Cartography definition pdf book pdf download gratis

I'm not robot!

"Cartography was not born full-fledged as a science or even an art," wrote map historian Lloyd Brown in 1949. "It evolved slowly and painfully from obscure origins." Many ancient maps made no attempt to reproduce actual geography but served as abstract visual representations of political or theological concepts. Written geography has an ancient pedigree, usually traced back to the Greeks and Phoenicians and the Roman historian Strabo. But the making of visual approximations of the world and an outer physical world"—in the words of historian J.B. Harley—the maps of the ancients tended to favor the former. This is, at least, a very general outline of the early history of maps. Harley's definition occurs in the first chapter of Volume One of The History of cartography, a massive six-volume, multi-author work tracing map making ever undertaken," Edward Rothstein writes at The New York Times. The University of Chicago project, begun in the mid-80s, combines "essays based on original research by authoritative scholars with extensive illustrations of rare and unusual maps." Unlike histories like Brown's, however, this one aims to move beyond "a deeply entrenched" Eurocentricity." The project includes non-Western and pre-medieval maps, presenting itself as "the first serious global attempt" to describe the cartography of African, American, Arctic, Asian, Australian, and Pacific societies as well as European. In so doing, it illuminates many of those "obscure origins." You might expect such an ambitious offering to come with an equally ambitious pricetag, and you'd be right. But rather than pay over \$200 dollars for each individual book in the series, you can read and download Volumes One through Three and Volume Six as free PDFs at the University of Chicago Press's site. In these extraordinary scholarly works, you'll find maps reproduced nowhere else like the Star Fresco from Jordan just above—with deeply learned commentary explaining how they correspond to very different ways of seeing the world. At the links below, see images of maps from all over the globe and throughout recorded human history, and begin to see the history of cartography in very different ways yourself. Volume 1 Gallery of Color Illustrations Volume 2: Part 1 Gallery of Color Illustrations (Plates 1-24) Gallery of Color Illustrations (Plates 1-3) Gallery of Color Illustrations (Plates 1-40) Volume 2: Part 3 Gallery of Color Illustrations (Plates 1-40) Volume 2: Part 3 Gallery of Color Illustrations (Plates 1-40) Volume 2: Part 3 Gallery of Color Illustrations (Plates 1-40) Volume 2: Part 3 Gallery of Color Illustrations (Plates 1-40) Volume 3: Part 1 Gallery of Color Illustrations (Plates 1-24) Gallery of Color Illustrations (Plates 57-80) Related Content: Ancient Maps that Changed the World: See World Maps from Ancient Greece, Babylon, Rome, and the Islamic World Download 67,000 Historic Maps (in High Resolution) from the World in 40 AD Josh Jones is a writer and musician based in Durham, NC. Follow him at @jdmagness The research and practice of making maps is cartography. Cartography, integrating science, aesthetics and methodology, builds on the idea that reality (or an imaginary reality) can be modelled in ways that effectively convey spatial details. The basic goals of conventional cartography are: Set the agenda for the map and pick the characteristics of the object that is to be mapped. This is the main focus of map processing. The traits might be physical, like roads or masses of land or might be abstract, like political borders or toponyms. Reflect the mapped object's terrain on flat media. This is the problem with map projections. Decrease the sophistication of the features that are to be mapped. There is also the dilemma of generalisation. To better transmit its vision to its viewer, organise the components of the map. This is the major area of focus with map design. Cartographic ProcessEvaluating the wiewer and using a diagram is the first step in mapmaking. It might help in deciding the map size and text features that are most essential to show the map colour schemes, as well as what projection is being used. It is necessary to understand this data because it will allow the map to be transparent and simple to comprehend. The cartography are produced on computers in modern cartography. Through internet sources, cartographers can collect the details they require, upload the information into their mapping software, and modify the functionality to match the necessary requirements. Types of Maps There exist three basic types of maps, and cartometric maps, general reference maps, and cartometric maps. Geographical location details such as highways, rivers, lakes, seas, political borders, cities and mountains are displayed on a general reference map. Such maps, and a basic all-purpose map which can be used for political maps, road maps, some topographic maps, and a basic all-purpose map which can be used for political maps, and a district, areas where a disease was already established, population size, the distribution of a species or the extent where a community can live, severe flooding, climate models and more are examples of thematic maps are the ones which concentrate on parameters such as area or distance that are unique. Such maps are mostly used for quidance, navigation and are also referred to as charts. Examples of cartometric maps are mostly used for quidance, navigate waterways such as oceans, lakes, and rivers, nautical charts can be used, whereas aeronautical charts enable airlines to navigate safely. Cartographic ScaleThe size of a map determines the area that is depicted by the map. A fraction such as 1:250,000 or 50,000,000 or 50,000 could be used in every measurement device without converting from one system to the other (such as from feet to meters). A map covering a small area is defined as a large-scale map. This relates to the map's representative fraction. The 1:250,000 fraction is greater than the 1:50,000,000 fraction, much like 1/2 is greater than 1/4 and 1/3 is greater than 1/6. A simpler way of describing the difference, though, is that the characteristics of a large-scale map. It must be remembered that although there is no standard unit of measurement for the absolute level of a map, like meters, feet, or miles, the scale bar is useful because it encourages spatial visualisation of data. This can display population spatial trends, economic growth, urbanization, as well as more. Cartography often aids in the preparation and rehabilitation of disasters and allows emergency responders to consider what is going on in the region where they operate. Cartography is useful because it encourages spatial visualisation of data. This can display population spatial trends, economic growth, urbanization, as well as more. Cartography often aids in the preparation and rehabilitation of disasters and allows emergency responders to consider what is going on in the region where they operate. Also, people use maps every day as they drive, locate restaurants, shops, and track their online transactions as they reach, with GPS and maps readily available on mobiles and other devices. The value of cartography is rising and becoming profoundly ingrained in our lives. Fun Facts about Cartography Ever since ancient times, lots of people are making maps. Thousands of years ago, cave drawings depicted hunting areas. Thanks to satellite imagery and GPS today's mapmaking is very accurate because of such factors. However, the earliest maps were constructed using basic methods and mathematical equations. 1. A SEMINAR ON CARTOGRAPHY 2. CONTENTS INTRODUCTION CARTOGRAPHIC PROCESSES USES & FUNCTIONS OF MAPS WAP SYMBOLS MAP PROJECTIONS TECHNOLOGICAL CHANGES ADVANTAGES OF MAPS & LIMITATIONS CONCLUSION BIBLIOGRAPHY 3. INTRODUCTION Cartography is the art, science and technology of map making. Maps are used as research tools and as sources of information. Maps have existed since the time of the Egyptian, Mesopotamian and Chinese civilizations, with the latter maps dating back to 6000 years. 4. CARTOGRAPHIC PROCESSES The communications model of Cartography emphasizes maps are used by variety of users. The role of the cartographer is to understand the subject matter of maps and also how the map will be likely used. Map making involves three stages: 1. Collection, Organization and manipulation of data. 2. Design and preparation of Maps 3. Map Reproduction 5. 1. Collection, Organization and manipulation of data. Data collection from existing maps, aerial photographs or digital imagery, documents e.g. legal descriptions of property boundaries, historical documents, etc., field work or questionnaire surveys. Data organized to understand the phenomena being represented. Data manipulation - in a form suitable for map making i.e. aggregating data to some specified set of spatial units, percentages, densities or other summary measures. 6. 2. Design and Preparation of Maps Many decisions go into the design of an effective map. These include geographic features and thematic attributes. The choices depend upon purpose of the map, the intended audience and the cartographer's understanding of the phenomena being represented. Maps of large areas it is a must to choose an appropriate map projection. Small scale maps are less detailed but covers a larger area. 7. 3. Map Reproduction methods acts as a constraint on the map design process. If only few copies of maps are required then black and white and colour laser printing and Xeroxing technology is ideal. If large number of copies then offset printing is the only practical alternative. Digital formats on tapes, disks or CD-ROM is replacing or reducing the need for printed maps. 8. USES OF MAPS It is a learned process requiring a variety of skills. Using a Map involves, three processes: Map reading Analysis Interpretation 9. FUNCTIONS OF MAPS 1. Navigation 10. 2. Visualization 11. 3. Measurement 12. TYPES OF MAPS Hundreds of Maps Prepared for Various Purposes General vs. thematic cartography Topographic vs. topological 13. MAP SYMBOLS In cartography symbols are everything. Cartographic symbology has been developed in an effort to portray the world accurately and effectively convey information to the map reader. A legend explains the pictorial language of the map, known as its symbology. 14. ALL MAPS NEED A scale A north arrow A key or legend 15. MAP PROJECTIONS: Any system for transferring parallels and meridians from a globe onto a flat map is called a projection. Mapmakers create projections according to mathematical formulas, often with the aid of computers. 16. It is impossible to project a sphere, such as the earth's surface, onto a flat map has inaccuracies in scale that result from shrinking the globe accuracy. in some places and stretching it in others to flatten it. 17. Projections by surface Cylindrical Hybrid Conic Pseudoconic Azimuthal (projections by preservation of a metric property Conformal Equal-area Equidistant Gnomonic Retroazimuthal Compromise projections 18. A map projection may be classified according to which properties of the globe it distorts least. Equal-area projections at any point accurately but distort size relationships. A map cannot be both equal-area and conformal, but many maps are neither. There is no name for this third category of projections classified by distortion. 19. A second way of classifying projections is according to the geometrical shape of the surface onto which the projections of the globe onto a cylinder. Although constructed by mathematical formulas, such projected onto the cylinder wrapped around an illuminated globe. Lines from the globe would be projected onto the cylinder wrapped around an illuminated globe. Lines from the globe would be projected onto the cylinder wrapped around an illuminated globe. Lines from the globe would be projected onto the cylinder wrapped around an illuminated globe. Lines from the globe would be projected onto the cylinder wrapped around an illuminated globe. Lines from the globe would be projected onto the cylinder wrapped around an illuminated globe. famous cylindrical projection is the Mercator projection. This conformal projection is useful to navigators because a straight line drawn between any two points on the map provides a route that can be followed without changing compass direction. 22. Conic projections are projections of a globe onto a cone. To visualize a conic projection, imagine a paper cone with its open end resting over part of an illuminated globe. Lines from the globe would be projected onto the cone, which would then be slit and unrolled. If the point of the poles, the meridians are projected as straight lines radiating from the pole. The parallels appear as portions of a circle. 23. Azimuthal projections are used most commonly to map compact areas of the earth's surface, such as the polar regions. One type of azimuthal projection, shows the shortest distance between any two points on the earth as a straight line. This distance is known as a great-circle route. Gnomonic projections are especially useful for planning intercontinental flights. 24. Other projections: Several useful projections are not based on the cylinder, cone, or plane. For example, projections that are oval in shape fall into a different category. Equal-area oval projections that are oval in shape fall into a different category. can achieve even less distortion by splitting the oval into several arching shapes. 25. TECHNOLOGICAL CHANGES In cartography, technology has continually constructed with brushes and parchment; therefore, varied in quality and were limited in distribution. Advances in mechanical devices such as the printing press, quadrant and vernier, allowed for the mass production of maps 26. Advances in photochemical technology, such as the lithographic and photochemical processes, have allowed for the creation of maps 26. Advances in photochemical technology, such as the printing press, quadrant and vernier, allowed for the mass production of maps 26. moisture and wear. Advancements in electronic technology in the 20th century ushered in another revolution in cartography. These days most commercial-quality maps are made using software that falls into one of three main types: CAD, GIS and specialized illustration software. 27. Toughbook Rugged Computer Laser Rangefinder 28. ADVANTAGES OF MAPS Maps are more objective and more efficient than verbal descriptions. A map makes it simpler to visualize and understand the spatial patterns. Maps can be useful sources of data and can give an historical perspective. Maps can be useful sources of data and can give an historical perspective. or complete. No one map can show all features present on the surface of the actual area. Good maps show the features that are relevant and focuses less on other features. 30. CONCLUSION Cartography is the theory and practice of map making and map use. Map is a form of communication between the map maker and the map user. As maps are synoptic they should be carefully designed to ensure the information is effectively conveyed. Earliest known maps were hand drawn whereas the modern day maps are digitized using high end softwares and instruments. 31. BIBLIOGRAPHY Reddy, Anji, M., 2000, Remote Sensing and Geographical Information Systems. BS Publications, Hyderabad, pP 1-21. on-to-cartography-geography1-14174414 32. THANK YOU!!!



