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**Item 5 of the Provisional Agenda**

**Reports of the liaison officers and international organizations**

## **The International Map Year 2015/16 \***

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\* Prepared by David Fairbairn and Ferjan Ormeling

# THE INTERNATIONAL MAP YEAR 2015/16

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## ABSTRACT:

This paper considers the nature of the ICA-organised International Map Year (IMY), an initiative for which ICA has sought the support of United Nations structures, including the United Nations initiative on Global Geographic Information Management (UN-GGIM). Preparatory work for this project has been undertaken by a Working Group of the International Cartographic Association, and details are presented of the way in which IMY will be organised and promoted. Particular activities mentioned in depth include 'national map days', children's activities, and a new book.

## 1. INTRODUCTION

The main purpose of the International Map Year (IMY), to be launched at the 28<sup>th</sup> International Cartographic Conference in Rio de Janeiro, is to expose the importance of maps and geographic information in human society. Our ever more complex civilisation would be lost without maps and a proper use of geographic information. It is therefore most important that every global inhabitant has access to maps and to geographic information, and that maps and geographic information can be easily retrieved and used.

Following the convincing nature of such statements, the United Nations Regional Cartographic Conference (UNRCC) in Bangkok in October 2012 adopted a resolution stating that, on behalf of UNRCC, the International Cartographic Association (ICA) should organise the International Map Year 2015. The resolution reads as follows:

*The conference,*

*recognizing the enormous benefit of reliable and authoritative geospatial information and maps in decision making for sustainable use of natural resources, economic development and for community well-being;*

*noting the need to promote geospatial information education and training for national governments, decision makers, the geospatial industry and users;*

*also noting the preparations made by the International Cartographic Association ad-hoc committee for the International Map Year, and the support by the Joint Board of Geospatial Societies (JB-GIS) on this initiative;*

*recommends the International Cartographic Association (ICA) to organize an International Map Year in 2015.*

Significant preparatory work has been carried out since that conference, with the establishment of an IMY working group under the auspices of ICA, and the raising of the profile of IMY within the United Nations itself. Pragmatically, it was determined that the most appropriate vehicle for driving the United Nations involvement should be the United Nations'

Initiative on Global Geospatial Information Management (UN-GGIM).

## 2. WHAT IS INTERNATIONAL MAP YEAR?

IMY is a worldwide celebration of maps and their unique role in our world. IMY provides opportunities to demonstrate, follow, and get involved in the art, science and technology of making and using maps and geographic information. It is intended that, hopefully with the assistance of the UN, the UN-GGIM, IMY will be celebrated across the planet: ICA expects that all its members (about 80 member nations worldwide) will participate in order to give each citizen a broader knowledge of maps – how they are produced and used for many purposes in society. IMY will provide opportunities to demonstrate, follow, and get involved in the art, science and technology of mapping and handling geographic information.

*The specific purposes of IMY are to:*

*Make maps more visible to citizens and school children in a global context;*

*Give all students an opportunity to learn more about cartography and about its associated geospatial sciences – geodesy, photogrammetry, remote sensing and surveying;*

*Show how maps and atlases can be used in society;*

*Encourage all to experience how information technology can be used in acquiring and handling geographic information, and how it is possible to produce one's own maps;*

*Display and show different types of maps and map production;*

*Show the technical development of mapping and atlas production;*

*Demonstrate the necessity of a sustainable development of geographic information infrastructures.*

IMY activities will focus on children and the general public, but also involve professionals and government agencies, thus covering a significant number of non-specialists, with the

intention of showing the value of maps to all sectors. It is also hoped that the increased awareness of maps resulting from IMY will improve the recruitment of students to cartography and cartography-related disciplines, and will encourage interest in ICA itself. The latter will be evident by increased membership among nations and also by affiliate commercial, academic and government companies and agencies.

*By involving United Nations organisations ICA hopes to realize some further aims:*

*To provide recognition by the United Nations and Member States of the importance of maps and geospatial information;*

*To ask Member States to encourage national mapping agencies and relevant government offices to take part in IMY;*

*To encourage member states on further support in making maps and geospatial information more accessible;*

*To motivate member states to improve the overall knowledge of the general public in how to use maps and geospatial information;*

*To provide recognition among geospatial professionals and local governments on the status of their work.*

### **3. ORGANISATION AND MANAGEMENT OF IMY**

Through the special Working Group, ICA will deliver a set of guidelines and resources allowing national delegates and cartographic organisations to offer a full programme of activities and events. Primary management will be at national level, with each country having different contexts within which to address the IMY agenda.

Thus, an important first step is to ask member nations to set up a National Committee to support IMY activities and provide the public and ICA with basic information about the planned activities. ICA will also encourage those who are not members to use existing structures to organise an equivalent Committee. It is expected that the National Committees will organise activities on a national level, although ICA will offer significant advice and practical support, co-ordinating worldwide activities. For example, the ICA Working Group will support IMY activities with basic information on ICA and its activities, on how ICA, its commissions and affiliate members can support mapping and atlas production, and on the way to improve the establishment of a geographic information infrastructure.

The national committee should contain representatives from all national mapping organisations and supporting organisations in geodesy, surveying and remote sensing, as well as education. The recommendation is that the National Committee will co-ordinate membership from the national topographic, geological and hydrographic mapping organisations; the commercial map/atlas production sector; the ICA liaison body within a nation; and some university/high school educational representative.

A major role of such a Committee will be to engage with the public: developing and coordinating events and inviting the public to these, and distributing information of all types to raise awareness, educate, encourage, and enlighten. One of the first duties, therefore, is to set up an informative web page which can act as the communications beacon for the Committee and

its activities. The National Committee will have a good understanding of the national capacity and practice in cartography and mapping, and may also have the influence to engage with industrial partners, political decision-makers, and sponsors. An initial strategic planning day for the Committee is expected to be arranged sometime before the initial launch of IMY (i.e. sometime during 2014).

The National Committee has a crucial role to play in all the activities described later in this paper, so it is expected that it will be able to a) reactively maintain a schedule and calendar of events; b) pro-actively initiate events; c) publicise all events and ensure nation-wide participation; d) promote and advise upon possible national initiatives such as a web-based national atlas, and a national strategic plan for the creation and the dissemination of geographic information; e) translate material emanating from ICA to suit local needs; f) encourage participation in international events, such as the Barbara Petchenik Children's Map Competition (individual children and schools participation), and the International Map Exhibition at the 2015 International Cartographic Conference (map makers and mapping agencies participation); g) report back to the ICA IMY Working Group with information regarding the outcomes of IMY.

The inaugural launch of International Map Year will be 1 January 2015, with a formal high-profile event during the ICA International Cartographic Conference to be held in Rio de Janeiro in August 2015. It will continue until the end of 2016. However, preparatory activities and promotion will be ramped up from the start of the calendar year 2015. All cartographers are urged by the IMY Working Group to look out for, and volunteer to hold, mapping activities in their own country.

### **4. ACTIVITIES IN IMY**

The text of the Bangkok resolution notes "*the need to promote geospatial information education and training for national governments, decision makers, the geospatial industry and users.*" It is expected that IMY will create opportunities to broaden knowledge about maps and other kinds of geospatial information among humankind as well as an awareness of the usefulness of maps and geographic information.

An ICA-managed central project web-site is being developed, which will offer suggestions including advice on advertising and promotion, events and activities, and methods of engagement with the wide range of politicians, civil servants, trade bodies, learned societies, educationalists, and members of the public for whom IMY will be of interest. Nominated national points of contact will be listed to allow any citizen to learn more about how to participate in the programme.

Through the web site, a set of promotional materials will be made available to allow the National Committees to put together fun and successful events for. ICA will grant organisations the copyright permission to use, copy, reproduce, and redistribute any or all of the IMY materials found on this web site in support of local IMY events and efforts. Thus, logos, fliers, brochures, posters, Powerpoint template etc. will be made available.

In addition to access to these resources, the web-site will, further, have a full Calendar of Events; reports of activities; submission methods for educative material, commentary and

experiences; blogs and comments; contact details; diary notes; and event reports from around the world.

#### 4.1 Events

In some countries, there are already established 'map days' or 'GIS days', either annual events or occasional celebrations, sometimes led by commercial companies, sometimes promoted by learned societies. Embracing such initiatives is expected to be a feature of IMY, and specific national conferences can also be used to widen the scope of the programme. Exhibitions of maps appear regularly in many countries, including travelling displays, library map displays, and also previews of a nation's contributions to each biennial International Cartographic Conference (ICC). It is expected that these, along with map competitions including the international Barbara Petchenik Children's Map Awards, will become part of IMY in 2015 and 2016. In all cases, a formal diary of events and schedule of activities will be maintained.

The IMY contains many actions directed to the general public and school children, and provided by geospatial professionals and local governments. The National Committee will support arrangements of local map days that will be held in municipalities, schools, universities and libraries.

Map days should be organised to get community members directly involved in a dedicated event which explores the power of maps. They can be organised at national, regional and/or local level, with co-ordinated scheduling if possible. Ideally, the community link would be through some organisation or local human activity which can involve mapping, such as agriculture, forestry, physical planning, housing, transport or natural resource exploitation. Municipalities could lead the organisation of such events, although local colleges and schools, museums, libraries, and other community groups should also be involved. It is suggested that the local prominence can be emphasised by concentrating on the area immediately nearby – perhaps supplying geospatial data of a village for participants to make their own map, or distributing free copies of a local paper map to encourage participants to explore their own environment. Local map days will inevitably interest local media, although for younger people, town newspapers are less important than using Facebook to find out about local events.

*A local map day may contain:*

*Exhibition of recent national maps from the national mapping organisations and other systematic mapping agencies;*

*Demonstrations of map production and of the use of maps;*

*Local mapping programs for planning and maintenance of infrastructure (these may involve local services, such as fire-fighters and police addressing a series of planning, decision-making and operations effectively, efficiently, and in timely fashion using maps);*

*Exhibition of historical maps – mainly local ones;*

*Exhibition of Barbara Petchenik Children's Map Competition entries;*

*Cartographic activities for children;*

*Short lecture program about the use of geospatial information;*

*Demonstrations of GPS, orienteering and geocaching;*

*Demonstrations of how to overlay old maps on new ones;*

*Map use exercises.*

It is expected that exhibitions will be free-standing, but the overall 'map day' will benefit from the presence of leaders who can answer questions and respond to enquiries. Importantly such 'volunteer facilitators' will be able to offer demonstrations and short talks, and lead activities for children in particular. It is vitally important not to duplicate activity or engender 'overload' on the part of the citizen: 'map days' must fit into the schedule of existing or regularly planned activities. National representatives of companies such as Esri, who already present the world GIS day, and other organisations such as national cartographic societies, organizing regular Map Days, must be involved in the planning activities of the national committees on IMY.

There are many other resources with which IMY can align in order to present a strong message about maps and mapping. The ICA Working Group will assist National Committees to access and use resources from organisations which already have significant experience in engaging with the general public: for example, the National Geographic Society has a rich set of teaching resources, many of them units which are already pitched to meet national educational standards; Esri offers Education Community Instructional Resources which can also be used in lesson plans and by individual students researching maps and mapping, and also presents an open Mapping Centre giving advice on cartographic concepts and techniques.

##### 4.1.1 New book, *The World of Maps*

One of the most important educational resources to be delivered by the IMY Working Group of ICA, and intended to be used worldwide to raise awareness of maps and mapping in the context of IMY, is a specially prepared on-line book called *The World of Maps* to be published in July 2014. This specialist textbook on cartography and geographic information, is being published initially in English and probably also Chinese, French and Spanish. It will describe how maps are created and used, presenting the importance of accurate and retrievable geographic information, and providing possibilities to download such resources.

Written voluntarily by an international range of contributors, *The World of Maps* will be available on the ICA web-site for free download. It presents a set of individual chapters covering a variety of cartographic topics and issues, and forms a coherent introduction, reference volume and work-book for those who are interested in investigating the nature of contemporary mapping. It is hoped, and will be encouraged, that this material will be translated into many further languages for local usage around the world, by appropriate National Committees. The contributors include members of the Working Group (acknowledged at the end of this paper), along with notable cartographers from academia and sister organisations to ICA, from Europe and North America

The World of Maps includes individual chapters covering a variety of cartographic topics and issues that form a coherent introduction, reference volume and work-book for those who

are interested in investigating the nature of contemporary mapping. The sections are listed below:

Introduction

*Preface, President of ICA*

*Foreword, Working Group*

*Table of Contents*

Executive Summary

*Cartography*

*Use of Maps*

*Geographic Information*

How to Make Maps

*Map Design*

*Topographic maps*

*Thematic Maps*

*Atlases*

*Geographical Names*

*Map Projections and Reference Systems*

How to Use Maps

*Map Use at the United Nations*

*Setting One's Course with a Nautical Chart*

*Maps for Orienteering and for Finding the Cache*

How to Present Maps

*Printing Maps*

*Web and Mobile Mapping*

Geographic Information

*Geographic Information Access and Availability*

*Volunteered Geographic Information*

Education and Further Information

*Education*

*Further Information*

A primary purpose of the book is to encourage those in the educational sector, both teachers and high school/university students, to produce digital maps and increase their interest in further education in geomatics. It does this with a richly illustrated and engaging appearance, and a comprehensive coverage of all aspects of cartography. However, the material will be presented as separate chapters in a concise PDF format to allow for downloading over low band-width connections (which characterise many parts of the world).

The penultimate chapter on Education is specifically directed towards classroom practice and procedures in the context of cartographic education and training. This chapter discusses the nature and scope of cartography (notably the United Nations definition); methods of education and training in the broad range of subject matter (from survey measurement to commercial retailing of geospatial data); contemporary developments in mapping activity; the response of educational institutions and programmes to such developments; the skills and requirements for a successful cartographer; the impact of GIS, etc. It is hoped that this chapter, in particular, can enthuse and encourage young people with interest and aptitude to seek out opportunities for continuing their study in cartography, wherever they may be in the world.

Of course, the book itself has been produced as a 'classroom-aide' and each chapter presents some exercises and suggestions

for further study. With the varying levels of material in each chapter, it is hoped that there will be exercises appropriate for a number of age- and ability-groups. To some extent the range and depth of the book parallel the introductory courses in undergraduate degree programmes; but there is also sufficiently elementary material to appeal to much younger children.

It is hoped that this volume will fulfil its intention to introduce a whole new generation to cartography and its importance. As an example, the chapter on Geographical names has been added to this paper.

## 5. CONCLUSION

International Map Year (IMY) is a worldwide celebration of maps and their unique role in our world. Supported by the United Nations, IMY is an intensive international, interdisciplinary, scientific, and social strategy to focus on the importance of maps and geographic information in the world today. The most important legacies will be a new generation of cartographers and geographic information scientists, as well as an exceptional level of interest and participation from professionals, schoolchildren, the general public, and decision-makers, worldwide.

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Bengt Rystedt (Sweden) (Chair)

Aileen Buckley (USA)

Serena Coetzee (South Africa)

David Fairbairn (UK)

Ayako Kagawa (Japan/United Nations)

Ferjan Ormeling (Netherlands) (Deputy Chair)

Vitek Vozenilek (Czech Republic)

The Working Group on IMY has its website at <http://www.bengtrystedt.se/>

Please find below, as an example for the style of the envisaged popular manual on cartography, produced on behalf of the International Map Year, the chapter on Geographical Names. All chapters will be incorporated on the ICA website in July 2014, and can be downloaded. The ICA working group on the IMY hopes many countries will translate these chapters in their own language. To those intending to do so, all illustrations of the book will be made available.

## Chapter 8 - Geographical Names

### Ferjan Ormeling

Maps are superb tools for getting to know our environment, to understand about distances, or to plan a journey. They show us how our location on Earth influences the climate and the possibilities to earn a living. But they only can show us these relationships when they bear geographical names. Look at the map in figure 8.1. It shows (parts of) 5 countries, separated by boundaries, and towns and cities and rivers and canals, but it does not tell us anything because we cannot relate to all these mapped objects as countries, settlements and rivers. They are not named. We can only refer to the objects rendered on the map in an indirect way, like 'the big city in the southwest of the map,' or 'the sea in the northwest corner of the map.'

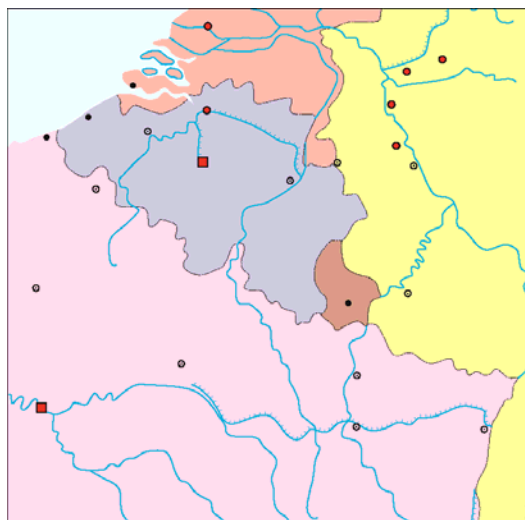


Figure 8.1 Map without geographical names.

Figure 8.2 shows the difference made by the addition of geographical names. Now every mapped object (except for a few smaller rivers and canals) can be directly referred to. The 'big city in the southwest corner of the map' now can be addressed directly as Paris, for instance, and the sea turns out to be the North Sea. Now it is easy to describe the relationships between the mapped objects; for instance, 'Liège is located in-between Brussels and Aachen,' or 'Luxembourg is bounded by France in the South, by Germany in the East and by Belgium in the North and the West.' The characteristics of all mapped objects now can be easily listed, for instance, in a gazetteer. A *gazetteer* is an alphabetical list of the geographical names within an area, like a country, with an indication of the location of the objects they refer to (expressed, for instance, in geographical coordinates, see Section 9.1), the nature of the named object (is it a town, a river, a canal or a country?) and of their official spelling.

For the official spelling, we have to look first at the way geographical names are collected during the survey of an area in order to produce a topographical map (see Chapter 5). Topographers will visit municipality offices in order to collect the names used locally to refer to the geographical objects. Sometimes they will also go into the countryside and ask the local inhabitants for the names of the lakes, hills, hamlets or forests in their neighbourhoods. All the names collected in this way will be submitted to a names bureau that will check whether the spelling of the name is correct according to the official orthography of the country's language(s) or whether the spelling reflects the local pronunciation of the name. When everyone agrees what the spelling of the name should be, it is officially defined. We call this process *standardization of geographical names*. All the



Figure 8.2 The same area as mapped in figure 8.1, but here geographical names have been added.

names of which the spelling has been standardised will then be published in official lists, so that everyone can see how they are to be spelled.

Because their spelling has been standardised, geographical names can also serve as links in geographical information systems. Statistics for municipalities can be linked to boundary files with the boundaries of these same municipalities, allowing for digital mapping of these statistical data. A procedure called *'parsing'* allows us to retrieve all documents in a database in which a specific geographical name is mentioned. But, again, this only works if everyone agrees about the spelling of that particular name. Here we are frequently confronted with the problem that people from a different language community than ours will use different names for the same geographical objects as we do.



Figure 8.3 The same area as mapped in figure 8.1, now with the officially standardized local names (endonyms).

Names like Trèves, Cologne and Dunkirk, used in the English language in order to refer to places that are called officially Trier, Köln and Dunkerque by their local inhabitants, are called exonyms. *Exonyms* are names used in a particular language for a geographical object outside the area where that language is spoken and differing in their spelling from the names used in the official language(s) of that area where the object is located. Trier, Köln and Dunkerque are examples of *endonyms*, or locally official standardized names. Exonyms often emerged in a process of adaptation of foreign names to our language, and frequently as such they have become part of our history, and our cultural heritage. In English history, the 'battle of Jutland' in the First World War refers to the naval battle off the coast of the Danish peninsula called Jylland in Danish, for which Jutland is the English exonym. The chicken breed called Leghorn in English refers to the Italian port of Livorno where these chicken were exported from. Leghorn is the

English exonym for Livorno. While it is understandable that these exonyms are part of our history, it is also understandable that in view of international name standardization, the use of endonyms is the preferred mode of communication.



Figure 8-4 Finnish exonyms for Western Europe.

The existence of two or more names for one and the same object is called *allonyms*. A good example is the German town of Cologne: the endonym is Köln; in



English and French it is called Cologne; in Dutch Keulen; in Spanish and Italian Colonia; in Czech Kolín; and in Polish Kolonia. Opposite of allonyms is the concept of *homonyms*: the fact that the same name can refer to different geographical objects. The Scottish town of Perth has the same name as the capital of Western Australia. Birmingham in Britain bears the same name as the capital of the American state of Alabama. Stratford upon Avon is the birthplace of William Shakespeare in England, on the banks of the river Avon. But the combination of the place called Stratford and the river Avon also occurs in Australia and in New Zealand. How do we distinguish between them? Here it becomes necessary to add features to these names: Birmingham, Alabama versus Birmingham, England, or Frankfurt am Oder versus Frankfurt am Rhein.

**National and International standardisation of geographical names**

In an ideal world, every geographical object would be recognised by its unique name, which would only refer to this particular object. In order to get as close as possible to this ideal situation, we first apply the process of national standardization of geographical names: every country decides what should be the spelling of the names of the geographical objects within its borders, and it communicates these spelling decisions to all other countries, by publishing gazetteers, so that inhabitants of those other countries would know what these official spellings are.

The next step would be the process of international standardization. There is a complicating factor here, and that is that we not only speak different languages all over the world, but we also use different writing systems. In order to have ‘*univocity*’—the existence of one unique standard name for each geographical object in each writing system—it requires that there only be one single, official way to convert names from one writing system, like Arabic, Chinese or Amharic to

another writing system like the Roman alphabet. In this way, local names that have been standardized officially in one language and writing system would be converted into standardized names in another writing system.



Figure 8.5 Writing systems used in Southeast Asia: Bengal (Bangladesh), Burmese (Myanmar), Thai (Thailand), Cambodian (Cambodia), Laotian (Laos), Roman (Vietnam) and Chinese (China) writing systems.

For most of the writing systems displayed in figure 8.5, the United Nations has recognised official conversion systems. The name of a conversion system depends on the writing system it converts into. Conversion into the Roman script is called a *romanization system*. Pinyin is the name of the romanization system recognised by the UN in order to convert names from the Chinese writing system into the Roman alphabet.



Figure 8.6 Southeast Asia with geographical names converted into the Roman alphabet.

It can be seen in figure 8.6 that in many names special signs have been added to the letters of the Roman alphabet in order to modify the normal pronunciation of these letters. Some of the letters even have two of these signs added to them (an example is the letter *e* in Viêt Nam), but that is exceptional. Not only do these pronunciation-modifying signs, called *diacritical signs*, change the sound of the names, they would also influence alphabetization, the sequence of names when arranged or listed alphabetically. In Danish, for instance, geographical names like Amager or Als fall under the first letter of the alphabet, while names like Ålborg or Århus come after the letter Z.

Endonyms can be converted from one language to another in three different ways:

- when both languages use the same alphabet the name can just be copied, including all the diacritical signs used from the first language to the second (e.g., Polish, German, Danish)—Warszawa (Warsaw), Köln (Cologne),



København (Copenhagen). In some countries this procedure is called transposition;

- names can be transferred "letter by letter" according to conversion tables (see also figure 8.7), (e.g. from Cyrillic to Latin, from Greek to Latin, from Arabic script to Latin, etc.)—София (Sofia), Αθήνα (Athens), الأقطر (al-Uqṣur, Luxor). This procedure is called transliteration; and

#### Systems of romanization

The national system of romanization (2002) is as follows:

1 ა	a	13 ნ	n	25 შ	sh
2 ბ	b	14 ო	o	26 ჩ	ch
3 გ	g	15 პ	p'	27 ც	ts
4 დ	d	16 ჯ	zh	28 ძ	dz
5 ე	e	17 რ	r	29 წ	ts'
6 ვ	v	18 ს	s	30 ჟ	ch'
7 ზ	z	19 ტ	t'	31 ბ	kh
8 თ	t	20 უ	u	32 ჯ	j
9 ი	i	21 ფ	p	33 ჰ	h
10 კ	k'	22 ქ	k		
11 ლ	l	23 გ	gh		
12 მ	m	24 ყ	q'		

Figure 8.7. Example of a conversion table, from the Georgian to the Roman alphabet, as proposed by Georgia.

- the sounds of the name can be rendered in the second language according to the pronunciation of the letters in its alphabet For example the Chinese name of the capital of China in Chinese characters: 北京 of China in Chinese) is rendered Beijing in English, Peking in German, Pechino in Italian, Pekín in Spanish, etc. This procedure of phonetic rewriting is called transcription.

#### Functions of geographical names

Geographical names not only serve in relating to our environment or as links in information systems, but they also play a role in brand names. Bordeaux, Beaujolais or Champagne not only are names of French regions, but they also refer to specific wines. And the use of these geographical names for these products can even be protected; it is not allowed to refer to some bubbly wines as Champagne unless they are actually produced in the Champagne region from grapes harvested there. A similar use of geographical names is valid for cheese: Edam and Gouda are names for typical Dutch cheese types, while Gorgonzola and Parmesan refer to Italian cheese types.

Most geographical names, when first given, were transparent. That is, their meaning was clear to those that gave the names. Rio de Janeiro is the name of a river in Brazil that was first sighted by the Portuguese 1 January 1502. Later on, the name of the river was transferred to the settlement that grew up on its bank. Cape Town is the English translation of the Dutch name Kaapstad, given to the settlement built by the Dutch in the 17<sup>th</sup> century close to the Cape of Good Hope, as a victualing station for the Dutch ships on their route from the Netherlands to the Spice Islands in the Moluccas. Some names lay claim to an area: the name Vladivostok, the Russian main naval port on the Pacific Ocean, means Ruler of the East. 'Nya Sverige' (or New Sweden) is the name of a 17<sup>th</sup> century Swedish colony on the banks of the Delaware River in the present-day United States. Like other European powers, it laid claim to a part of the North American continent. France claimed its 'Nouvelle France,' England its 'New England' and the Netherlands its 'Nieuw Nederland.' When the Dutch first arrived in the present-day Australia in the 17<sup>th</sup> century, they called it New Holland, after their principal province of Holland. When the British at the end of the 18<sup>th</sup> century claimed

it, they were not happy with this Dutch name and they introduced a new, more neutral sounding name, Australia, derived from the Latin word 'australis' which means southern. This new name thus referred to the 'southern' continent.

Names carry meaning. The name Amsterdam is the present-day version of the mediaeval name Amstelredamme, which means the dam in the river Amstel where the first hamlet of this name was situated in the 13<sup>th</sup> century. So names describe the original situation of the location or its surrounding area. Dutch names ending in -lo (Almelo, Hengelo) refer to locations in clearings in the forest; names ending in -koop (Nieuwkoop, Boskoop) refer to settlements created when the peat areas were drained and cleared for agriculture; and names ending in -drecht (Sliedrecht, Zwijndrecht) refer to names of settlements built along the dikes in the Middle Ages. Like in personal names, where trends to name children after pop or movie stars alternate with traditional names or fancy French names, there also have been trends in naming towns.— And by studying names it sometimes becomes possible to establish when these names were first given. The study of the meaning of place-names is called *etymology*.

#### Name elements

Geographical names sometimes consist of a single word and sometimes of multiple words—examples are London and Newcastle upon Tyne (this addition to the name Newcastle serves to distinguish it from other towns called Newcastle). But even if a name consists of a single word, it may have been constructed from different elements. The name of the Scottish capital Edinburgh consists of two elements, *burgh*, meaning fort and the personal name *Eidyn*, so the name would mean the Fort of Eidyn. We call the part that describes the nature of the named object, in this case -burgh, the generic part of the name, and the part that refers to the person whom the fort was named after, the specific part. Sometimes

the generic part is a separate word, like in Mount Everest, Forest of Dean, or Bay of Fundy. Sometimes it is combined with the specific part, like in Newcastle, Blackpool or Plymouth (naming the settlement at the mouth of the river Plym). The distinction of generic and specific elements of names is relevant regarding exonyms. Sometimes when a name is transferred from one language or writing system to another, the generic parts of these names are translated into the new language. So the Greek name Αιγαίο Πέλαγος (Aigaio Pelagos) is converted into English as Aegean Sea, and the Russian name мыс Дежнёва (Mys Dezhnev, a cape named after the Russian explorer Semyon Dezhnev) is converted to Cape Dezhnev.

#### Historical names and name planning

Many geographical names used in the past are no longer current and official. This can be caused by changes in the official orthography of a language. It can also be caused by conquest when one country occupies (part of) another country and imposes its own names on the geographical objects in the conquered lands. It can be caused by decolonization as well, when the names used by the former colonial power are exchanged for new names in the language of the newly independent people. In figure 8.8, some examples are given of new names (in black) that emerged in Africa after the decolonization process that happened in the 1960s and replaced former colonial names (in red). These former geographical names that have been replaced by the current new names that are now official locally are called *historical names*. Examples of these historical names are Batavia, the former Dutch name of the Indonesian capital Jakarta; Leningrad, the former Communist name of the Russian port city on the Baltic Sea called Saint Petersburg (in Russian, Санкт-Петербург, converted into the Roman alphabet as Sankt-Petersburg); and Madras, the former name of the Indian city Chennai, capital of the Indian state Tamil Nadu.



Figure 8.8 Some examples of post-colonial names in Africa.

Whenever names are changed, it is good practice to place the former and the new name side by side for a given time period so that the population can get used to the new name, and foreigners unfamiliar with the new name can still find their way around. This is an aspect of name planning. Name planning can be defined as the deliberate effort to influence the spelling of place-names, primarily in order to improve communication. There can be other reasons; however, for instance, shedding of the toponymic influences regarded as foreign.



Figure 8.9 Detail from Dutch school atlas, 1960, with the names Zuidchines Bergland and Zuidchinese zee.

Name planning is also needed when the orthographic rules of a language change. Even seemingly small changes, like the introduction of hyphens after cardinal directions instead of joining those words to the main specific name elements, may result in thousands of changes in a reference atlas. In the 1960s, in the Dutch language, the words Zuid (south) and Chinese were



Figure 8.10 Detail from Dutch school atlas, 2006.

joined while from 2000 onwards these words had to be separated by hyphens, as can be seen when comparing figures 8.9 and 8.10. The impact of such spelling measures on cartographical products can necessitate a major overhaul of them.

**Further references:**

For those interested in toponymy and cartography, we refer to the online web course in toponymy, to be accessed from either the website of UNGEGN, the United

Nations Group of Experts on Geographical Names (at <http://unstats.un.org/unsd/geoinfo/ungegn/default.html>) or to the website of the Commission on Education of the International Cartographic Association (<http://lazarus.elte.hu/cet/index.html>) under Internet Cartography Teaching courses).

The UNGEGN website also provides information on national and international geographical names standardization procedures, addresses of national bureaus in charge of geographical names, and access to national *toponymical guidelines*. These guidelines inform map editors and other editors on how geographical names in specific language areas are spelled, how countries are dealing with names in multilingual areas, and how names are pronounced.

UNGEGN itself also produces a global gazetteer, which can be accessed at <http://unstats.un.org/unsd/geoinfo/geonames/>, which presently lists the names of all cities with over 100,000 inhabitants and their pronunciation. It also has all country names in the 6 official UN languages (including Russian, Arabic and Chinese) and the local language.

