

World History Commons - Analyzing Maps Full Transcript

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1) What do you first notice when looking at a map?

It would be no surprise, almost to anybody, in any culture, at any time, if they're going to represent the universe as a whole or the world as a whole, and you ask, "What is in the center?" You are in the center, right? You start with, and lo and behold, this is Rand McNally, headquarters in Skokie, right, north of us, so what is in the middle? See, it's the Western Hemisphere. And if I would have brought along some maps from say, Japan, what would be in the middle? It would be Japan, or if it was from Paris. You get the idea.

Similarly, once it's in the center, what's on the edges? What selection has been made? What things are represented on the map and which are not? What are the hierarchies involved—just the size of the print, for example? Are things rounded up to make them look more artistic?

This is a communication. Think of a map as the world is out here. There is an observer looking at the world who takes certain aspects of that and puts them into a graphic device to convince someone of something. He's making an argument and you have to have the right kind of cultural understanding to take that argument and to understand it and to be convinced by it.

Then you can start looking at what's on the map, what is not on the map. What is missing? How is it packaged? How is it framed? How is it meant to be used? We don't know a lot of these things, by the way. It's like any historical document that you get. That it tends to all of a sudden put things together spatially, and say, "Well, what implication does it have? What does that mean? Why is this cartographer emphasizing this dimension?"

And we might, in our minds, think about alternative ways, alternative audiences, alternative purposes. And once you start playing with the map like that, it's a series of questions and answers and arguments, and delivery systems if you wish. I think you're on your way to understanding the power of place and the power of the representation of place.

2) What steps do you take to analyze a map?

There are seven things to think about when you look at any map. The first idea is that any map is

part of a sequence of maps. And the sequence of maps very often record change. So no matter what map you look at—it could be a map of this hotel [Palmer House Hilton, Chicago, Illinois]. There was a map of this hotel last year and the year before and the year before.

The second thing about maps is the size at which certain things are represented on the map indicate power. A map of the downtown Chicago, published by the Palmer House, probably will have the Palmer House location printed in bold letters because they are the ones in charge. And the iconography of a map is an expression of power.

Third point is maps tend to show distribution. Again, if we had the map of the Palmer House that they would give out for the downtown Chicago area, they would probably show how the Palmer House is central to the distribution of important places to visit in Chicago—the Art Institute, the Field Museum. Go around and see how this would be kind of set up so that you would get some sense of the distribution of resources, the distribution of people, the distribution of roots, some distribution aspect.

Along with that, especially when you think about roots, is the whole idea of movement. No map really is just a static stage. The map is a stage on which things are happening, and that sequence will show you some things are happening, but there are other things as well. And the alert map reader will start asking questions. What is happening on this map? What does the cartographer want us to imagine is happening? What else is happening that is being suppressed?

Then, the sixth point is that there is a spatial context for this map. There's always, on a large-scale map, a map that comes next to it. If you look at a map of the state of Illinois, there's another map of the state of Indiana, of Wisconsin, Iowa, Kentucky, Missouri. You can go all the way around and you can keep adding on to that context and seeing the map of the Midwest, of the United States, of the North American continent. There's always this layering of spatial context in which a map occurs. And that's very useful I think for a student of history to think in terms of, "What am I looking at? What is the larger context?"

Similarly, what's there that you can zero in on the map? And the use of the computer is wonderful in that respect. You can get the whole map of North America, but you can zero in, let's say, on the state of Iowa. And all of a sudden, the state of Iowa appears and then you can go into Des Moines and Des Moines appears. And then you can go into the state capitol area in Des Moines, and that, so you can actually get that, that telescoping and see that spatial context, which before computers took an enormous amount of work and paper.

And then, finally, relative location. When you put it in spatial context, there is an absolute

location and a relative location for the focal point of the map. And the relative location is how it relates to other places. How do you construct the map to show that this is in the center, or at the edges? Is it on the periphery of things or is it at an intersection? Is it a nexus of power?

So, basically those are seven things:

- They'll see the map as part of a sequence;
- They'll see the map as an exercise in power;
- To see distributions on a map;
- To see movement on a map;
- To see the movement following certain routes on a map;
- To put this map into a broader and a narrower spatial context; and then
- To think about relative location—how one can relate one particular place to the other places around it.

3) How do maps reflect the world?

This is a Mercator projection, a 16th-century kind of ingenious discovery by this cartographer by the name of Gerhard Mercator. He wanted to figure out some way in which you could peel off the skin of the surface of the Earth on a globe and stretch it in such a way that the directions would remain constant, or that a great circle would be a straight line in technical terms. And he developed this projection which didn't catch on immediately, but by the middle of the 18th century it had almost become the standard map in western civilization.

People decry it today because of its distortions—it makes Europe bigger than it should be and so on. And it has certain, obviously, disadvantages. And if it was the only projection that an instructor would use or students would view, it would be problematical. It has an advantage, however, in that to make all of the directions constant, all the lines pointing to the North Pole happen to be parallel. And that means that we can play with the concept of centrality.

And what I will do is simply take the 90th west meridian, which runs through the Delta of the Mississippi River. And I will cut this map . . . Okay, what I've done is I've cut the map at 90 degrees west and then simply moved the center to the edges, and now we have the Afro-Eurasian land mass in the center [with] the mouth of the Ganges in the center of the map at 90 degrees east. So now we have an entirely different look to the world and it's kind of interesting how American history gets changed from an Atlantic civilization to a civilization which faces both the Atlantic and the Pacific.

I could continue cutting this at 180 degrees and move it over. And I could cut it at the prime meridian and we would get a Eurocentric version; we would get a Pacific-centric version. Here we have the version with the Afro-Eurasian continent in the middle. But there's another distortion on this and that is, the Equator, of course, is in the center of the Earth. Well, the Equator is not, as you can see, in the center of the map, as it is in the center of the world just by definition. So we all of a sudden realize that: look, this goes way down to the Antarctic Circle, but we extend considerably north of the Arctic Circle, so we have to get the scissors out.

What we have done by cutting off the bias—this distortion at the north end of the map—is we have made Africa become more visually prominent. Mercator projections are very distorted in the high latitudes, so we just kind of eliminate them. And all of a sudden, you see, Africa assumes a much more important role than it looked like when we started this map. There's one other thing that's happened. When I cut off the high latitude, we have a world in which water is more significant than land.

If I take some blue surplus from the part of the map that I cut off and cover up what's sometimes called the cartouche or the title of the map, [it] tips the balance between kind of an Earth-centered map and a water-centered map.

Now if I would turn this upside down and put the water hemisphere on top and put the land at the bottom, it would become even more apparent that water dominates the globe, even on a Mercator projection.

But I started this whole episode just to indicate how important the center and balance, where you end a map, how you set the map up, is a matter of culture. It makes it very apparent that maps are a product of a particular place, of a particular culture, a particular purpose. They're all arguments in a sense; they're all texts. Of course, they're also artifacts. And understanding our world reference map as a point of departure sets up looking at other civilizations, other times, other places. How they have envisioned the world as a whole, or the universe as a whole.

4) How do maps function in different cultures?

One can understand a little bit more about maps, how they function in a different culture, by looking at an encounter between the Powhatan Indians and John Smith that possibly the famous rescue story is a part of. Story is this: John Smith describes how he was out with an exploratory hunting party. They stopped to get a meal and Smith, as was his nature, went off a little bit beyond, apparently saw an Indian in the bush and tried to beat a retreat and got stuck in the

mud—literally stuck in the mud.

He was taken captive by a group of Powhatan Indians. And he tried then to—this is a little bit of interpretation—but he tried to turn his capture into something else. He was not sure if he was a captive, and he didn't want to act like a captive. And he had his compass with him. So he then wanted to present the compass to Powhatan, to the leader of the Indians. And this was arranged and, apparently, there was enough communication between Smith and Powhatan that Smith then turned his presentation of this compass into a geography lesson. And he described how the land that he came from had millions of people, and insinuating these people were going to come and rescue him.

Powhatan then gave Smith a geography lesson. This is tit-for-tat; these are kind of equals going back and forth. What Powhatan did is he marched Smith from town to town, so they would realize how big and how powerful and how extensive his confederacy was.

The famous rescue might have been staged by Powhatan to indicate to Smith how powerless he really was. That he had to have a little girl, or a young lady, save his life.

But the climax came when then Powhatan gave Smith a geography lesson. And it was not a matter of instrumentation and scientific explanation as Smith, product of the Renaissance and so on, was apparently giving to Powhatan. But it was a traditional, probably Neolithic ceremony, that probably was repeated in Neolithic cultures all over the world, as a representation of their Earth, their world, in dramatic fashion. It took three days. You can't, respectfully, see a map of the world in less than proper time. It has to be done with certain ceremonies, certain incantations, certain dances.

They start with the campfire. That's the *Axis Mundi*; that's the center of the Earth. That's what everything revolves around, just like the Mississippi Delta was on our first map. The campfire starts, and then, maybe several ceremonies later, the circle of ground meal is laid around the campfire. And then, around that, the outer limits of North America or where the Powhatan Indians, where their knowledge was dissipated at the edge of the sea—another concentric circle is laid down. Smith describes all of this, how it's done, of corn, whole corn kernels.

And then, finally, there is another edge, which is the edge of the world or the edge of the human existence, another circle, again of ground corn. And then Powhatan indicates where Smith came from by a group of little sticks placed towards the edge of the world. That a map is functioning in this culture in a much different way than that first map functioned in our culture. And that it was in a sense of paying respects to the creator and kind of an ode of thanksgiving.

5) How did you first get interested in maps as primary sources?

In the early 1970s, when the Newberry Library in Chicago was asked to consider how the American Bicentennial might most appropriately be commemorated. And I participated in one of these early grants. The thing I chose to do was to figure out what images of the Earth did the European general populace have when Columbus set sail. Or better yet, when Columbus came back. Or better yet, when it became apparent that the discoveries across the Atlantic Ocean were a New World rather than an extension. They were all of a sudden being confronted with the fact that there was more to the map of the world than they had thought. What images of the Earth accommodated this new stuff?

And I was amazed of finding a reference to a map by Hanns Rüst published in Augsburg [Germany] about 10 years before Columbus set sail. It's a medieval image of the Earth that was given away, apparently, or sold for a very small price in central Europe in the 15th century. And these early wood cuts apparently were meant for people to put on their walls, middle class people put on their walls, and write with maybe some charcoal the calendar underneath it. And then you erase that month, put the next month.

This is before Columbus set sail, you have people in central Europe getting a holiday gift to put on their walls, and it's a map of the world as they understood it or as one way in which it could be understood. I can still remember just being struck by that fact. And then I did a little publication of what other images of the world were extant for, say, an educated European into which the New World, the newest of the discoveries, could be placed.

And that's kind of a wind-up or a prelude, to this map, which is a map from 1507 by another central European intellectual, by the name of Waldseemüller. His map is the first one to name the western continents the Americas, or America. He had access to the letters of Amerigo Vespucci, which his little circle published. And then they were going to redo Ptolemy's account of the world. Now this is, you realize, just a few years after the initial discovery—within 15 years, they are trying to put together a kit to explain to people in central Europe what the New World looked like, how to fit it in.

And their kit consisted of three things. One is the very famous map, a big wall map printed in sections of the world. The other part of the kit was a basic introduction to physical geography—the world as a sphere. And then another thing, they had a series of gores, so that individuals could make their own little globe. But you would cut it out and put together this globe. To me that's just astounding, that you have a people with kind of an interest in the world, and not only

an interest of the world, but of sharing that interest. They want to kind of integrate the new knowledge into the old knowledge and to provide, in terms of teaching of history, they want to provide these little helps. This big map, which you can assemble; the globe gores, which you can make a little globe for yourself; and a little handbook that tells you all about it.

6) What other sources do you use to understand maps?

Maps never exist kind of independently. And if you can find a narrative to go along with the map, or you can place the map into a historical context, that's very important. One of the ways to get a historical context for any map is to find out other maps that are similar. Other maps produced at that the same time and place. Or of the same subject by the same cartographer, from the same school. From maybe the same purpose.

Another very important aspect of maps is to find other graphic representations that might not technically be maps but that are similar to it. For example, if you have a city map, a city view, that is an artistic representation, not from the top down to the Earth, but tilting it to the side, looking at it as a bird's-eye view. Or dropping all the way down and looking at it as a profile of the city, the skyline of the city, for example. See how they're all part of a continuum. Where the map begins and where a bird's-eye view begins, and where a profile ends just depends on your definition really and your arcs.

Certainly to understand a map of downtown Chicago, it would be nice to have a skyline view. It would be nice to have a map looking from the top down. It would also be nice to have a bird's-eye view. And then if you can do it time-wise. You can have one from today, one from yesterday, one from 1990, 1980, and just go back all the way to the beginning, then you're starting to look at things with historian's eyes, to see one document as part of this sequence.

Art history has a lot of things to say to a person looking at a map, because a map is an artistic rendering. And it becomes more convincing with certain flourishes. Certainly the fact that the water is painted blue on a map all of a sudden tells us something about the map. And if one changes that for dramatic effect, sometimes to show pollution, for example, all of this would show up in red where it should be blue. That kind of manipulation of color and of form and texture and so on, one moves kind of away from a historian's training over to the training of an art historian.

I think also, linguistics is a good place because of place names. Almost every map betrays itself in terms of its origin by what places it names. The more we can bring to an understanding of these place names, the more, I think, rich the historical context of the map actually becomes.

Certainly, if you're going to look at medieval maps, you have to know something about classical mythology, you have to know biblical history. You have to know something about the Teutonic mythology. Once you have those three things in mind, all of a sudden, the map becomes a really lively thing.

7) How do students approach maps?

The basic bias that I think that I have to overcome is that students think maps are accurate representations, value free, and one has to convince them that they're documents.

Maps have the great advantage that when I pass them out and give everybody a xerox copy of the map—which I think is important, that they have their own map. I think that sense of ownership and being able to manipulate it is very important. Once they have their own map, most people can relate to it in a very direct way. You can enter it anywhere. You don't have to begin at the top left; you can look at it in a variety of ways. You can admire the art. You can admire the geography. You can look for some of the history on the map. You can look for literary allusions or context.

But we all have mental maps, because if we show a map to a group of students that's distorted in some ways, some will pick up "this is distorted because it doesn't match my mental image." They might not be able to draw it, but they can pick up the distortion.

We all, I think, have a private geography. Sometimes it's a family geography. I'll give you an example from my own experience. We have a summer place out in northwestern Illinois. If I would tell my children that I'm going to Bluegill Cove, that's not on any map, but it's part of our mental vocabulary because my boys, when they first went up there, caught Bluegills in this spot, and it's been Bluegill Cove ever since.

That's true of all names. That's true of all representations of the Earth. And, in some ways, our culture defines how to look at the Earth. And that's a cultural expression. And, one of the liberating things about history, in terms of time, is you can step out of that orientation and look at other orientations. And especially if one gets to kind of global history or step outside of our own cultural tradition and look at mapping in another cultural tradition.