Entries Listed by Conceptual Cluster

*Indicates a composite entry with subentries belonging to more than one cluster.

**Historiographic Context (0)**
- Cartobibliography
- Dictionary, Cartographic
- Histories of Cartography
- History of Cartography Project
- Modes of Cartographic Practice

**Surveying and Observation (1.1)**

**Property Mapping (1.1.1)**
- Cadastral Map
- Cadastral Surveying
- Electromagnetic Distance Measurement
- Property Mapping
  - Canada and the United States
  - Latin America
  - Africa
  - Europe
  - Russia and the Soviet Union
  - Australia and New Zealand
- Property Mapping Practices
  - Professional Practice in Land Surveying
  - Triangulation, Trilateration, and Traverse
  - Monumentation and Recovery
  - Global Positioning System and Property Surveying

**Boundary Surveying (1.1.2)**
- Boundary Disputes
- Boundary Surveying
  - Canada and the United States
  - Latin America
  - Africa
  - Europe
  - Middle East
  - East and Southeast Asia

**Topographical Surveying (1.1.3)**
- Atlas*
  - Subscription Atlas
- Facilities Map
- Himalaya, Cartography of the
- Landscape Architecture and Cartography
- Orienteering Map
- Physiographic Diagram
- Plane Table
- Projections*
  - Projections Used for Topographic Maps
- Relief Depiction
- Relief Map
- Relief Model
- Relief Shading
- Remote Sensing*
  - Satellite Imagery and Map Revision
- Route Map
- Terrain Analysis and Cartography
- Topographic Map
- Topographic Mapping
  - Overview
    - Canada
    - United States
    - Latin America
    - Africa by the British
    - Africa by the French
    - Africa by the Germans
    - South Africa
    - Western Europe
    - Eastern Europe
    - Russia and the Soviet Union
    - Middle East
    - China
    - Japan
    - Indonesia
    - Australia
- Wayfinding and Travel Maps*
  - Campus Map
Urban Mapping (1.1.4)

Urban Mapping

Overhead Imaging (1.1.5)

Globe*
  Views of Earth from Space
Lidar
Map*
  Images as Maps
Photogrammetric Mapping*
  Aerial Photogrammetry and Cartography
  Air Photos and Geographic Analysis
  Feature Extraction and Photointerpretation
  Military Photogrammetry as a Precursor of Remote Sensing
  Instrumental Photogrammetry and Stereocompilation
  Orthophotography and Orthophoto Mapping
Remote Sensing*
  Earth Observation and the Emergence of Remote Sensing
  Satellite Systems for Cartographic Applications
  Data Handling and Information Extraction from Remotely Sensed Imagery

Mapping & Visualization (1.2)

Perception and Cognition of Maps*
  Perception and Map Design
  Cognition and Cartography
  Map-Use Skills
Visualization and Maps

Geographical/Reference Mapping (1.2.1)

Aeronautical Chart
Airline Map
Atlas*
  Electronic Atlas
  Facsimile Atlas
  Historical Atlas
  Historical-Boundaries Atlas
  National Atlas
  Regional Atlas
  School Atlas
  World Atlas
Cave Map
Conformality
Education and Cartography*
  Teaching with Maps
Geographic Names
  Social and Political Significance of Toponyms

Applied Toponymy
Gazetteer
Place-Name Studies
Geographical Mapping
Globe*
  Cultural and Social Significance of Globes
Historians and Cartography
Historical Geography and Cartography
Map*
  Definitions of Map
  Map Typologies
  Map as Metaphor
  Sense of Place and the Map
Mercator Projection
Meteorology and Cartography
Oblique and Perspective Views
Prime Meridian
Projections*
  World Map Projections
  Interrupted and Polyhedral Projections
  Cultural and Social Significance of Map Projections
  Regional Map Projections
  Projections Used for Aeronautical Charts
Railroad Map
Road Mapping
  Canada and the United States
  Latin America
  Africa
  Europe
  Australia and Oceania
Robinson Projection
Tactile Map
Travel, Tourism, and Place Marketing
Wall Map
Wayfinding and Travel Maps*
  Cyclist Map
  Hiking and Trail Map
  Indexed Street Map
  In-Vehicle Navigation System
  Mobility Map
  Orientation Map
  Public Transportation Map
  Road Atlas
  Road Symbols
  Web-Based Wayfinding
  Wheelchair Access Map

Celestial Mapping (1.2.2)

Astrophysics and Cartography
Lunar and Planetary Mapping
Star Chart
Thematic Mapping (1.2.3)
Alpine Cartography
Atlas*
  Thematic Atlas
Biogeography and Cartography
Cartogram
Census Mapping
Centrography
Choropleth Map
Climate Map
Dasymetric Map
Demographic Map
Epidemiological Map
Ethnographic Map
Genetics and Cartography
Geologic Map
Geophysics and Cartography
Interpolation
Kriging
Linguistic Map
Oceanography and Cartography
Projections*
  Projections Used for Statistical Maps
Soils Map
Statistical Map
Statistics and Cartography
Thematic Mapping
Weather Map

Marine Charting (1.2.4)
Coastal Mapping
Hydrographic Techniques
  Early Twentieth-Century Hydrographic Techniques
  Aerial Imagery in Hydrographic Mapping and Coastal Charting
Sounding
Satellites in Hydrographic and Oceanographic Mapping
Global Positioning Systems in Hydrographic Mapping
Marine Chart
Marine Charting
  Overview
  Canada
  United States
  Argentina
  Great Britain
  France
  European Nations
  Russia and the Soviet Union

Dynamic Cartography (1.2.5)
Animated Map
Cinema and Cartography
Geographic Information System (GIS)*
  Computational Geography as a New Modality
  GIS as an Institutional Revolution
  GIS as a Tool for Map Analysis and Spatial Modeling
Hypermapping
Interactive Map
Software*
  Geographic Information System (GIS) Software
Time, Time Geography, Temporal Change, and Cartography
Virtual Reality

Art, Craft, & Cartography (2.1)
Airbrush
Anaglyph Map
Art and Cartography
Chroma Key
Cloth, Maps on
Color and Cartography
Conventions, Cartographic
Drafting of Maps
  Drawing Instruments
  Drawing Media
  Pen-and-Ink Drafting
Electronic Cartography*
  Electronic Cartography and the Concept of Digital Map
  Display Hardware
  Electronic Map Labeling
Geographic Information System*
  GIS as a Tool for Map Production
Globe*
  Manufacture of Globes
Holographic Map
Labeling of Maps
  Labeling Techniques
  Typography and Map Design
Map*
  Printed Map
  Electronic Map
  Map Pin
Paper
Photography in Map Design and Production
Reproduction of Maps
   Reproduction of Maps by One-Off Processes
   Reproduction of Maps by Printing
Engraving
Photomechanical Processes
Color Reproduction
Prepress Techniques
Reproduction, Design, and Aesthetics
Folding Strategies
Scribing
Software*
   Mapping Software
   Illustration Software
   Image Processing Software
Styles, Cartographic
Wax Engraving

Science and Cartography (2.2)

Accuracy in Mapping
Analytical Cartography
Bivariate Map
Cartometry
Computer, Digital
Coordinate Systems
Electronic Cartography*
   Data Structures and the Storage and Retrieval of Spatial Data
   Data Capture and Data Conversion
   Electronic Map Generalization
   Computer-Aided Boundary Drawing
Exploreratory Data Analysis
Figure of the Earth
Forestry and Cartography
Fractal Representation
Geocoding
Geodesy*
   Geodetic Triangulation
   Geodetic Trilateration
   Gravimetric Surveys
   Satellite Geodesy
   Geodetic Computations
Geodetic Surveying
   Canada and the United States
   Latin America
   Africa
   Europe
   Russia and the Soviet Union
   Australia
   For the Planets
Geographic Information System*
   Metadata
Global Positioning System (GPS)
Mathematics and Cartography
Metric System
Navigation
Perception and Cognition of Maps*
   Vision and Discrimination
   Perceiving, Understanding, and Remembering
   Subject Testing in Cartography
Experimental Studies in Psychology
Psychophysics
Photogrammetric Mapping*
   Analytical Photogrammetry and Control Surveying
   Geodesy and Photogrammetric Mapping
Projections*
   Projections Defined for the Ellipsoid
Scale
Scientific Discovery and Cartography
Space Oblique Mercator Projection
Standards for Cartographic Information
Tissot’s Indicatrix
Uncertainty and Reliability
Viewshed Mapping

Public Sphere & Cartography (3.1)

Children and Cartography
Community Mapping
Counter-Mapping
Literature and Cartography
Narrative and Cartography
Persuasive Cartography
Peters Projection
Privacy
Public Access to Cartographic Information
Race, Maps and the Social Construction of
Recreational Map
Women in Cartography
World Revolution and Cartography

Map Publishing (3.1.1)

Advertising, Maps as
Copyright Traps
Customization of Maps
Intellectual Property
Journalistic Cartography
Marketing Cartographic and Spatial Data
Marketing of Maps, Mass
Political Cartoons, Maps as
Remote Sensing*
   Remote Sensing as a Cartographic Enterprise
Entries Listed by Conceptual Cluster

Television and Maps
Web Cartography

Map Collecting (3.1.2)
Antiquarian Maps and Grand Larceny
Collecting, Map
Canada and the United States
Europe
Decoration, Maps as
Digital Library
Libraries, Map
Libraries and Map Collections, National
Wolfegg Castle

Academic Cartography (3.1.3)
Academic Paradigms in Cartography
Academic Cartography in Canada and the United States
Academic Cartography in Europe
Education and Cartography*
Educating Mapmakers
Cartographic Textbooks
Electronic Cartography*
Intellectual Movements in Electronic Cartography
Conferences on Computer-Aided Mapping in North America and Europe
Conferences on Computer-Aided Mapping in Latin America
Geography and Cartography
Journals, Cartographic
Social Theory and Cartography
Societies, Cartographic
Canada and the United States
Latin America
Africa
Western Europe
Eastern Europe
Australia and New Zealand
Societies, Geographical
Canada and the United States
Europe
Societies, Map
Societies, Map Librarianship
Societies, Photogrammetric and Remote Sensing
Sources of Cartographic Information

State Formation & Cartography (3.2)
Air-Age Globalism
Colonial and Imperial Cartography
Decolonization and Independence

Eastern Europe, Boundary Changes in
Eurocentric Bias
Forensic Mapping
Geopolitics and Cartography
Indigenous Peoples and Western Cartography
Law of the Sea
Nation-State Formation and Cartography
Russia and the Soviet Union, Fragmentation of

Administrative Cartography (3.2.1)
Administrative Cartography
Crime Map
Electoral Map
Emergency Planning
Environmental Protection
Fire Insurance Map
Hazards and Risk, Mapping of
Historic Preservation and Cartography
Land Systems Analysis
Land Use Map
Planning, Urban and Regional
Redlining
Tax Map

Warfare and Cartography (3.2.2)
Cartographic Duplicity in the German Democratic Republic
Cruise Missile
Geodesy*
Geodesy and Military Planning
Military Mapping by Major Powers
United States
North Atlantic Treaty Organization (NATO)
Great Britain
France
Germany
Italy
Austro-Hungarian Empire
Ottoman Empire
Israel
Russia and the Soviet Union
China
Japan
Military Mapping of Geographic Areas
Canada and the Polar North
North Africa
Sub-Saharan Africa
Scandinavia
Europe
Middle East
Southeast Asia
Korea
Australia
Projections*
Projections Used for Military Grids
Warfare and Cartography
Wayfinding and Travel Maps*
Escape and Evasion Map

**Individuals, Institutions, Artifacts (4)**

**Individuals (4.1)**

Almagià, Roberto
Bagrow, Leo
Bertin, Jacques
Chen Shupeng
Close (Arden-Close), Charles Frederick
Cortésão, Armando
Cvijic, Jovan
Dainville, François de
Eckert, Max
Gannett, Henry
Goode, J(ohn) Paul
Harley, J(ohn) B(rian)
Harrison, Richard Edes
Heiskanen, Veikko Aleksanteri
Hinks, Arthur R(obert)
Holdich, Thomas Hungerford
Hotine, Martin
Imhof, Eduard
Jefferson, Mark Sylvester William
Keates, J(ohn) S(tanley)
Koeman, Cornelis
Koláčny, Antonín
Kretschmer, Ingrid
Lobeck, Armin K(ohl)
Maling, D(erek) H(ylton)
Marschner, Francis Joseph
Martin, Lawrence
Martonne, Emmanuel de
Miller, O(sborn) M(aitland)
Molodenskiy, M(ikhail) S(ergeyevich)
Ormel, Ferdinand J(an)
Pearsall, Phyllis
Penck, Albrecht
Petchenik, Barbara B(artz)
Peucker, Karl
Radó, Sándor (Alexander Rado)
Raisz, Erwin (Josephus)
Ratajšek, Lech
Ristow, Walter W(illiam)
Robinson, Arthur H(oward)
Salishchev, Konstantin Alekseyevich
Shelton, Hal

Snyder, John P(arr)
Tanaka, Kitirō
Tharp, Marie
Thrower, Norman J(oseph) W(illiam)
Tobler, Waldo R(udolph)
Tooley, R(onald) V(ere)
Warnitz, William
William-Olsson, William
Woodward, David
Wright, John K(irtland)

**Institutions & Periodicals (4.2)**

Agricultural Adjustment Administration (U.S.)
Akademie für Raumforschung und Landesplanung
(Academy for Spatial Research and Planning; Germany)
American Automobile Association (AAA)
American Cartographer, The
American Geographical Society
Automobile Association (U.K.)
Board on Geographic Names (U.S.)
Bundesamt für Kartographie und Geodäsie (Federal Office for Cartography and Geodesy; Germany)
Bundesamt für Landestopographie (Federal Office of Topography; Switzerland)
Cartographic Journal, The
Cartographica
Comité Européen des Responsables de la Cartographie Officielle (European Committee of Representatives for Official Mapping; International)
Directorate of Overseas Surveys (U.K.)
Environmental Systems Research Institute (ESRI; U.S.)
Esselte Kartor AB (Sweden)
European Union
Experimental Cartography Unit, Royal College of Art (U.K.)
Freytag-Berndt und Artaria KG (Austria)
GEOSPACE Beckel Satellitenbilddaten GmbH (Austria)
Glavnoye upravleniye geodezii i kartografii (Chief Administration of Geodesy and Cartography; Russia)
Hallwag Kümmerly+Frey AG (Switzerland)
Hammond Map Company (U.S.)
Harvard Laboratory for Computer Graphics and Spatial Analysis (U.S.)
H. M. Gousha Company (U.S.)
Imago Mundi
Institut Géographique National (National Geographical Institute; France)
Instituto Geográfico Nacional (National Geographical Institute; Spain)
Inter-American Geodetic Survey
Intergraph Corporation (U.S.)
International Cartographic Association
International Civil Aviation Organization
International Geographical Union
International Hydrographic Organization (Monaco)
International Institute for Geo-Information Science and Earth Observation (ITC; Netherlands)
*International Journal of Geographical Information Systems/Science*
Institut Cartogràfic de Catalunya (Cartographic Institute of Catalonia)
Istituto Geografico De Agostini (Geographical Institute De Agostini; Italy)
John Bartholomew & Son (U.K.)
Justus Perthes (Germany)
*Kartographische Nachrichten*
Kokudo chirin (Geographical Survey Institute; Japan)
Kümmerly+Frey AG (Switzerland)
League of Nations
Mairs Geographischer Verlag (Germany)
MapQuest.com (U.S.)
Michelin (France)
Moskovskiy institut inzhenerov geodezii, aerofotos”-yemki i kartografi (Moscow Institute of Geodetic Engineering, Aerial Photography, and Cartography; Russia)
National Aeronautics and Space Administration (U.S.)
National Center for Geographic Information and Analysis (U.S.)
National Geographic Society (U.S.)
Office of Strategic Services (U.S.)
Ordnance Survey (U.K.)
Orell Füssli Kartographie AG (Switzerland)
Permanent Committee on Geographical Names (U.K.)
*Petermanns Geographische Mitteilungen*
Preußische Landesaufnahme
Rand McNally & Company (U.S.)
Ravenstein Verlag (Germany)
Royal Geographical Society (U.K.)
R. R. Donnelley & Sons (U.S.)
Russkoye geograficheskoye obshchestvo (Russian Geographical Society)
Survey of India
Topografische Dienst (Netherlands)
Touring Club Italiano (Italian Touring Club)
Tsentr’nyy nauchno-issledovatel’skyy institut geodezii, aero”yemki i kartografi (Central Research Institute of Geodesy, Air Survey, and Cartography; Russia)
United Nations
U.S. Army Corps of Engineers
U.S. Census Bureau
U.S. Geological Survey
U.S. Intelligence Community, Mapping by the
Velhagen & Klasing (Germany)
Verlag Ed. Hölzle (Austria)
Wagner & Debes (Germany)
Weather Channel, The (U.S.)
Westermann Verlag (Germany)
Wuhan cehui keji daxue (Wuhan Technical University of Surveying and Mapping; China)
Zhongguo kexueyuan (Chinese Academy of Sciences)

**Artifacts, Databases, Map Series, Projects, and Software (4.3)**

*Atlas of Canada*
*Atlas of Finland*
*Bol’shoy sovetskiy atlas mira*
Canada Geographic Information System
Digital Worldwide Mapping Projects
General Bathymetric Chart of the Oceans (GEBCO)
IDRISI (software)
International Geophysical Year
International Hydrographic Chart
International Map of the World
Landsat
London Underground Map
*National Atlas of the United States of America, The*
SYMAP (software)
*Times Atlas of the World*
Vinland Map
World Aeronautical Chart

**Events (4.4)**

Cold War
Gulf War (1991)
Paris Peace Conference (1919)
World War I
World War II

**Spatial Contexts (5)**

Antarctica
Arctic, The