

# Culture and Sustainability: Exploring the Nexus in the Context of Globalizing Asian Cities



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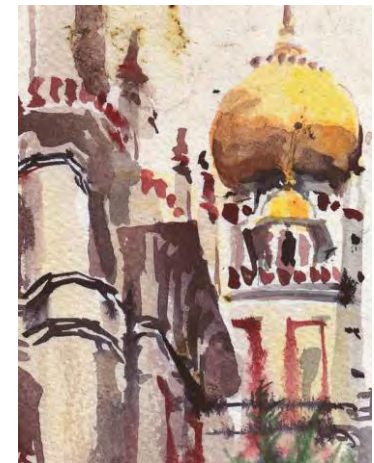
Supported by the Singapore Ministry of National Development, Urban Redevelopment Authority (URA) and the Housing and Development Board (HDB)



Centre for Sustainable Asian Cities  
School of Design and Environment

# Introduction

The purpose of this paper is to present a simple methodological framework to evaluate how well a city is doing in harnessing culture's potential contribution to urban sustainability, using the case study of Singapore.



From Various artist of the Singapore Urban Sketchers

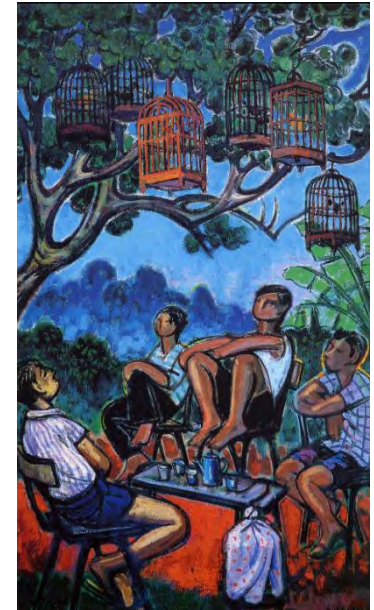
# Benchmarks, Best Practices and Framework for Sustainable Urban Development

## Research Objectives

- To advance the knowledge of sustainable urban development through multi-disciplinary research.
- To identify and analyze existing international best practices for sustainable urban development.
- To provide sustainability performance benchmarks for Singapore.
- To develop a comprehensive framework that will provide guidance on sustainable urban development in Singapore and cities in Asia.

## Theme-based approach

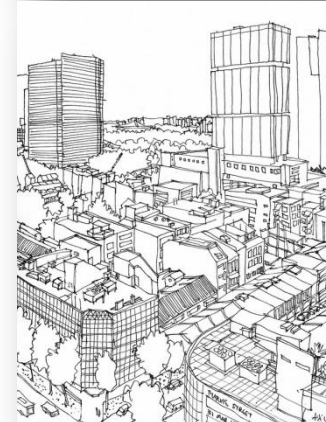
Culture  
Community  
Economy  
Air  
Water  
Waste  
Energy  
Climate  
Transport  
Biodiversity  
Food  
Governance  
Land



Work by Singaporean artist  
Liu Kang

# Context of Singapore

- **Dense Island City-State:**
  - 5.18 Million Residents
  - 714.3 sq km
  - Population density 7,257 per sq km
- **GDP per capita**
  - USD 50,123 (2011)
- **Multi-Ethnic**
  - Chinese 74.1%
  - Malays 13.4%
  - Indians 9.2%
  - Others 3.3%

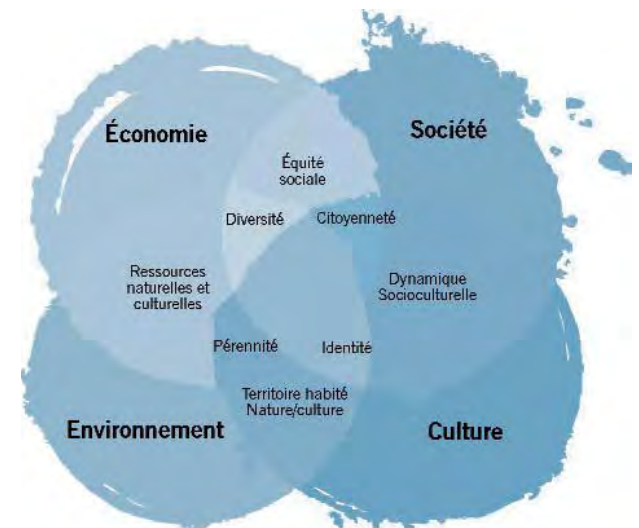


# Culture and Sustainability

- “culture is not the decoration added after a society has dealt with its basic needs....**culture is the basic need** – it is the bedrock of society” (Hawkes 2006)
- Cultural sustainability as a **condition necessary for sustainable development** (Hardoy 1992; Chiu 2004)
- Culture can be both a driver of sustainable development and a response to sustainability initiatives.

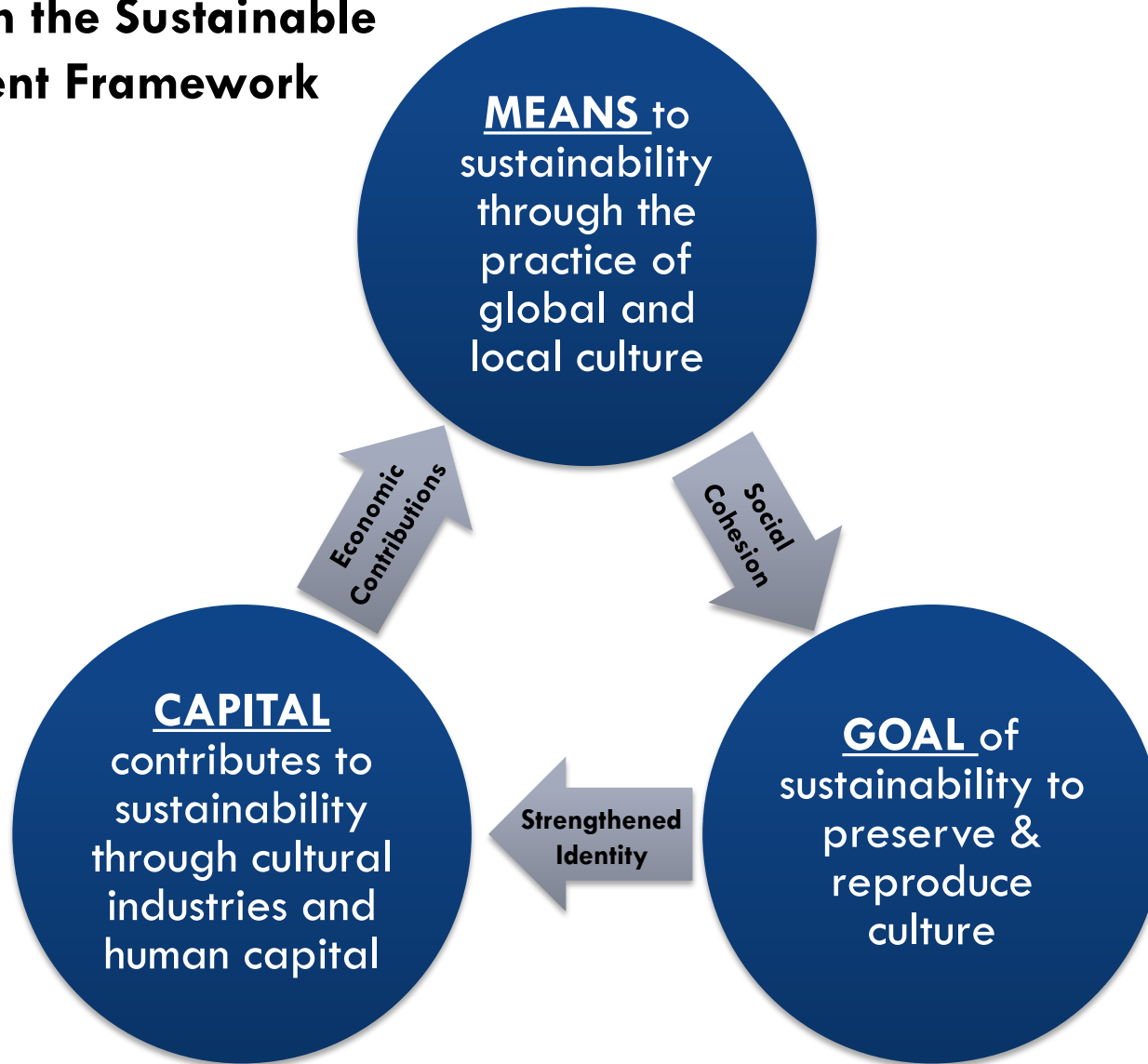


“Culture and sustainable development: examples of institutional innovation and proposal of a new cultural policy profile” 2009 UNESCO p. 16



The four pillars of sustainable development. Ministère de la culture, la communication et la condition féminine du Gouvernement du Québec, 2009.

# Culture as both Means and Ends within the Sustainable Development Framework



# Defining the “Culture of a Place” in the Context of Sustainable Urban Development

- “the panoply of **resources**” which makes a place “**unique and distinctive**” (Landry 2008)
- These resources are linked to the intangible and tangible qualities of a city, from how a city is **remembered** to how it is physically **shaped**.
  - **Tangible** – physical achievements and enactments, such as art, music or literature, and the built environment necessary for these fields
  - **Intangible** – manifested as local styles, traditions, and customs and displayed as practices and events



Lee Wen, performance artist; Installation from the OH Tiong Bahru Open House; guerilla installation “walter” by dawn ng

# Cultural Development in Singapore



- 2011-2012 Arts and Culture Strategic Review
- School of the Arts 2008
- Peranakan Museum Opens 2008
- 2008 Renaissance City Plan III
- Singapore Biennale 2006
- National Museum Reopened 2006
- 2005 Renaissance City Plan II
- Singapore Season, Singapore Art Show 2005
- The Arts House 2004
- Asian Civilization Museum 2003
- Esplanade 2002
- Tyler Print Institute 2002
- Yong Siew Toh Conservatory of Music 2001
- 2000 Renaissance City Plan I

- Singapore Arts Festival started (annual) 1999
- Singapore Art Museum opened 1996
- Arts Education Program 1993
- 1991 National Arts Council formed
- Singapore Writers Festival 1991
- The Substation established 1990

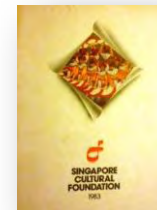
- 1989 Report of the Advisory Council on Culture and the Arts
- LASALLE College of the Arts 1984

- Cultural Medallion 1979
- 1978 Singapore Cultural Foundation
- Singapore Festival of the Arts Biennial 1977

- 1959 Arts first promoted for nation-building

- Nanyang Academy of Fine Arts Established 1938

- National Museum Established 1887





# Developing Quantitative Indicators

**1. Compile a Database of Indicators**

**2. Organized Indicators into Key Dimensions**



**3. Delphi Consultation**

**4. Final Set of Headline Indicators**



# Sustainability and Related Studies

## Measuring Culture

Survey	Is culture included?	How is culture measured in the survey?
Yale University's Environmental Performance Index, 2008	NO	--
Mercer Quality of Life Index, 2011	NO	--
Siemens Green Cities Index, 2009-2012	NO	--
UN Human Development Indicators, 2011	NO	--
UN Indicators of Sustainable Development, 2001	NO	--
Urban Sustainability Indicators by the European Foundation, 1998	NO	--
Economist Intelligence Unit Global Livability Survey of Cities, 2011	YES	1 Indicator "Cultural availability"
PricewaterhouseCoopers (PWC) Cities of Opportunities Study, 2011	YES	1 Indicator measures "Cultural Vibrancy"
World Bank Global Cities Indicators, 2007	YES	1 Indicator under "Quality of Life" measures the percentage of jobs in the cultural sector

# Studies specifically measuring culture

- Agenda 21 Cultural Indicators
- Bhutan Gross National Happiness Survey
- Community Indicators, Victoria, Australia
- Creative Community Index for Silicon Valley, USA
- Creative Vitality Index for Washington State, USA
- Cultural Development Network Art Indicators for Local Governments, Australia
- Cultural Indicators for New Zealand
- Cultural Vitality Index by the Urban Institute, USA
- Euro-Creativity Index, by Richard Florida
- Global City Indicators Facility, The World Bank
- Hong Kong Arts and Cultural Index
- Indicators for Culture and Communication in Quebec, Canada
- London Culture Audit, United Kingdom
- Metropolitan Philadelphia Indicators Project, USA
- National Indicators for Local Authorities and Local Authority Partnerships: Handbook of Definitions Consultation, United Kingdom
- Quality of Life Indicators for Culture and Leisure, Canada
- Seattle, Kings County Communities Count, USA
- The Boston Indicators Project, USA
- The Knight Foundation Community Indicators, USA
- Vital Signs: Cultural Indicators for Australia



# Developing Quantitative Indicators

## 1. Compile a Database of Indicators

- Reviewed 20 studies that measure culture and 3 other studies
- Compiled 98 Indicators: 96 high relevance & 2 low relevance based on sustainable urban development

## 2. Organized Indicators into Key Dimensions

Initially examined from perspective of consumption & production of culture

Finalized to Four Dimensions

- The Presence and Definition of Culture
- Cultural Milieu
- Culture's Economic Contributions
- Cultural Education

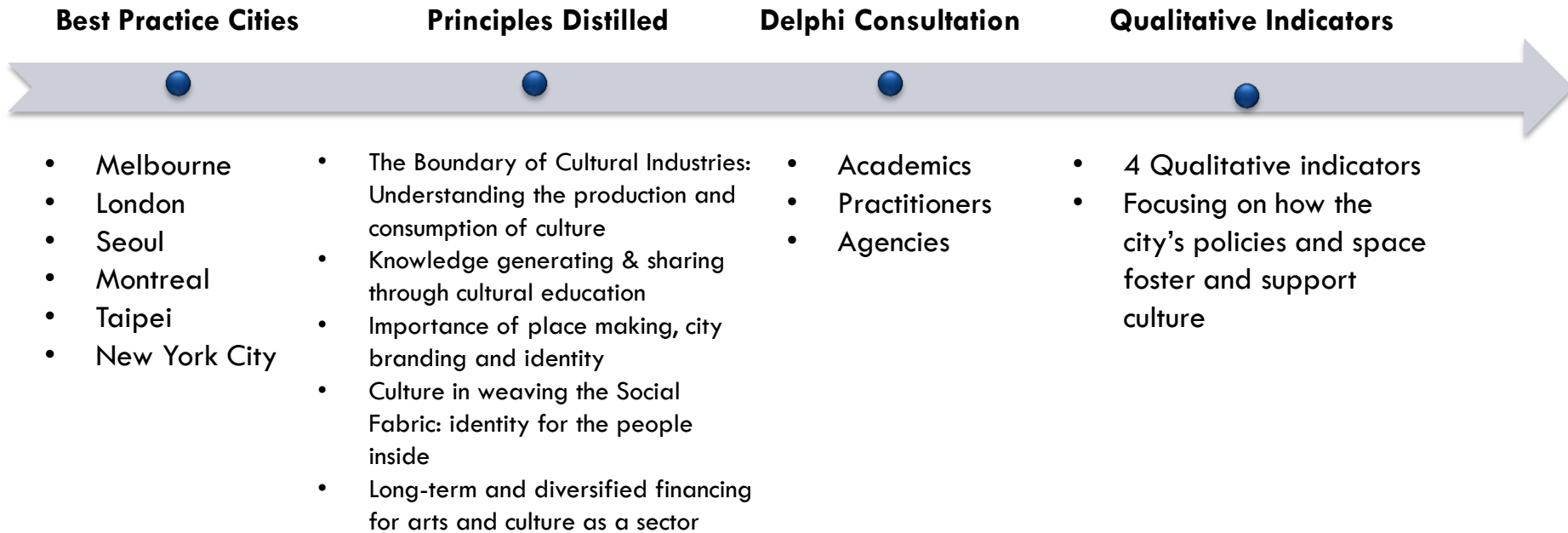
## 3. Delphi Consultation

- NUS Professors
- Singapore Practitioners
- Ministry of Information Communication and Arts, and the Ministry of Education

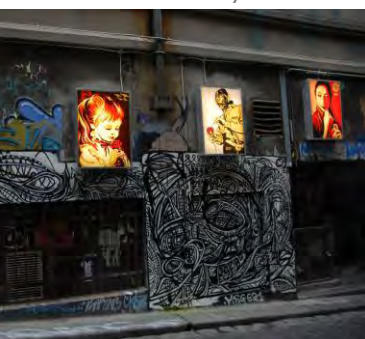
## 4. Final Set of Headline Indicators

12 Quantitative Indicators  
Under 4 Dimensions

# Developing Qualitative Indicators



Melbourne's Laneways



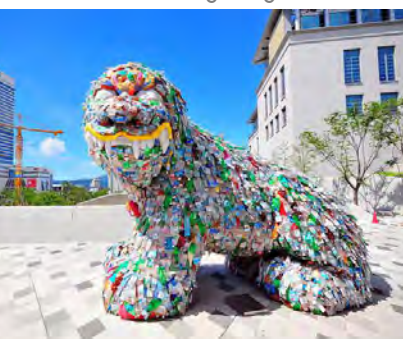
Taipei Bao An Temple



Montreal Street Art



Seoul's Urban Design Logo



London's Cultural Audit



# Indicators for Measuring Culture's Contribution to Sustainability in Singapore

"Life by the River"  
by Liu Kang



## The Presence and Definition of Culture

1. Number of arts and cultural establishments by non-profit and commercial establishments per thousand population.
  2. Number of international shows, performances, and exhibitions per year.
  3. Number local shows, performances, and exhibitions per year.
- Qualitative 1. Does the city have a cultural report or plan for the cultural sector?

Art in a Singaporean  
Void Deck



## Cultural Milieu

4. Total number of heritage sites and buildings gazetted as a percent of the building stock.
  5. Percent of residents that have attended at least one arts or cultural event in the last year.
  6. Attendance at ticketed performances per year as a percent of the population.
- Qualitative 2. Does the city have affordable space for creative professionals to display, create, and practice their work? If so what are the creative professional's perceptions of this space?
- Qualitative 3. Are there spaces in the city that foster creativity and allow for arts and cultural works and events to be freely displayed?

Kennel Shared work  
Space in Singapore



## Culture's Economic Contributions

7. Government Funding for arts and cultural programs as a percentage of GDP.
  8. Proportion of the total funding for arts and culture from philanthropic donations.
  9. Number of Persons Employed Full time in the cultural sector per 1,000 Employed Persons.
  10. Value added by cultural industries as a percentage of the GDP.
- Qualitative 4. Does the city have plans for long term investments in arts and culture that includes diverse areas of expenditures such as: infrastructure, public art, programing, education, etc.?

Singapore  
School of the Art



## Cultural Education

11. Curriculum time dedicated to music, literature, visual and performing arts as percent of the total classroom time per week (*this indicator's metrics are under review*)
12. Students in degree-granting arts and cultural programs as a percent of total students.

# Preliminary Analysis of Singapore

## The Presence and Definition of Culture

1) Number of arts and cultural establishments by non-profit and commercial establishment per thousand population.	0.218 organizations (2010) or 1,109 total organizations
2) Number of international shows, performances, and exhibitions per year.	369 Foreign Productions in Singapore in 2007 (need exhibitions and other performances)
3) Number local shows, performances, and exhibitions per year.	2,633 local productions in 2007 (need exhibitions and other performances)
Qualitative 1) Does the city have a cultural report or plan for the cultural sector?	Yes: Singapore 2011 Cultural Statistics and the 2012 Arts and Culture Strategic Review

## Cultural Milieu

4) Total number of heritage sites and buildings gazetted as a percent of the building stock	7154 total buildings and monuments conserved (2010)
5) Percent of residents that have attended at least one arts or cultural event in the last year.	40% of Singaporeans have attended at least one arts event in 2009
6) Attendance at ticketed performance per year as a percent of the population.	27% (2010) or 1,377,900 total tickets
Qualitative 2) Does the city have affordable space for creative professionals to display, create, and practice their work? If so what are the creative professional's perceptions of this space?	Yes, Singapore has an "Arts Housing Scheme" but many are critical about its level of "success"
Qualitative 3) Are there spaces in the city that foster creativity and allow for arts and cultural works and events to be freely displayed?	To be determined

## Culture's Economic Contributions

7) Government funding for arts and cultural programs as a percentage of GDP	0.1473% (2010) or SGD 419 million total
8) Proportion of the total funding for arts and culture from philanthropic donations	10.05% (2010) or SGD 46.8 million total
9) Number of persons employed full time in the cultural sector per 1,000 employed persons.	27.49 (2008) or 80,827 employees
10) Value added by cultural industries as a percentage of the GDP	0.4954% (2009) or SGD 1.231 billion total
Qualitative 4) Does the city have plans for long term investments in arts and culture that includes diverse areas of expenditures such as: infrastructure, public art, programing, education, etc.?	There are plans to finance arts and culture but the expenditures need to be examined.

## Cultural Education

11) Curriculum time dedicated to music, literature, visual and performing arts.	To be determined (this indicator's metrics are under review)
12) Students in degree-granting arts and cultural programs as percentage of total students.	9.79% (2009) or 12,936 total students

# Concluding Thoughts

- This project is currently a work-in-progress, but the methodology and the defined indicators used to evaluate Singapore's arts and cultural scene can provide valuable lessons for other cities as well.
- The purpose of this study is not just to assess the overall cultural scene but to have a few well defined, direct and relevant indicators and dimensions that consider how culture is contributing to Singapore's sustainable development, as part of a large evaluative study on sustainability.
- Overall, the current evaluation shows that Singapore does have a much more vibrant cultural scene than existed a few decades ago, and this is progressively contributing to the well-being and quality of life of its residents.



Singapore School of the Arts





# Thank You.

## Image Sources

Map of Singapore [http://en.wikipedia.org/wiki/File:Singapore\\_location\\_map.svg](http://en.wikipedia.org/wiki/File:Singapore_location_map.svg)

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London Cultural Metropolis: 152

"Life by the River" Liu Kang [http://www.thecanvas.sg/wp-content/uploads/Life-by-the-river\\_edit.jpg](http://www.thecanvas.sg/wp-content/uploads/Life-by-the-river_edit.jpg)

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