toponymy course:

Atlases and databases

Ferjan Ormeling and Tjeerd Tichelaar

Issues for the atlas editor

- 1. For which names should we use exonyms and for which may we choose endonyms or local names?
- 2. When we apply endonyms, how should we treat compound names containing a generic element that holds relevant information?
- 3. Do we have to include generic terms at all?
- 4. How should we transliterate names from non-Roman writing languages?
- 5. Which obsolete (replaced) names should still be mentioned in the map?
- 6. How should we render secondary names?
- 7. What do we do with articles and definite/indefinite forms?

General rules for rendering names in school atlases

- Within Roman language area, local names will be given priority, current exonyms being added between brackets: Venezia (Veneza)
- Outside Roman language area, exonyms will be used for well-known objects [ex.: Bangkok].
- If local names use Roman alphabet, all diacritics will be included, with some exceptions: (Constanţa, Münich, İstanbul).
- Non-Roman alphabets will be systematically transliterated in a way acceptable to the school market.

- Generics in compound names must only be translated when not clear. Ex. Rocky Mountains and not (Montanhas) Rochosas. But: (Αιγαίο Πέλαγος) Mar Egeu and not Aigaio Pelagos.
- Where a generic element is written separately from a specific element, it can be translated: Cap Bon>Cabo Bon
- Names consisting of a generic element and an adjective specifier, are either left in local language [ex.: Red River, Mont Blanc] or fully translated [ex.: Tuz Gölü = Lago Salgado].
- Omit redundant generic elements [ex.: Columbia (not Columbia Riv.); Ouessant (not Île d'Ouessant].
- Duplication of generics should always be avoided [ex: Ysyk-Köl, Alaköl, Mississippi].

- The number of secondary names (added between brackets to the primary name) should be kept as low as possible. It should always be clear to which language secondary names belong: São Petersburgo (Leningrad)
- Alternative names would be separated by a slash Helsinki/Helsingfors
- Wherever available, toponymic guidelines published by UN should be followed.
- Articles should as much as possible be omitted [ex: Setesdal instead of Setesdalen, Hufuf instead of Al-Hufuf]. But: A Coruña
- Names of open water features are rendered in the atlas language.

Names indexes in atlases

Woensdrecht (gemeente) 240-241 B3 Woensdrecht (plaats) 42-43 C4 Woerden (gemeente) 240-241 C1 Woerden (plaats) 40-41 C4 Woeste Hoeve 40-41 E4 Woëvre 98-99 F2 Wognum 40-41 C2 D2 Wohlensee 112-113 C2 Woking 100-101 F6 Wold A 38-39 E5 Woldberg (Gelderland) 40-41 E3 Woldberg (Overijssel) 40-41 F1 Wolden, De 238-239 E3 Woldendorp 38-39 G2 Wolderwijd 40-41 E3

X

Xaafuun 138-139 E7 Xaafuun, Raas 162-163 I3 Xaidulla 152-153 B4 Xaignabouri 146-147 C2 Xainza 152-153 D5 Xalapa 172-173 G8 Xam Nua 146-147 C1 Xankändi 128-129 J8 Xanthi 120-121 H5 Xàtiva 116-117 E3 Xay 146-147 C1 Xiamen 152-153 J7 Xi'an 152-153 H5 Xiang 152-153 l6 Xiangfan 152-153 I5 Xianggang (plaats) 152-153 I7 Xianggang (provincie) 152-153 I7 J7

Yibin 152-153 G6 Yichang 152-153 I5 Yichun 152-153 L2 Yidu 154E Yıldızgebergte 120-121 I4 I5 Yiliang 152-153 G7 Yinchang 154E Yinchuan 152-153 G4 H4 Yingcheng 152-153 i5 Yingkou 152-153 K3 Yingtan 152-153 J6 Yining 152-153 C3 Yio Chu Kang 149E B1 Yishun 149E B1 Yitulihe 152-153 K1 Yli-Kitka 106-107 l2 Yme 95 D2 Yobe 167C Yogyakarta 146-147 D7 E7 Yokkaichi 156 D3 Yokohama 156 D3

Woleai 146-147 K4

Wolfenbüttel 102-103 F4

Wolfgangsee 110-111 J2

Wolf 182-183 D7

Rules for making the index

- If a name starts with a 'loose' generic element or an article, the name will be inverted. (Cape Canaveral>Canaveral, Cape) Problems:
 - The generics/articles must be recognized.
 - ◆Take care of 'false' generics and articles (Rio de Janeiro, Los Angeles, Cape York).
- In case of homonyms, generic and/or locational attributes are added (Chalôns>Chalôns-en-Champagne, Chalôns-sur-Vesle, Chalôns-du-Maine)

Index-related issues

- Alphabetisation is language-dependent.
- Cross-references should be included:
 - Alternative names/spellings, including exonyms not used in the map.
 - ◆Old names (up to 10 years after their substitution).
- Every name-object combination should only occur once
- How to deal with diacritics and ligatures? How do they influence the letter sequence?

Examples of diacritics coding

```
10e = é Montr10eal
10n = \hat{n} Pozna10n
10a = \acute{a} M10alaga
11e = e Gen11eve
12a = \ddot{a} G12avle
12u = ü M12unchen
13i = \hat{i} N13imes
14c = c Besan14con
14s = $ Eski14sehir
14S = $ 14Sanl15iurfa
```

15i = I D16iyarbak15ir

16| = | 16|stanbul

```
17s = $ Ni17s
18L = 18L100d10z
19a = \tilde{a} S19ao Paulo
20a = a Elbl20ag
21i = \bar{i} R21iga
22e = ė Klaip22eda
23ae = æ L23aes24o
240 = \emptyset R24om24o
250e = \infty Bar250eul
26a = \mathring{a} Lule 26a
27Th = 9 27Thorshamn
28dh = \delta Sey28dhi
```

A relational database for atlases

- a relational database for atlases would allow for :
 - producing text-output ready to load into a dtp application to produce an index of names;
 - providing the ability to store and query all possible information on geographical names.
- As a production database, it can deliver all names belonging on a specific map scale for a specific language edition

A relational database for atlases 2

- As a knowledge-base, the database would enable individual editors to answer questions forwarded to the publisher about geographical names.
- The database would also give access to all the rules (e.g. transliteration) and sources the existing names were derived by, in case a new name has to be added to an existing map.

Database components

- Tables interconnected by key fields
- Knowledge base:
 - Table of geographical names
 - Table of geographical objects
 - Subsidiary data files
- Indexing system:
 - Table containing all occurrences of geographical names in all maps.
 - Tables listing all atlases and the maps they contain.

NAME

Field Name	Data Type
Name_ID	Number
Object_ID	Number
Language_ID	Number
Script_ID	Number
Transliteration_ID	Number
Name_Main	Text
Inversion_ID	Number
Gender_ID	Number
Number_ID	Number
Flag_Official	Yes/No
Flag_Primary	Yes/No
Flag_Definite	Yes/No

- Name_ID: key attribute
- Differently transliterated forms of the same name or different alphabet versions are considered different names in terms of the database.
- Name Main =specific element
 - By storing names in their original script version in the database we are able to retransliterate names in case UN-recommended transliteration keys are replaced.

ADJECTIVE

Field Name	Data Type
Name_ID	Number
Flag_Official	Yes/No
Flag_Primary	Yes/No
Flag_Definite	Yes/No
Flag_Generic	Yes/No
Flag_Long	Yes/No
Flag_Short	Yes/No
Flag_Old	Yes/No
IPA	Text
Source_ID	Number
Onoma_ID	Number
Adjective	Text
Accent	Number

- Adjective forms are in many languages different from the nouns.
- Often they are not formed in a systematic way, sometimes they are even derived from predecessors of the current name or a different language version.
- Homonymous names may carry different adjectives.

Field Name	Data Type
Object_ID	Number
Display_Name_ID	Number
ObjType_ID	Number
Country_ID	Number
State_ID	Number
Region_ID	Number
Object_Parent	Number
Object_Longitude	Number
Object_Latitude	Number
Year-Origin	Number
Elevation_m	Number
Length_km	Number
Flag_1stOrd_High	Yes/No
Flag_2ndOrd_High	Yes/No
Flag_1stOrd_Cap	Yes/No
Flag_2ndOrd_Cap	Yes/No

OBJECT TYPE

- Differentiates classes of objects like 'populated place', 'independent first order area', different types of 2nd, 3rd and 4th order areas, mountains, lakes, rivers, etc.
- Enhanced to meet the requirements of foreign publishers: e.g. 'fleuve' vs. 'rivière'.

BGE-UNGEN international toponymy course, Rio 2017

Objects vs. Names

- One geographical object can be refered to by many different names
- In some instances, objects are subjectively defined by names: this holds, for instance, for the complete object class of streams.

Objects defined by Names



Objects defined by Names

