# Developing Graphics Frameworks with Java and OpenGL



Part 10: Animation and Color

### **Animation with Uniform Variables**

 Uniform values can be changed efficiently between (but not during) draw calls to create animated effects and interactive programs

Usually want to reset/clear color buffer between draw calls:

glClear( bufferConstant )
Resets all values in the output buffers specified by bufferConstant (values such as GL\_COLOR\_BUFFER\_BIT).

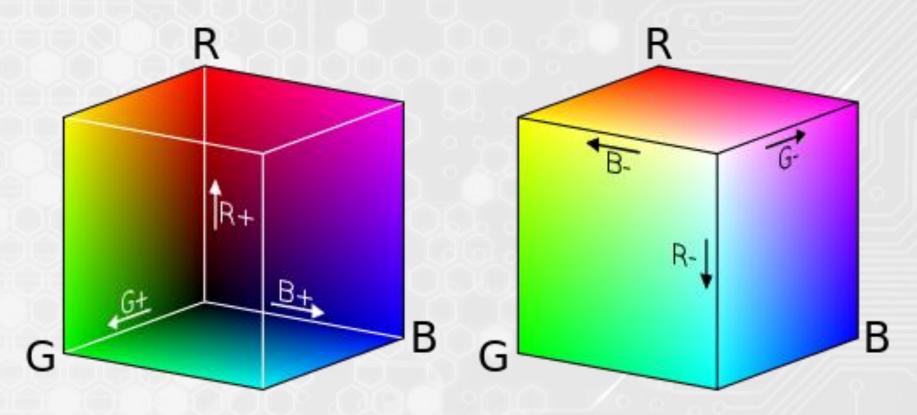
### **Animation: Relative vs Absolute**

 Relative: change values of an attribute (position, color) based on current value

Absolute: set values of an attribute based on time/functions

### Color Models: RGB

• Often use RGB (Red, Green, Blue) to specify a color



• Other specifications are possible (and sometimes more convenient)

## **Color Models: HSV**

• HSV: Hue, Saturation, Value (Brightness)

