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Teaching tough Stuff

Teaching Students to Locate and Use Statistics on International Telecommunication Systems

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The comparative study of national telecommunication systems requires up-to-date statistical information. These data might include the number of radio and television stations and receivers, daily and nondaily newspapers, scholarly and popular periodicals, telephones, and the like. The telecommunication scholar teaching a course on comparative national systems or independently researching this field and, of course, the librarian charged with providing the bibliographic support of either effort must necessarily develop ingenious strategies for obtaining recent statistics. Only the most comprehensive research collections will possess more than a handful of statistical compilations for the world's developing nations. Indeed, for many nations an equivalent to the *Statistical Abstract of the United States* might be unavailable or perhaps nonexistent.

The Course

In Comparative Telecommunication Systems, a first-level graduate course in international communication at Purdue University, instructor and librarian have taken the mutual problem of obtaining up-to-date statistical data and turned it into an opportunity to introduce students to a wide range of statistical sources and other bibliographic reference works, and to demonstrate that useful data can be derived by applying a little imaginative effort. This article describes our experiences in using several familiar reference resources to obtain recent statistics on international communication systems.

The Perspective. Despite its focus on comparisons of various national mass media systems, Comparative Telecommunication Systems is taught— and also bibliographically supported— from the perspective that communication systems are most meaningfully studied as integral parts of global networks of political, economic, social, and cultural systems and of those institutions created to regulate and foster international communication concerns.

Studying the data. The course, therefore, approaches international communication systems as process (that is, systems undergoing continuous change in response to internal and

external dynamics), not as static, monolithic institutions existing independently in each nation. Consequently, it is emphasized that data for a nation's media—the numbers of radios, televisions, newspapers, telephones, and the like—are most meaningful when regarded in relation to a nation's particular character, one that is not merely technological, but also demographic, economic, political, cultural, and social.

Starting Points

General resources. Most academic libraries should have several readily available resources that can at least provide starting points for the ambitious task of describing a particular nation's communication system. The initial step, of course, is to acknowledge that a history of telecommunication in, for example, Burkina Faso might recently have been published; the subject catalog, *Books In Print*, and *Cumulative Book Index* can never be overlooked. A bibliography like Eleanor Blum's *Basic Books in the Mass Media* might also provide a useful reference. Likewise, a statistical almanac for, say, Rwanda might be identified in *Statistics Sources* and obtained. *PAIS* has also proven helpful on several occasions. The *American Statistics Index*, similarly, might identify data on another nation's media in a U.S. government publication. In addition, some statistics on mass media might also be found in volumes in the "Area Handbook Series," now also known as "Country Studies," published by the American University's Foreign Area Studies program and irregularly issued by the Department of the Army. Finally, for very technical data, the *World Radio TV Handbook* is an essential source that cannot be overlooked. Its applications, however, are very limited.

Two statistical sources. For basic statistics for the majority of the national communication systems of the world, however, the best starting points are likely *World Communications: A 100 Country Survey* and George T. Kurian's *World Press Encyclopedia*. The former volume, now over a decade out of date, is primarily of historical interest for the insights that it provides about UNESCO. Kurian's work, on the other hand, includes essays on a variety of international press topics as well as country-by-country assessments of press conditions, complete with bibliographies. The national data include figures for population; GNP; literacy rate; the number of daily and nondaily newspapers, with aggregate circulation and circulation per 1,000 inhabitants; periodicals, radio and television stations and receivers, with receivers per 1,000; annual total and per-capita newsprint consumption; and total newspaper advertising receipts.

These data, although very general, clearly delineate each national communication system. The accompanying narrative surveys in turn detail the historical development of a national press and identify its leading media, personalities, and concerns. The principal shortcoming of this resource, however, is that these data are also five years or more out of date. For Nigeria, for example, data for radio and television are from 1977.

Dated Information

The task of updating the "historical" information from UNESCO's World Communications and Kurian's World Press Encyclopedia is much more difficult than it might at first seem. Recent volumes of several of the most generally available statistical compilations are also dated. The UNESCO Statistical Yearbook for 1983 includes data through 1982. Other familiar sources, like B.R. Mitchell's European Historical Statistics, 1750-1975; International Historical Statistics: Africa and Asia; and International Historical Statistics: The Americas and Australasia, provide a dated and

somewhat uneven coverage of the media.

The third edition of Kurian's *Encyclopedia of the Third World*, published in 1987, includes substantial information about "Transportation and Communications" and "Media and Culture" in a familiar survey format. Its narrative details about a Third World nation's most influential media are especially useful. On the other hand, much of the data provided by Kurian is based on UNESCO's *World Communications* and *Statistical Yearbook* and, consequently, dates from 1982.

A Recommended Reference Work

Experience has taught us that the most comprehensive, up-to-date statistical information about many national communication systems is most likely to be found in the *Europa Year Book*. This familiar reference work provides information on the United Nations, its agencies (like the International Telecommunication Union), and other international organizations; detailed information about each country in an introductory survey; a statistical survey; and a directory covering constitution, government and political organizations, religion, press, finance, trade and industry, transportation, tourism, and atomic energy. Information on national communication systems covers newspapers, periodicals, press agencies, radio, and television.

Using the data. Like the information contained in Kurian's narrative surveys in both World Press Encyclopedia and Encylcopedia of the Third World, data are usually very specific. Information about a particular newspaper, for example, might include the name of its editor, founding date, language of publication, political affiliation or sponsorship, and circulation. Some of these details can be, in turn, used with another reference resource, like the International Who's Who, or related to demographic, economic, or political data also available in the Europa to obtain additional revealing details about the particular character of a nation's communication system. For example, a student might want to know the number of daily newspapers published in English in a nation in which the Hausa, Ibo, and Yoruba languages predominate.

A caution. To be sure, some caution must be exercised to determine if the Europa's data for a particular national media in fact supplement those available elsewhere. The 1986 *Europa's* data for French radio and television, for example, are based on the 1983 *Statistical Yearbook*. On the other hand, data in the same edition for radio and television in Northern Ireland date from 1985.

An Exercise

The students are encouraged to follow leads and mine the numerous details included in the *Europa*. In addition, they are advised to use the *Europa* for its significant historical coverage. We demonstrate the *Europa's* tremendous value for historical research on a national communication system by conducting a very simple exercise. Each student in the class is given a different annual volume and then asked to identify the number of television receivers in a particular nation, the circulation of one of its newspapers, the political affiliation of one of its press agencies, or the like. These data for each year are recorded on the blackboard. This exercise quickly reveals to the students that the individual components of a national communication system are neither static nor monolithic.

We then ask the students to consider the same nation's demographic, economic, educational, and political data and the like, also provided in the *Europa*, in the same historical framework as well as in relation to their findings about the communication system. Presented in

this manner, the implications for a national media in terms of economic growth or decline, political stability or unrest, are very easily seen.

Educational Gains

Evidence of the effectiveness of the course's approach to international communication systems and of its bibliographic support has been found in the students' subsequent performances in oral reports, and on papers and examinations. Most students have found the methods and presentations instructive and the *Europa* exercises especially convincing. Students who have entered the course with minimal library experience have learned how to approach a variety of reference resources with greater confidence. Others with more research experience have learned to approach statistical sources more analytically. It is quite apparent to us, however, that most have also developed a larger appreciation and awareness of the complexity of international communication and of the difficulty of obtaining up-to-date information about its role in the global community.

Selected Reference Books

American Statistics Index (Washington, D.C.: Congressional Information Service, 1973-).

Area Handbook Series (Washington, D.C.: Foreign Area Studies, American University, Irregular).

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Statistical Yearbook (Paris: UNESCO, 1964-).

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