The Person

Concordia Amalie Dietrich is a German biologist. She focused on areas such as Australia, natural history, zoology, botany, and plant hunting.

She spent a decade on the "Fifth Continent" – Australia. At the time known as the British colony New Holland, she collected plants, animals, ethnographic objects, human skulls, and skeletons for the Godeffroy Museum.

Amalie Dietrich was, after Maria Sibylla Merian, the most significant female naturalist and scientific explorer in Germany.

The collection of botanical and zoological materials that Amalie Dietrich gathered during her stay in Australia is considered the largest ever compiled by a single individual.

She discovered nearly 640 plant species.

The Project

The floral facade is an artistic, three-dimensional design of the exterior wall of the UN building. The "reliefs" (=trees, arches) create an impressive texture and give the building depth.

The trees are represented in an abstract form, symmetrically and harmoniously. The "tree" becomes thinner towards the top. The arches are doubly symmetrical and equipped with a canopy.

The interplay of light and shadow on the relief surface creates dynamic effects that further emphasize the floral forms. The facade seems to "breathe" and come to life, as the relief generates different visual impressions depending on the time of day and light conditions.

The Code

```
def makeStamm(level=0):
    global lastVals
    #print lastVals, ">>",
    sX = lastVals[-1][0]#+ random.randint(-level, level)
    eX = lastVals[-1][0]+int(random.randint(-level,
level)*0.7) ### "breite baumKrone"
    hX = lastVals[-1][1] + levels[-1-level] - 5+level*1 +
random.randint(-0,0)
    if sX < 1: sX=0
    if eX < 1: eX=0
    if sX > 20: sX=21
    if eX > 20: eX=21
    if hX > 78: hX=78
    p0 = gC( sX, 0, h=lastVals[-1][1])
    p1 = gC( eX, 0, h=hX)
    #rs.AddLine( p0, p1)
    allCoords.append( p1 )
    lastVals.append([eX, hX])
    #print lastVals
    #rs.AddPoint( p0 )


##Baum
#lastVals = [[random.randint(4,17),0]]
a=3
#for b in range(a, 22-a, a+1): ### Anzahl Baeume
halbeHoehe = gC( 0, 0, 39)[2]
print "HalbeHoehe:", halbeHoehe
baeumeStart = [9,12]
for b in baeumeStart: ### Anzahl Baeume
    for x in range(25): ## Veraestelung
        lastVals = [[b, random.randint(0,2)]]
        allCoords = [ gC( lastVals[-1][0], 0, h=0) ]
        #allCoords = []
        for lev in range(8): ## Hoehe
            makeStamm(level=levels[lev])
        allCoords = [ rs.VectorAdd(cor,
rs.VectorScale(dVec,
random.uniform(dm.reMap(cor[2], 0, 62, -2,-12), 0)))
for cor in allCoords ]
        #Relief in Staerke
        allCoords = [ rs.VectorAdd(cor,
rs.VectorScale(lVec, random.uniform(-1,1))) for cor in
allCoords ] #Relief in Breite
        crv = rs.AddCurve( allCoords, 1 )
        rs.ObjectName( crv, "Baum_unten")
        exploded = rs.ExplodeCurves( [crv],
delete_input=1 )
        rs.ObjectName( exploded, "Baum_unten")
```