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

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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.
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 as both Means and Ends within the Sustainable Development Framework

**MEANS** to sustainability through the practice of global and local culture

**CAPITAL** contributes to sustainability through cultural industries and human capital

**GOAL** of sustainability to preserve & reproduce culture

Economic Contributions

Social Cohesion

Strengthened Identity
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
# Cultural Development in Singapore

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887</td>
<td>National Museum Established</td>
</tr>
<tr>
<td>1938</td>
<td>Nanyang Academy of Fine Arts Established</td>
</tr>
<tr>
<td>1959</td>
<td>Arts first promoted for nation-building</td>
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<tr>
<td>1977</td>
<td>Singapore Festival of the Arts Biennial</td>
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<tr>
<td>1978</td>
<td>Singapore Cultural Foundation</td>
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<tr>
<td>1979</td>
<td>Cultural Medallion</td>
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<tr>
<td>1984</td>
<td>LASALLE College of the Arts</td>
</tr>
<tr>
<td>1990</td>
<td>The Substation established</td>
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<tr>
<td>1991</td>
<td>National Arts Council formed</td>
</tr>
<tr>
<td>1993</td>
<td>Arts Education Program</td>
</tr>
<tr>
<td>1996</td>
<td>Singapore Art Museum opened</td>
</tr>
<tr>
<td>1999</td>
<td>Singapore Arts Festival started (annual)</td>
</tr>
<tr>
<td>2001</td>
<td>Yong Siew Toh Conservatory of Music</td>
</tr>
<tr>
<td>2002</td>
<td>Tyler Print Institute, Esplanade</td>
</tr>
<tr>
<td>2003</td>
<td>Asian Civilization Museum</td>
</tr>
<tr>
<td>2004</td>
<td>The Arts House</td>
</tr>
<tr>
<td>2005</td>
<td>Singapore Season, Singapore Art Show</td>
</tr>
<tr>
<td>2006</td>
<td>Singapore Biennale, National Museum Reopened</td>
</tr>
<tr>
<td>2008</td>
<td>School of the Arts, Peranakan Museum Opens</td>
</tr>
<tr>
<td>2009</td>
<td>2008 Renaissance City Plan III</td>
</tr>
<tr>
<td>2010</td>
<td>2005 Renaissance City Plan II</td>
</tr>
<tr>
<td>2011-2012</td>
<td>2000 Renaissance City Plan I</td>
</tr>
<tr>
<td>2011-2012</td>
<td>Arts and Culture Strategic Review</td>
</tr>
</tbody>
</table>
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

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

<table>
<thead>
<tr>
<th>Best Practice Cities</th>
<th>Principles Distilled</th>
<th>Delphi Consultation</th>
<th>Qualitative Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melbourne</td>
<td>- The Boundary of Cultural Industries: Understanding the production and consumption</td>
<td></td>
<td>- 4 Qualitative indicators</td>
</tr>
<tr>
<td>London</td>
<td>of culture</td>
<td></td>
<td>- Focusing on how the city’s policies and space foster and support culture</td>
</tr>
<tr>
<td>Seoul</td>
<td>- Knowledge generating &amp; sharing through cultural education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Montreal</td>
<td>- Importance of place making, city branding and identity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taipei</td>
<td>- Culture in weaving the Social Fabric: identity for the people inside</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New York City</td>
<td>- Long-term and diversified financing for arts and culture as a sector</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

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?

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?

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.?

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

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

## Cultural Milieu

<table>
<thead>
<tr>
<th>4) Total number of heritage sites and buildings gazetted as a percent of the building stock</th>
<th>7154 total buildings and monuments conserved (2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5) Percent of residents that have attended at least one arts or cultural event in the last year.</td>
<td>40% of Singaporeans have attended at least one arts event in 2009</td>
</tr>
<tr>
<td>6) Attendance at ticketed performance per year as a percent of the population.</td>
<td>27% (2010) or 1,377,900 total tickets</td>
</tr>
<tr>
<td>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?</td>
<td>Yes, Singapore has an &quot;Arts Housing Scheme&quot; but many are critical about its level of &quot;success&quot;</td>
</tr>
<tr>
<td>Qualitative 3) Are there spaces in the city that foster creativity and allow for arts and cultural works and events to be freely displayed?</td>
<td>To be determined</td>
</tr>
</tbody>
</table>

## 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

<table>
<thead>
<tr>
<th>11) Curriculum time dedicated to music, literature, visual and performing arts.</th>
<th>To be determined (this indicator’s metrics are under review)</th>
</tr>
</thead>
<tbody>
<tr>
<td>12) Students in degree-granting arts and cultural programs as percentage of total students.</td>
<td>9.79% (2009) or 12,936 total students</td>
</tr>
</tbody>
</table>
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.
Thank You.

Image Sources
London Cultural Metropolis: 152
Creative Space Melbourne: The Common Room http://www.creativespaces.net.au/case-studies/the-common-room
London Cultural Audit http://static.london.gov.uk/mayor/culture/docs/cultural-audit.pdf
Seoul Icon http://www.flickr.com/photos/68558939@N00/5035250859/
http://www.inthekennel.com/kennel/#
Montreal Street Art http://www.jazzhostels.com/blog/2030-montreal-graffiti-art/