamad, Ira Mentayani, Arya Ronald (Gadjah Mada University, Yogyakarta, Indonesia)

Is There Any Role of Local Community on Tourism Development in Kota Tua (Oud Batavia), Jakarta–Indonesia?
- Primi Artiningrum, Danto Sukmajati (Mercu Buana University, Jakarta, Indonesia)

The Meaning of Space-Use Efficiency for The Inhabitants of Four Low-Cost Multi-Storey Public-Housings In Bandung, Cimahi, and Soreang, Indonesia
- DR. Yasmin Suriansyah (Parahyangan Catholic University, Bandung, Indonesia)

Comfort Comparison Study on Office Colonial Building and Modern Office Today.
- Antonius Ardiyanto, Arif Kusumawanto (Soegijapranata Catholic University, Semarang, Indonesia; and Gadjah Mada University, Yogyakarta, Indonesia)

Simulation of the Impact of the Climate Change on the Current Building’s Envelope Thermal Transfer Value (ETTV) Regulation in Singapore
- Nyuk Hien Wong, Steve Kardinal Jusuf, Nedyomuki Imam Syafii, Wen Hui Li (National University of Singapore, Singapore)
3.1.8

VERNACULAR ARCHITECTURE IN JAKARTA AND SURROUNDINGS

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ABSTRACT

The city of Batavia as a native of Jakarta, is believed by many experts is a fusion of several ethnic groups who lived together for several centuries, such as the Sundanese, Javanese, Arabic, Balinese, Bugis, Sumbawa, Ambon, Chinese and Malays. Therefore, some cultural products including architecture also reflects the combination of these.

Since becoming the capital, the pace of development in the city of Jakarta has made the Betawi people uprooted from their group so that complicates communication between them. Betawi people become increasingly crowded and displaced. As a result, thousands of people moved out and divorced Betawi dispersed into the suburbs. According to Saidi (1996), the Betawi people have been trying to maintain its cultural existence. However, supporters of Betawi culture in Jakarta were increasingly depleted.

In the 1970s, the government took the initiative to create a conservation culture in the village of Batavia Condet. However, speculative development is precisely the Betawi people have been marginalized in Condet with the opening edge of this region. In the 1990s the number of people in Condet Betawi expected to live 30% is an optimistic number. Learning from this experience, the decade of 2000s the government to develop more cultural conservation at the Setu Babakan. In this effort, a new vernacular architecture was built to replace the old building, coupled with the conservation of agriculture, art and food to attract tourists.

In coastal areas, Coastal Betawi people "meet" with the Chinese and Bugis. This meeting has resulted in the Chinese style of rural vernacular architecture in the Gulf region Naga, Tangerang and Bugis fishermen in the area of Kamal Muara, North Jakarta. Meanwhile in the southern region, the Betawi hicks "meet" with people who produce vernacular architecture Sundanese house on stilts in the region Kranggan, Bekasi.

This paper is a study of vernacular architecture in five regions covering Jakarta and surrounding Bay Dragons, Kamal Muara, Condet, Setu Babakan, and Kranggan. Some aspects of the study include spatial, accessibility, looking buildings, and building ornaments.

Keywords: Architecture, Vernacular, Jakarta

I. BETAWI PEOPLE AND JAKARTA

Some experts believe that people are actually starting a newcomer Betawi in Jakarta. This ethnic group was born from a combination of other ethnic groups who were already living in Jakarta, such as people of Ambon, Arabic, Balinese, Banda, Bugis, Bima, Bali, Buton, Flores, Java, Malays, Sundanese, and Sumbawa. University of Indonesia anthropologist, Dr Yasmine Zaki Shahab MA gauge, the newly formed ethnic Betawi about a century ago, between the years 1815 to 1893.

This estimate is based on a study of demographic history of city dwellers, who pioneered the Australian historian, Lance Castles. In the Dutch colonial era, governments always do the census, which is categorized by ethnic group. In census data Jakarta in 1615 and 1815, there were people from various ethnic groups, but there is no record of the Betawi ethnic group.
In addition, the results of the census of 1893 showed a loss of some ethnic groups that previously existed. For example, Arabs and Moors, the Javanese and Sundanese people of South Sulawesi, Sumbawa people, people of Ambon and Banda, and the Malays. Recognition of the existence of the Betawi people as an ethnic group and as a social and political unit within a wider scope, namely the Dutch East Indies, newly emerged in 1923, when Moh. Husni Thamrin, community leaders established Perkoempoelan Kaoem Betawi Betawi. Also new at that time all the Betawi people realize they are a faction, that faction Betawi people.

Some analysts and researchers are unsure of the Betawi ethnic Castles above hypothesis, as Koentjaraningrat (1975), Amri Marzali (1983), Probonegoro (1987), Supardi Suparlan (1990), Shahab (1994), and Mona Lohanda (1996) (Siswantari, 2000). But there who disagree with the Castles of Ridwan Saidi, a prominent Batavia.

According to Saidi (in Siswantari, 2000) the origin of the Betawi people more emphasis on theories about language Nothofer Melayu Bern dialect of Jakarta. Bahasa Melayu originated from the Polynesian family persebarannya point comes from West Kalimantan.

Nothofer (in Siswantari, 2000) argues that around the X century at the former power of population migration Melayu Tarumanegara West Kalimantan to Jakarta, via Bangka and Palembang. These migrant Malays berakulturasi with natives who came from Java, and produce generations of Malays called Java. In the XV century, they have memluk Islamic religion and have called the Chinese diving difficult to say Islam. The Malays of Java this is the forerunner of the Betawi.

Clarified by Saidi (1994) estimated that the Hindu kingdom Tarumanegara located in the Citarum river (now Jakarta with the Donegal border) that extends up to the power wing of the Bogor region (stele Ciaruteun) and Marunda (Monument inscriptions at Kampung Batu Growing up, now Kramat Tunggak). They are then referred to as the Betawi people come from Tarumanegara kingdom.

Shahab (2000) classifies the Betawi people based on place of residence consists of: Central Batavia, Betawi edge, hicks Batavia, and Batavia Coast.

2. Betawi Pinggir, inhabit the area around Market Rebo, Pasar Minggu, Pulo Gadung, Jatinegara, Kebayoran, and Mampang Prapatan.

3. Betawi Udik, inhabit the area around Cengkareng, Tangerang, Batu Ceper, Cileduk, Ciputat, Sawangan, Cimanggis, Pondok Gede, Bekasi, Kebon Jeruk, Kebayoran Lama, Cilandak, Kramat Jati, and Cakung.

4. Betawi Pesisir, inhabit the region around the Bay of Dragons, Mauk, Japad, Tanjung Priok, Marunda, Kalapa, and the Thousand Islands.

Furthermore, the Betawi hicks has two types:

1. they are influenced by Chinese culture, living in the north and west of Jakarta, and Tangerang.

2. they are strongly influenced by the Sundanese culture, living in the east and south of Jakarta, Bekasi and Bogor. In terms of dialect, they are known as Betawi Ora, which has the characteristics of the end of the lettered word "a" becomes "ah", eg "saya" becomes "sayah".

This study took five regions including the Gulf of Naga, Kamal Muara, Condet, Setu Babakan, and Kranggan. Thus, in addition to belonging to the Dragon Bay Coastal Betawi Betawi hicks there are also influenced by Chinese culture, namely the Chinese Beteng west of the village. Chinese Architecture Beteng this is the major target of the study. Kamal Muara is a mixture between Betawi settlement with the Bugis Coastal North Jakarta. Condet and Setu Babakan is Betawi hicks. While Kranggan is a region where there is the Sundanese and Betawi Ora.

![Figure 1. Distribution Research Areas](image)

**II. TELUK NAGA**

Fortress Chinese people in general are farmers and living together with the Sundanese and Betawi in the Gulf coastal region Dragons. This community is located in between two villages namely "Lemo Village" and "Village Estuary." Lemo village majority of the population is rural Sundanese and Betawi Estuary is a majority.
Houses *Cina Beteng* in general is one single dwelling unit and located in front of the field / fields. Orientation of main buildings on the street and other buildings facing each other. This pattern is similar to a village in Indonesia in general.

Spatial pattern of the Chinese house Beteng this unique is that there is a wide yard, either in front or behind the house. On the front is generally used for drying agricultural products and activities on the terrace used occupant activities. While at the rear, there is the back porch, barn, and a bathroom / WC outside.

Building materials used in general is a local materials such as bricks, wood and bamboo. Bricks used as a terrace floor, wood used for walls and roof construction. While bamboo is used as a wall for storage.

In the facade of the building, a typical Chinese ornaments are also presented, but the colors generally follow the colors used in building materials.
III. KAMAL MUARA

Kamal Muara is a fishing village. Formerly a village of Batavia with ponds which has now become the property of people outside the village. The arrival of the Bugis people since the 1960s, making this village is inhabited by the Bugis and Betawi, each of which is estimated to reach 40%. Both these groups live side by side, select a different location to reside. Betawi people prefer to live in the "land", while the Bugis people preferred to stay at the water's edge, either edge of the sea or rivers. This closeness is very linked to the Bugis livelihoods as fishermen and farmers green mussel.

Bugis village orientation was also followed rivers. Two features of the mosque to the instructions from the village of Bugis. However, the traditional home architecture Bugis has become increasingly rare. This is caused by several things. First, practical reasons such as activities in the field of fisheries. Bugis house berbentung stage became lower because of the green mussel waste backfill activities. Second, the preferred construction material not easily found on the market, such as wood Nibung be imported from Lampung. Third, the second generation prefer to stay at home made from the wall.

Dividing the space (zoning) horizontally at Bugis house generally consists of Private, Semi-Private, and Semi-Public. Because it is a stage house, the entrance through the staircase and into the space that is named tamping. From here there are tamping into the living room door. A guest who are not relatives are only allowed to be here. While in the private, all the walls are separated by a curtain.

On the division of space vertically, Bugis people in Kamal's house is generally still divided into three parts, namely Rakkeang, Ale bola and Awa bola

In architecture Bugis, Rakkeang generally used for storage and Ale ball for occupancy. However, the Bugis houses in Kamal Muara Awa storage space is at a ball, because Rakkeang generally does not
work. Several openings in the side of the building and the building looks better air circulation functions as well as some of them have a distinctive ornament.

Figure 6. Vertical Pattern Bugis House

IV. CONDET AND SETU BABA KAN

Condet and Setu Babakan are two areas that have similarity in terms of conservation of Betawi culture. Condet developed since the 1960s, while the Setu Babakan developed since the 1990s. Condet failure suspected to be an important step in the development of Babakan Setu.

Condet is an area located in District Kramat Jati, East Jakarta Municipality. Region used to be the area of fruits, especially salak lanseum Condet and then used as well as preserve the Betawi culture preservation of fruits by decree (SK) Jakarta Governor Ali Sadikin numbered D.IV-115/e/3/1974 issued for strengthen an area of 18 228 hectares as the area of cultural heritage which includes Village batumpar, Balekambang, and Kampung tengah. Reason Bang Ali 30 years ago is because 90 percent of people who lived in Batavia Condet is genuine. With maketh Condet as a cultural reserve, the government and build roads Condet Kingdom, which connects the region with Cijantung Cililitan. Ease of access is coupled with the vagueness and lack of supervision resulted in the concept of cultural heritage of this region as it grows like a normal residential area. Administration time to a status-quo of the region in 1986 because of rapid housing development.

Consequences of failure in Condet, Batavia township in Setu Babakan, Srengseng Sawah, Sub Jagakarsa, South Jakarta and was initiated as a new area of cultural heritage. Setu Babakan initial momentum developed as a cultural heritage area was pioneered on September 13, 1997 at the event "A day at Setu Babakan". When it held various competitions, such as decorating contest getek, canoe races, competitions of fruit, vegetables and cooking competitions tamarind. Once this momentum, several Betawi cultural activists trying to involve the various institutions to develop this area. Department of Agriculture to plant tree seedlings, while the Department of Fisheries and sowing the seeds of hundreds of fish. The road to this area was also improved. In the end, the Governor issued Decree No. 9 years old in 2000 by the Provincial Government of DKI Jakarta, which makes the Setu Babakan as Betawi culture of conservation.

Here are some things that distinguish the two regions

4.1. Accessibility and Conservation

Condet accessibility in the region had been the enclave of closed and in the development and cultural preservation became an open area. With the construction of access roads through the region consisting of three villages (Balekambang, Central and Kampung Batu Ampar) This resulted in the influx of immigrants in recent decades even more dominant in number. Balekambang villages situated along the river Ciliwung is the most populated area of the Betawi people in Condet. But in the 1990s, their number reaching 25% is considered as the numbers are too optimistic. Betawi people in the region
A. Indigenous Architecture as Basic Architectural Design

comprising Kambang Bale Village, Batu Ampar, and Middle Village are in the minority. According to the 2000 census, the number of residents in the area Betawi Condet only 1.5% of the total population in the region. As a result, the Betawi people rarely found homes with pristine architecture. From visual observation, researchers found only three houses whose condition is still original.

Learning from Condet, Setu Babakan is the government's initiative to preserve Betawi culture in general. Houses inhabited by residents in the area restored to original Betawi house. In addition to homes, agriculture, processing of traditional foods (culinary), dance art, textiles, and etc. all of which developed into cultural tourism and education.

Accessibility to these areas is more difficult than Condet region. There is only one connecting road and no public transportation to enter this area. Setu (lake) to the end of the route to this region, and pledged an open space for tourism purposes.

4.2. Zone

There are several zones in the original house Betawi, which is the main zone (for a family residence), the zone of support (for relatives), gardens and ponds (Syafwandi et al., 1996). Both in Setu Babakan and there Condet main zone and zone support. However, gardens and ponds are still more prevalent in the Setu Babakan compared Condet.

4.3. Building Type

There are three types of Betawi style buildings: joglo, warehouses, and bapang (Syafwandi et al., 1996). In Setu Babakan, the type most often found Joglo.

4.4. Ornament

Some ornaments comparison of the two regions which are presented on ventilation, windows, doors and fences are presented in the following tables.

V. KRANGGAN

Kranggan is a township in the city of Bekasi, Bogor regency bordering areas. In this village can still be found traditional houses shaped house on stilts. Called the house on stilts because the building houses a number of pillars propped up, with the distance between the ground floor and averaging about 50 centimeters.

Traditional houses in Kampung Kranggan have varied roof forms and functions of each room in the house. At least there are three forms of roof houses on stilts which now remains in Kampung Kranggan, ie roof pyramid model, the model jure, and the model ngapak looming. Roof of the pyramid model and a cursory jure similar, but the roof has no ampig pyramid model, or cover the front and rear
are made of woven bamboo. Ngapak roof shaped like a towering model of a house roof joglo, with the top of taper.

At this stage the house generally has three core room, which is shaped los den, a bedroom, and used the back room or storage area heirloom rice called pangkeng or pandaringan. Besides these three rooms, equipped hall stage house addition, or Paseban, which serves as a place to relax or receive visitors.

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