

# Towards a historical GIS platform in Poland

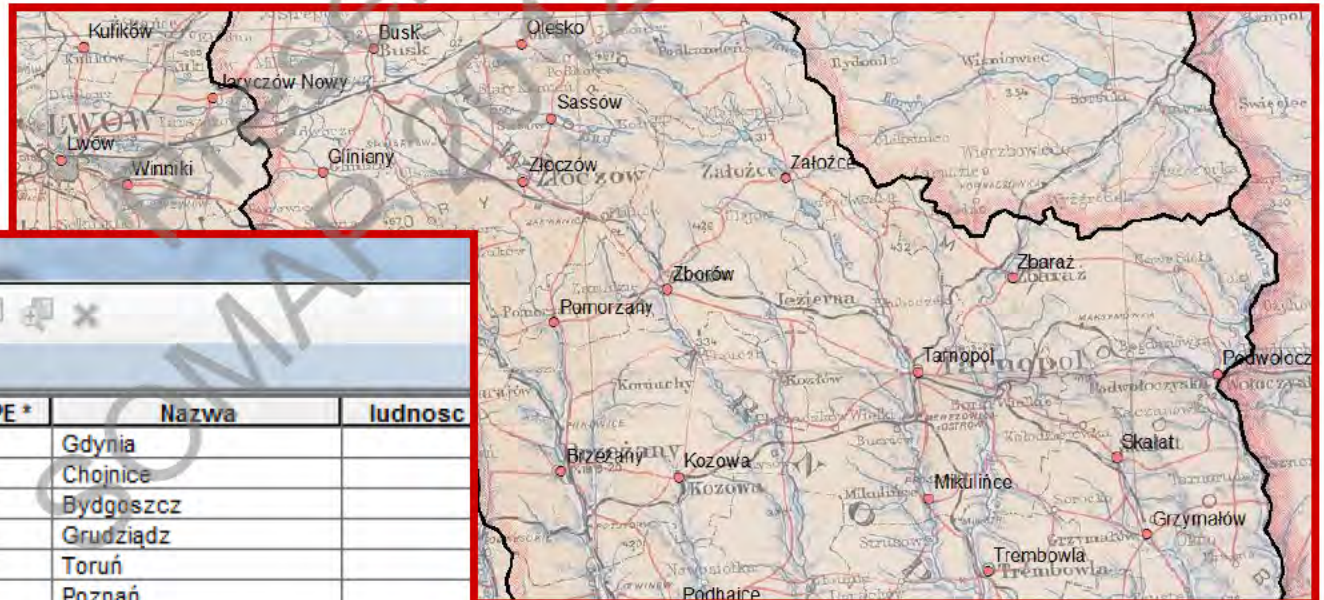


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Cartomatic

# hGIS or spatial history

Information system which supports presentation, as well as spatio-temporal analysis of historical maps, spatial and statistical data.



Table

miasta

OBJECTID*	SHAPE*	Nazwa	ludnosc
1	Point	Gdynia	
2	Point	Chojnice	
3	Point	Bydgoszcz	
4	Point	Grudziądz	
5	Point	Toruń	
6	Point	Poznań	
7	Point	Kalisz	
8	Point	Łódź	

census data 1790-2010

GIS-compatible boundary files

mapping options – online tool

GENERAL POPULATION CHARACTERISTICS

ECONOMIC INDICATORS

BUILDINGS

AGRICULTURE

SOCIAL AND ENVIRONMENTAL INDICATORS

Table Topic Filter

Breakdown Filter

Core Demographics

- Total Population
- Age
- Sex
- Race
- Relationship
- Children
- Mental Status
- Vital Statistics

Disability Status

- Work Disability
- Mobility Limitation
- Self-Care Limitation
- Unspecified Disability

Background / Ancestry

Social Explorer

1790 Census - % Nonwhite

Map Filter

1790 Census - % Nonwhite

1800 Census - % Nonwhite

1810 Census - % Nonwhite

1820 Census - % Nonwhite

1830 Census - % Nonwhite

1840 Census - % Nonwhite

1850 Census - % Nonwhite

1860 Census - % Nonwhite

1870 Census - % Nonwhite

1880 Census - % Nonwhite

1890 Census - % Nonwhite

1900 Census - % Nonwhite

1910 Census - % Nonwhite

1920 Census - % Nonwhite

1930 Census - % Nonwhite

1940 Census - % Nonwhite

1950 Census - % Nonwhite

1960 Census - % Nonwhite

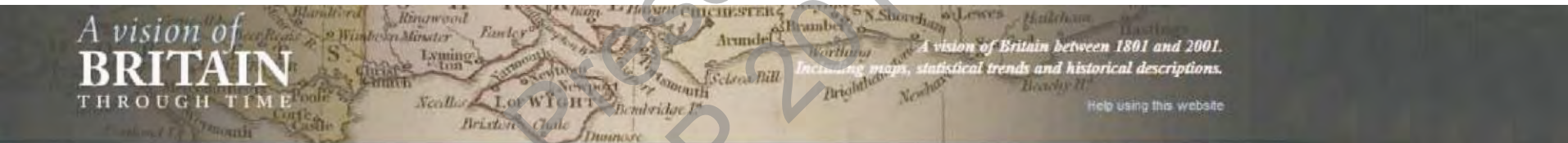
1970 Census - % Nonwhite

1980 Census - % Nonwhite

1990 Census - % Nonwhite

2000 Census - % Nonwhite

2010 Census - % Nonwhite



statistical atlas including e.g. census data

historical maps

travel writing with geo-referenced places

Find a place

Search by postcode or a place name (just a name, NO county) in the search box to access all our content for a place - or just go somewhere.

Expert search

Find places, administrative units and descriptors more precisely using our expert search option

News

17th Feb 2012: Reflecting on the launch of Old Maps Online

19th Feb 2012: New website launched: Old Maps Online

Today sees the UK launch of a new website Old Maps Online. Created in collaboration between the Great Britain Historical GIS.

7th Feb 2012: Learn about "Working Digitally with Historical Maps and Geographical Information" - Portsmouth, June 2012

The Great Britain Historical GIS team, the people behind Vision of Britain through Time and other resources like Old Maps...

Historical maps

Topographical, land use and adorn maps from the 16th and 20th Centuries.

- Oxidance Survey 1st Series
- Oxidance Survey New Popular
- British War Office
- More maps »

Election results

We hold results from every parliamentary election since 1832.

- 1905: Victory for the Progressive Alliance
- 1982: Thatcher's Landslide
- 1997: Blair's Landslide
- More elections »

Land of Britain

Our separate website demonstrates the wealth of historical data in our changing landscape.

Travel writing

This is the largest collection of historical British travel writing on the web. Each author gives a different perspective on the towns and villages they visited.

- John Bury — Birmingham Diaries
- Geo. Hoad — Handwriting Diaries
- Thomas Pennant — Chester to London
- More writers »

Census reports

Since 1801 the Census has created a uniquely detailed record of our changing communities.

- 1841: First survey of populations
- 1911: England and Wales a hundred years' ago
- Guide to Census Reports: Great Britain 1801-1966
- More reports »

Place: London

Location

Historical writing

Units and statistics

Related websites

Place names

Search for places within London

Search

In 1807 John Barrow's *Geographer of the British Isles* described London via this:

London, the capital of England, and the principal town of the British Empire, on river Thames, nearly in Middlesex, but also occupying parts of Surrey, Kent, and Essex, so wide by the river's winding, from the sea to the Tower... The centre of the Government and commerce of the British Empire. London is the greatest city of any age or country. Politically, financially, and commercially, as well as an account of its business size and population, its progress and pre-eminence forms a very remarkable feature in the history of civilization. Without entering upon the usual traditions which have derived from more obscure eras, we find that as early as A.D. 43 the Lombards of the Romans with a glow of admiration, Colonus Augustus being another of its Roman designations.

A vision of London

For an overview of how the reports have changed, please see our embedded information for the history of London - but you should check this covers the area you are interested in.

Has what you were looking for? Our tools for more detailed choice in finding places within A vision of Britain include: Time, and maps being references to other pages called London.

# Polish hGIS – main ideas

Exploration of the old maps' informative potential through a web-based Historical GIS Platform for Poland. Developing appropriate functionality of the platform.

Potential users are: historians, archaeologists, urban planners, sociologists, biologists... and others interested in the subject.

# Polish hGIS – collaborators

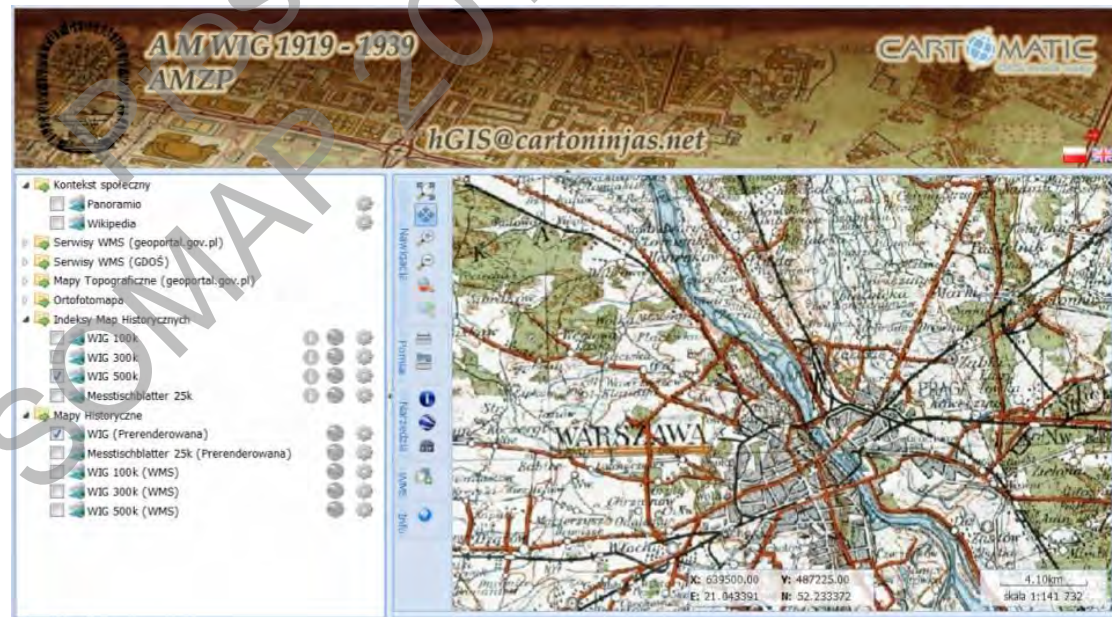
Institute of History, University of Warsaw;

Department of Cartography, University of Warsaw;

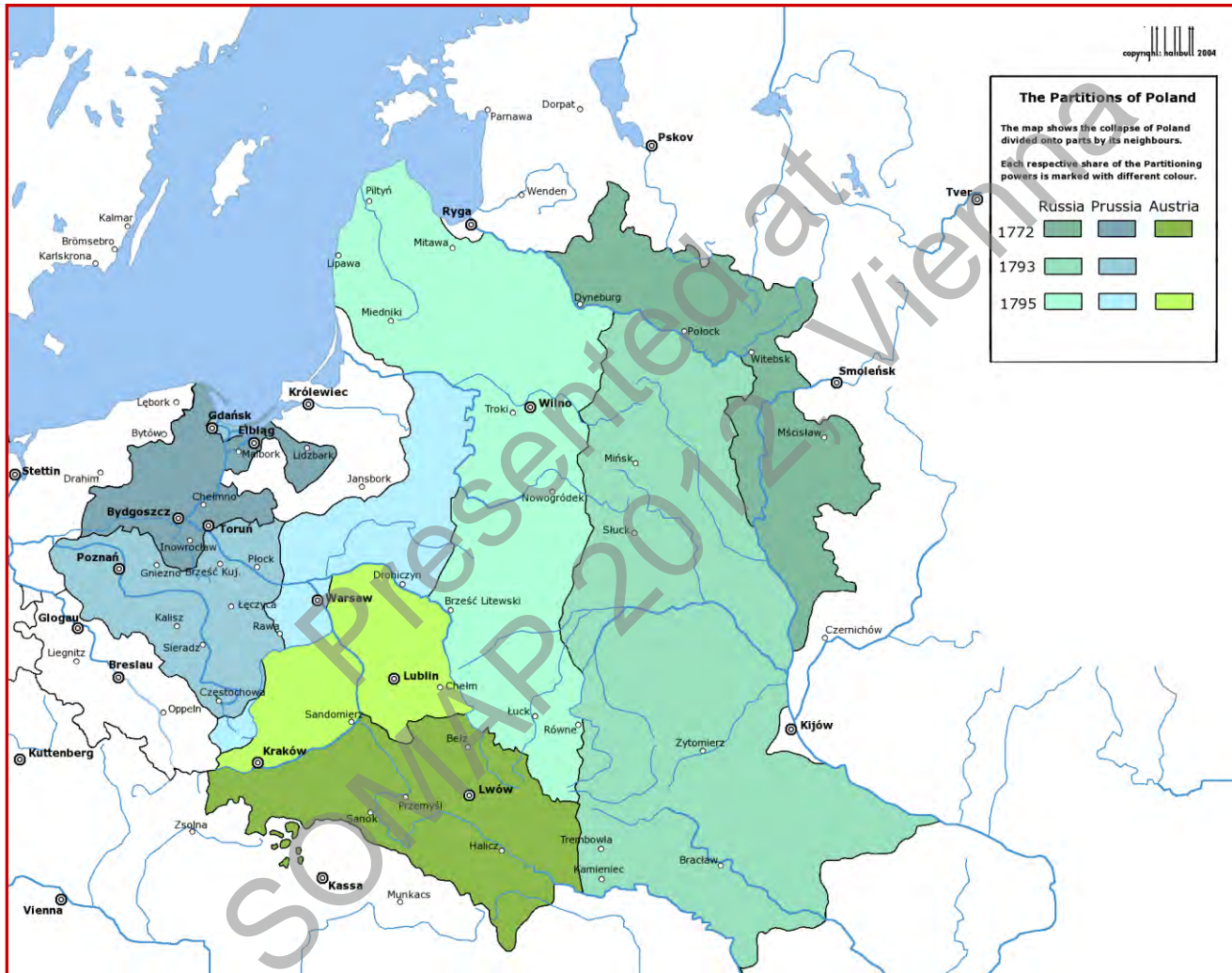
Institute of History, Polish Academy of Sciences;

The John Paul II Catholic University of Lublin;

Cartomatic



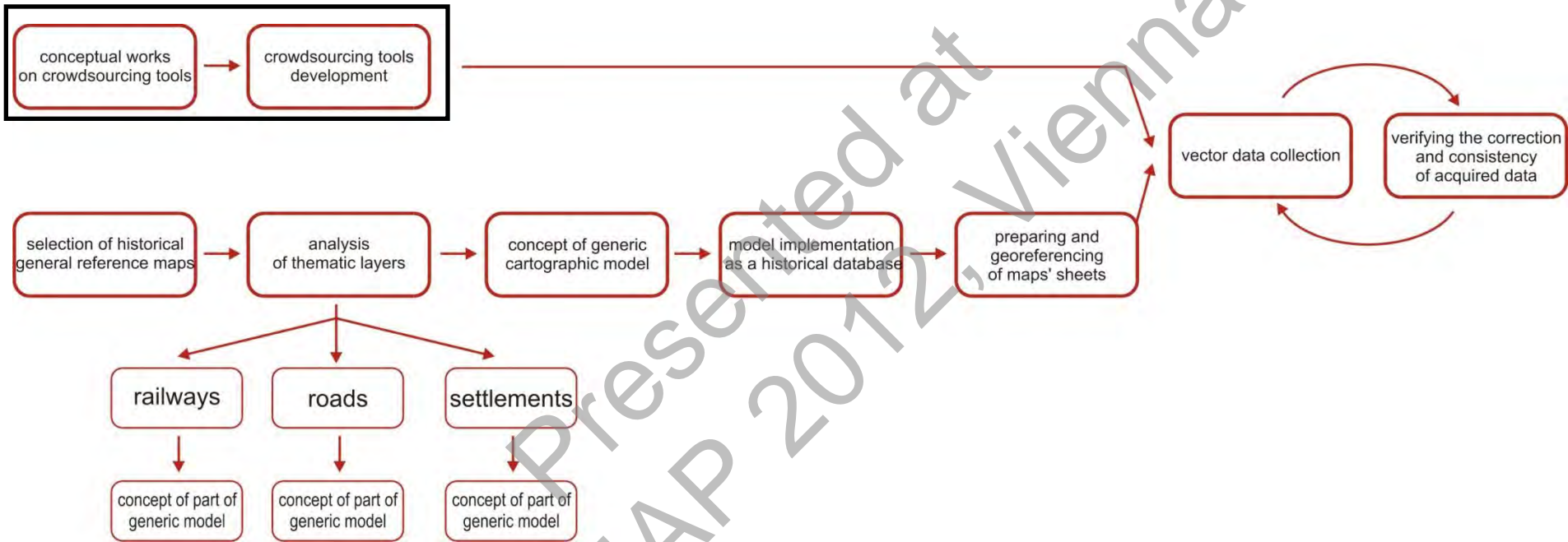
# Polish history...



# ... and its consequences for cartography



# Workflow





# Additional functionality: advanced editing and crowdsourcing tools

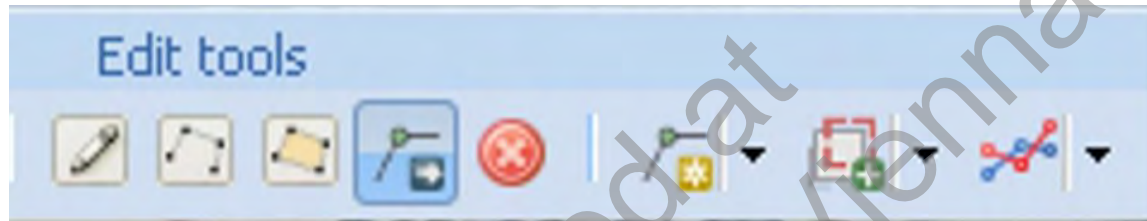
The screenshot displays a GIS web application interface. At the top, there is a header with the text "AM WIG 1919 - 1939 AMZP" on the left, "hGIS@cartoninjas.net" in the center, and the "CARTOMATIC GIS made easy" logo on the right. The main map area shows a historical map with a blue polygon overlaying a feature. A dialog box titled "Edit feature" is open on the right side of the map, showing fields for "Opis:", "Dd:" (set to "Opcja 1"), "picture:" (with a "Preview" button), "Create Date:" (set to "10/22/2012"), and "Modify Date:". The dialog also has "Update" and "Cancel" buttons at the bottom.

On the left side, there is a sidebar with a list of layers and maps. The "Test - crowdsourced data" layer is expanded, showing sub-layers like "testTomka", "Test - Crosses", and "Test - Windmills". Below this is a table of "Available maps":

Map	Description	EPSG
hGIS	Default map	2180

At the bottom left, there are links for "Log Off" and "Change password", and the user name "user: Dominik Mikiewicz". At the bottom right, there is a scale bar showing "513 m" and "scale 1:17 717".

# Editing tools



Draw point

Draw line

Draw polygon

Nodes editing

Nodes view

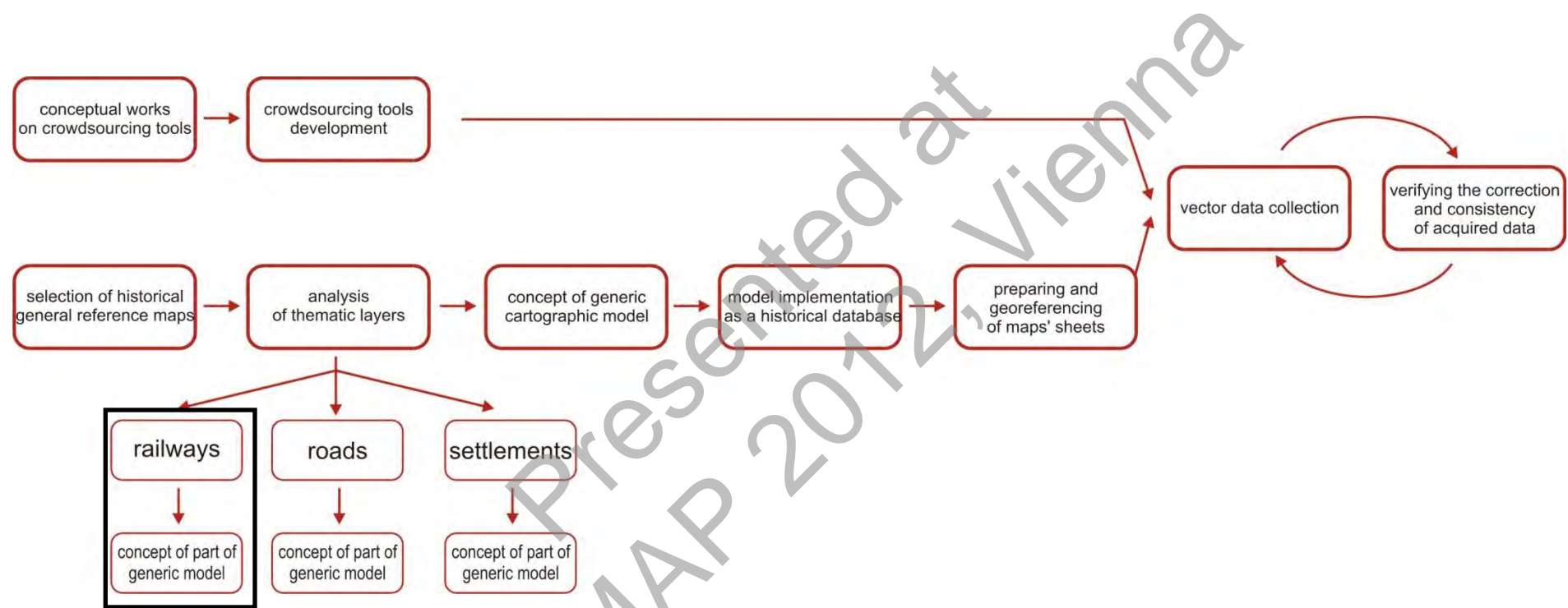
Skeleton view

Snapping

Object deletion




























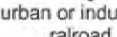






SOMAP Presented at Vienna 2012

# Workflow

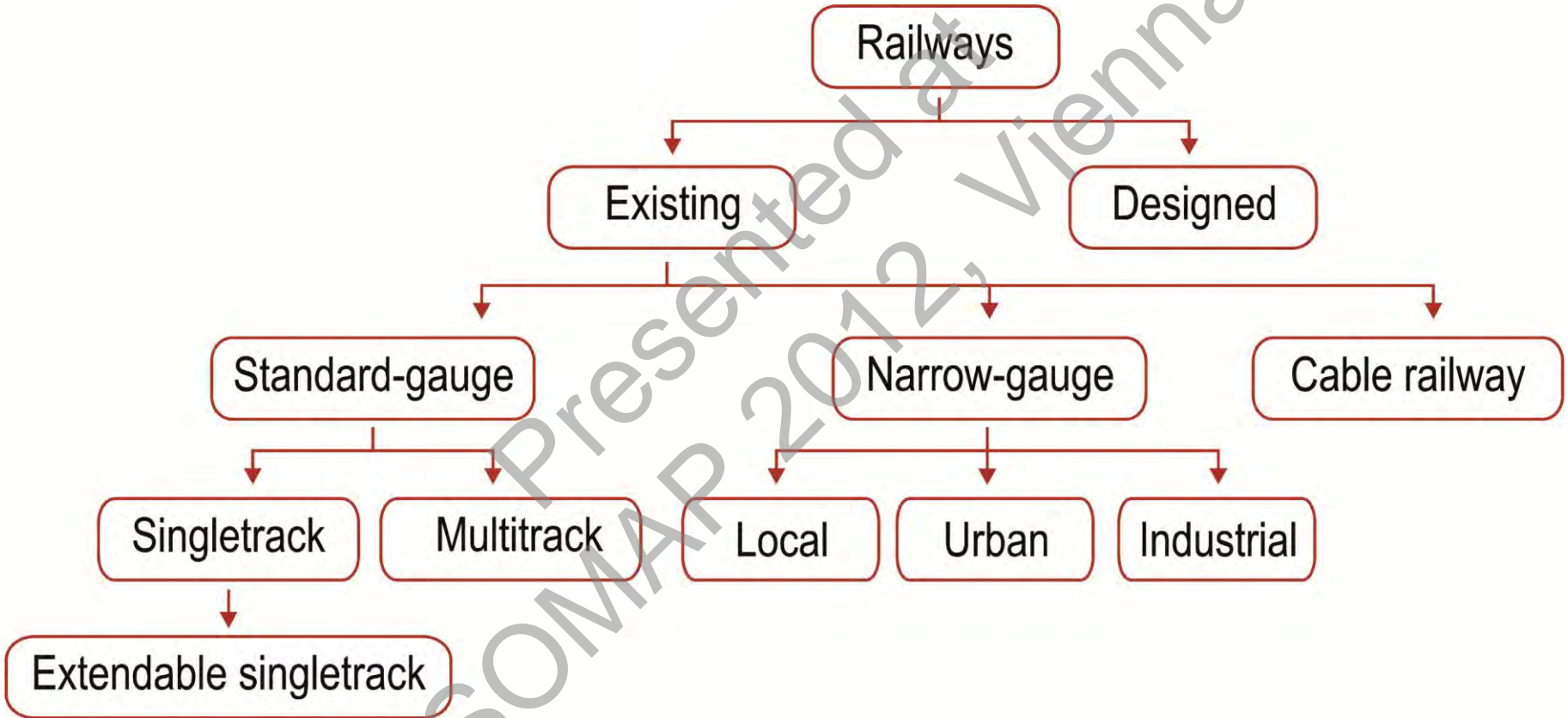




# Results of the railways analysis

Quatermaster's Map 1 : 126 000 1839	Map of the past Poland 1 : 300 000 1840-1859	Reymann's Spezialkarte 1 : 200 000 1844-1853	Karte des Deutsches Reiches 1 : 100 000 1879-1939	Übersichtskarte von Mitteleuropa 1 : 300 000 1893-1939	Spezialkarte der Österreichisch-Ungarischen Monarchie 1 : 75 000 1909-1917	Karte des Westlichen Russlands 1:100 000 1914-1921	Tactical Map 1 : 100 000 1921-1939	Operational Map 1 : 300 000 1921-1939
			 Multitrack railroad	 Multitrack railroad	 Multitrack railroad	 Multitrack railroad	 Multitrack railroad	 Multitrack railroad
						 Extendable singletrack railroad		
Singletrack railroad 	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad	 Singletrack railroad
			 Local railroad	 Local railroad				
			 Narrow-gauge railroad	 Narrow-gauge railroad	 Narrow-gauge railroad		 Narrow-gauge railroad	 Narrow-gauge, urban or industrial railroad
			 Urban or industrial railroad		 Urban or industrial railroad	 Urban or industrial railroad	 Urban or industrial railroad	 Urban or industrial railroad
							 Cable railway	 Cable railway
 Designed railroad					 Designed railroad		 Designed railroad	 Designed railroad

# Concept of the part of generic model



# Roads analysis: challenges

- Unification/standardisation is more complex
  - railways: 8 categories in generic model,
  - roads: at least 20 specific categories,
- Legend categories are classified according:
  - road quality (surface, width)
  - purpose (post roads, commercial roads, used by horses, etc.)
  - importance (state road, district road, local road)
- Is the first legend category the most important one?
  - Constructing a legend in 19th century – idea or incident?

## Same area, same time, similar scale – differences?

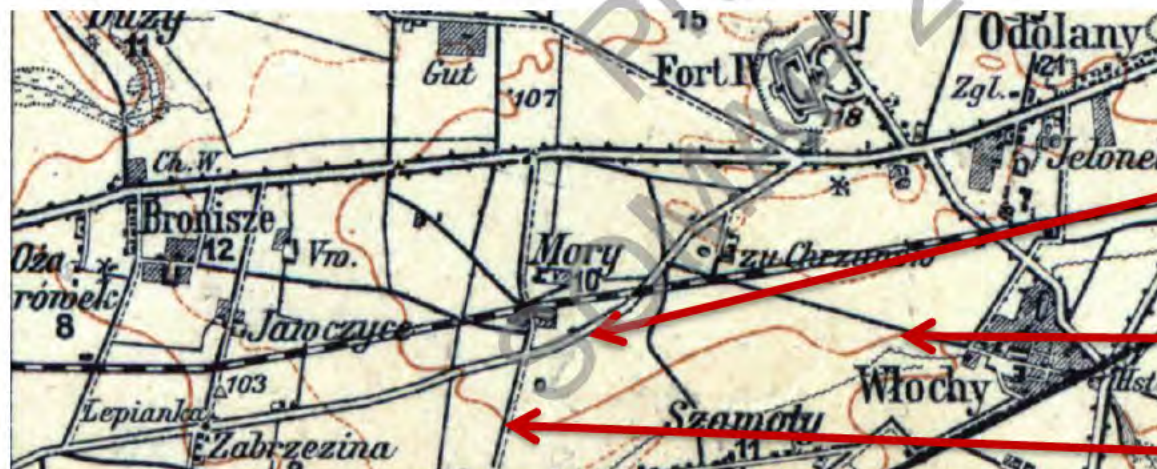


Well maintained road

Road for wagons

Badly maintained road

Austrian, 1:75 000, 1911



Wide state road

Dirt-track

Local road with ditch

German, 1:100 000, 1911



# Future of the platform

