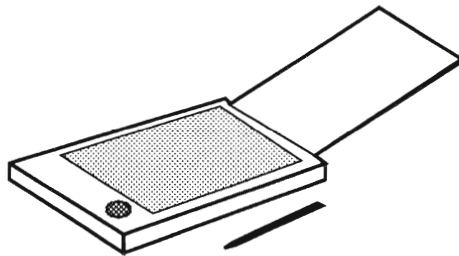


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CHANGING THE MEDIUM: THE POTENTIAL OF PEN- BASED COMPUTERS FOR MAP USE



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I. INTRODUCTION

Implicit goal of computerization in cartography was to match the graphic quality of hand-drawn maps.

The primary function of many microcomputer mapping programs is no longer the creation of maps on paper.

Animation has also been incorporated in the display of maps - a feature that cannot be duplicated with maps on paper.

Microcomputers are beginning to change the medium of cartography from paper to the screen of a computer.

Palm-top computers will accelerate this change by making this technology more accessible.

Computer technology has now the potential to restructure the human relationship with maps

- to not only change how maps are created but also how they are used.**

The challenge presented to cartographers by this technology is to further 're-define' how map information is presented to map users.

1.0 MAPS AND THE MEDIUM

Maps are an indispensable form of information display. They represent a vital 'link' between Man and the surrounding world.

It seems, however, that the map use process is not very effective. Some people avoid using maps entirely.

While the educational system may be blamed for not specifically teaching about maps or their use, maps themselves may be largely to blame.

Maps on paper are passive objects that often do not invite or encourage the potential map user.

2.0 THE MEDIUM IS THE MESSAGE

ALAN KAY: The computer is not a tool or an instrument but a medium.

McLuhan's main concern is with the pervasive effect of the medium.

By becoming overdisciplined by the closely ranked regiments of text, we have closed our minds to the wider possibilities of imaginative expression.

McLuhan argues that we live in a rear-view mirror society.

It is an exaggeration to claim that the medium is the message, the medium does exert an effect over and above that which is carried in the message itself.

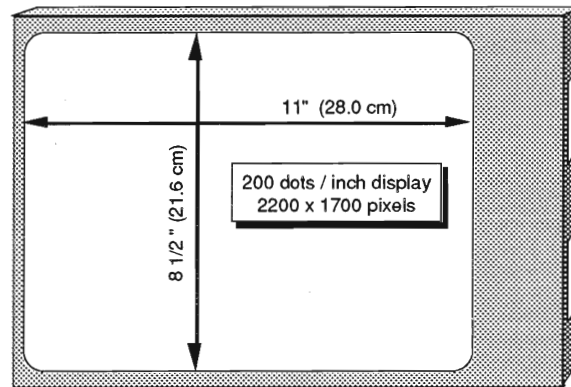
3.0 THE MEDIUM IN THE MAP

Cartography has developed within the limitations and possibilities of the paper medium. The way that we have learned to depict the world is to a large degree a product of this medium.

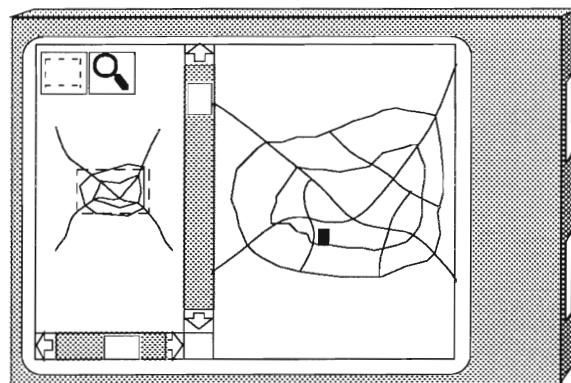
Each map embodies the medium of paper in that the cartographer has been controlled by centuries of experience with this medium.

The influence of paper upon cartography is so pervasive that it is difficult to conceive of a map form that is not influenced by this medium, even those displayed on the computer.

4.0 CONCLUSION: A NEW MEDIUM



‘Cartographic Zoom’



CONCLUSION

Muehrcke: “We must be willing to challenge all design assumptions associated with printed maps if we are to optimize the design of the new interactive map form.”

This will be especially true if palm-top computers are to be effectively incorporated for map use.

