Deep Mapping: Creating a Dynamic Web Application Museum "Soft Power" Map

Project CI: Natalia Grincheva

Introducing Web Application

Museum
"Soft Power" Map

The goal of the project is to employ Geographical Information Technologies (GIS) to create a dynamic web application that can evaluate, map, and visualise museum "soft power." The application will put museums and their local communities on the global map by exposing the predominantly transnational nature of their cultural resources and collections, visualizing the geography of their social "ecosystems" as well as revealing their economic and environmental impacts on the local, national, and international levels. It will demonstrate the scope and intensity of museums' powers by highlighting a vast geography of cultural assets which enable them to accumulate social resources and generate economic capital.

This project aims to address existing needs in the museum sector by utilising "deep" mapping as an innovative research method designed to overcome many challenges in traditional cultural impact assessments. The application will allow museums to examine their complex networks, extended communities, and global audiences from a completely new perspective.

Contents

"Soft power" is the term first coined by the American Professor of International Relations, Joseph Nye, to describe the ability of a country to influence the behaviour of people through persuasion, attraction or agenda setting.[1] Even though the concept has been mostly used to conceptualise impacts within international contexts, "soft power" has both international and domestic dimensions. The power of institutions to strengthen local economic growth, social regeneration, and environmental development ultimately appeals to and attracts audiences from abroad but, more importantly, builds strong and loyal relationships with publics at home.

Why "Soft Power"?

"Soft power" resources are usually intangible and include ideas, knowledge, values, and culture which have long-term impacts upon societies and are quite difficult to measure. Recently several approaches have been proposed to evaluate the "soft power" of cities and countries in terms of specific quantitative indicators.[2] These evaluation systems normally rely on metrics that include data from different dimensions: economic, environmental, social, political, and cultural. A great number of mostly quantitative indicators are designed to communicate the public value, international significance, and positive image of certain places in order to attract tourists, investment, and development opportunities. For example, The Soft Power 30 index[3] employs international polling from 25 different countries, as well as innovative digital methods developed in collaboration with Facebook to collect data for 76 metrics indicators[4] covering several dimensions of "soft power," including 1) global engagement (diplomatic networks), 2) culture (reach and appeal of national pop and high culture), 3) government (quality of political institutions), 4) education (academic contribution to world scholarship), 5) digital diplomacy (digital infrastructure and capabilities of diplomacy) and 6) enterprise (business friendliness and

capacity for innovation.)[5] In the 21st century these "soft power" metrics have become quite popular among national governments and institutions as they help to track national brand recognition and reputations in a global context.[6]

In Australia

According to the recent findings of the world "soft power" rankings, Australia is measured high on the scales of natural resources, environment, and agriculture. However, its global reputation for cultural and scientific achievements is still not developed.[7] Addressing this problem, the national government is keen to promote Australian innovation, culture, creativity, technology and science.[8] The 2014-2016 Public Diplomacy Strategies developed by the Department of Foreign Affairs and Trade specifically emphasize the urgent need to advertise Australia's competitive investment environment, and excellence in science and technology to make the country globally known as "an attractive place to study, visit, live and invest."[9] It is imperative for the country to develop and employ reliable tools that can track, measure, and demonstrate the development of Australia's reputation in the world.

Historically, museums have been important vehicles of "soft power," building cultural bridges across borders whether by developing cultural tourism or by organizing traveling exhibitions and international programming overseas.[10] Cultural heritage manifested in museum collections is not inherent to just one place or specific time, but results from travelling or cultural flows across borders. The transnational nature and appeal of cultural collections make various cross-cultural initiatives and exchanges meaningful and desirable.

Why Museums?

International exchanges have always empowered museums to serve as important nodes in transnational cultural networks connecting peoples and institutions around the world. In the 21st century museums are experiencing a new transformation turning them "to places of soft power."[11] Due to increasing globalization and development of new technologies, museums become important players in their local communities; they serve as key economic actors helping their cities to compete for talent, tourism, and investment.

Applying the "soft power" concept to explore the role of contemporary museums in local and global contexts recognizes these institutions as powerful agents exerting significant impacts at a local, regional, and international level. This project aims to provide an effective visualization tool assessing the scope and intensity of museums' "soft power" by exposing the transnational origin and history of their collections, demonstrating diversity and reach of their international connections, and mapping their online and onsite audiences at home and abroad.

In Australia

According to the 2014 Monocle Soft Power Survey, Brisbane was in 25th place among cities ranked for their global reputation. This was the only Australian city included in the world annual top 25 due to its first truly international attraction, the Gallery of Modern Art.[12] With over 100 million objects held across Australia's GLAM institutions, including unique collections of Asia-Pacific origin, Australian museums have unlimited potential to serve as magnets for international tourists, leading world curators, artists and scientists, as well as for capital investment that can boost Australia's economy.

The power of Australian museums to play an important role in developing tourism and international engagements was recognised by the Council of the Australian Museum Directors in their 2011 Report. It stressed that Australian museums help to promote the country as a cultural destination attracting more than 3 million tourists annually and contributing around $20 billion dollars a year to the national market.[13] Furthermore, Australian museums develop international relations with other countries building bridges of trust and cooperation. In 2013-14 alone Australian museums signed formal agreements with over 25 countries to develop and tour exhibitions, exchange loans, develop scientific research projects, and advance professional development with staff exchanges.[14]

Recent policies which reinforce the instrumental value of culture as a tool for local development urge museums to look for comprehensive and reliable means to prove that they are worthy of public support.[15] In a time of reduced public funding and increased competition for existing resources, museums must offer convincing arguments in support of their case. A great number of measurement scales, surveys, and frameworks have been proposed in the last two decades,[16] but many of these cultural evaluation methods are inconsistent and misleading, in the end creating more problems than solutions.

Why Deep Mapping?

There is a need in the cultural sectors of many countries to develop a reliable assessement framework that values qualitative methodological approaches, employs innovative technologies capable of visualizing cultural impacts, and creates a collegial professional environment among institutions encouraging cooperation. Furthermore, there is a growing need to develop innovative ways of demonstrating results which reflect more than one authoritative viewpoint.

Recently "deep" maps have been regarded by academics and cultural practitioners as important vehicles for mobilizing the collective understanding of cultural and political phenomena.[17] Spatially oriented software, represented by GIS, facilitates the integration of data essential to the paradigmatic shift toward interdisciplinary research. This research is reinforced by cartographic display of information in a way that provides fresh perspectives and new insights into the study of culture and society.[18] Deep mapping has increasingly been employed as a powerful research tool visualizing and evaluating interrelationships, coexistence, and processes of complex phenomena.

In Australia

The national government policies aimed at "building social capital" require museums to prove that they can "make a difference" in terms of long-term economic and social impacts.[19] Addressing this need, many parties, including local authorities on regional and municipal levels, academic research centres, and industry partners have been engaged in developing cultural assessment metrics. A good example is Culture Counts, a computer dashboard data program, developed in Western Australia by the Department of Culture and the Arts to capture the quality and reach of art and cultural productions.[20] Even though it is currently being trialled for wider rollout by the Arts Council England, it was severely criticised in the academic world for decontextualizing measurement results from the informational and cultural "ecosystems" of institutions and their communities.[21] Researchers from Laboratory Adelaide stressed that there is a high risk of political manipulation associated with the use of this dashboard, including the threat of imposing a stressful and competitive environment among cultural institutions which are situated in different social contexts, serve different audiences and demographic sectors, and are driven by different cultural values and missions.[22]

Museum "Soft Power" Map will link museums within their local communities to a bigger global map showing "spill overs" of creative activities of museums in different regions. The application will also demonstrate the popularity of museums among global audiences. The visual component of the "soft power" map will make visible a refreshing amount of international activities, partnerships, links, and collaborations occurring beyond neighbourhood "hubs."

Functions

The application Museum "Soft Power" Map will address several problems generated by automated cultural assessments systems. By bringing in a new "global" geographic perspective to the field of cultural evaluations and mapping, the application will:

Redirect the focus from quantitative assessments to the geography of museums' outreach and influence.

It will visualize networks of the museums' power exposing rich connections, complex networks, and diverse areas of impacts. It will reveal important connections and ties developed by museums with their local communities, at the same time tracing their "embeddedness" in larger international networks.

Eliminate a comparative framework and show institutional interdependencies and growth in time.

It will capture complexities generated by connections and relationships among institutions and their stakeholders which currently traditional museum reports and white papers fail to reflect. It will produce a research platform that is continually unfolding and changing in response to new data, new perspectives, and new insights.

Develop a richer context of museums' "ecosystems" visualising complex data.

It will integrate detailed information about museums, their audiences, resources, and activities that can be mapped and examined at various scales. It will enable objects, including text, imagery, video, and sound to be added to the presentation, thus creating a multilayered depth.

Democratize result demonstration by incorporating geo-tagged social networks' data.

It will integrate geo-tagged data from social networks such as OpenStreetMap, FourthSquire, Tripadvisor and others. It will aggregate museums' rankings from social media channels to demonstrate public reputation as reflected in social media worlds.

The application Museum "Soft Power" Map will operate as a series of layers, each representing a different dimension of museums' capital tied to a specific location on the globe. These dimensions will include 1) Resources or cultural capital, 2) Outputs or social capital, and 3) Impacts or economic capital. These layers or combination of layers can be made opaque while leaving others visible. They can be viewed individually or collectively, thus exposing important correlations between layers and reflecting different aspects of museum "soft power".

LAYERS

RESOURCES: CULTURAL CAPITAL

This layer will visualize the diversity and scope of museums' collections, highlighting geographic areas of the collections' and artefacts' origins. It will allow an exploration of quantitative and geographic dimensions of artefacts in permanent collections from different regions, new acquisitions, museum landings, and traveling exhibits to other countries. It will map main museum facilities and various affiliated exhibition venues locally and internationally.

OUTPUTS: SOCIAL CAPITAL

First, this layer will visualize the strength of museum ties with communities in a global context through quantities and geographies of museums' social resources including members, volunteers, donors, corporate sponsors, or international supporters. This layer will also map museums' connections to other cultural organizations and museums, schools and universities, government agencies, and community centres at local and international levels. Second, this layer will highlight geographic areas of museums' traveling exhibitions and blockbusters, collaborations, exchange programs, research initiatives, participation in world fairs, and international projects connecting museums to global publics and stakeholders. Finally, this layer will expose a vast geography of museums' audiences, demonstrating geographic distribution of online and onsite visitors.

IMPACTS: ECONOMIC CAPITAL

This layer will demonstrate "measurable" effects of museums upon the local economy or the economy of other regions. It will build on the metric of economic effects, usually measured through wages, contracts, sales, royalties, commission fees, direct & indirect employment, as well as visitors' expenditure during visits or special events at home or abroad.

Furthermore, this layer will visualize museum effects on urban design and reconstructions provoked by museums, their capital projects or cultural activities and special exhibitions at home and abroad. It will highlight land use, built amenities and facilities and will draw connections between the museum and its urban environments locally and globally.

The application Museum "Soft Power" Map will have strong practical implications. It will contribute significantly to the agenda of public institutions to be more socially open and transparent by offering a demonstration and evaluation tool that can help to build more productive, strategic, and proactive relationship with a wide range of museum partners, stakeholders, and constituency. It will open up conversations to explore further the concept of museums' global powers in the 21st century.

IMPLICATIONS

Marketing tool

It will be a new marketing tool that is visual, structurally open, genuinely multimedia, and multilayered. The application will visualise the role and place of museums within their immediate and remote environments and serve as a "navigation" tool for interested publics. It will highlight which museums within their specific geo-locations are visited the most and admired by locals and tourists, which of them are environmentally and socially influential, which are the most connected to other communities at home and abroad, and what the nature of these ties is.

Reporting tool

The application will create a dynamic evaluation platform that will empower museums to communicate clearly their public and social value when reporting to their constituencies, including government agencies at state and local levels. The mapping database of rich information will create an effective framework demonstrating museums' "soft power" evidence in a new and visually appealing way. It will employ multiple quantitative indicators that are already in use across cultural sectors in different countries, but will allow these numbers to communicate new meanings through the visual geography of museums' resources, networks, and economic effects.

Academic research tool

The application will develop innovative research practices that are conceptually different from standard statistical or cultural assessment analysis. Geo-visualization of quantitative data will expose patterns and correlations that can provoke new questions and redirect institutional energy into areas which have been overlooked. It will provide both a conceptual base and a methodological platform to combine quantitative and qualitative traditions within cultural mapping. With a strong emphasis on multiple media, dynamic representation, and mixed-method analysis, the application will help to conduct research that will significantly contribute to existing academic scholarship on cultural evaluations and mapping.

Considering that "Soft power" measurement tools have been restricted to evaluation of countries' images and reputations, Museum "Soft Power" Map will be the first dynamic web application to demonstrate the "soft power" of museums as important actors in a post-industrial global economy. Building on recent research across several academic fields, including "soft power"/public diplomacy evaluations, cultural mapping and impact assessments, as well as museum audience research, the project will develop a new evaluation model for visualising the "soft power" of museums.

REFERENCES

1 - Nye, Joseph. 2004. Soft Power: The Means to Success in World Politics. New York: Public Affairs.

2 - See Anholt-GfK Roper Nation Brands Index (NBI) http://nation-brands.gfk.com/; The Monocle Soft Power Survey https://monocle.com/; National Trackers of The Reputation Institute https://www.reputationinstitute.com; The Soft Power 30. A Global Ranking of Soft Power. http://softpower30.portland-communications.com/

3 - The Soft Power 30. A Global Ranking of Soft Power. http://softpower30.portland-communications.com/

4 - Metrics. The Soft Power 30. http://softpower30.portland-communications.com/wp-content/themes/softpower/pdfs/The-Soft-Power-30-List-of-Metrics-2016.pdf

5 - Methods. The Soft Power 30. http://softpower30.portland-communications.com/methodology/

6 Anholt, Simon. 2007. Competitive Identity: The New Brand Management for Nations, Cities and Regions. New York: Palgrave Macmillan.

7 - Mar, Phillip. 2014. "Australia's Approaches to Cultural Diplomacy With/in Asia." Report: Australian Council of Learned Academies. www.acola.org.au

8, 9 - Department of Foreign Affairs and Trade. Australian Government. 2014. Public diplomacy Strategy 2014-2016. http://dfat.gov.au/people-to-people/public-diplomacy/Documents/public-diplomacy-strategy-2014-16.pdf

10 - See Arndt, Richard. 2005. First Resort of Kings: American Cultural Diplomacy in the 20th century. Washington DC: Potomac Books; Sylvester, Christine. 2009. Art/Museums: International Relations Where We Least Expect It. Routledge; Grincheva, Natalia. 2016. "Museum dimension of American 'Soft Power': Genealogy of cultural diplomacy institutions." In: Chambers, M. (eds.) "Hearts and Minds": US Cultural Management in Foreign Relations in the 21st Century. Peter Lang.

11 - Lord, Gail Dexter and Ngaire Blankenberg. 2015. Museums, Cities and Soft Power. Rowman & Littlefield Publishers. AAM Press.

12 - Monocle. 2014. Quality of Life Survey 2014. https://monocle.com/film/affairs/quality-of-life-survey-2014/

13 - Council of Australian Museums Directors. 2011. Museums, Collections and Australian Culture – A contribution to the development of the National Cultural Policy. http://camd.org.au/files/2011/07/CAMD-Submission-on-National-Cultural-Policy-21-Oct-2011.pdf

14 - Council of Australian Museums Directors.2014. International Engagement. http://camd.org.au/showcasing-museums/international-engagement/

15 - Lee, David and Abigail Gilmore. 2012. Mapping cultural assets and evaluating significance: theory, methodology and practice, Cultural Trends, 21:1, 3-28

16 - Partal, Adriana & Kim Dunphy. 2016. Cultural impact assessment: a systematic literature review of current methods and practice around the world, Impact Assessment and Project Appraisal, 34:1, 1-13

17, 18 - Bodenhamer, David J., Corrigan, John and Trevor M. Harris 2015. Deep Maps and Spatial Narratives. Indiana University Press.

19 - Scott, Carol 2006. Museums: Impact and value, Cultural Trends, 15:1, 46.

20 - See Culture Counts https://culturecounts.cc/

21, 22 - Meyrick, Julian, Maltby, Richard, Phiddian, Robert and Tully Barnett. 2016. "Why a scorecard of quality in the arts is a very bad idea." The Conversation. http://bit.ly/2gOBHmK