
Subject: Object graphics polygons

Posted by [Steven Chetelat \(CS\)](#) on Fri, 14 Apr 2000 07:00:00 GMT

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Greetings, all. I'm slowly delving my way into object graphics, and I'm having some pretty serious problems with my lighting. Specifically, I have a set of polygons representing an isosurface of a solid. I generated them using shade_volume. In direct graphics, I used them as input to polyshade, like this:

```
shade_volume, new, .5,vert,poly, /low  
shade_volume, new, 1,lvert,lpoly, /low  
scale3, xrange=[0,xr], yrang=[0,yr], zrange=[0,zr],ax=xa,az=za  
tv,bytscl(polyshade(vert,poly,/t3d))+bytscl(polyshade(lvert, lpoly,/t3d))
```

I didn't specify any lighting. When I try to get a decent display of the polygons using object graphics like this:

```
shade_volume, full, .5,vert,poly, /low  
mopol = OBJ_NEW('IDLgrPolygon', vert, polygons = poly)  
mopol -> SetProperty, XCOORD_CONV=[-1.0, 1.0/170.0]  
mopol -> SetProperty, YCOORD_CONV=[-1.0, 1.0/79.0]  
mopol -> SetProperty, ZCOORD_CONV=[-1.0, 1.0/49.0]  
mywindow = OBJ_NEW('IDLgrWindow', DIMENSIONS=[340,158])  
myview = OBJ_NEW('IDLgrView', VIEWPLANE_RECT=[-1,-1,1,1], ZCLIP=[1,-1])  
mymodel = OBJ_NEW('IDLgrModel')  
myview -> Add, mymodel  
mymodel -> Add, mopol  
mywindow -> Draw, myview
```

The view completely lacks definition. When I add lights, very small sections light up, but I can't seem to position the lights to illuminate the whole object. How can I reproduce the lighting model used by polyshade in direct graphics, or at least get enough intensity out of light objects to suit my purposes?

K-Bye,
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