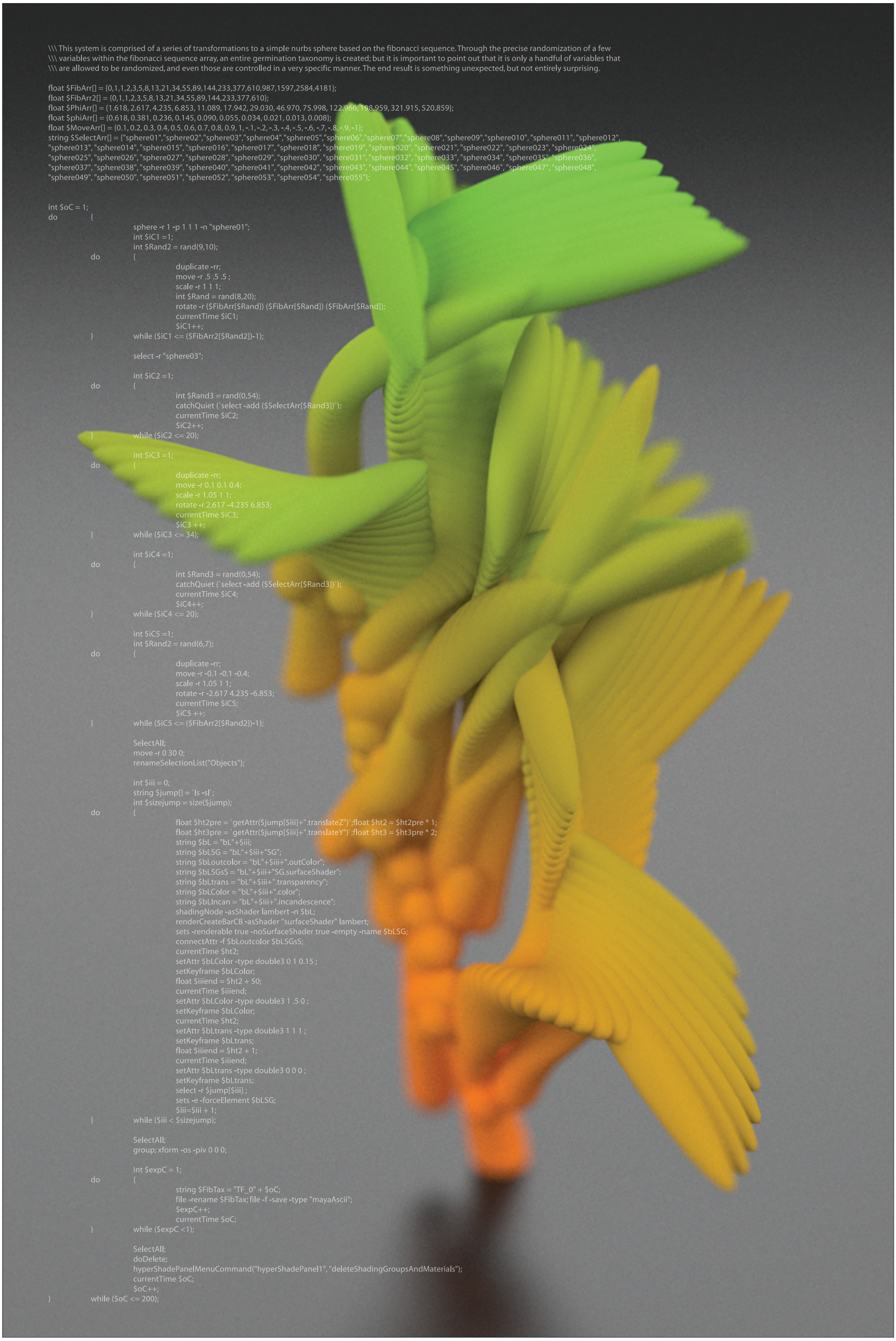

```
\\\ This system is comprised of a series of transformations to a simple nurbs sphere based on the fibonacci sequence. Through the precise randomization of a few
\\\ variables within the fibonacci sequence array, an entire germination taxonomy is created; but it is important to point out that it is only a handful of variables that
\\\ are allowed to be randomized, and even those are controlled in a very specific manner. The end result is something unexpected, but not entirely surprising.

float $FibArr[] = {0,1,1,2,3,5,8,13,21,34,55,89,144,233,377,610,987,1597,2584,4181};
float $FibArr2[] = {0,1,1,2,3,5,8,13,21,34,55,89,144,233,377,610};
float $PhiArr[] = {1.618, 2.617, 4.235, 6.853, 11.089, 17.942, 29.030, 46.970, 75.998, 122.966, 198.959, 321.915, 520.859};
float $phiArr[] = {0.618, 0.381, 0.236, 0.145, 0.090, 0.055, 0.034, 0.021, 0.013, 0.008};
float $MoveArr[] = {0.1, 0.2, 0.3, 0.4, 0.5, 0.6, 0.7, 0.8, 0.9, 1, -.1, -.2, -.3, -.4, -.5, -.6, -.7, -.8, -.9, -1};
string $SelectArr[] = {"sphere01","sphere02","sphere03","sphere04","sphere05","sphere06","sphere07","sphere08","sphere09","sphere010", "sphere011", "sphere012",
"sphere013", "sphere014", "sphere015", "sphere016", "sphere017", "sphere018", "sphere019", "sphere020", "sphere021", "sphere022", "sphere023", "sphere024",
"sphere025", "sphere026", "sphere027", "sphere028", "sphere029", "sphere030", "sphere031", "sphere032", "sphere033", "sphere034", "sphere035", "sphere036",
"sphere037", "sphere038", "sphere039", "sphere040", "sphere041", "sphere042", "sphere043", "sphere044", "sphere045", "sphere046", "sphere047", "sphere048",
"sphere049", "sphere050", "sphere051", "sphere052", "sphere053", "sphere054", "sphere055"};


int $oC = 1;
do              {
                        sphere -r 1 -p 1 1 1 -n "sphere01";
                        int $iC1 =1;
                        int $Rand2 = rand(9,10);
                do      {
                                duplicate -rr;
                                move -r .5 .5 .5 ;
                                scale -r 1 1 1;
                                int $Rand = rand(8,20);
                                rotate -r ($FibArr[$Rand]) ($FibArr[$Rand]) ($FibArr[$Rand]);
                                currentTime $iC1;
                                $iC1++;
                }               while ($iC1 <= ($FibArr2[$Rand2])-1);

                        select -r "sphere03";

                        int $iC2 =1;
                do      {
                                int $Rand3 = rand(0,54);
                                catchQuiet (`select -add ($SelectArr[$Rand3])`);
                                currentTime $iC2;
                                $iC2++;
                }               while ($iC2 <= 20);

                        int $iC3 =1;
                do      {
                                duplicate -rr;
                                move -r 0.1 0.1 0.4;
                                scale -r 1.05 1 1;
                                rotate -r 2.617 -4.235 6.853;
                                currentTime $iC3;
                                $iC3 ++;
                }               while ($iC3 <= 34);

                        int $iC4 =1;
                do      {
                                int $Rand3 = rand(0,54);
                                catchQuiet (`select -add ($SelectArr[$Rand3])`);
                                currentTime $iC4;
                                $iC4++;
                }               while ($iC4 <= 20);

                        int $iC5 =1;
                        int $Rand2 = rand(6,7);
                do      {
                                duplicate -rr;
                                move -r -0.1 -0.1 -0.4;
                                scale -r 1.05 1 1;
                                rotate -r -2.617 4.235 -6.853;
                                currentTime $iC5;
                                $iC5 ++;
                }               while ($iC5 <= ($FibArr2[$Rand2])-1);

                        SelectAll;
                        move -r 0 30 0;
                        renameSelectionList("Objects");

                        int $iii = 0;
                        string $jump[] = `ls -sl`;
                        int $sizejump = size($jump);
                do      {
                                float $ht2pre = `getAttr($jump[$iii]+".translateZ")`;float $ht2 = $ht2pre * 1;
                                float $ht3pre = `getAttr($jump[$iii]+".translateY")`;float $ht3 = $ht3pre * 2;
                                string $bL = "bL"+$iii;
                                string $bLSG = "bL"+$iii+"SG";
                                string $bLoutcolor = "bL"+$iii+".outColor";
                                string $bLSGsS = "bL"+$iii+"SG.surfaceShader";
                                string $bLtrans = "bL"+$iii+".transparency";
                                string $bLColor = "bL"+$iii+".color";
                                string $bLIncan = "bL"+$iii+".incandescence";
                                shadingNode -asShader lambert -n $bL;
                                renderCreateBarCB -asShader "surfaceShader" lambert;
                                sets -renderable true -noSurfaceShader true -empty -name $bLSG;
                                connectAttr -f $bLoutcolor $bLSGsS;
                                currentTime $ht2;
                                setAttr $bLColor -type double3 0 1 0.15 ;
                                setKeyframe $bLColor;
                                float $iiiend = $ht2 + 50;
                                currentTime $iiiend;
                                setAttr $bLColor -type double3 1 .5 0 ;
                                setKeyframe $bLColor;
                                currentTime $ht2;
                                setAttr $bLtrans -type double3 1 1 1 ;
                                setKeyframe $bLtrans;
                                float $iiiend = $ht2 + 1;
                                currentTime $iiiend;
                                setAttr $bLtrans -type double3 0 0 0 ;
                                setKeyframe $bLtrans;
                                select -r $jump[$iii] ;
                                sets -e -forceElement $bLSG;
                                $iii=$iii + 1;
                }               while ($iii < $sizejump);

                        SelectAll;
                        group; xform -os -piv 0 0 0;

                        int $expC = 1;
                do      {
                                string $FibTax = "TF_0" + $oC;
                                file -rename $FibTax; file -f -save -type "mayaAscii";
                                $expC++;
                                currentTime $oC;
                }               while ($expC <1);

                        SelectAll;
                        doDelete;
                        hyperShadePanelMenuCommand("hyperShadePanel1", "deleteShadingGroupsAndMaterials");
                        currentTime $oC;
                        $oC++;
}               while ($oC <= 200);
```

Generative Scripting [Fall 2008] Instructor [Nicholas Pisca] Designer [Benjamin Rice]