# Maps in the world: A History of Imagined Realities

Höög, Victoria

*Published in:*
Ymer

2008

# *Maps of the World: a History of Imagined Realities*

VICTORIA HÖÖG

## INTRODUCTION

Nowadays, many of us start a trip to an unknown location by logging onto the computer, typing in the departure address and the required destination, and requesting a route. After a few seconds, a detailed road description appears on the screen together with a two-dimensional map. If I use Google Earth, a three-dimensional view of the required destination appears. My use of a computer map search illustrates a new phenomenon, namely, that in the digitalized map world, a personal travel advice function can be added to a standardized map available to the public.[1]

The history of maps is a story that parallels the cultural, economic, political and scientific history of the world – or any historical development of the world. Maps are products by the cartographers' skills, but are also characterized by the context in which they are made and used. The story can be told from different perspectives.

One possible start could be the dawn of civilization with the appearance of Homo sapiens. Usually, we consider cave paintings, dating back about 100 000 years, to be the first cultural artifacts. Often, they are interpreted as an expression of the inherent artistic essence dwelling in the human being. Hence, the hunters and gatherers were the first crea-

tive artists to depict their imagined or real world. However, these cave paintings can also be interpreted as maps that were made to represent the cosmological and earthly order of the world. (Cosgrove 2007).

We rarely have difficulties in agreeing that using signs and symbols is a universal inherent attribute of the human mind. Symbols communicate the meaning of the experienced world. If we accept that the function of the symbols is to create order, then the symbols work in the same way as maps, i.e. they are more than aesthetic artistic expressions.

The history of maps could be written as a parallel to the history of science. It is even hard to imagine the scientific view of the world without it being communicated by pictorial maps and illustrations. For example, expanding geographical knowledge during the sixteenth century made the Ptolemaic world map obsolete. New world maps were produced that included the continents of North and South America, for example, in Martin Waldseemüller's *Universalis Cosmographia* map, made from 1507. Further, the scientifically inspired maps illustrated new scientific discoveries such as geological layers, magnetic declination and density of population. These discoveries were real facts, but without the maps they would have been purely theoretical descriptions of the world, invisible to the observer's everyday range of senses. The power of maps and pictures helped science to acquire its prestigious and superior position in modern Western society.

The focus of this article is the historical use of maps. The argument is that the using maps has a common feature, independent of time and space, namely that the map user relies on his/her imagination to interpret the chosen map, to see what they actually believe they are seeing. (Akerman 2007). Maps are not objective representations of the world: it is not territory they represent (Cosgrove 1999). Maps are what people want the world to be like. Maps help to shape our imagination about the space we live in and this is intertwined with self-identity. By looking at a map before making a trip to an unfamiliar place, we acquire an image that familiarizes us in advance. We know the names of the

streets, the blocks, the metro lines etc. Google Earth has facilitated the acquisition of knowledge of places before we visit them; we can fly to places in our imagination and inform ourselves about a hotel's location, and look at the rooms by a virtual tour.

## MAPS AS DEPICTERS OF IMAGINED GLOBAL AND LOCAL SPACES

A traditional function of maps is to serve as a creator of new spaces, by visualizing the unknown. Google Earth is certainly a new tool, but it expands and improves a well-known function of maps. For kings and emperors, the depicted space was an emblem of power, prestige and cosmopolitanism. One spectacular example is the *Miller Atlas* (ca. 1519). It gave a bird's eye view of the grandeur of the Portuguese Empire, with its commercial trading ports in Malaysia in the Far East, and Mogadishu on the East African coast. The atlas had splendid illustrations of Portuguese castle constructions and Portuguese ships all over the world seas, i.e. pictures that defined the superiority of Portugal. An atlas produced by a skilled artist engaged a spectator's imagination; it made the empire visually and physically within grasp. This was achieved by the distinct outlines and artistic quality, without any presumed scientific ambition. It created a symbolic space that facilitated the imaginative power of what it meant to be Portuguese in the sixteenth century. When Louis XIV commissioned the Venetian spherographer, Vincenzo Coronelli, to produce the biggest and most impressive globes ever made – situated in Marly but intended for the Mirror Gallery in Versailles 1683 – the King expressed his power as the ruler not only of France, but also as a global emperor. The two globes each measured about 4 meters (13 feet) in diameter. To the observer, the globes represented the King's ambitions. The huge scale was intended to encourage belief in the king's supreme power. A pure imaginative world in one moment could be the factual world in the future.

If the above atlas genre reflected the views of empires, the maps of the English gentry represented a more individualized mapping of the

local world where personal land holdings, including a picture of the residence, were mapped. These individualized maps appeared during the 19th century and became quickly popular in gentry circles. Anything the owner wanted could be placed on his personal map, as long as he paid for it (Dillon 2007). Such maps were often framed and hung centrally in the entrance hall of a residence, and informed visitors about the owner's distinguished position and personal achievements. For the owner, it was a symbol confirming the self-identity supported by the selected image. Another notable aspect is that the personal story and the country's history were fused in the depicted imaginative, rather than the realistic landscape. The culture and history of the local landscape became closely intertwined with the private property owner's life story.

When maps were used to illustrate the expanding scientific field of statistics related to morality at the end of the 19th century, the areas with high criminal rates were colored black and safe areas appeared in light colors. André Michel Guerry (1802–66) was a pioneer in making comprehensive map overviews of the moral state of France in the 1860s (Illustration: Crimes contres les personnnes, 1864). His moral maps illuminate an important phenomenon, the maps are not cartes blanches, they structure the world and create new perceptive space for us. (Eco 1979). If areas with high rates of crime had been colored white, the usual cultural association between dark colors and miserable lives would have been blurred, and hence caused confusion.

The 19th century represented the peak of innovative, user-friendly illustrations in the field of science. The illustrative technique adhered to the style of popular illustrations by complementing graphic innovations with visual forms used in newspapers and weekly magazines (Friendly & Denis 2006). The expansion of the natural and social sciences in the next century promoted more abstract formal illustrative modes that underlined the scientist as an expert, with knowledge inaccessible by the educated general public.

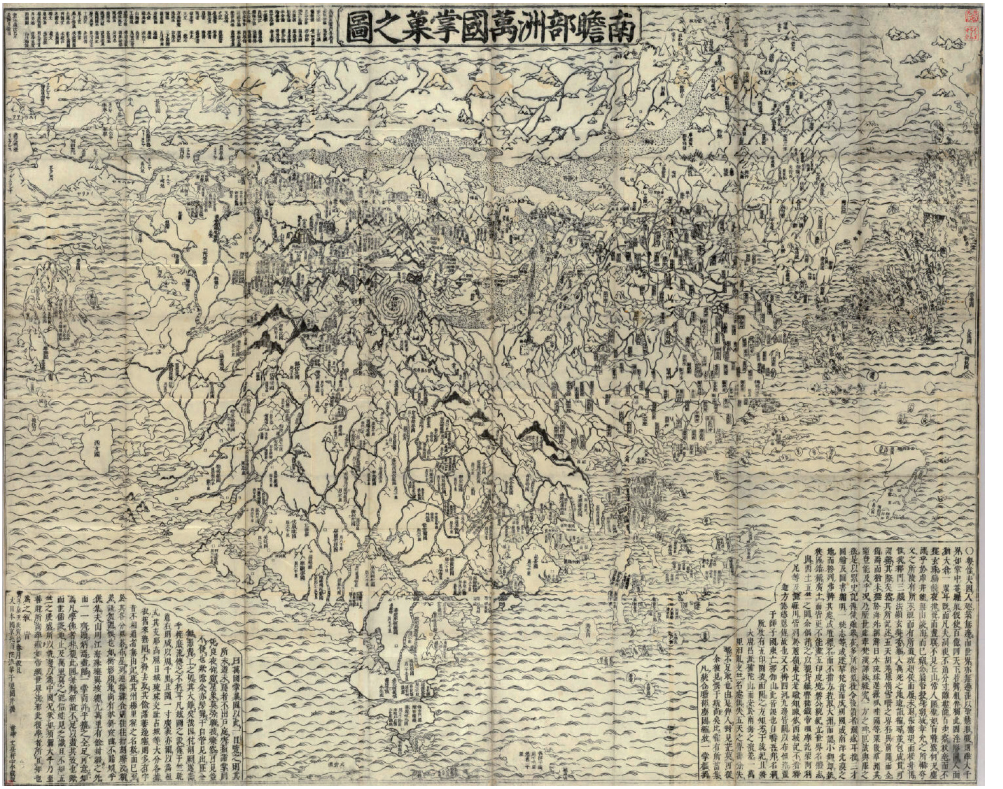
## MAPS IN THE MASS CONSUMPTION ERA

The next century, the 20th century, was the era of mass consumption and improved living standards in the West. Maps became widespread and integrated parts of the changed living patterns. When the newspaper reader opened the daily paper, the weather forecast was presented as a map. The US army positions in the First World War were also illustrated on maps.

In the 1920s, the privately owned car replaced the train for leisure travel on the North American continent. A new genre of road maps developed that contributed to the formation of a national car-based tourist industry (Dillon 2007). The producer of the maps could be a gasoline company, or the American Automobile Association, the Triple A, founded in 1902. From the user's point of view, the new road maps contributed to an updated self-image. The car tourist was in tune with modern dynamic times. The car represented material status, helping to upgrade social standing, especially of men as successful breadwinners.

A civic sense was also fused into the new tourism industry. The car tourists did not only enjoy themselves as private travel consumers, they performed a patriotic duty by traveling around and discovering the homeland. These maps relied on the cartographic aura of scientific objectivity and usefulness. They were accurate in depicting the road net and correct distances. In contrast to the English gentry maps of the 19th century, these maps were part of the new mass consumer society. The maps were printed in copious editions, lacked any personal design and were cheaply available at gas stations.

The mass consumption maps cultivated a geographic and visual literacy that contributed to the formation of new social identities by lending themselves to the viewer's imagination. The map's function was to help travelers prepare for trips. The viewer used the maps to situate the trip into the landscape, imagining how long the drive would take, where to stop for gas, food and an overnight rest. Also, the final destination could be imagined. A drive into a national park or unknown urban area




*Hotan Buddhist universe map, 1654–1738. Japanese Historical Maps, Regents of the University of California.*

was facilitated, not only by looking at the road system, but also by envisioning the future location. The envisioning was promoted by the eye-catching graphics (Dillon 2007). One way of doing this was to locate three-dimensional images on a flat paper surface, such as buildings or people. This added a physical dimension that linked the map with the user's imagination.

Scientific maps from the first half of the 20th century and tourist maps represented two different genres. Tourist maps were similar to traditional maps as a category of distinctive artwork, while the scientific map acquired a more abstract, statistical look (Friendly 2006). How-

ever, I would claim that the scientific map and tourist map shared a common dependence on human perception. In both cases, the maps were open and accessible to our projected imagination to merge with our identities, as professional scientists or holiday planners.

## MAPS IN THE 21TH CENTURY

Since the early modern period, world maps as well as local maps, had relied on a cartographic tradition that combined the instructive task and the viewer's ambition to orient himself/herself visually in the chosen space, be it for a pilgrimage, or holiday trip. In the case of old historical maps, this feature is strikingly apparent; towns, seas, coastlines, and roads are represented pictorially. The cartographer's artistic skills were the means of providing this visual pleasure. However, a component of this pleasure was the presence or evidence of human existence. The non-scientific maps depended on the observer's intention, which relied on identification symbols. An exception was pure graphical maps, for example, metro maps.

The famous view of the earth from Apollo 17 in 1972 lacked any evidence of human presence. The globe was pure nature, void of any anthropocentric view. It conveyed a feeling that has procreated religions, underlining that man is a late arrival, a diminutive visitor in universe. Yet, in a benevolent interpretation, old religious maps had the intention of communicating to the observer the religious doctrinal worldview. The famous Hotan Buddhist universe map, which could be seen on the opposite page, Nansenbushu Bankoku Shoka made about 1710, is void of man's presence, but tells the informed observer that the known universe is only one among millions of others. The depicted religious universes have infinite space for man's soul. The contrast to the cosmographic mode of the Apollo earth picture is striking; it is without God and does not invite man's presence.

With the Internet, the naturalized picture of the globe has regained the anthropocentric perspective from pre-modern world maps. Google Earth stands for this striking feature of 21st century map development.

The screen opens with a view of the globe, produced by naturalistic satellite photos. But within a few seconds, a man-made cultural world of landscapes, cities, roads and houses come into sight. We follow up by zooming in, focusing and selecting our personal design.

The latest development allows another human dream to come true, namely time traveling. Historical maps can be exactly covered over by a visual image from a Google Earth map. For archeologists, historians, and cultural geographers this option opens up areas of new knowledge. Science fiction has to cede space for a new genre where past and present merge with minute and delicate accuracy. A well-known function of the maps is to help the user to perceive the places visually, in advance. Now, the latest digitalization stage makes inverted time traveling easy. We travel from the present into the past or from the past into the present, depending on our purpose.

What should we say about this mix of historical and current maps? What kind of visual imagination will this promote for the users? Will reality and history be another fictional digitalized game that helps to form our identity, as online games might do (Castranova 2005)? We can all agree that digitalized services have encouraged people to use maps more often and expanded cartographic literacy, but what this means for our world view is a wide open question.

## CONCLUSION

The French philosopher, August Comte (1798–1857), the founder of positivism insisted that, from the very beginning, human existence has had a universal drive to search for knowledge. A human characteristic is to search for meaning and understanding in given conditions. At the first, pre-scientific stage, thinking is characterized by an urge for a comprehensive understanding of existence, more than a search for the essential truth. In this first stage, the world is viewed by anthropomorphous measures. Organic nature is supposed to have souls, even if this is of a magical kind that makes communication logically possible by the help of special rituals.

Comte's philosophy can be used as an interpretative framework for the universal existence of maps: they are tools to create comprehension and connections in life, between past, present and the imagined unknown. Another well known aspect of Comte's philosophy also seems to apply to maps, namely that human understanding of the world moves towards a more abstract scientific way of interpreting the world. The anthropomorphic stage is succeeded by the metaphysical approach to the world. Lastly, according to Comte, metaphysics too is overcome, and the highest stage is achieved, namely the scientific approach to reality.

Following the expansion of the sciences in the 17th century, Western maps changed in appearance. The naturalistic artistic painting genre was superseded by abstract graphics. Hence, a shift in genre occurred. Until the seventeenth century, maps in Europe were anthropomorphous, depicting the natural and the cultural world from the human point of view.

Nonetheless, Comte was wrong in one central aspect: the scientific stage has not proved to be the last supreme stage of human knowledge for interpreting and understanding the world. The modern digitalized maps coincide with non-modern maps in their human scale. One can easily move oneself into the imagined space in advance as a layman. No professional scientific qualities are needed to use the available information. When we enter a building, we look for a map for an overview. A museum exhibition has maps available for visitors, as do bus companies for passengers. Such maps are, primarily, produced to facilitate a quick orientation of a new or unknown space. For a long time, such maps have relied on a graphically inspired tradition dating back to the London Underground map, which is instructive but has no naturalistic ambitions. The obvious purpose is to find the required destination, and eliminate any unnecessary embellishments.

Digitalization offers museums a new, user-friendly option: it complements the graphic, traditional visitor's map by recommending the visitor a virtual tour. We enter the virtual room. Borders are blurred between real and virtual experience. Both aspects are mind-depend-

ent realities, no experience less real than the other (Thomasson 2001). The scientific period from the later 19th century and onwards, upholds an image of maps as definitive true representations of the chosen subject. In current times, the non-modern and the post-modern mapping of the world coincide in a virtual map world that easily allows a personal design to be applied on the available standard map. One prerequisite behind this development is the public availability of scientific data, for example, when NASA satellite images fuse with commercial interests, as in Google Earth. If the earlier periods produced a scientific era with truth telling as the primary scholarly task, the digitalized life world may tempt us to supersede truth seeking with amusing personal experience. Our imagination can more easily than ever be applied to the public map. A personal map for every new life event is a quite, easy piece of work to achieve. These maps may be our new photo albums, a memory book of the family history. The maps may also be the science archives of the future, with illustrations mattering more than the body of text. The history of maps keeps on being a good storyteller of the history and development of society.

## *Note*

[1] I would like to thank Hisayuki Ishimatsu, Head of the Japanese Collection at UC Berkeley. I am profoundly indebted to him for sharing his knowledge and friendship. As a constant source of inspiration and encouragement over the years, my thanks also go to Wahé H. Balekjian, Professor in Jurisprudence, at Glasgow University and Vienna University.

## *REFERENCES*

Akerman, James R. & Karrow, Jr. Robert W. (eds.) 2007. Black, Jeremy. 2003. *Visions of the World: A History of Maps.* London: Mitchell Beazley.

Dillon, Diane. 2007 "Consuming Maps" in Akerman et al. (eds.) 2007.

Eco, Umberto.1979. *A Theory of Semiotics.* Bloomington: Indiana University Press.

Casey, Edward. S. 2002. *Representing Place. Landscape Painting & Maps.* Minneapolis: University of Minnesota Press.

Castranova, Edward. 2005. *Synthetic Worlds: The Business and Culture of Online Games.* Chicago: University of Chicago Press.

Cosgrove, Denis. (ed.) 1999. *Mappings.* London: Reaction Books.

Cosgrove. Denis. 2007. "Mapping the World" in Akerman et al (eds.) 2007

Friendly, Michael. 2006. http://www.math.yorku.ca/SCS/Gallery/

Friendly, Michael & Denis, Dan. 2006. "Milestones in the History of Thematic Cartography". Available at http://www.math.yorku.ca/SCS/Gallery/

Harley, John B. 2002. *The New Nature of Maps. Essays in the History of Cartography.* Baltimore/London: John Hopkins University Press.

Livingstone. David N. 2003. *Putting Science in its Place.* Chicago: The University of Chicago Press.

Livingstone. David N. 1992. *The Geographical Tradition.* London: Blackwell.

Thomasson, Amie L. 2001. "Geographic Objects and the Science of Geography" in Topoi, no. 20. p. 149-159. The Hague: Kluwer Academic Publishers.

Walter. Lutz. (ed.) 1994. *Japan. A Cartographic Vision.* New York: Prestel

Wood, Denis & Kaiser, Ward L. & Abramms, Bob. 2006. *Seeing Through Maps.* London: New Internationalist Publications.

Wood. Denis.1992. *The Power of the Maps.* New York: The Guilford Press.

Zerubavel, Eviatar. 2003. *Time Maps. Collective Memory and the Social Shapes of the Past.* Chicago: The University of Chicago Press.