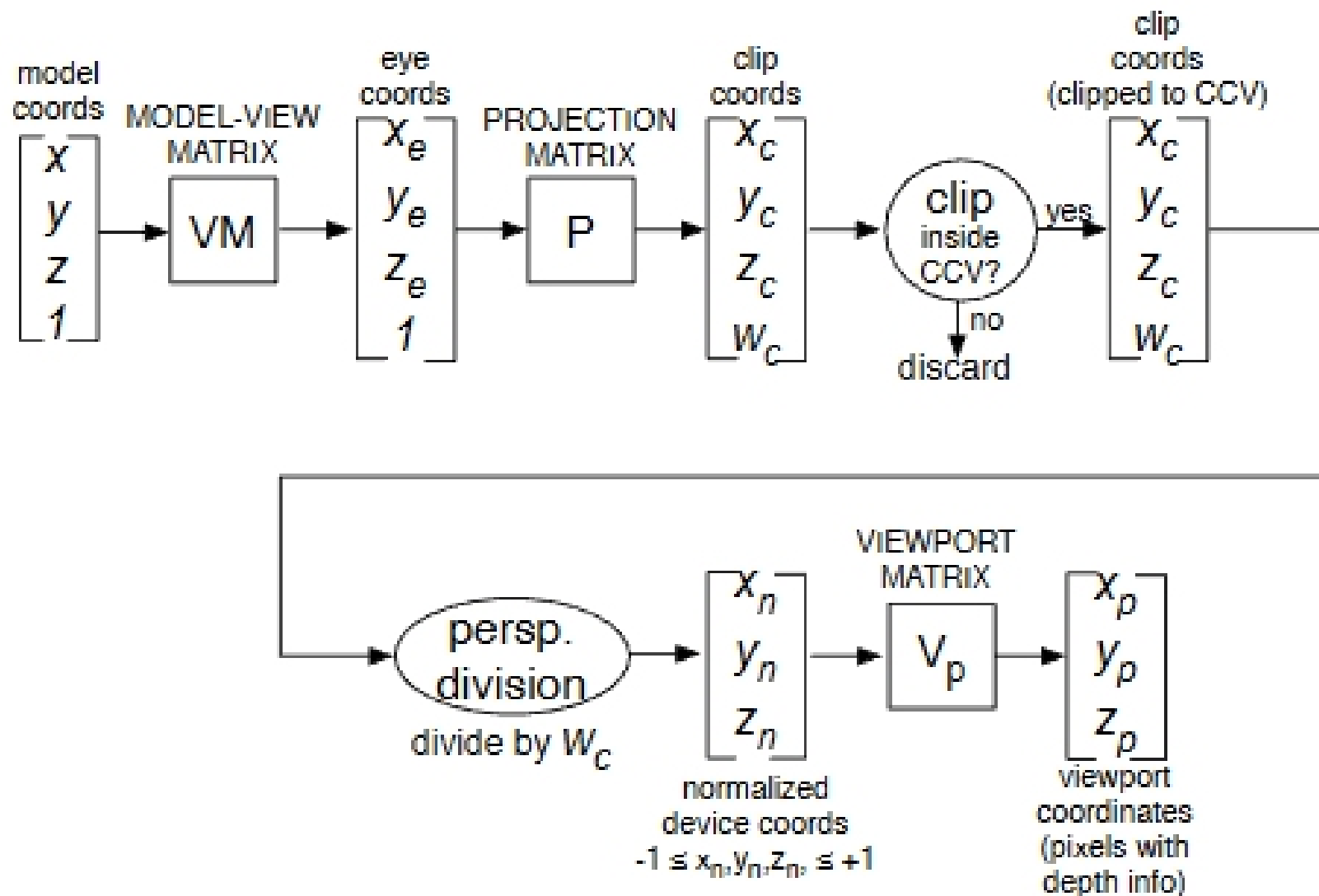


# Clipping in 4-D

CS/Cpts 442/452

October 3, 2007

## A Vertex's Trip Down the Graphics Pipeline



## Clipping to the Canonical Clipping Volume (CCV)

- The projection matrix maps points to the CCV (ortho / persp).
- The CCV is conducive for clipping:
  - Faces are parallel to the principle axes;
  - Center at origin with faces at unit distances from origin.
- Below the triangle  $\triangle V_0, V_1, V_2$  clipped to a quadrilateral  $\square V_0, V_1, b, a$ .
  - New vertices  $a$  and  $b$  (and their associated attributes; e.g., color) are computed via *interpolation*.

