

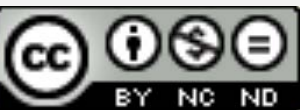
# The Computer Graphics Process and the Graphics Pipeline



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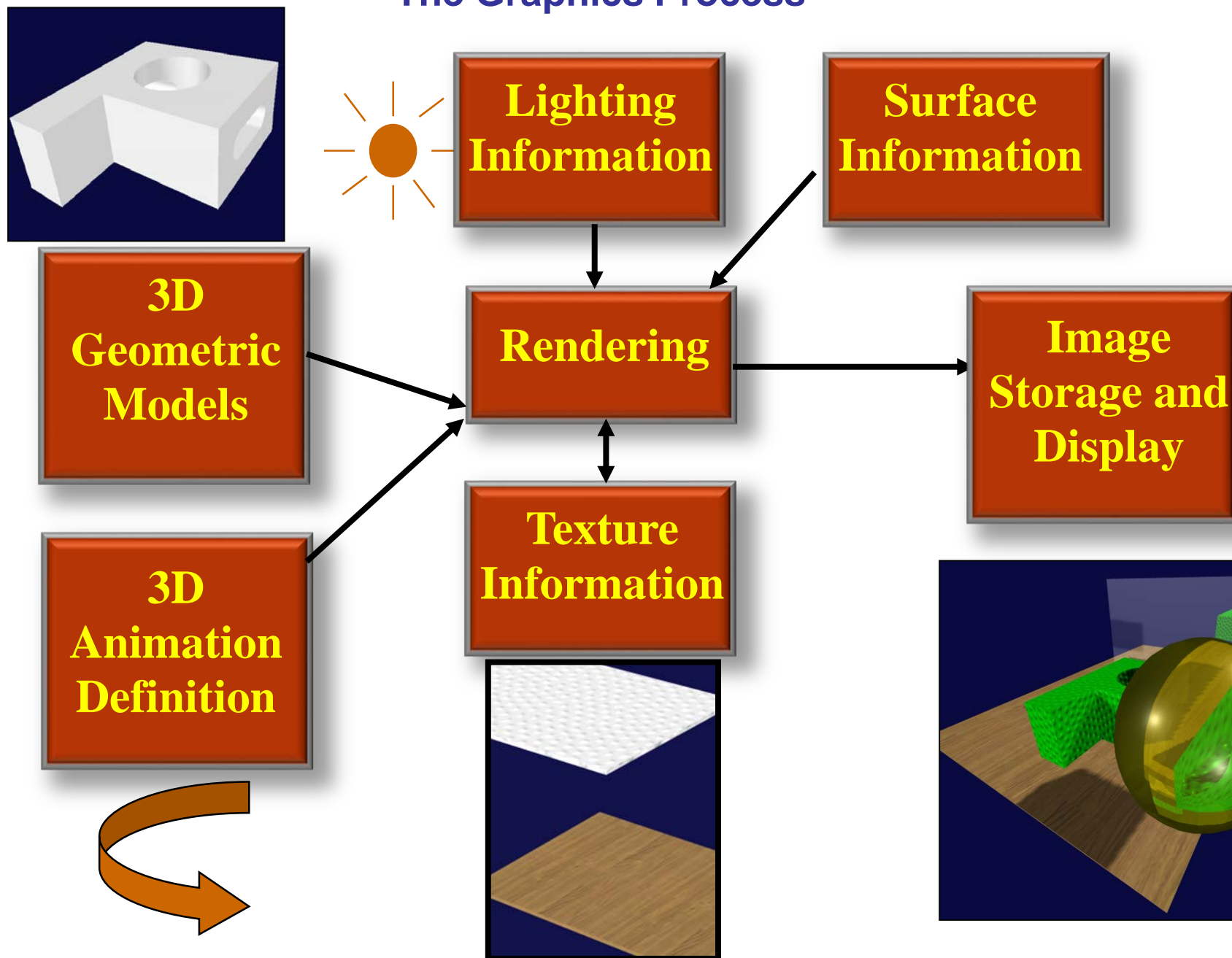
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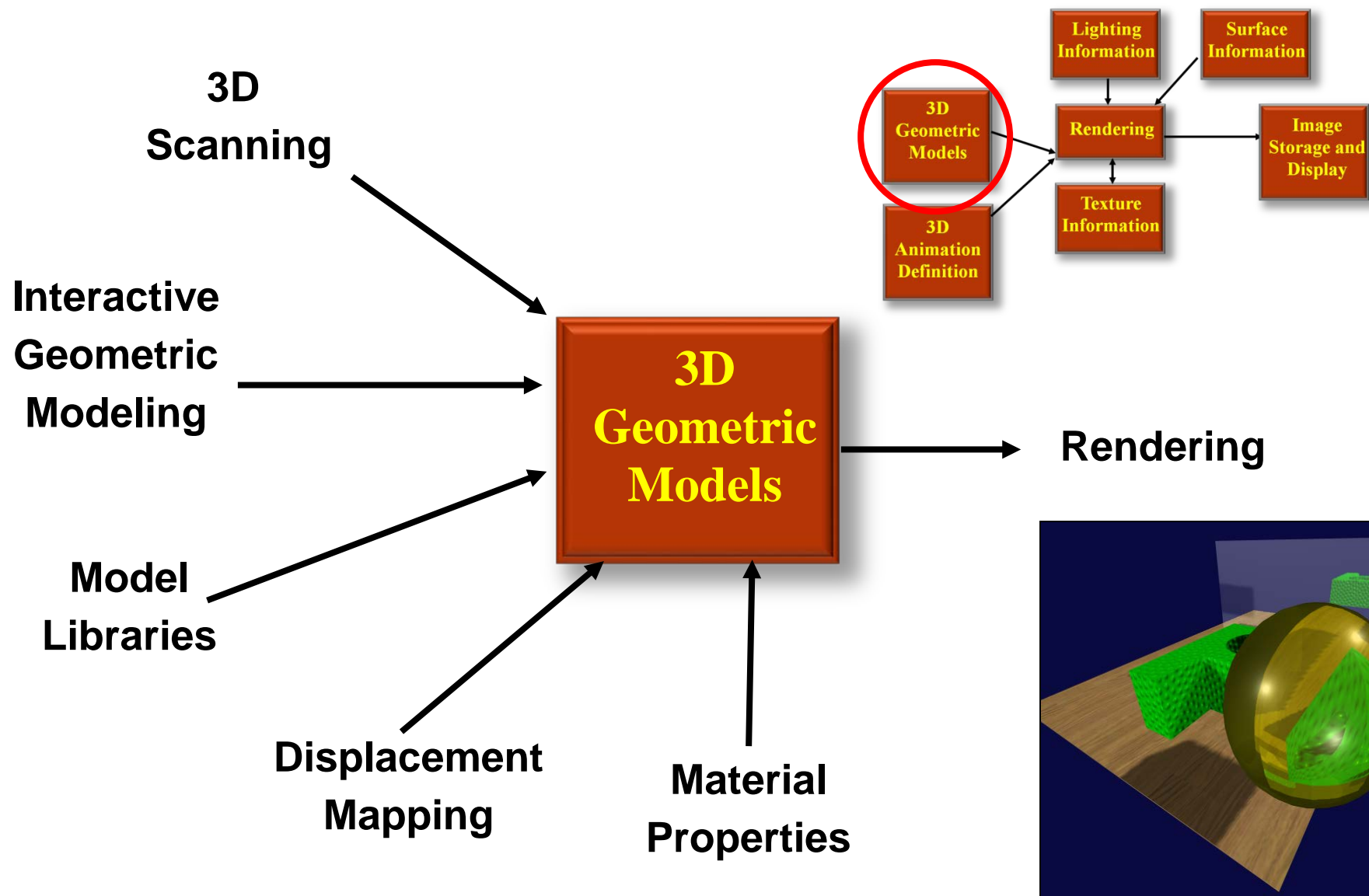
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University

Computer Graphics

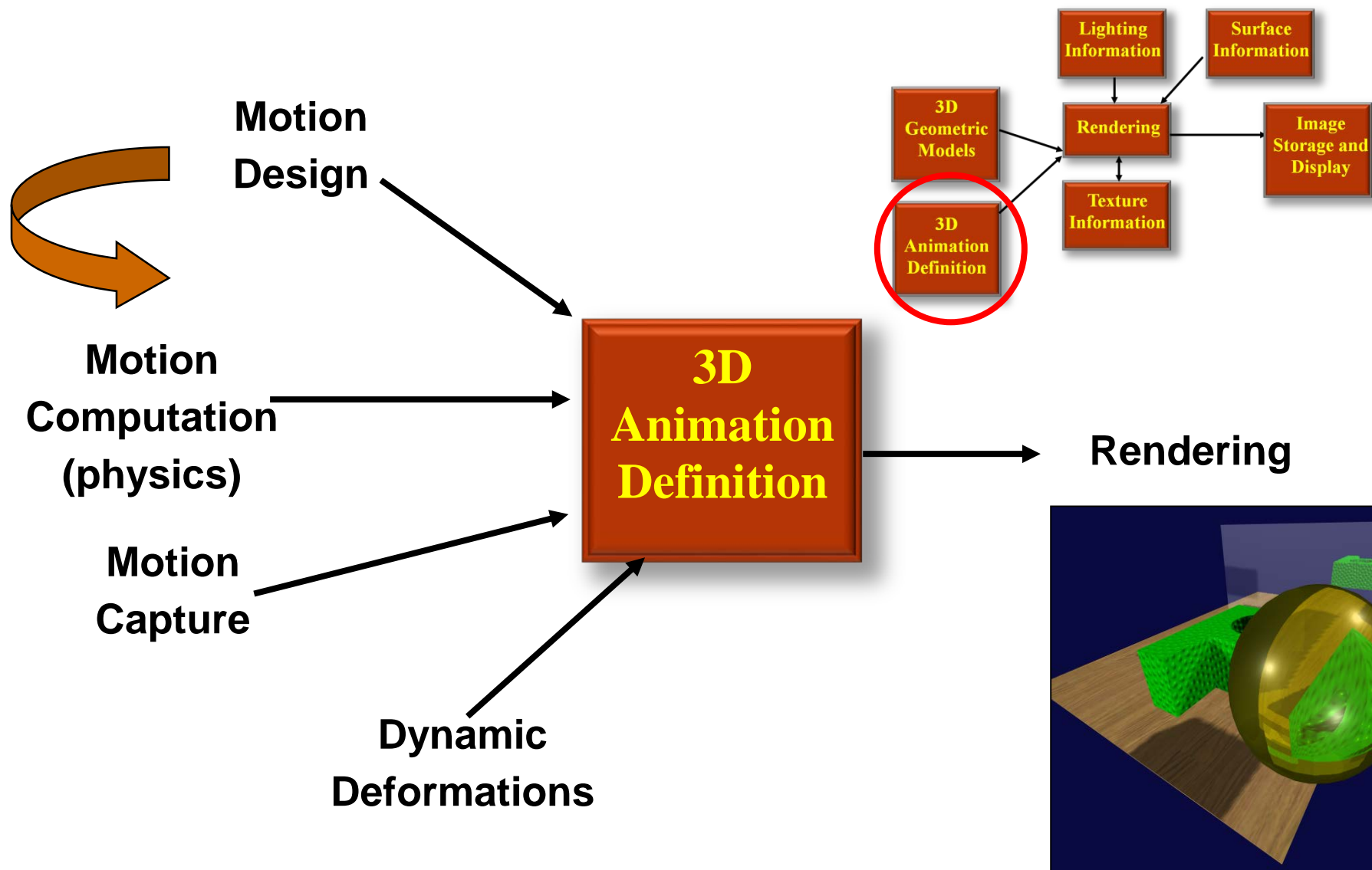
## The Graphics Process



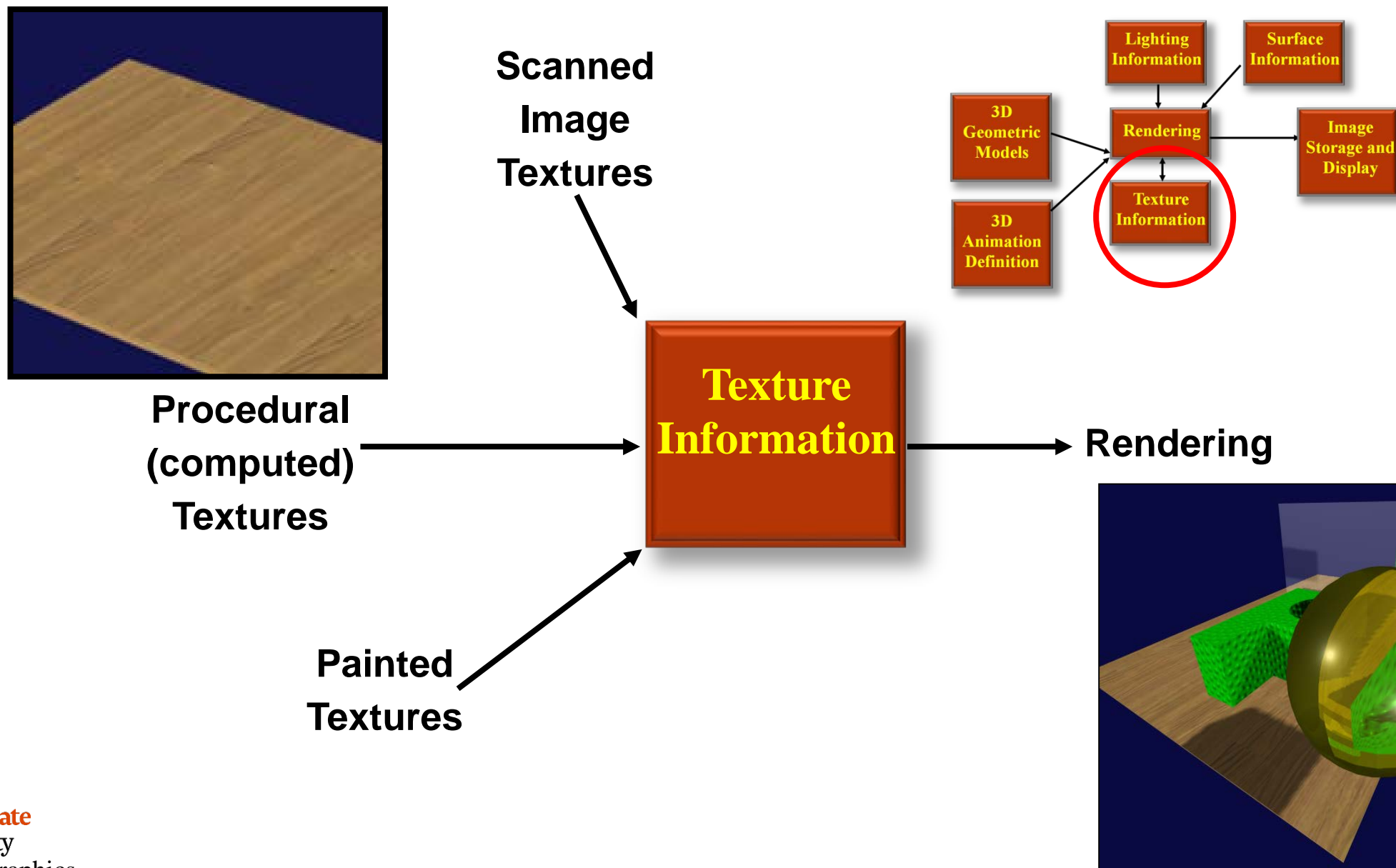
## The Graphics Process: Geometric Modeling



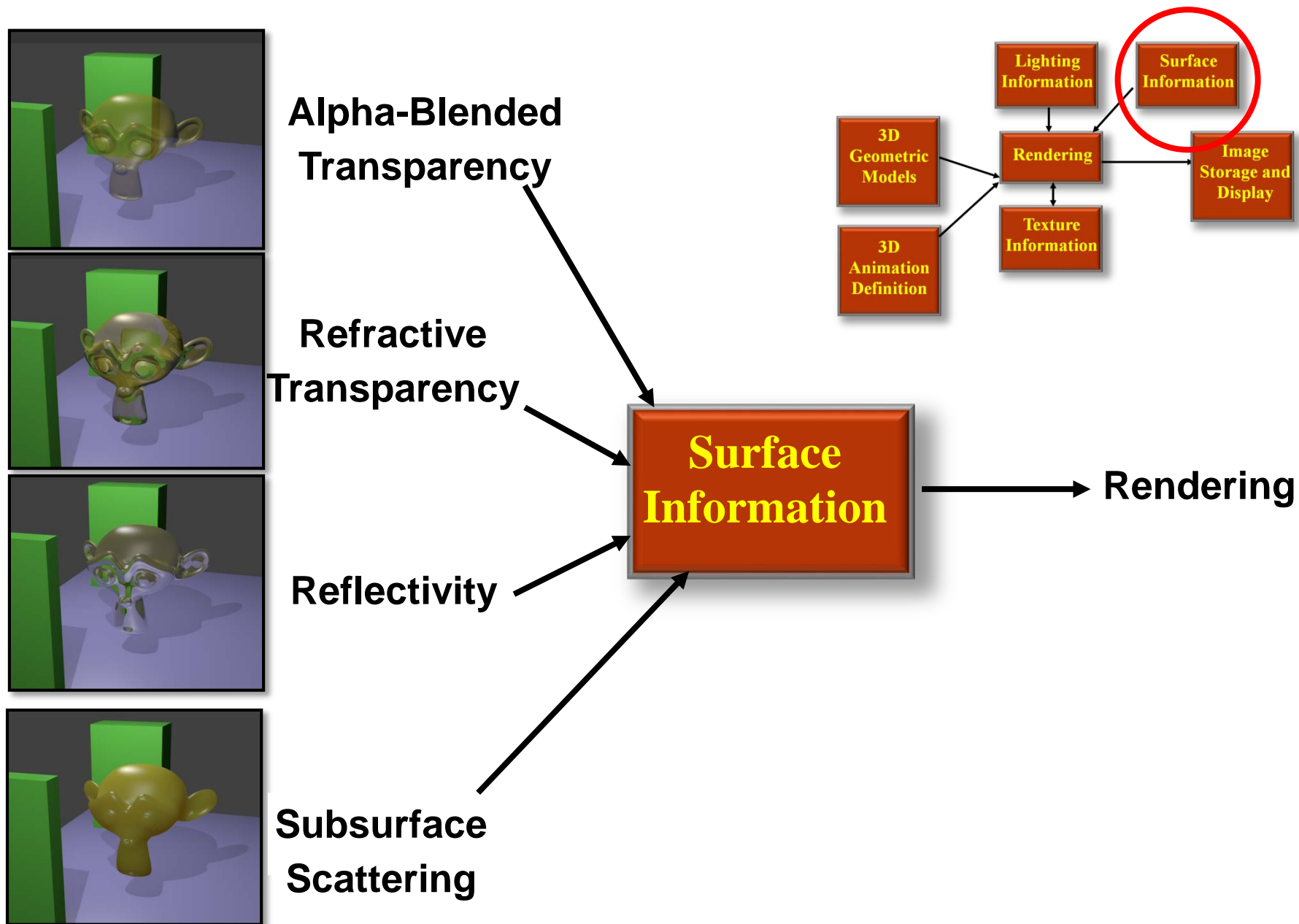
## The Graphics Process: 3D Animation



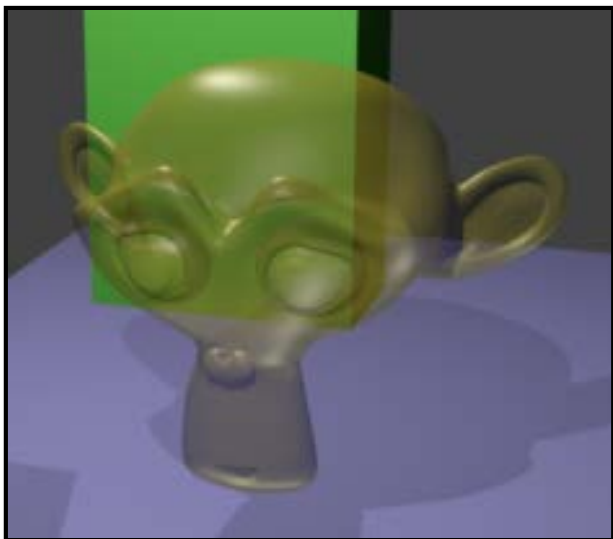
## The Graphics Process: Texturing



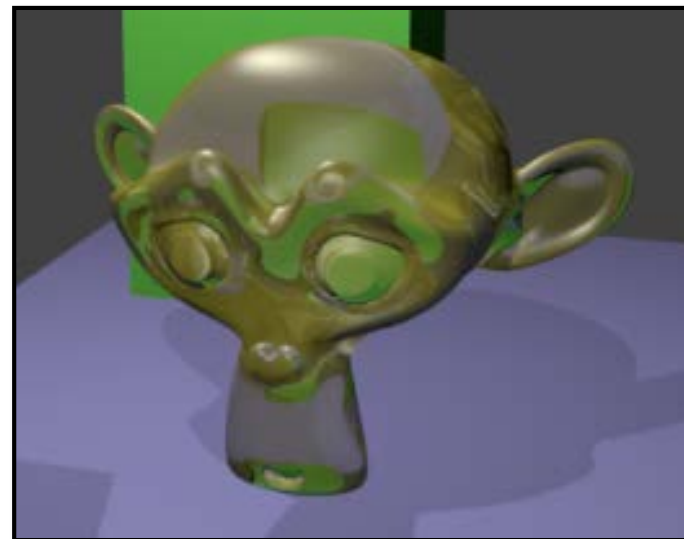
# The Graphics Process: Surface Information



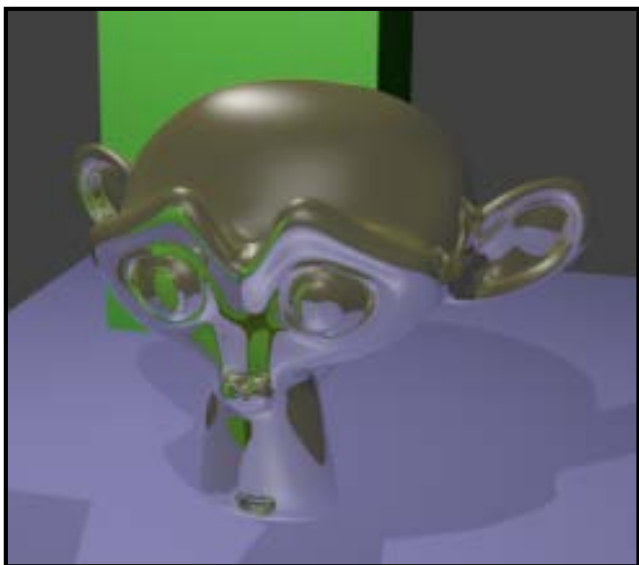
## The Graphics Process: Surface Information



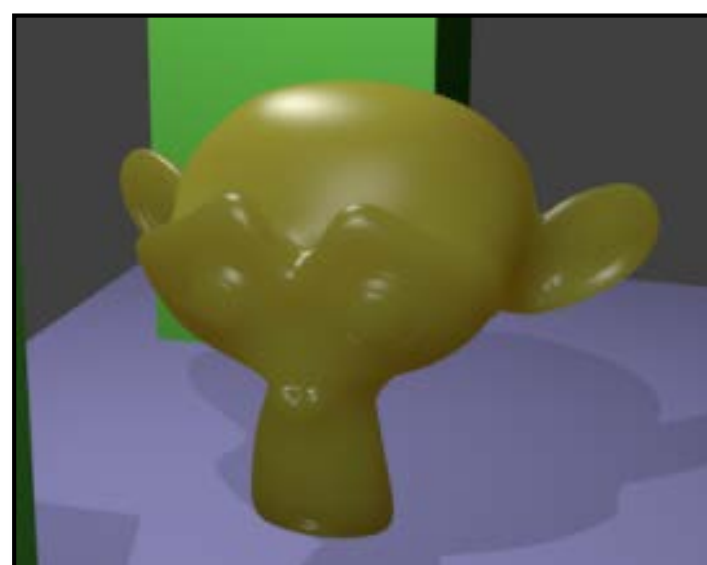
**Alpha-Blended Transparency**



**Refractive Transparency**



**Reflectivity**



**Subsurface Scattering**





## The Graphics Process: Lighting

**Lighting  
Types**  
(point, directional, spot, ...)

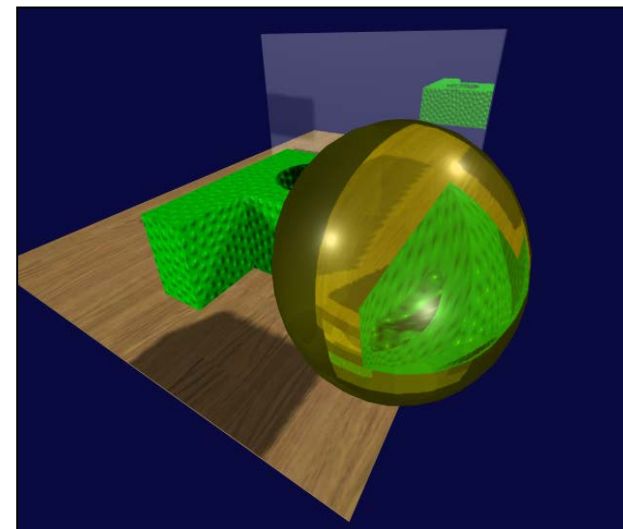
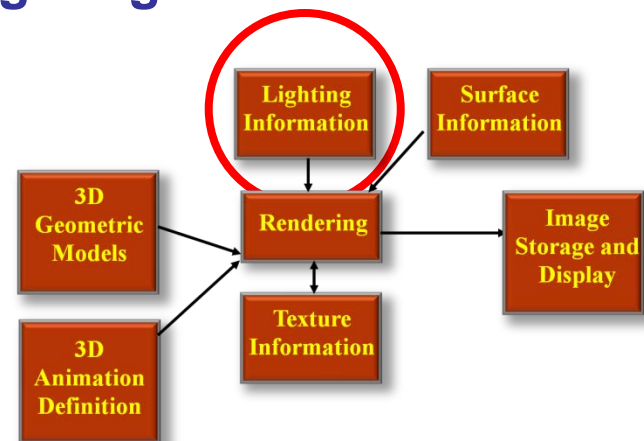
**Light  
Positions**

**Light  
Colors**

**Light  
Intensities**

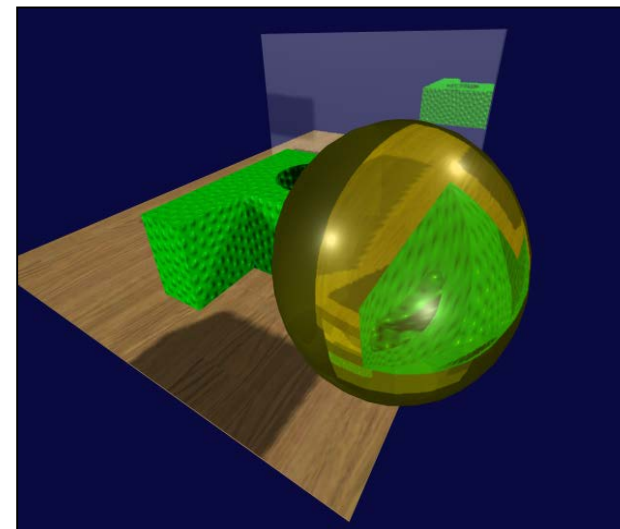
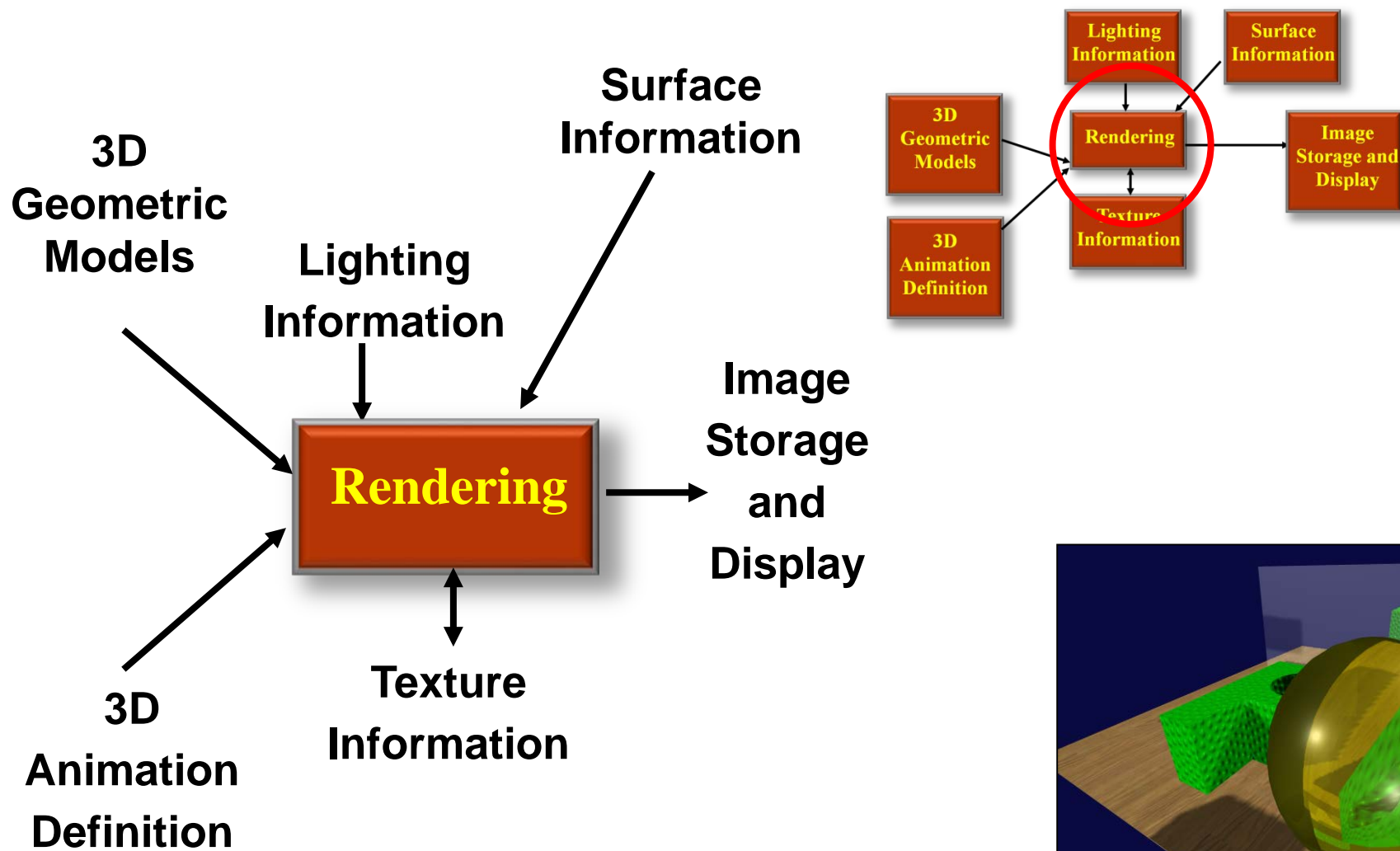
**Lighting  
Information**

**Rendering**

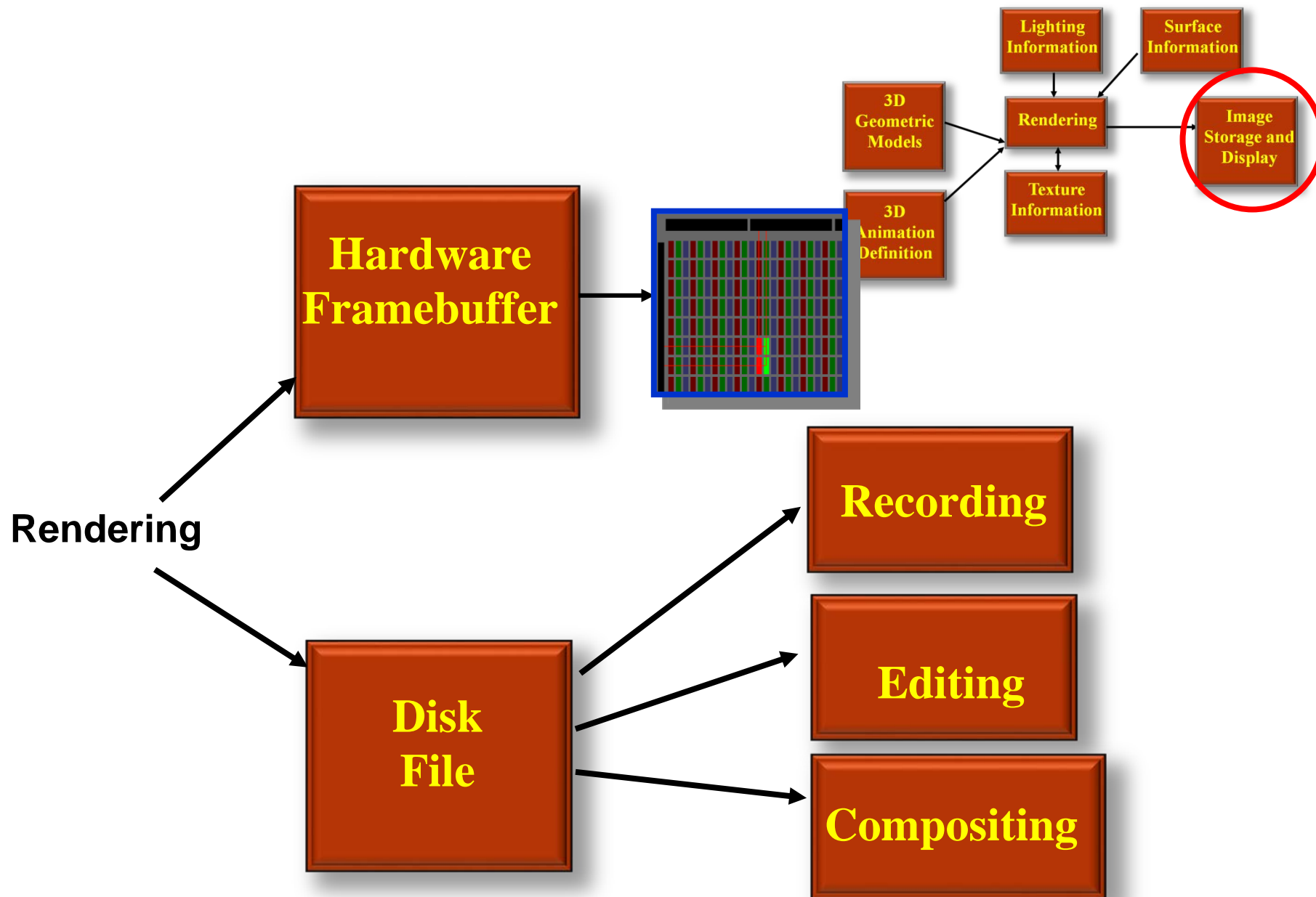




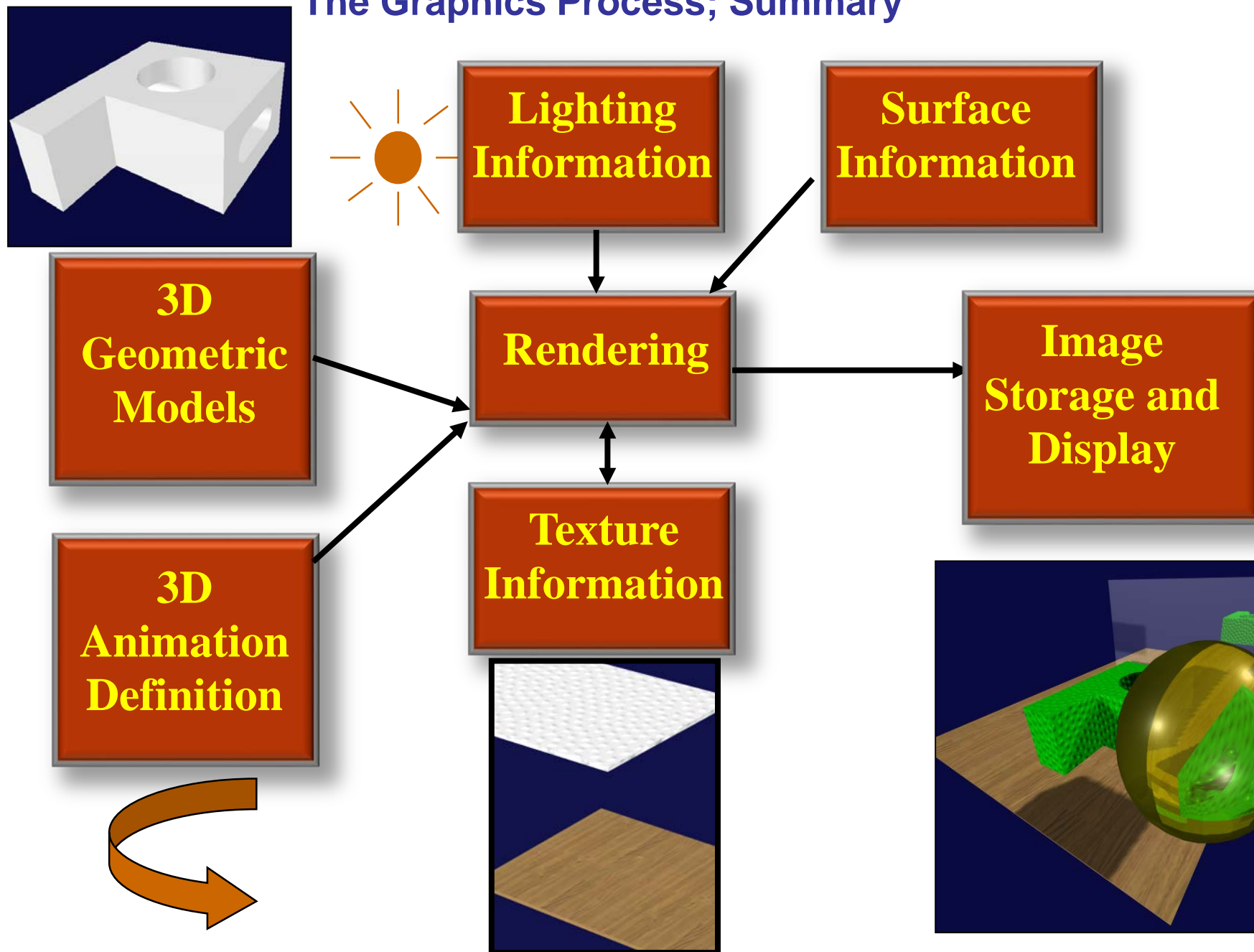
# The Graphics Process: Rendering



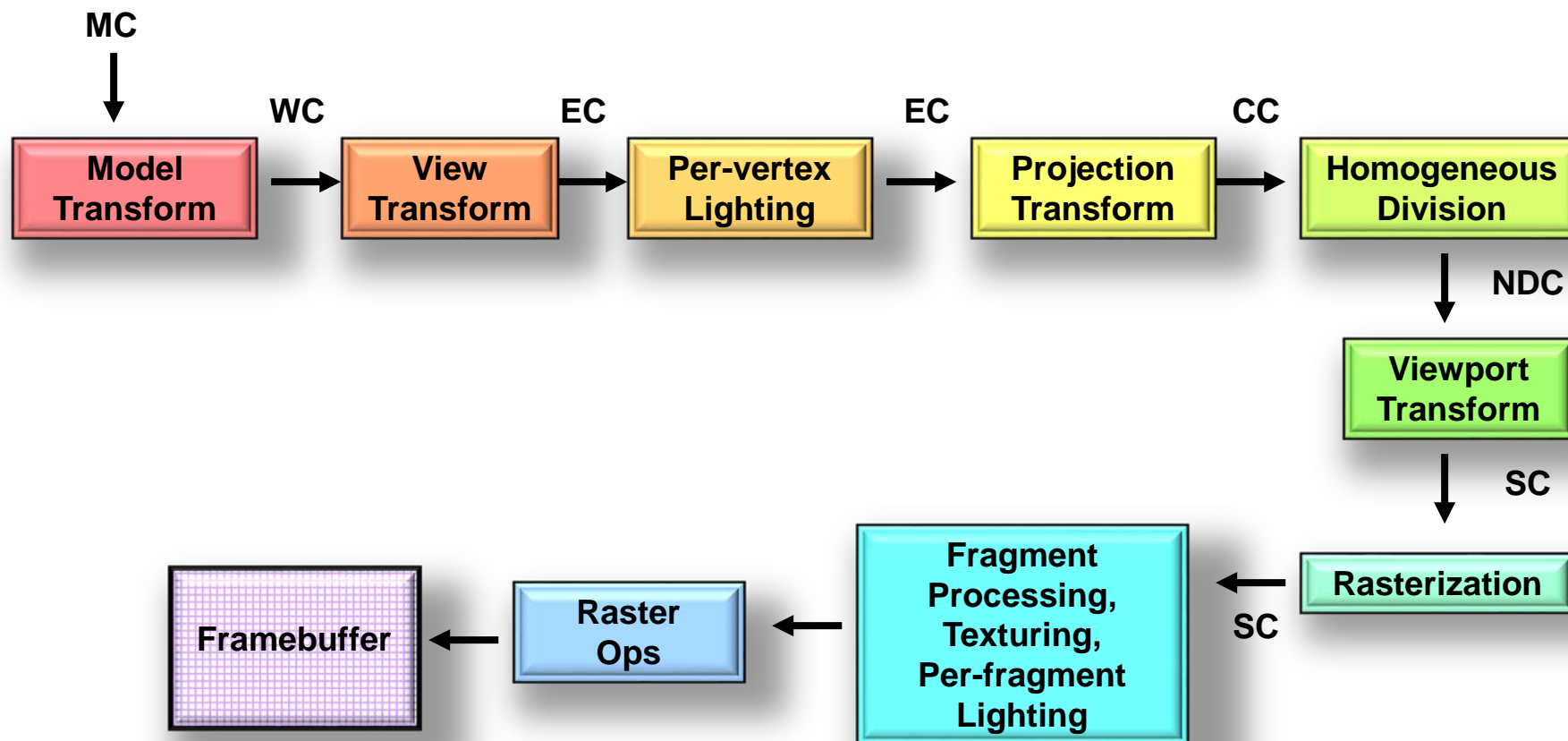
## The Graphics Process: Image Storage and Display



## The Graphics Process; Summary



# The Basic Computer Graphics Pipeline



MC = Model Coordinates  
WC = World Coordinates  
EC = Eye Coordinates  
CC = Clip Coordinates  
NDC = Normalized Device Coordinates  
SC = Screen Coordinates

