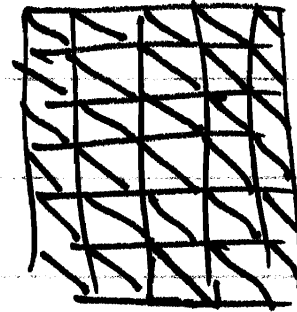


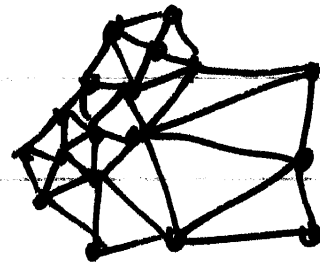
Terrain Grid (Raster)



DEM / DSM
DTM

29-1

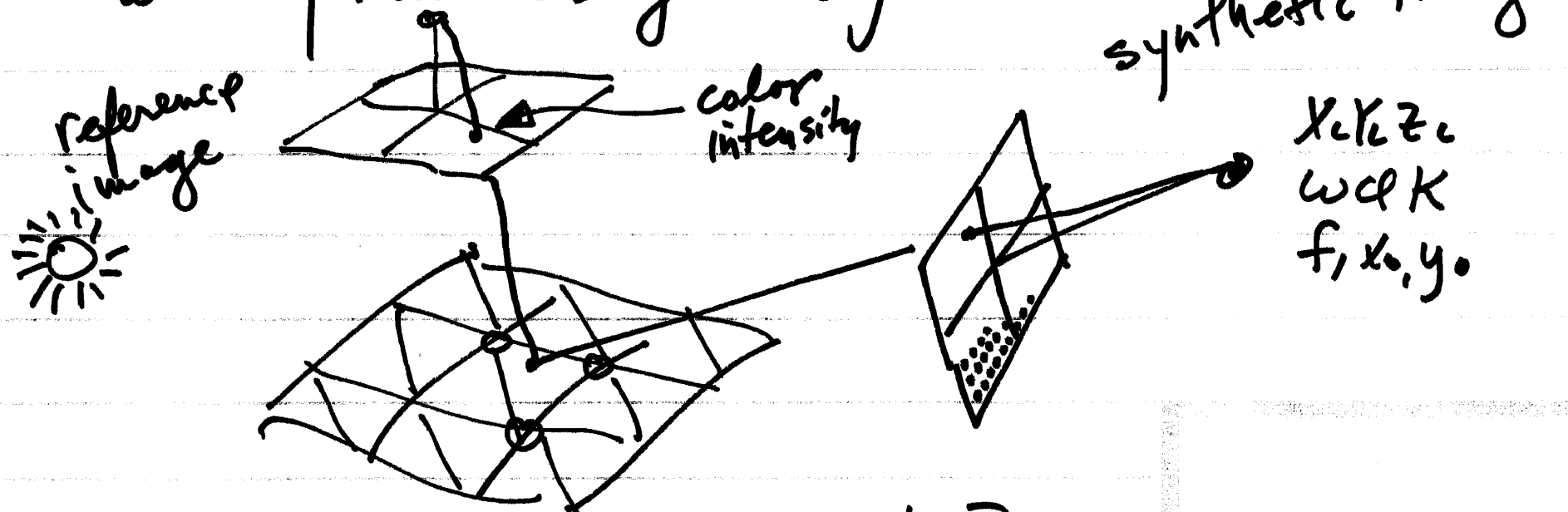
Irregular Sampling



TIN
triangulated
irregular
network

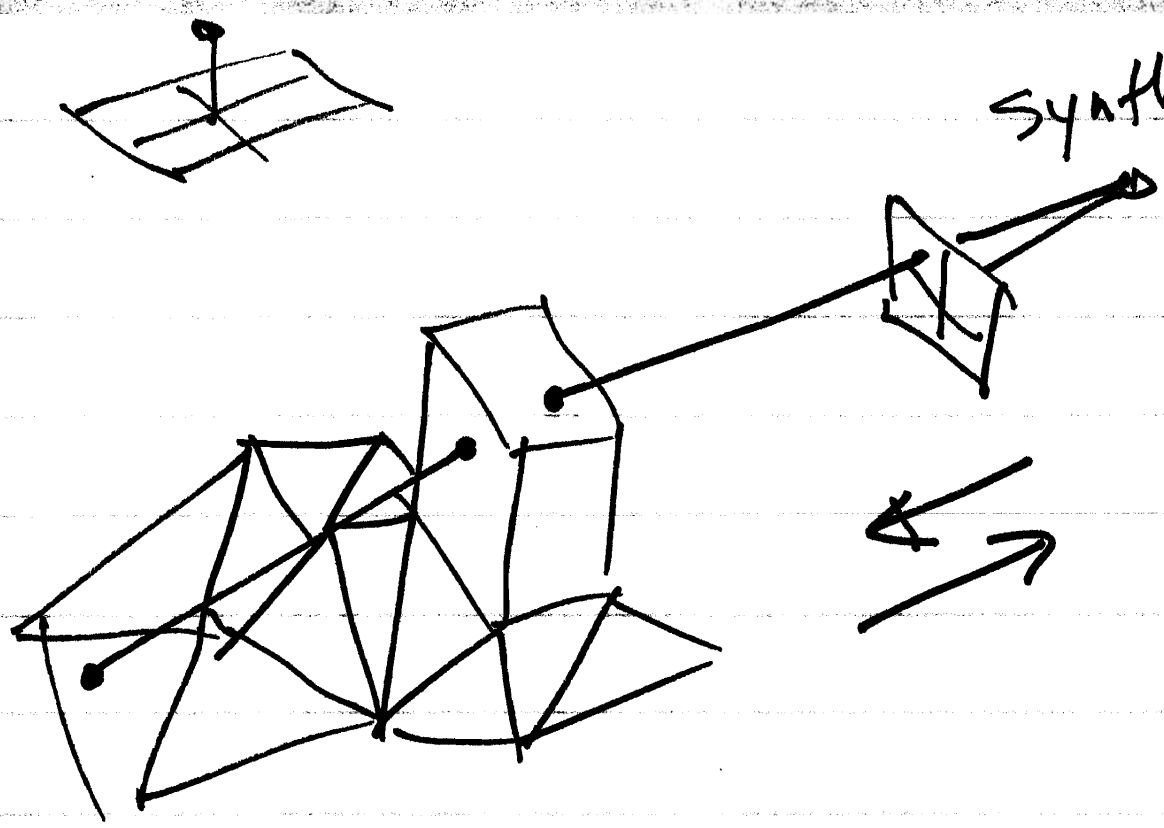
Visualization = { image synthesis
synthetic image generation

already have 3D geometry



where obtain intensity for a point?

1. illumination model, color
2. from existing reference photographs



synthetic image

ray trace

$$\begin{pmatrix} x' \\ y' \\ -f \end{pmatrix} = \lambda M \begin{pmatrix} x - x_c \\ y - y_c \\ z - z_c \end{pmatrix}$$

z-buffer \leftarrow $\begin{pmatrix} u \\ v \\ w \end{pmatrix}$

z-buffer : when you compute an intensity for given image point - only store it if $z_{new} < z_{existing}$