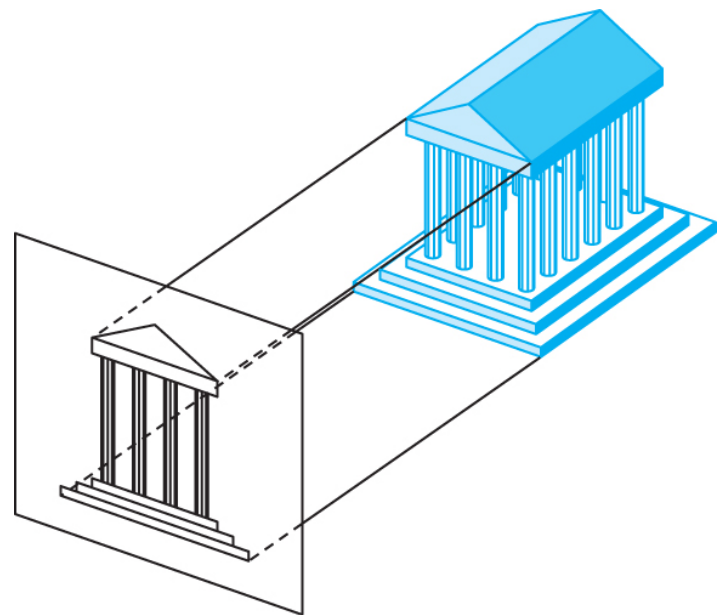
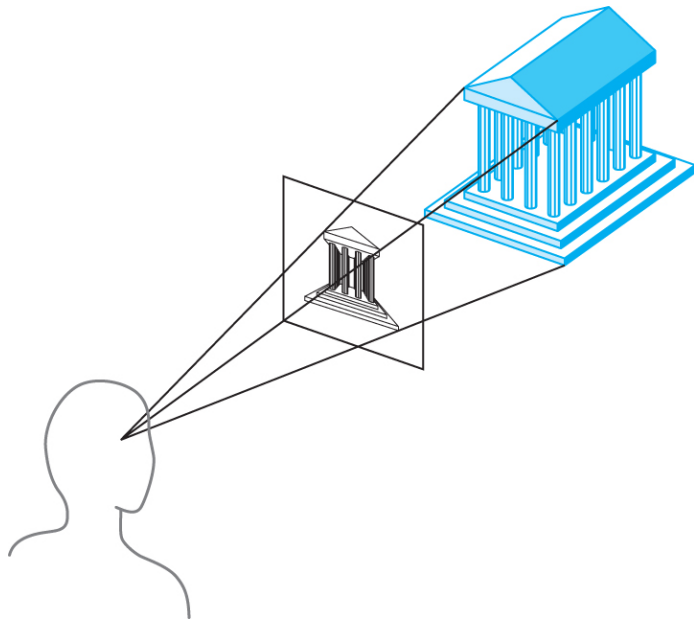


CS 354
Computer Graphics
Viewing

John Edwards
Fall 2012

Perspective vs. Orthographic

- Perspective: projections converge to a finite center of projection (COP)
- Orthographic: COP is at infinity so projections are parallel



Perspective

[x]-point perspective	three	two	one
# directions parallel to projection plane	0	1	2
# directions in which parallel lines converge	3	2	1



(a)



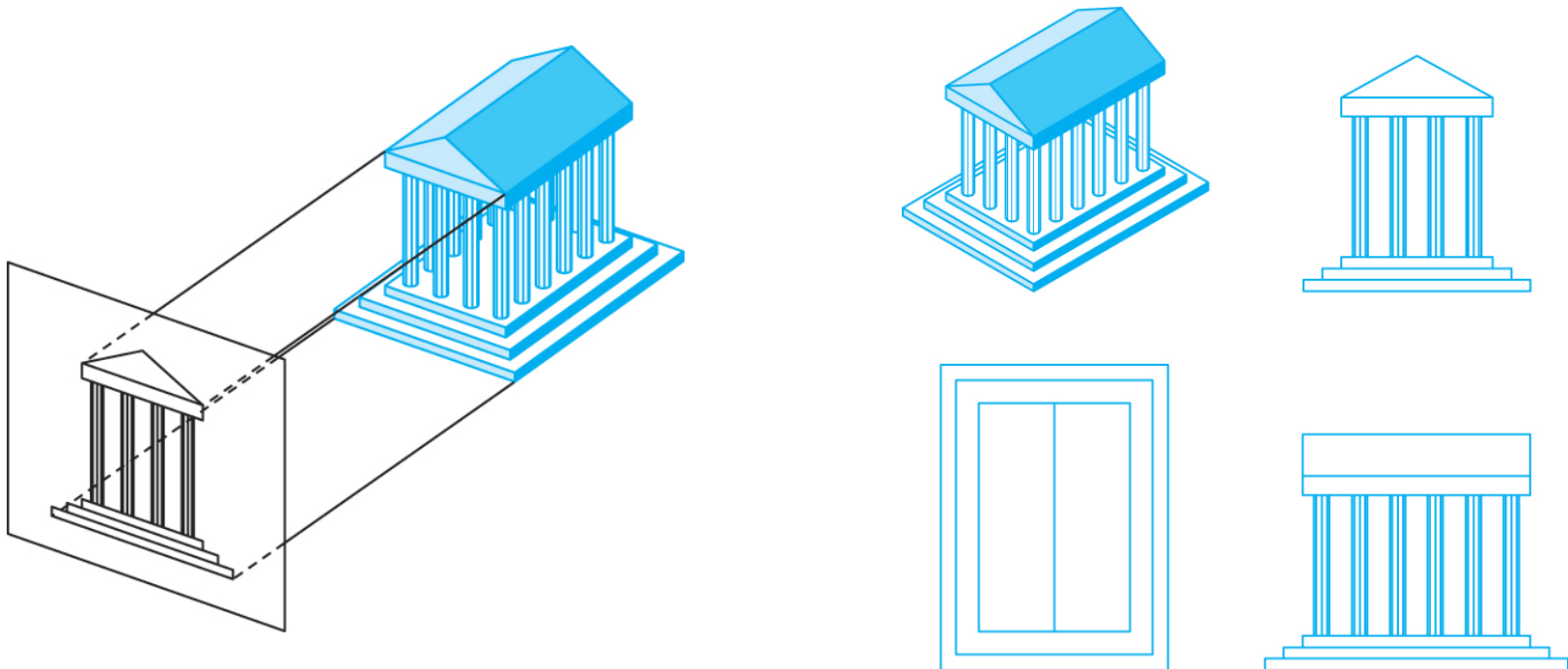
(b)



(c)

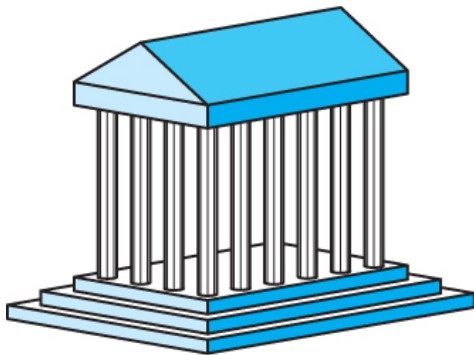
Orthographic

- Most common parallel view
- Projectors are orthogonal to projection plane
- Multiple views are usually used

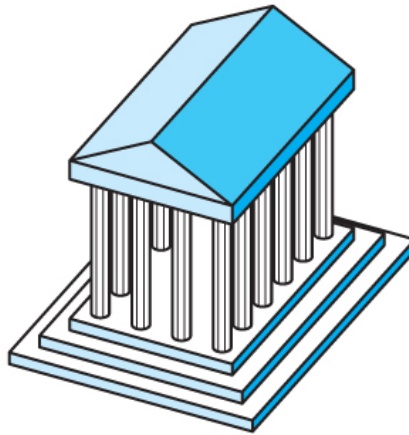


Orthographic - axonometric

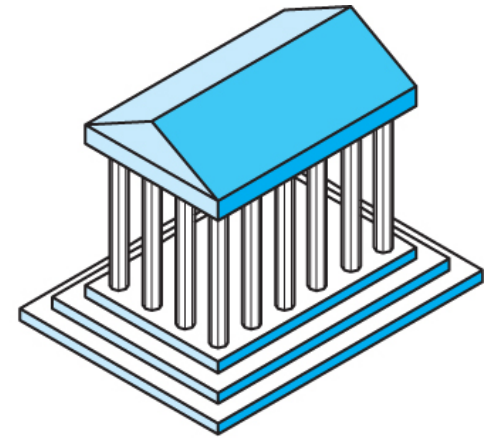
[x]-point perspective	isometric	dimetric	trimetric
# symmetric principal faces	3	2	1
# foreshortening ratios	1	2	3



Dimetric



Trimetric



Isometric