Stereo pairs

Dear Editor:

In reference to the article "Stereo Alternating-Pair and Techniques for Display of Computer-Generated Images," by Larry Hodges and David McAllister (IEEE CG&A, Sept. 1985, pp.38-45): I understand that in stereo/alternating pairs of computer-generated landscapes, spherical coordinates centered on the viewers must be used, and the shift angle between the perspectives must be inversely proportional to the radial distance from the coordinate center to each one of the visible points. The points at the horizon, at infinity, do not shift, and the nearest visible points have the biggest shifts.

Also I think that the radial distance coordinate must define spherical shells separated by an exponentially increasing distance, where the visible points are located, so the same number of spherical shells contains the points from one meter to ten meters or from one kilometer to ten kilometers from the observer.

Sincerely,
Jaime Sotof
Electronics Engineer
ENAER Division, Electronica
Santiago, Chile

The authors reply:
There are many considerations which are important for proper computation and display of stereo pairs. The method suggested in the letter to the editor results in a three-dimensional image whose depth goes back into the display screen. This display method is usually preferred by stereo photographers. Our paper dealt primarily with the technologies available for computer-generated stereo display systems. We are currently working on a second paper, which will discuss heuristics and algorithms for display and generation of stereo pairs.

Larry F. Hodges and David F. McAllister
North Carolina State University

New reference

Dear Editor:

In the “Indexed Bibliography on Computer Animation,” by Nadia Magnenat-Thalmann and Daniel Thalmann, published in the July 1985 issue of IEEE Computer Graphics and Applications I noticed there was no mention of an article I authored with Gary Demos on supercomputer animation. This paper was originally published in the Proceedings of the IEEE. I wrote this with Gary’s cooperation when I was employed by Digital Productions.

I hope you find the article of interest. I look forward to your citing it in future publications of your bibliography.

Sincerely,
Maxine Brown
Maxine Brown Associates
Los Angeles, California

The authors reply:
We are sorry for the omission of this paper in our bibliography in the July issue of IEEE CG&A. We did not have the Proceedings when it was compiled. We have read the paper since then, and we found it an interesting and thorough discussion of digital scene simulation: the synergy of computer technology and human creativity.

Nadia Magnenat-Thalmann and Daniel Thalmann