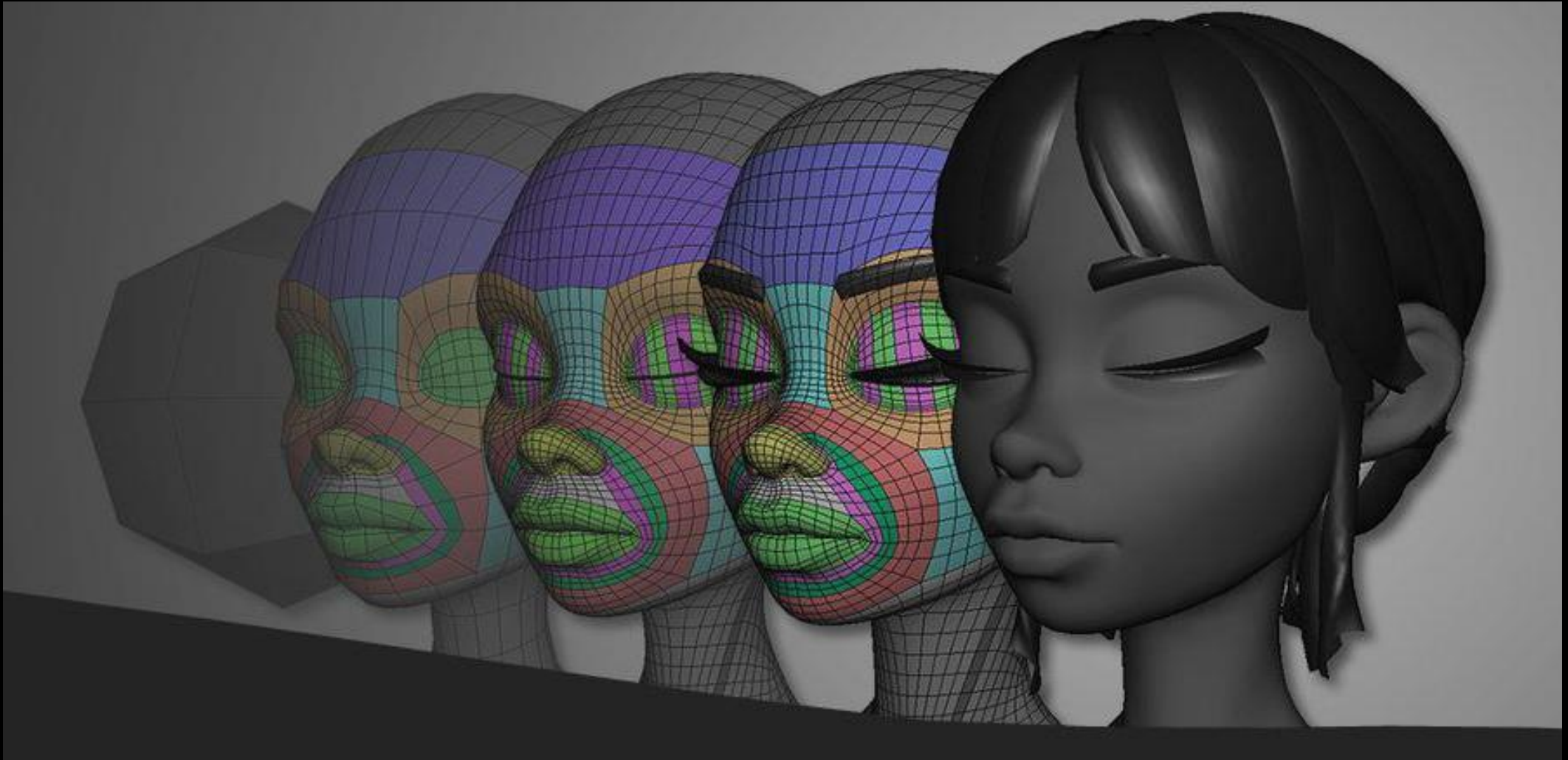
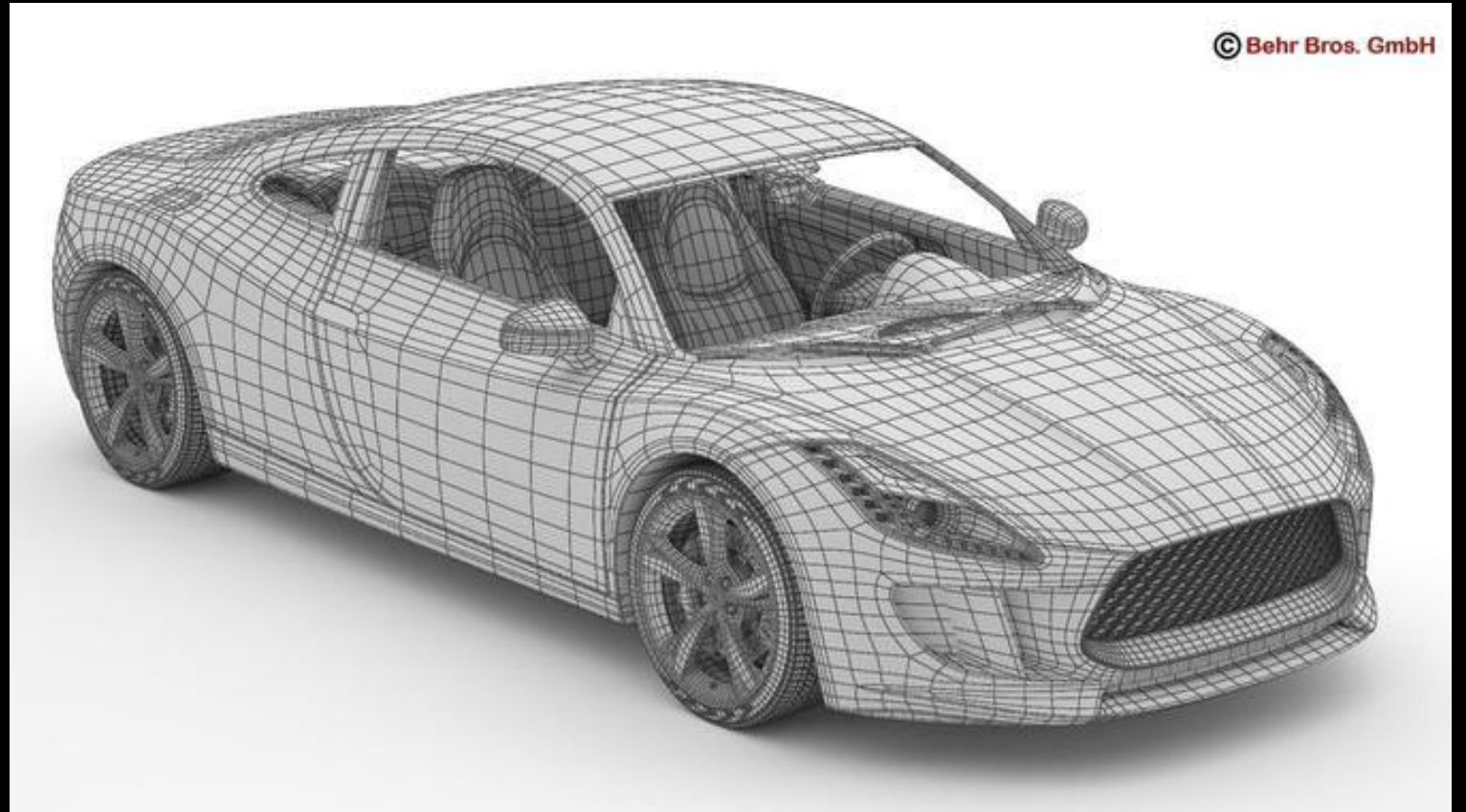


# 3D Graphics



# Overview of Computer Graphics

- Modeling
  - Camera creation
  - Meshes
  - Parametric surfaces
  - Implicit surfaces
  - Etc.



# Overview of Computer Graphics

- Animation

- Keyframing
- Articulated models
- Deformable models
- Particles
- Collisions
- Etc.



# Overview of Computer Graphics

- Rendering
  - 3D scene to image
  - Local lighting
  - Materials
  - Textures & details
  - Etc.



# Overview of Computer Graphics

- Practicals

- OpenGL library
- Real-time rendering
- GPU programming
- GLSL language



```
void main()
{
    vec4 texel = texture
    vec4 final_color = t

    vec3 N = normalize(n
    vec3 L = normalize(l
```

GLSL