December 15, 1985 (letter 6)

Dear Colleague:

What is the relationship between geography and cartography? Geographers as different as Carl Sauer and Peter Gould appear to put maps pretty close to the heart of geography, and certainly the public sees geography as having to do with either place-names or maps. Here are some informal--one might even say, irresponsible--reflections, inspired by a recent lunch with David Woodward. I should add that the parts that make sense or have the ring of originality I owe to David; the wild flights into the blue yonder are my own.

One tradition in geography is the people-environment theme. Human beings have transformed nature. How they have done so and what they have wrought are a main thrust of our research, whether we think of the agricultural terraces of Peru or the shopping malls of American cities. Until recently, there is one important step in the "how" that has escaped our sustained attention. This is the formation of images and mental maps, the fact that one must have some idea or image in mind before one can set out to change the environment. What is the character of this image or mental map? Often, we can't tell. We may infer the mental map from the accomplished fact of transformed landscape, but this procedure will contribute little or nothing to our understanding of the landscape. So why bother? I, for one, would still want to "bother" for the sake of completeness, because I am reluctant to let go of an important step--the step of image-idea that precedes and accompanies the step of physical action. But let us leave this problem aside for the moment. When people want to alter nature on a large scale, they find that the fuzzy mental maps in their heads are inadequate to the task. So they produce real plans and maps. The way they lay down streets, fields, and political boundaries are guided by these plans and maps. Now, it is clear that if we want to understand the transformed landscape, we will need to study these maps for what they say about the people's intentions. There can be no doubt that historical geographers will be overjoyed if they can find, for instance, a cache of Inca street plans, or of Han-dynasty military maps.

Maps of sophistication imply the existence of sophisticated techniques of surveying and measurement. When we think of the European settlement of North America, we tend to think of successive waves of people: first, the hunters-and-trappers and fur traders, then, the farmers and merchants. They have each in their turn helped to create humanized worlds out of the wilderness. But texts on settlement tend to skip a stage: they forget that very early on come the explorers and surveyors--the geographers and mappers, if you like. They appear on the scene usually long before the farmers. They are the first to domesticate nature, not by the physical labor of cutting down trees, but by the mental labor of "taking nature's measure" (in both the literal and figurative senses of that expression) and reducing it to size--that is, reducing it to maps that can be rolled up and put into one's coat pocket. So, surveying and mapping are an integral part of the story of the taming of nature. They are a step that cannot be missed if we wish to understand the landscapes of North

America, Europe, and China, as well as those of their colonial extensions--that is, landscapes in those parts of the world where action is preceded and accompanied by conception.

A map is a two-dimensional model of reality. Or, as David puts it, a model is a three-dimensional map. Maps and models are both artifacts, but a model can be a feature in the landscape--indeed, a monumental feature. In traditional societies, the house can often be interpreted as a model of the cosmos. The floor plan of the house, with its partitions and directional points, are a two-dimensional map of the cosmos. The three-dimensional house is a model--a three-dimensional map--of the larger reality of the heavens and the earth. Still more prominent in the landscape are the ceremonial complexes, such as those of the Maya civilization. They are a scaled-down model of the universe. If we wish to understand Maya reality, we should like to know their mental maps (but how do we gain access to them?); we should like to study their maps (if they have them), and we should certainly want to study what we do have, namely, the cities and ceremonial complexes--the models and three-dimensional maps.

But, you will say, if I use "map" in this loose way, what is <u>not</u> a map?
Indeed, what isn't? Is Madison the rock-bottom real thing or is it, essentially and profoundly, a map? I say it is a map. A map of what? Answer: a map--that is, an incomplete, tentative model--of the ideal Capital City of Wisconsin, which is yet to be built. To your objection that this ideal is not "real", not tangible, I ask, what is real? To Plato the truly real are the eternal forms, compared with which the things we see in nature or build ourselves are merely flimsy, distorted models. And whatever we may say, we are all a bit of a Platonist at heart: we are, I believe, all tempted to think of the triangles and circles we draw on the blackboard as insubstantial, make-do representations of perfect and ideal figures in the sky.

On the other hand, there is also the opposite temptation: we may think of our maps as works of art in their own right, to be appreciated without regard to the larger reality they depict; likewise, we may be so taken with our own three-dimensional constructions--the landscapes, ceremonial complexes and shopping malls--that we forget they are merely the scaled-down, distorted maps of something we know (in our more alert moments) to be more real and more worthy of our sustained regard, namely, the cosmos and the heavenly city. The last sentiment seems well suited to this season, so I will end by wishing you all a <u>Merry Christmas</u> and a <u>Happy New Year!</u>