Research in Brief

The Media Communications Environment through a Spatial Lens: The Mapping the Media in the Americas Project

Chantal Hansen
University of Calgary

Heng Sun
City of Calgary

Nigel Waters
George Mason University

In an effort to foster fairness, increase transparency, and galvanize stability in the electoral process throughout the Americas, the University of Calgary, along with the Ottawa-based Canadian Foundation for the Americas (FOCAL) and the Atlanta-based Carter Center, developed a series of Web-based, interactive, country-focused media maps designed to explore the relationships between the media and the democratic process in the Americas: www.mediamapcanada.info. The media communications environment in Latin American countries has changed considerably over the past decade. As countries’ economies have developed, people have become more literate and a greater access to disposable incomes has been realized, and thus it is inevitable for more investment to be focused on mass communications infrastructure to reach these audiences (Cole, 2006; McConnell, Hansen, & Waters, 2005). With this development, new legislation in the field of communications policy and how the media influence the electoral process needs to be evidence based (Bauer, Kim, Mody, & Wildman, 2005; McChesney, 2004; Napoli, 2007).

Chantal Hansen is a GIS Analyst for the Mapping the Media in the Americas Project, based in the Latin American Research Centre at the University of Calgary, SS004, 2500 University Drive NW, Calgary, AB T2N 1N4. Email: cvhansen@ucalgary.ca. Heng Sun was a GIS Analyst of the Mapping the Media in the Americas Project from 2005 until 2008 and is an Asset Management Technologist at the City of Calgary, P.O. Box 2100, Stn M, Calgary, AB T2P 2M5, Mail Code #4011. Email: heng.sun@calgary.ca. Nigel Waters was the Technical Director of the Mapping the Media in the Americas Project from 2004 until 2007 and is now the Director of the Center of Excellence in Geographic Information Science and a Professor in the Department of Geography and Geoinformation Science at George Mason University, 4400 University Drive, MS 6C3, Fairfax, VA 22030-4444. Email: nwaters@gmu.edu.
The Mapping the Media in the Americas (MMA) project sought to provide some insight into the following research questions:

1. How accessible are traditional media to the average voter in Latin America?
2. To what extent does media ownership and distribution limit the advancement of the democratic process?
3. Does the concentration of media ownership in some countries limit the range of information on electoral issues that reach the average voter?

Using geographic information system (GIS) technology, the online maps describe where media are located, how far they broadcast, who owns them, and the socio-economic and demographic profile of the electoral constituencies they reach. In addition, recent federal election results were mapped for each country. In addition, the maps also show the visualization techniques afforded by a GIS, the MMA project sought to engage media professionals—owners, editors, columnists, and journalists—in efforts to improve and make transparent campaign and party finance practices. The intent of this project was to explore the lines of influence that the media have had in shaping the campaign finance environment and to engage government, political parties, and civil society leaders in active reform of media communications policy before, during, and after elections. The project also included examining degrees of monopoly and competition that affect pricing and diversity of political advertising. It also examined the variety of news sources available to voters, because many radio and television stations within conglomerates all draw on the same news feeds. By demonstrating the success of Web-based GIS mapping tools, we hoped to inform decision-makers of the need for policy reform that would guarantee that all citizens had equal access to the media during electoral campaigns.

Project data collection
The 11 countries selected for GIS mapping and analysis are geographically distributed across the subregions of North America, Central America, the Andean Region, the Southern Cone, and the Caribbean. They are countries in which government authorities have been receptive to sharing data, however scarce, on elections, demography, and the media. The core project team sought to include a wide variety of electoral systems and political finance regulatory practices.

Although a number of new media formats are operating in the region (i.e., electronic publications, satellite TV), the traditional media formats (TV, cable TV, AM and FM radio, and newspapers) were selected for mapping due to their ongoing importance as key information sources for the majority of citizens as well as data accessibility considerations. Given that the main objective of the MMA project is to increase transparency about the media and their operations, data on the following variables in the three categories were collected and mapped.

Physical location and identifiers of media outlets: Location of media/broadcast outlets (XY coordinates or the municipality where they operate), call sign, frequency, and station name.
Ownership structure of media sector: Concession or licence holder of individual media outlets, affiliation of individual media outlet with a media group or network.

Coverage of media outlet: Jurisdiction of broadcast licence, height of broadcast antenna and power of the signal, circulation figures for press.

To contextualize the media data the maps also present electoral and socio-demographic information about the communities within which media operate. The following information is featured on the maps and was deemed to be useful when investigating links between media and democratic processes.

Electoral data: Presidential/federal election results, eligible voters, registered voters, and electoral participation rates for the most recent elections.

Socio-demographic data: Population density, education, literacy, income levels, and indigenous populations/languages.

One of the original project objectives was to highlight the issue of political finance, since this is a major policy concern for most governments, and to include data on political party campaign spending, given the large expenditures on media advertising during elections and the assumed impact of this advertising on the vote. Political party spending data exists and are displayed on the Canada map. While partial data was accessible in some of the other 11 countries mapped, this information was not obtained in a GIS-friendly format. It is hoped that additional political finance data will become publicly available and can be added to the maps in the future. The goal of the MMA project was to make this data available along with electoral results so that research on these issues would be facilitated and would allow for informed policymaking.

The final product—A data repository of media and socio-political information

The project team managed to collect and configure a substantial portion of the data required to build the maps. Concrete data on existing television, radio, and newspaper ownership structure, their broadcast/circulation range, viewer/readership, news sources, and editorial lines or political affiliations were collected, imported into a geodatabase, and a digital map created. The map “layers” the collected data on the media over a territorial map of each country’s electoral districts (Figure 1). This shows exactly which news and political advertising sources reach which voters. The addition of other disparate information (e.g., electoral results and census information) helps map users to visualize the connections between media publicity, electorate profile, and voting patterns.

The impact on the electorate

Democracy depends on a knowledgeable and informed citizenry whose access to a broad range of information enables them to participate fully in the political life of their nation. One key to creating an informed electorate during a political campaign is to allow equitable access to the media by all candidates and political parties, not just those that can afford it.
By creating a tool that graphically illustrates and helps untangle the complex web of Latin American media ownership, the MMA project raised public awareness of the lines of influence that the media have had in shaping the campaign finance environment. This resource was not presented as criticism but as a form of assistance for those involved in the political process who needed to consult with media owners, policymakers, and others. Thus it was hoped that it would encourage social responsibility among the media while also empowering government officials to implement and enforce policies that require fair media access during election campaigns and between them.

**Next steps**

After these online GIS portals were created by the technical team at the University of Calgary during phase 1 of the project, they were transferred during phase 2 to a variety of organizations in the countries involved so as to ensure long-term sustainability of the databases. This would allow for their maintenance and for the entry of future data sets as new censuses produced more recent socio-demographic data. It would allow for the results of new elections to be included and for changes in media ownership to
be recorded. As the data sets are supplemented with newer information, historical and trend analyses will become possible. Please check www.mediamapcanada.info often as the country maps are continually being updated with new information, and certain countries’ maps may be “under construction” for short periods of time.

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Notes
1. Given the flexible nature of the GIS, other types of media could be added to the maps in the future.
2. We accept that this is essentially a Western notion of democracy. Similar statements may be found on the U.S. State Department website (United States, n.d.) and in the Carter Center’s publications (Neuman, 2002). Some sources of national variation that might arise are focused on the definitions of what constitutes a citizen and what information is indeed readily available. In the United States since 9/11, access to information has indeed become more limited.

Website

References
Mapping the Media in the Americas. [Website]. URL: http://www.mediamapcanada.info [September 11, 2009].