

# cartographic perspectives

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## messages

FROM THE GUEST EDITORS

### Introducing the Special Issue on Map Use

In a personal conversation at the Symposium on Cartographic Design and Research in Ottawa in 1994, Muehrcke opined that 'it just gets down to a question of map use.' In his formal paper from that Symposium, Muehrcke (1996) cited map use many times in "The Logic of Map Design." Some examples from the paper include: "Much of the discussion in this book focuses on the importance of the map user. I would go further to state that changes in the way maps are used in the electronic age are probably far more significant than changes in how they are made." (272-3) "The cartographic literature, including our textbooks, does not seem to be as much at fault here as the cartographic literacy of those who use maps." (273) "Some of our critics seem to have missed the point here—the issue of user responsibility. . . users must learn to handle mapping tools responsibility." (275) "If we are really

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concerned about the map user, the basis for making much bigger and quicker gains is already within our grasp. We only need to catalogue and teach the strategies practised

by expert map makers and users" (277) "Unfortunately, . . . the level of user sophistication is dismal." (277)

This concern with the map user is consistent with the work of the authors of the papers collected here. In meetings of the Map Use Commission at the International Cartographic Association General Assembly in Barcelona in 1995, there were many discussions about collecting our thinking on map use. We decided to organize one or more sessions on map use at the Annual Meeting of the Association of American Geographers in Charlotte in 1996. Here are some of the papers presented in two sessions at that meeting.

The Web pages of the Map Use Commission (1997) spell out the terms of reference and directions of the Commission. Included there are the organizing themes of the study of map use. These themes focus on what are considered to be the four major dimensions of map use: the individual map user, a map user community, the map use environment, and the map use task. Monmonier (1996) has suggested the addition of a societal dimension of map use.

Individuals bring various skills, competencies, experiences, abilities or disabilities to the act of map use. Some of the papers here focus on different types of individuals. Ungar, et.al., report on two studies of blind and visually impaired users. One study involves blind adults who are experienced in

navigation with tactile maps. Another study examines children, where a group of blind children is compared to a group of sighted children in performing given tasks. Board attempts to catalog the expertise of a group of educated geographers who bring considerable knowledge to the higher level task assigned to them. Thompson pleads for guidance in working with college students who have little or no knowledge of maps and mapping but who are called upon to make and study maps to learn about cities.

Carter (Map Use Commission, 1997) contends that in many cases map user communities determine what maps will be produced, at which scales, and in which forms. The experts in these communities set standards for acceptable uses of their maps, although in many cases these standards are implicit rather than spelled out. In the papers in this issue, Board carries out his study using topographic maps from many different nations. The nature of the community that specifies small scale topographic standards has been so effective that the same tasks can be performed with maps from many different sources. It can be said that the other authors are seeking some standards that may lead to better map use in the future.

For centuries we have thought of maps as ink on paper, being the result of some printing process. While these paper maps are static and fixed in time, a user can linger over a paper map, make measurements, magnify segments of the map, and annotate the map. Of course, these paper products may not be convenient to use under some environmental conditions. As we move into an electronic age, the environments in which maps are being used is changing radically. We have dynamic maps that may be very current. Users have unique tools that allow them to interact with the maps in ways not

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