number of maps from newspapers are provided to illustrate his comments on what does, and does not, work.

Projection is the first major element Monmonier considers. He notes that distortion is an inevitable accompaniment to the process of transferring a three dimensional globe to a two dimensional page. However, for most subcontinental areas, the distortions involved are negligible and the ready availability of atlas base maps, clip art files, and commercial outlines makes it relatively simple to provide appropriate base maps. For larger areas (continents, the whole world) an appropriate projection choice is critical.

Projections can also be used to provide dramatic insights to areas of interest. The use of bird's eye perspectives, gnomonic projections to illustrate great circle routes, and views of regions from other than north-up are examples of creative applications.

Monmonier cites several design questions which enter into planning a news map. Among these are the amount of surrounding territory to be shown, the number and selection of relevant places, inclusion of inset or locator maps, as well as positioning of type. Poorly centered and illegible maps often result from trying to reuse archived drawings, particularly where the originals must be highly reduced. State or national chauvinism is another factor often contributing to poor design. The point is well made that weather and travel are seldom restricted to home states, especially for cities located near borders, yet single state maps of these topics are the norm rather than the exception.

The graphic hierarchy of geographic features is yet another design feature that can lead to confusing maps. "The overall collection of map elements should be designed to convey and reinforce the hierarchy of geographic concepts inherent in the map, its caption, and the story it accompanies." Sometimes confusion results from overly rigid style guidelines or the limitations of photowire transmission.

Locator insets can provide a unifying element to the overall design of the newspaper if carefully executed. Aspects of insets to avoid include lack of a border, large areas of solid black, and heavy drop shadows. Monmonier feels that the drop shadow adopted by newspaper artists in the 1980s with the same fervor that automobile designers embraced the tail fin in the late 1950s — can be effective if light in tone and not too thick. Similarly the popular use of three dimensional symbols can divert attention from more important elements.

Type is yet another aspect of design that can cause serious problems. Wherever possible, labels should be placed near their symbols rather than in lists or legends. Names should be aligned with their features. Type style and size should be varied in a consistent manner that reinforces the graphic hierarchy.

Dr. Monmonier has provided a handy design guide to a very particular set of map producers. These producers seldom have any formal cartographic training and must often work under very tight deadlines with limited facilities. As an increasing number of news maps are produced "pressure for improving standards must come from managers and committed professionals. Workshops, practicums, regional and juried competitions, and other outreach programs will be highly important means of upgrading and maintaining quality standards." Editor's note: Mark Monmonier is author of Maps with the News University of Chicago Press (1989).

Tibbetts, Steve (1989) Big Map Idea. ECM Records 839-523 (CD); 52' 52" AAD. reviewed by David DiBiase, Penn State University.

Tablas jwoop, congas patter; skilled fingers and palms caress stretched hides. Ephemeral rhythms: now urgent, now pensive, now fading among brown mists at dusk. Wisps of children's song glimmer through high silver clouds. Fine brass-wound nickel strands tuned low over hollow, cherished spruce and rosewood; fingered guitar sings a wanderer's muse, improvised intricate as gnarled branches of winter oaks. Delicately thumbed kalimba. malleted steel drum, bells, shakers, berimbau . . . whence comes this music? From uncharted lands.

Big Map Idea — guitarist Steve Tibbetts' fifth ECM release transports this listener to remote, unfamiliar landscapes. Tibbetts and his long-time collaborator, percussionist Marc Anderson, often discover the kernel of a new composition in a fragment of 'found sound' recorded during their travels. The exotic triptych "Three Letters," for instance, is informed by snippets of festivities recorded at a Hindu shrine at Parpen, Nepal. Says Tibbetts, "These little pieces of sound make you realize you're far from home."

Tibbetts has remarked that "Musicians may be overly sensitive to their environment." In a recent interview I asked if he and Anderson work consciously to evoke images of particular places in their music. He suggested that it tends rather to be "the sense of place [that] evokes a song."

Forced to categorize, he calls his work 'folk music.' "I am an untrained musician and a 'folk' as well." But not all of Tibbetts' recordings rely principally on the delicate voices of acoustic instruments. A previous release, Exploded View (1987; ECM 831-109),

is a stormy hour about which Tibbetts has remarked, "A lot of emotional upheaval and travelling created that record." Exploded View is remarkable for Claudia Schmidt's soaring soprano, but specially for Tibbetts' searing electric guitars that rage down through roiling clouds like Shiva, come to lay the world to waste.

So what is the big map idea? According to Anderson, titles are always an afterthought for the duo, and "Big Map Idea" was "a title of Steve's that in the end we both rejected." An ECM executive selected it from a list of prospective titles.

Meanwhile, Tibbetts and Anderson are embarked on a new exploration. Asked where his forthcoming music is headed, Tibbetts said, "I don't know. I don't want to know." Tibbetts' art springs from sensitivity to his instruments and surroundings, not from premeditation. "The sound of the guitar, just the noises get me excited about making music. The way a guitar feels when I play it ... " A plan or map can be a hindrance to the visceral appreciation of some landscapes. Yet Tibbetts does admit a fondness for cartography: "My favorite Christmas gift last year was a Times Atlas of the World."



Reprinted in Harper's Magazine, August 1990, from the Utne Reader

cartographic artifacts

NTIS BIBLIOGRAPHIES
Computer Aided Mapping
January 1987-April 1990, a bibliography from the NTIS Database.
National Technical Information
Service, 5285 Port Royal Road,
Springfield, Va. 22161. April 1990,
71p, supersedes PB89-861652.
PB90-8654486/WNR; price code
PC N01/MF N01.

This bibliography contains citations concerning theoretical aspects and applications of computer techniques in cartography. Topics include automatic mapping, discussions of databases, and computerized photomapping. Satellite image analysis and processing techniques, and descriptions of specific mapping projects are discussed. (This updated bibliography contains 137 citations, 34 of which are new entries to the previous edition.)

Geographic Information Systems (GIS) April 1971-March 1990, a bibliography from the NTIS Database. National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161. March 1990, 90p, supersedes PB89-854608. PB90-864182/WNR; price code: PC N01/MF N01.

This bibliography contains citations concerning theoretical aspects and applications of geographic information systems (GIS). Data Collection and organization methods, the use of artificial intelligence in photointerpretation, and program overviews are among the topics discussed. Considerable attention is given to descriptions of selected GIS projects. Citations pertaining specifically to computer aided mapping are excluded. (This updated bibliography contains 164 citations, 37 of which are new entries to the previous edition.)

1990 GIS SOURCEBOOK ANNOUNCED

GIS WORLD magazine will soon publish its second annual GIS Sourcebook. The sourcebook will contain extensive technical and price data on most GIS software. "Our first software survey, in 1988, compared thirty-five systems. The 1989 edition contained sixty-two systems, and the new survey to be published in this year's GIS Sourcebook will reach one hundred," said H. Dennison Parker, publisher.

In addition to GIS technical data, the GIS Sourcebook will have articles on GIS applications, consultant listings, data sources and firms and GIS educational opportunities. Its price is being held to a minimum. "Our primary objective is to provide useful information about GIS technology," said Parker, "and our advertisers are helping us do that by making a book like this available to virtually anyone." The book will sell for \$59.95 to GIS WORLD subscribers. \$119.95 to others. A 30 percent pre-publication discount off both prices is available until July 16. The book will be published and distributed worldwide in August. Contact: GIS World, Inc., P.O. Box 8090, Ft. Collins, CO, USA 80526 (303) 223-4848.

GUIDE TO CARTOGRAPHIC LITERATURE

Informational Sources in Cartography, edited by C.R. Perkins and R.B. Parry, June 1990, 540p., \$75. Designed for practitioners, academics, and map librarians, this new contribution to Saur's highly regarded Guide to Information Sources series covers information sources for cartography and related material. With contributions from thirty-four different authors, Information Sources in Cartography highlights the "best