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Geographical names - maps, identity and the United Nations

Helen Kerfoot,
Chair, UNGEGN
Emeritus Scientist, Natural Resources Canada
hkerfoot@nrcan.gc.ca

Introduction

Distinguished guests, colleagues, ladies and gentlemen, it is certainly a pleasure and an honour to participate in the 2009 International Cartographic Conference – particularly as I remember well being part of the local organizing committee when the Conference was held in Ottawa, Canada, ten years ago! I have to turn the clock back even further (actually over twice as far) to recall the previous time I was in Santiago – en route from Easter Island to Lima.

I mention "Easter Island" (and I realize that some of you have had the good fortune to visit this most interesting island before this Conference), but should I be referring to the island by this name? Dutch explorer Admiral Jakob Roggeveen, arriving on Easter Sunday in 1722 referred to "Paasch-Eyland", which I understand in current Dutch would be "Paaseiland"; the French (La Pérouse) in 1756 preserved this name as "île de Paques" and the Spanish explorers used the name in similar vein as "Isla de Pascua". However, there are local names which have nothing to do with Easter, but are rather more descriptive in nature. Several names appear to have been used: from "Te pito te henua" (the navel of the world), to "Te pito o te kainga a Hau Maka" (little piece of land of Hau Maka), "Mata-ki-te-rangi" (eyes that talk to the sky – possibly referring to the giant stone moai), or in recent times "Rapa Nui" (large Rapa – likely in reference to an island in the Marquesas from where the local population appears to have originated). So - as Chile annexed the island in 1888, perhaps in international cartography we should be favouring the Spanish "Isla de Pascua" and/or the local endonym "Rapa Nui". The other names are either historical forms or exonyms.

This leads me into my talk this morning on geographical names, their connection with maps and identity, and the question of standardization of toponyms and the work of the United Nations and the UN Group of Experts on Geographical Names (UNGEGN). Definitely this is an example of international cooperation (involving 192 UN member states) and I trust you will agree that geographical names are a very important element of spatial data and of cartography.

Names could improve communication

As cartographers, geographers, GIS specialists and the like, you will be familiar with depictions of the world, or parts of it, that do not include names as we need for reference purposes. For instance:

(a) Stick charts of island people, for example, as shown on stamps of the Marshall Islands, where islands are shown by shells and the curved palm fronds represent the swells. Although the user could interpret this unnamed aid to memory, with its generalizations of direction and distance, for most of us, the interpretation of the island names is a definite asset for logical discussion. With the help of a Captain Winkler (1901) and author David Lewis (*We the Navigators*) all the names have been provided for the islands represented by cowrie shells on this rebbilib (or stick chart) given to Robert Louis Stevenson in the late 1880s or early 1890s by the great King Kabua, ruler of the Marshall Islands.

(b) Carved driftwood maps created to represent the rugged coastline of Kalaallit Nunaat (Greenland) contain no traditional name references. As far back as three hundred years ago they were made so that the edges could be felt up one side and down the other side of the wooden block to guide someone in a kayak or small boat (Bagrow/Skelton, 1960). No doubt the user could internalize the names used for the headlands, bays, etc., but to us the communication is certainly very limited.

(c) While to a historical cartographer, the Dummer and Wiltshaw hand-coloured manuscript map of the lower course of the River Arun in southern England is certainly a work of art, for a map user the lack of toponyms makes reference very difficult. However, in this case letters have been added and a key is provided at the bottom of the map – certainly the minimum necessary, when one considers that the map was produced to assess south coast harbours by the Royal Navy in 1698 (Dummer and Wiltshaw, 1698; interpreted by Norgate, 2002).

(d) Similarly, a map likely of Dutch origin (Johan Nieuhof, 1658), of the island of St. Helena in the Atlantic Ocean, and showing no names (and a rather square shaped bird's eye view of the island) was included in several publications (Dutch, French and English) in the late 1660s. In John Ogilby's book about Africa published in 1670, this map has some numbering and is keyed to some valley names in English and in Dutch. By the time geographer Herman Moll created a map of St. Helena in 1732, various names of features, rather confused with labels (such as "valley") were included on the face of the map.

Maps lacking names and so presenting difficulties of communication are not limited to historical or specialized perception maps. Today's presentations of thematic maps, air photos and satellite imagery may also lack names, but for the message to be delivered clearly, toponyms are a definite requirement.

Fortunately many maps (even maps of the imagination), air photos and imagery have been crafted to provide excellent and clearly portrayed toponymy. A basic question, however, is the validity of the names used.

Geographical names are more than just labels on a map

Geographical names are indeed essential elements, and often a key entry point into today's GIS, and all spatial data infrastructure systems. They are, however, more than just mere labels on a map. The topic of geographical names is far reaching and brings together elements of geography, history, cartography, language, culture, oral tradition, psychology, politics and much more. Toponyms are a connecting point between Man and the Land and carry with them much cultural significance. Although production managers, and indeed cartographers, would like to think of them as static, they may change over time; they may appear, disappear, and re-appear elsewhere; and they may carry with them the hopes and challenges of a people, their language, culture and identity (where names may not equate to well defined topographic features of the landscape, but rather to happenings at certain places).

In speaking, we use geographical names every day with little thought as to the details of writing them. But in the written form, names – accurate, "standardized" names – are necessary for communication and access to other areas of knowledge and information in today's globalized and digital world. Accurate names – their recording, storage, authorization and dissemination – are basic for use in documents, maps, and databases that support humanitarian aid, urban planning, infrastructure development, tourism promotion, preservation of cultural heritage, and so on. Misuse of names can be the trigger for indignation and hostility. Inaccurate references; inappropriate use of exonyms, with political or historical connotations; inaccurate spelling; lack of respect for international boundaries, or lack of recognition for name changes can certainly create a source of friction.

Ambiguity versus standardized names

It may seem trivial that an airline passenger confuses Dulles airport (Washington, D.C.) with Dallas (Texas) or that an individual arrives in Sydney (Nova Scotia, Canada) rather than in Sydney, Australia. However, it is not trivial when duplication or the lack of clearly recorded and easily available names result in confused instructions to emergency services and that time wasted puts lives at risk. As many of you know, it is the written forms of toponyms that are the subject of national standardization encouraged through the United Nations Group of Experts on Geographical Names (UNGEGN). On several occasions at UNGEGN sessions, participants have been spurred on in their efforts by hearing of the practical aspects of their endeavours. Correctly recorded, standardized names – easily available – are key to provision of humanitarian aid. This we have had demonstrated by UNOCHA (Office of Coordination of Humanitarian Affairs, Ulgen, 2007) when he compared responses to earthquake tragedies. For instance, the Pakistan earthquake in 2005 had more than 88,000 deaths. In these remote valleys the maps, the accepted geographical names, and the census data were not integrated and were not readily available to those who were tasked with organizing aid to the area and needed to input the data into GIS for rapid rescue response. By contrast, in 2006, an earthquake in Indonesia had a more organized and rapid response because the toponymic and census data for Java were organized, integrated, up-to-date, and readily accessible. As a result of UNOCHA's experience, one of the cooperative international ventures now being undertaken by UNGEGN (through one of its Divisions), is the creation of a regional gazetteer and digital map for South-East Asia and the

South-West Pacific Region, covering world areas vulnerable to natural disasters. The data for these digital files – all standardized endonyms –for each country of the region was gathered by the New Zealand government and made into a database and digital regional map by the government of South Australia.

UNGEGN has been informed of other significant applications of standardized names, for instance the United Nations projects like the Second Administrative Level Boundaries (Ebener, 2009) and even the work of UN Habitat (You, 2009) where addressing (street naming) to provide identity to urban slum dwellers was considered as a contribution towards enabling the improvement of slum infrastructure. On the cultural side of geographical names we have heard from UNESCO (Gosselin, 2007) of the recognition of oral traditions and linguistic heritage as part of a country's intangible cultural heritage and the connection of toponyms to this heritage.

What is "standardization"?

Just to clarify the interpretation of "standardization", I would like to quote from the UNGEGN *Glossary of Terms for the Standardization of Geographical Names*, published in 2002:

> "The prescription by a names authority of one or more particular names, together with their precise written form, for application to a specific geographical feature, as well as the conditions for their use."

Although not stated in this particular definition, "local usage" is considered a key factor in the authorization of toponyms.

Accurate names are basic for use in documents, maps, information management, litigation, and spatial databases to support humanitarian aid, responses to climate change, world health issues and food provision, urban planning, infrastructure development, tourism promotion, preservation of cultural heritage, and so on. So, data sets of standardized geographical names can provide a country with benefits that are technical, economic, social and cultural in nature.

The key is not to wait for disasters, but to have names correctly recorded (based on local usage), standardized in writing and application through a national authority and readily accessible for general use.

National authorization of geographical names

At the heart of the work of UNGEGN is the promotion of names as authorized by each country of the world. For cartographers, obtaining such information for countries across the world is not always straight forward. UNGEGN contact points are the national names authorities in each country, failing that the national mapping/hydrographic/or military mapping agencies would be the default. Not until the late nineteenth century did the first national names authority come into being. Although Norway passed an act in 1863 including the updating of farm names spelling, it was not until 1890 that the first national names authority was established. This was the United States Board on Geographic Names (USBGN) created by Executive Order of the President, Benjamin Harrison. Decisions of the Board were binding for federal use, and by 1906, the USBGN's responsibilities included the standardization of all geographical names for federal use.

By 1897, Canada also had a names board, established by legislation, and in particular addressing naming associated with settlement spreading west and the mapping of the western mountains. In the following years, other countries established names authorities: Denmark (1910), New Zealand and Ireland (both in 1946), but not until the 1970s were many more national names authorities created. Today some 40 countries have formalized names authorities. During 2009, two countries have recognized the advantage of creating a specific body to deal with questions of names and naming – Brazil, that established a National Committee of Geographical Names and Afghanistan, that by Presidential decree brought the Board of Geographic Names of Afghanistan into operation.

There is not just one model for a national names authority, but each country develops their own approach which suits their structure of government, size of country and distribution of languages. At the simplest level, one can distinguish between the centralized approach and the decentralized approach. In the centralized approach, all decisions are taken by a committee of government, and perhaps non-government, experts. Such a committee could have the final decision, or could make their recommendations to a departmental Minister for final decision. Of course, such a committee (or board, council or commission) could include sub-committees or experts invited to provide advice in particular fields (e.g. languages and linguistics) to assist with the decision making. Many countries across the world follow in general such a model (e.g. Hungary, Estonia, Burkina Faso, Botswana, and New Zealand). With a decentralized approach, regional offices (perhaps at the state or provincial levels) make the decisions on names for national use, while a national umbrella committee fulfills a coordinating role, develops national policies and provides a forum for discussion. (Australia, Canada, Malaysia and Indonesia provide examples of such names boards.) Some other countries, such as the USA and South Africa, incorporate decision-making at both the state and national levels. All names boards have a mandate and develop their principles and procedures for naming. Their size and frequency of meeting, of course, varies considerably. The largest committee of which we are aware is the KPMA of Madagascar with the participation of 44 Government departments stated in their decree of 2001.

Although UNGEGN records may not be complete, we are endeavouring to build a record of all national names committees. This is available in map and table form on the UNGEGN website (http://unstats.un.org/geoinfo/nat_names_auth.htm).

Each country is encouraged to have their authorized names data available for public use. Many countries have produced paper copy gazetteers (although not all are really up to date) and today more countries are developing web-based data services. These are also available through the UNGEGN links (http://unstats.un.org/unsd/geoinfo/Websites-links.htm).

Multi-national geographical names data – what is available?

Individual country data is generally the most detailed, but is not always the most useful for data users. Yet today, because of the nature of data being nationally based, the creation of multinational data sets of authoritative geographical names is still in its infancy. In addition to the regional gazetteer and map project already mentioned for South East Asia and the South West Pacific, others are looking for similar groupings - for instance, the countries of Mali, Niger

and Burkina Faso are looking at the possibility of a CD-ROM of names data for the three countries. Arabic-speaking countries (22) are cooperating to develop a digital gazetteer of towns, based on the Beirut system of Romanization.

Another approach to make publicly accessible, multinational geographical names data, is the major EuroGeoNames endeavour in Europe developed through the EGN Consortium of public, academic, and private sector participants. The project will provide an infrastructure and services based on the decentralized national databases. Phase I, managed through Bundesamt für Kartographie und Geodäsie (BKG), has been completed and by the end of 2009, 16 countries will have contributed their data to a very well researched and structured system.

Through the Statistics Division at the United Nations in New York, the Secretariat for UNGEGN is spear heading another type of database to be generally available. This multilingual, multiscriptual database is being built to include names of countries (currently in the six UN languages and in the languages of the countries themselves), names of capital cities and names of cities/towns with a population over 100,000. So far, data for the countries and their capitals has been loaded according to UN and UNGEGN files, and 58 countries have contributed their authorized city data, 22 with sound files (in .wav format) to provide the pronunciation of their endonyms. As far as possible the writing systems of the world (together with accepted romanized forms of names) are being used to portray the data which can be accessed through an interactive world map or through a country list. Some challenges still remain with certain character sets, and some countries have yet to provide us with their nationally accepted data.

Toponymic Guidelines for Map and Other Editors

In the late 1970s, for the benefit of map editors and text editors, UNGEGN started compilation of Toponymic Guidelines for each country. Prof. Josef Breu of Austria, then Chair of UNGEGN, created a sample for Austria, which was developed into a template for others to use. The aim was to provide information that would assist editors, particularly map editors, to understand how to interpret and use the toponyms of a country. Such projects were supported by several UN resolutions (IV/4 (1982), V/11 & 14 (1987), VI/7 (1982), VII/9 (1988)).
The contents included:

- The country's languages (official, national and regional) and information for each about the legal status, spelling and grammar rules, pronunciation, and dialects
- Names authorities at the national and provincial/state levels and the legal aspects of their establishment or the use of the names
- Important source material (maps, atlases, gazetteers, and databases) for authoritative names
- Glossary of words (including generic terms) needed to understand maps
- Abbreviations used on maps
- How toponyms are distinguished from other type on maps
- Administrative maps of the country

So far some 40 countries have compiled such guidelines for editors and these can be found through the UNGEGN website section that provides information on the Coordination of

Toponymic Guidelines, or through the Links section of the website. Material is fairly readily available for Europe, but for Africa, for instance, there is still much work to be done at the country level. These guidelines can be of particular assistance to cartographers who need to understand country specific issues, such as multiple names in different languages, full forms of abbreviations found on maps, and authoritative sources for names data.

The United Nations Group of Experts on Geographical Names (UNGEGN)

Background

Although the use of geographical names as references goes back to the early days of human communication, the first concrete proposal for a worldwide system of standardization was made by the German geographer Albrecht Penck at the 5th International Geographical Congress in Bern, Switzerland in 1891 (de Henseler, 1992). He launched the idea of a 1:1,000,000 scale world map (IMW), to include standardized writing of geographical names in the technical specifications. It is interesting that both the IMW and the standardization of geographical names became part of the agenda of the Economic and Social Council (ECOSOC) early in its history.

Even in the early debates of ECOSOC in 1948 the problems of geographical names were raised; in 1949 a UN cartographic office was created; and in the 1950s discussion on writing geographical names on maps took place at the First Regional Cartographic Conference for Asia and the Pacific (in 1955) and subsequently at ECOSOC (1956). This culminated with resolution 715 A (XXVII) of ECOSOC in 1959 – it recommended the establishment of national organizations to standardize and disseminate geographical names, the creation of a clearing-house function at the UN, and the setting up of a small group of specialists to consider technical problems of names standardization and the possibility of an international conference on the subject. That resolution is the basis for the work of UNGEGN and the nine UN Conferences on the Standardization of Geographical Names that have been held to date.

UN/UNGEGN/Divisions and Working Groups

I would briefly like to "demystify" the work of UNGEGN and the UN with regard to names work. First, let me clarify that neither UNGEGN nor the Conferences have a mandate to decide on individual names, but rather in cases of dispute to encourage further discussion towards resolution of naming situations. Today there are opportunities to learn of best practices, cooperative ventures, new developments in geographical names administration, practical outcomes of names standardization, and problems that need resolution.

The first UN Conference on the Standardization of Geographical Names was held in 1967 and another eight have been held at five-yearly intervals. Since two preliminary meetings of groups of experts in 1960, 25 formal sessions of UNGEGN (one of the seven standing expert groups of ECOSOC) have been convened. UNGEGN has the task of following up Conference resolutions, encouraging national standardization, and setting up a structure of Working Groups and Divisions to address questions of general or regional interest – hence the 12 Working Groups and special committees, and 23 geographical/linguistic Divisions of UNGEGN.

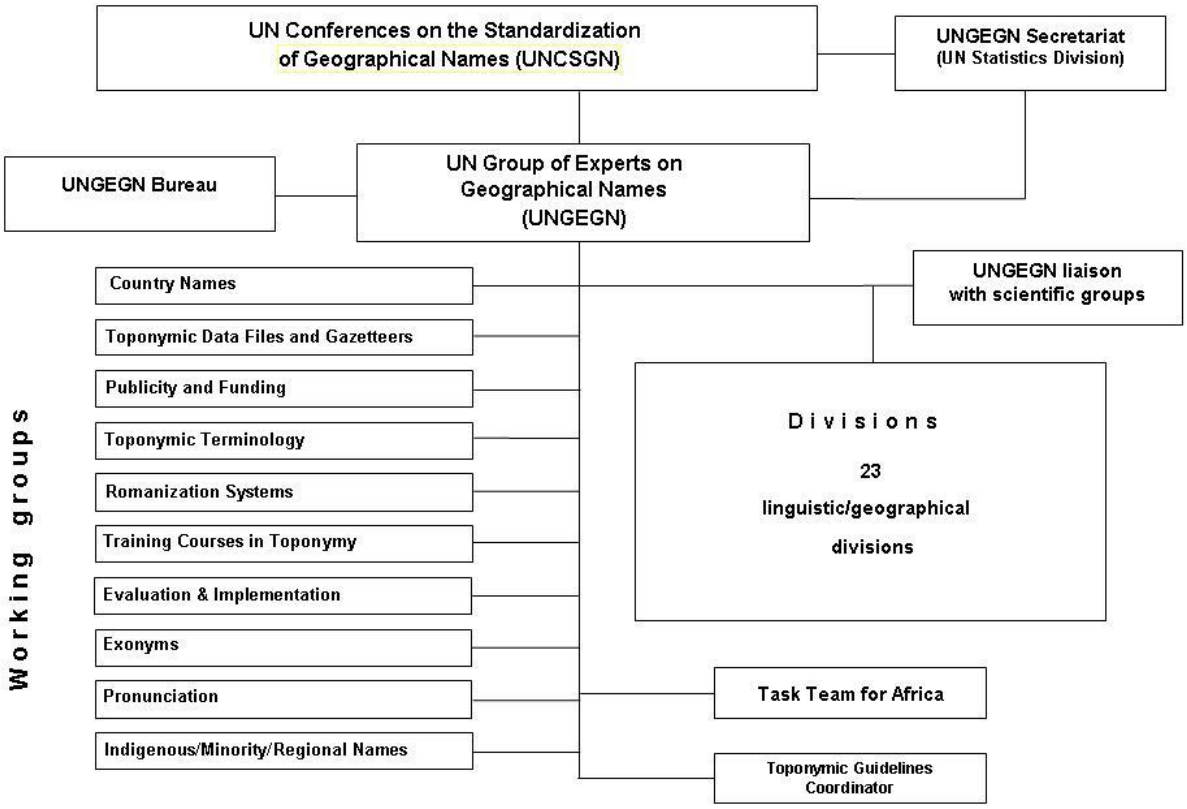

Fig. 1. Structure of UNGEGN

Participants in UNGEGN activities include managers, geographers, linguists, cartographers, database specialists – mainly from government, but also from academia, international organizations (e.g. UN, ICA, IHO, ISO, SCAR) and industry. Meetings of the Working Groups, in particular, welcome all interested in the topics under discussion. For the more formal UNGEGN sessions and Conferences, national credentials are a pre-requisite for participation.

Working Groups

Among the Working Groups that might well interest ICA participants are the following:

Romanization Systems (convened by Peeter Päll, Estonia). The conversion of geographical names from one writing system to another remains at the heart of UNGEGN's work. However, the development of single conversion systems that are scientifically sound and will become a UN standard is slow and the use of the systems by the proponents is not always the case. Although in principle one should be able to convert all systems to Chinese, to Russian Cyrillic to Arabic and so on, for practical reasons we have had to concentrate on systems of romanization. To this point, romanization systems for 28 languages / scripts have UN recognition; another 17 are under discussion. Presentation of details of these romanization systems (from Amharic to Urdu)

can be found in Part one the UNGEGN publication *Technical reference manual for the standardization of geographical names* (2007). Currently this Group is cooperating with the International Corporation for Assigned Names and Numbers (ICANN) that is accepting proposals for non-Roman script web addresses.

Training courses in Toponymy (convened by Ferjan Ormeling, Netherlands). Training for those endeavouring to administer national toponymy in developing countries has been requested since the early days of UNGEGN. The first course was organized in Indonesia by Ferjan Ormeling Snr in 1982. Since that time, over thirty sessions, ranging from a few days to two weeks, have been arranged with the help of the Convenor, a host country and various UNGEGN Divisions. For instance, from 2007-2009 courses were organized in Tunisia, Burkina Faso, Romania and Nairobi. The Pan-American Institute of Geography and History (PAIGH) also works in conjunction with UNGEGN, offering toponymy courses annually in Spanish in South and Central America. As you will realize, the financial support and computer lab facilities mean that less than 50 students will participate at any one time. However, making the course materials more widely available on CD and in recent times on the web with the assistance of ICA's Commission on Education and Training (lazarus.elte.hu/cet), has meant that potentially a wider audience can be reached. Of course, within countries themselves, toponymy courses are offered, as we have seen recently at IBGE in Brazil, and has happens annually in China, where urban growth creates the need for 20,000 new names each year, makes training of those administering the names data essential.

As with other groups that are involved with world projects, UNGEGN has been very conscious of the relatively low participation from countries of Africa south of the Sahara. In 2004 UNGEGN set up a special *Task Team for Africa* (convened by Brahim Atoui, Algeria), to work more collaboratively with international organizations in Africa, to offer training (as just mentioned) and to encourage countries to take responsibility for their geographical names in this post-colonial and globalized era. Whether they are looking to improve their infrastructure, to promote tourism, or to provide aid after war or natural disaster, their layer of accurate names is an important element for development. We are certainly pleased that the UN Economic Commission for Africa (based in Ethiopia) is now pro-actively introducing a database/gazetteer structure that can be used freely and customized for the needs of any country in Africa.

Other Working Groups would also interest those in ICA, for instance promoting the recording and use of indigenous, as well as minority and regional language group names – names that in many instances have existed in oral tradition only and without recording and storage are in danger of being lost to future generations, with the consequent erosion of culture, identity and language. Another Working Group deals with discussion of exonyms (toponyms in a language from outside the territory where the geographical feature is located, and differs from the endonym(s)). This group has published a collection of articles on aspects of exonyms (Peter Jordan et al, editors, 2007) and is currently involved with the very difficult task of trying to make recommendations about the use of exonyms vis-à-vis endonyms.

UNGEGN website

For users of names data, I certainly refer you to the UNGEGN website (unstats.un.org/unsd/geoinfo), where we now have a substantial corpus of documents presented at Conferences and UNGEGN sessions, pdf files of all UNGEGN publications available for download, and a portal providing links to national names authorities and national interactive names databases around the world.

Is world standardization possible?

There are certainly so many questions that remain to be answered regarding geographical names and their use (not to mention the more academic aspects of toponyms, language, and their meanings). With 192 UN member states with very varied types and levels of government administration, progress towards all countries having their own names standardization and all writing systems having conversion systems to other forms of writing, seems almost unachievable! The United Nations has been involved with geographical names standardization for nearly 60 years. Yes, we have made progress in encouraging countries to take charge of their toponymy, in disseminating geographical names for public use and in making guidelines and other publications generally available on the web. There certainly remains much to be done and today, it is in conjunction with enterprises such as Google, that we are moving ahead. Challenges are great for names administrators – the ever-changing nature of world politics, the continuing leaps forward in communication media, the increased expectations of users, and the vast amounts of variable quality data available on the Internet all underline the need for maintaining the processing of reliable and authoritative names data. Whether one is accessing data from a handheld device in Africa, or trying to use geospatial data to prepare for response to famine, flood or epidemics, accurate names form a key piece of the framework.

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