U.S. Board on Geographic Names
Foreign Geographic Names
Standardization Program

Trent Palmer
NGA Geographer
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Outline

• Foreign Language at NGA
• U.S. Board on Geographic Names (BGN)
• NGA Support of the BGN Mission
• Geographic Names Database
• GEOnet Names Server

Reminder: Keep in mind the human skills and technology required to accomplish the BGN mission at NGA
Mission: NGA provides timely, relevant, and accurate geospatial intelligence in support of national security.

Created in 1996 (NIMA)

NGA - 2003

Geospatial Revolution
Foreign Language at NGA

- Hires language-skilled analysts to work in the geographic names standardization program

- 2007: Foreign Language and Culture Program established; FLIP pay began

- 2008: on-site DLPT testing

- Recent rise in interest in hiring language skilled employees (human geography, open source research, etc.)
U.S. Board on Geographic Names (BGN)

• US BGN first established in 1890 by Executive Order

• Re-established in present form in 1947 by Public Law 242, 80th Congress

• BGN (with the Secretary of the Interior), responsible for all aspects of geographic names standardization within the Federal government

• **Purpose**: avoid duplication of effort among Federal Departments and Agencies by establishing a single authority for resolution of geographic name issues

• **Scope**: domestic and foreign geographic names, to include undersea features and features in Antarctica
BGN Membership

- Foreign Names:
  CIA, Commerce (Census), Defense (DIA, NGA, NSA, US ACE), Library of Congress, and State Department

- Domestic Names:
  Agriculture (Forest Service), Commerce (Census, NOAA), Defense (US ACE), GPO; Homeland Security (USCG, FEMA), Interior (BIA, BLM, BOEM, NPS, USGS), Library of Congress, and Postal Service
“the spelling of foreign geographic names presents several problems which are only vaguely understood by the general public.”

First Report on Foreign Geographic Names (1932)
BGN Geographic Names Data

• The ‘product’ of the BGN was Decision Lists

• World War II brought about more focus on BGN
  • February 1943: staff of linguists and geographers assembled to systematize analysis, collection, and dissemination of standard geographic names
  
  • Alphabetical master file of place-name cards established

  • Forerunner of the BGN/DoD *Foreign Place Names File* (FPNF)
<table>
<thead>
<tr>
<th>NAME ON SOURCES</th>
<th>NO.</th>
<th>DATE</th>
<th>SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abbássiyé</td>
<td>(1)</td>
<td>1945</td>
<td>Ser. Geog. F.F.L. 1:50 NI-36-XVII</td>
</tr>
<tr>
<td>Aábbássiyé</td>
<td>(2)</td>
<td>1945</td>
<td>Liban, Gaz. 1:50, Page 19</td>
</tr>
<tr>
<td>Abbássiyé</td>
<td>(3)</td>
<td>1948</td>
<td>Highway Map, 1:200 Nat'l Geog. Office</td>
</tr>
<tr>
<td>Abbássiyah</td>
<td>(4)</td>
<td>1969</td>
<td>Arabic reconstructed by the Linguistics Section</td>
</tr>
</tbody>
</table>

**Geographic Details:**
- **Country:** Lebanon
- **Province:** Al Janūb
- **Map Coordinates:**
  - Latitude: 33° 18' N
  - Longitude: 35° 17' E
Foreign Place Names File

- Continuously maintained through gazetteer production projects until 1993
- Generally was not used to support cartographic production
- Defined the content specification of the subsequent GNDB
Geographic Names Database

- Formally established in 1993-94 with the introduction of the Geographic Names Processing System
- Initialized through loading of “Names Information Tapes”
- Foreign Place Name File retained on microfilm, with card file bequeathed to the National Archives

**NIT Tapes**

Nine-track magnetic tapes created to support gazetteer publication. Contained the seven basic data fields appearing in BGN gazetteers.
Is the BGN relevant today?

Eyjafjallajokull
http://www.jongustafsson.com/eyjafjallajokull-volcanic-eruption-photographs/

Iran sues Google
Is the BGN relevant today?

"Over the past decade, Google Earth and Google Maps have become the online cartographic resources of reference. But popularity does not bestow authority. The lines that Google draws on maps have no government’s imprimatur. Yet by virtue of its ubiquity, Google is often the arbiter of first recourse for borders and toponyms [5]. So where Google’s maps show borders or place names that deviate from official usage or stray into international disputes, they may cause confusion, offense or worse."

BGN and NGA

- US BGN Foreign Names staff transferred from Department of Interior to the Department of Defense (1968)

- The majority of the staff were assigned to the Army Map Service

- Principal activity was the production of National Intelligence Survey gazetteers
BGN Foreign Names Staff

• US BGN Foreign Names Secretariat and staff are provided by NGA

• Within NGA, the staff is assigned to the Political Geography Division of the Office of GEOINT Research, Source Operations and Management Directorate

• The Political Geography Division also bears responsibility for political boundary work at NGA
International Collaboration

• United Kingdom’s Permanent Committee on Geographical Names (PCGN)  http://www.pcgn.org.uk


• Toponymic training programs
The Geographic Names Database (GNDB)

- Over 8 million names for over 5 million features
- Based on 60 years + of analysis and compilation
- Most names based off medium-to-small scaled maps
- Recent updates being done using large-scale sources
Positional Accuracy
Refining coordinates from the nearest minute to the nearest second

Lebanon: data density and distribution - before and after shots
Language/Linguistics Knowledge

• Understanding of culture

• Ability to fully exploit sources in native publications and websites

• Development of policy

• Development of transliteration

• Database work

Reminder: Keep in mind the human skills and technology required to accomplish the BGN mission at NGA
Romanization

- Develop/adopt romanization systems for geographic names
- Work done in conjunction with PCGN (UK)
- Monitor UN systems for romanization
- 2008 publication (31 systems)
- Posted on GEOnet Names Server (now 48 systems)
- NGA staff contributes to work in development of transliteration systems for personal names (IC)
## Development of a Transliteration System

### Example: Dzongkha (Bhutan)

<table>
<thead>
<tr>
<th>Native Source: Script</th>
<th>Native Source: Transliteration</th>
<th>UNGEGN Applied Transliteration</th>
</tr>
</thead>
<tbody>
<tr>
<td>བོད་ཐང</td>
<td>Bumthang</td>
<td>bum-thang → Bumthang</td>
</tr>
<tr>
<td>ཆུ་་</td>
<td>Chhukha</td>
<td>chhu kha → Chhukha</td>
</tr>
<tr>
<td>ཆུ་་</td>
<td>Gasa</td>
<td>ga-sa → Gasa</td>
</tr>
<tr>
<td>བོད་་</td>
<td>Pemagatshel</td>
<td>pema-ga-tshel → Pemagatshel</td>
</tr>
<tr>
<td>བ་་</td>
<td>Punakha</td>
<td>pu-na-kha → Punakha</td>
</tr>
<tr>
<td>བོད་་</td>
<td>Samdrup Jongkhar</td>
<td>sam-drup-jong-khar → Samdrupjongkhar</td>
</tr>
</tbody>
</table>

1987 map produced for the Planning Commission of the Royal Government of Bhutan by the International Bank for Reconstruction and Development (The World Bank)
BGN Information Portals


- GEOnet Names Server (NGA/BGN Foreign Names)
  - also on SIPRnet and JWICS

- US BGN Domestic Names (and Antarctica): USGS site listed above

- Web Map Service (WMS)/ Web Feature Service (WFS), Web Feature Service-Gazetteer (WFS-G) web services available
Custom Search Criteria

Name Type Search
Select one or more of the eleven name types
- Conventional
- Approved (BGN Standard)
- Unverified
- Provisional
- Variant
- Anglicized Variant
- Native Script
- Unverified Native Script
- Provisional Native Script
- Variant Native Script

Select Display
- Diacritics
- No Diacritics

Select Sort Order
- Feature
- Name
- Coordinate
- Feature Designation

Any combination of these may be selected for a query
Tools / Miscellaneous

Download File
  – Used with the Output tab

Show Search Criteria
  – Lists search parameters selected

Create Generic Term Glossary
  – Creates list of all generics for any given country file

Lookup Tables
  – ADM1 Codes
  – Country Codes (Former FIPS 10-4 code)
  – Designation Codes
  – Language Codes

GeoName Downloads
  – Country Files in either HTTP or FTP
What is trending?

Trendsmap
BGN – Foreign Names

Key Points of Current Environment

• Challenged by attempt to balance work to support map production, database maintenance, and sustaining relevant and meaningful support to global BGN mission

• Promote awareness, maintain relevance to, and solicit active participation from US Government community

• WWW presence of data can be a liability
Questions?

NATIONAL GEOSPATIAL-INTELLIGENCE AGENCY
Know the Earth... Show the Way... Understand the World

Trent Palmer
NGA Geographer
BGN Executive Secretary for Foreign Names
Trent.c.palmer@nga.mil
571-557-7028