

**[Waldo R. Tobler collection: the beginnings of computerized cartography
and geographic information systems].**

A Finding Aid to the Collection in the Library of Congress



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**Geography & Map Division
Library of Congress
Washington, D.C.
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<http://hdl.loc.gov/loc.gmd/gmd.contact>

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<http://hdl.loc.gov/loc.gmd/eadgmd.gm015006>

LC Online Catalog record:

<http://lcn.loc.gov/2015587099>

Prepared by Ryan Moore

Collection Summary

Title: [Waldo R. Tobler collection: the beginnings of computerized cartography and geographic information systems].

Span Dates: 1954-1978

Call No.: G70.2 coll Tobler

Creator: Tobler, Waldo R.

Extent: 42 folders ; 1 archival box (.5 linear ft.)

Language: Collection material in English

Repository: Geography & Map Division, Library of Congress, Washington, D.C.

Abstract: Materials from Waldo R. Tobler's time as an Assistant Professor to Professor at the University of Michigan from 1961 to 1977 and portions of his thesis when a student at the University of Washington from 1957 to 1961. Items include manuscripts, some of which were published, manuscript maps, early cartographic computer programs, and geographic instructional materials. Tobler's early research, represented in this collection, focuses on map projections, and transforming cartographic data into computerized display and simulation, both of which served as precursors to geographic information systems ("GIS"). Many of these papers are out of print and hard to find in libraries. Many of these materials are out of print and hard to find in libraries.

Selected Search Terms

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

People

Tobler, Waldo R. (Waldo Rudolph), 1930-

Subjects

Cartography--History.

Historical geographic information systems.

Form/Genre

Manuscript maps.

Administrative Information

Provenance

In 2011, Joel Morrison, retired Professor of Geography and Head of the Center for Mapping at Ohio State University, donated the materials.

Processing History

The Tobler collection was arranged and described in 2015 by Ryan Moore, generally adhering to the arrangement by Professor Joel Morrison.

Copyright Status

The status of copyright of the Tobler collection is governed by the Copyright Law of the United States (Title 17, U.S.C.).

Access and Restrictions

The Tobler collection is open to research. Researchers are advised to contact the Geography & Map Reading Room prior to visiting. Many collections are stored off-site and advance notice is needed to retrieve these items for research use.

Preferred Citation

Researchers wishing to cite this collection should include the following information: Container number, Tobler collection, Geography & Map Division, Library of Congress, Washington, D.C.

Biographical Note

Waldo Tobler, born in 1930, is an American-Swiss geographer and cartographer. Tobler is famous for the "first law of geography," an idea that posits "everything is related to everything else, but near things are more related to each other." He is a leading figure in the development of digital cartography and invented many map projections.

Tobler received his doctorate in geography from the University of Washington at Seattle in 1961. He taught at the University of Michigan from 1961 to 1977. Until his retirement in 1994, he held the positions of Professor of Geography and Professor of Statistics at the University of California, Santa Barbara. The University of Zurich, Switzerland, awarded him an honorary doctorate in 1988.

Tobler has work on the editorial board of many journals, which include Journal of Regional Science, The American Cartographer, International Journal of Geographical Information and Geographical Analysis. He served as a member of Royal Geographical Society in Great Britain, Regional Science Association and United States National Academy of Sciences. He was the United States delegate to International Geographical Union Commission on Sensing and Data Processing.

Scope and Content Note

Consists of 42 folders of manuscripts, instructional materials, and bibliographies.

Arrangement of the Collection

The Collection is organized in one series and follows Professor Joel Morrison's organization of Tobler's papers.

- [Series I](#) Tobler collection

Description of Series

Container

Series

Tobler collection

Container List

<i>Container</i>	<i>Contents</i>
Tobler collection	
FOLDER 1	An Empirical Evaluation of Some Aspects of Hypometric Colors: Chapter II - Color 1957 University of Washington - Thesis
FOLDER 2	Automation in the Preparation of Thematic Maps 1961 Paper for Presentation at the Technical Symposium of the International Cartographic Association in Edinburgh
FOLDER 3	Computation of the Correspondence of Geographical Patterns 1964 Paper for Presentation at the 1964 Meeting of the Regional Science Association in Ann Arbor
FOLDER 4	An Experiment in the Computer Generalization of Maps 1964 Technical Report No. 1., ONR Task No. 389-137, Contract Nonr 1224 (48) Office of Naval Research
FOLDER 5	Of Maps and Matrices 1967 Journal of Regional Science, Vol. 7, No. 2 (Supplement)
FOLDER 6	Notes on the Analysis of Geographical Distributions 1965 Paper delivered at the Institute on Emerging Concepts and Methods in Urban and Regional Analysis, East Lansing
FOLDER 7	Numerical Map Generalization and Notes on the Analysis of Geographical Distributions 1966 Discussion Paper 8 Michigan Inter-University Community of Mathematical Geographies
FOLDER 8	Medieval Distortions: The Projections of Ancient Maps 1966 Reprinted from Annals, Association of American Geographers, Vol. 56, No. 2
FOLDER 9	An Empirical Map Projection of the United States 1967
FOLDER 10	Computer Cartograms 1967
FOLDER 11	Geographical Filters and Their Inverses 1968
FOLDER 12	A Digital Terrain Library 1968 Technical Report, ORA Project 08055, under contract with U.S. Army Research Office
FOLDER 13	Computer Movie Simulating Urban Growth in the Detroit Region 1969 Prepared for the International Geographical Union Commission on Quantitative Geography Meeting
FOLDER 14	Continuous Transformation Useful for Districting 1972 Paper prepared for presentation at the New York Academy of Sciences
FOLDER 15	Choropleth Maps without Class Intervals 1972
FOLDER 16	Continuous Transformation Useful for Districting 1972 Paper prepared for presentation at the New York Academy of Sciences
FOLDER 17	Smooth Pycnophylactic Interpolation for Geographical Regions 1977 Submitted to the Journal of American Statistical Association
FOLDER 18	Local Map Projections 1973
FOLDER 19	Chapter II Map Projections
FOLDER 20	Numerical Method for the Equal-Area Mapping of Two Dimensional Surfaces onto a Plane
FOLDER 21	Appendix II Map Projection Equations
FOLDER 22	Map Projection of "Portolan Charts" (First Draft)
FOLDER 23	Map Projection Research by Digital Computer

Tobler collection

<i>Container</i>	<i>Contents</i>
FOLDER 24	Geography 574: Spectral Analysis of Spatial Series lecture
FOLDER 25	Explanation of Triangulation lecture
FOLDER 26	Geography 482: Map Projections lecture
FOLDER 27	Geography 633: Curvilinear Plane Transformation lecture
FOLDER 28	Distance and direction from an arbitrary point on a sphere lecture
FOLDER 29	Cartographic Display Requirements 1978 Proceedings of Auto-Carto III, The Third International Symposium on Computer-Assisted Cartography, San Francisco
FOLDER 30	Geography 281: Reading List 1963
FOLDER 31	Computer program for calculation of values of Tissot's indicatrix for maps of the sphere and cover letter 1964
FOLDER 32	Map Projections: a Short Bibliography 1962
FOLDER 33	Areal Conversions in Geography 1964 lecture
FOLDER 34	Transformations of Surface Integrals: a Class of Map Projections Useful to Geographers "A reworking of Chapter VI of Thesis"
FOLDER 35	Geobotanical Distance Between New Zealand and Neighboring Islands
FOLDER 36	Curvilinear Coordinates lecture
FOLDER 37	Geography 622: Comments on Geographical Trend Analysis
FOLDER 38	Choropleth Mapping Program computer program and description
FOLDER 39	Map Plotting Program computer program and description
FOLDER 40	A Note on Orthogonal Transformations
FOLDER 41	Geography 126: History of Cartography as Taught at UCSB lecture
FOLDER 42	Miscellaneous