What is a Cartographer?

Cartography or mapmaking is the study and practice of making maps. Map making involves the application of both scientific and artistic elements, combining graphic talents and specialised knowledge of compilation and design principles with available techniques for product generation. Maps function as visualization tools for spatial data. Spatial data is stored in a database and extracted for a variety of purposes. The traditional analog methods of map making have been replaced by digital systems capable of producing dynamic interactive maps that can be manipulated digitally.

Modern Cartography like many other fields of "information technology" has undergone rapid changes in the last decade. Rather than merely drawing maps the cartographic process is concerned with data manipulation, data capture, image processing and visual display. Cartographic representations may appear in printed form or as dynamic images generated on a computer display screen. Computer assisted mapping systems have added a new and exciting dimension to cartographic techniques and traditional methodologies have to be augmented with new skills. The fundamental nature of cartography has changed with the evolving technologies, providing cartographers with new methods for visualization and communication of spatial information.

With a basic understanding of the concepts of cartography, it will be easier to understand and define what a cartographer is. A cartographer is a person who draws new maps or studies the history of maps. Most often, cartographers perform both roles. It is important for cartographers to have a knowledge of the history of maps or a region because they must be drawn with delicate accuracy. The lines and measurements of the map must be precise so that users can view the physical world in a more simplified manner. Having a broad knowledge of the latest mapmaking techniques (modernly through digital means) as well as mapmaking history helps cartographers perform their jobs more efficiently.

Cartographers are responsible for the creation of maps. There are many types of maps, each with a different purpose. This topographic map shows the terrain of the United States.

The fundamental objectives of traditional cartography are to:

1. Set the map's agenda and select traits of the object to be mapped.
2. Represent the terrain of the mapped object on flat media.
3. Eliminate the mapped object's characteristics that are irrelevant to the map's purpose.
4. Reduce the complexity of the characteristics that will be mapped.
5. Orchestrate the elements of the map to best convey its message to its audience.

These objectives are achieved by combining scientific and artistic elements, and by applying specialized knowledge of compilation and design principles with available techniques for product generation.