

The 40" Yerkes refractor



Reflector telescopes

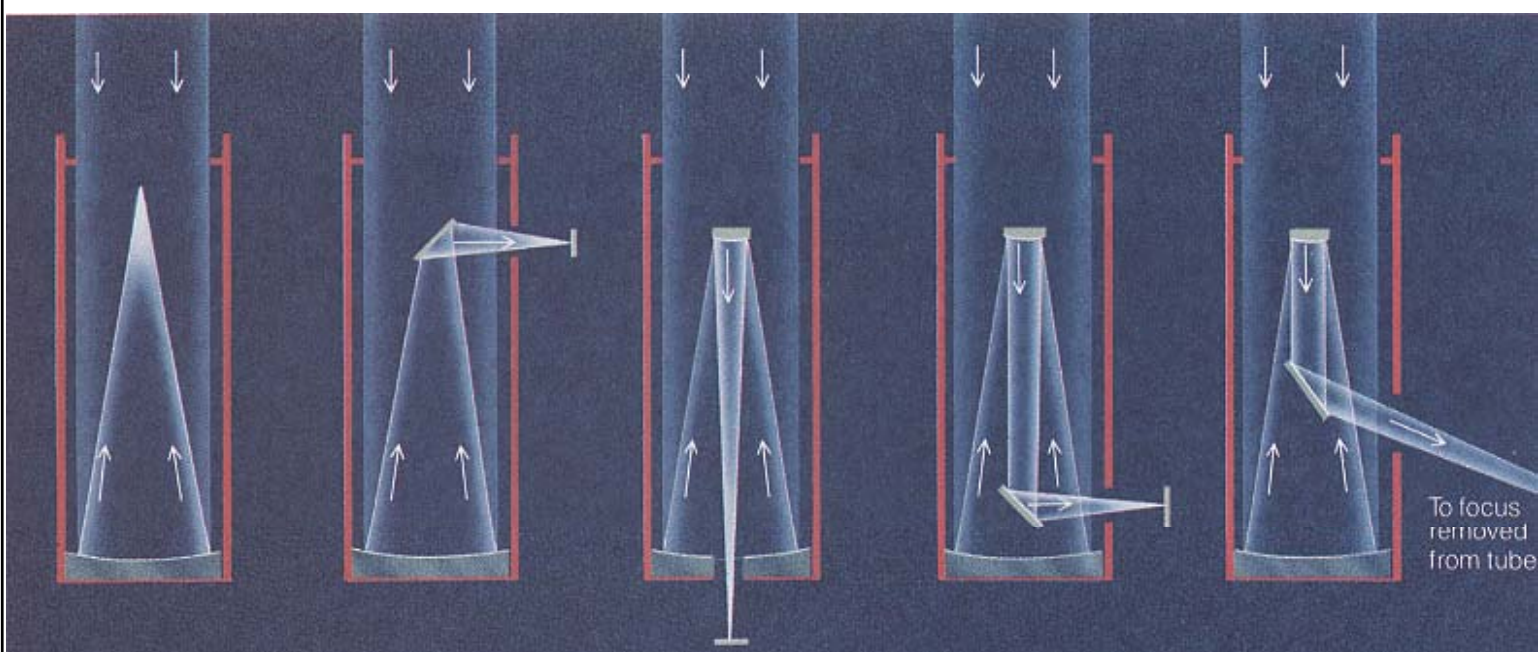


Shane 120"
Lick Observatory, CA



Hale 200"
Mount Palomar, CA

Telescope focal positions



Prime focus

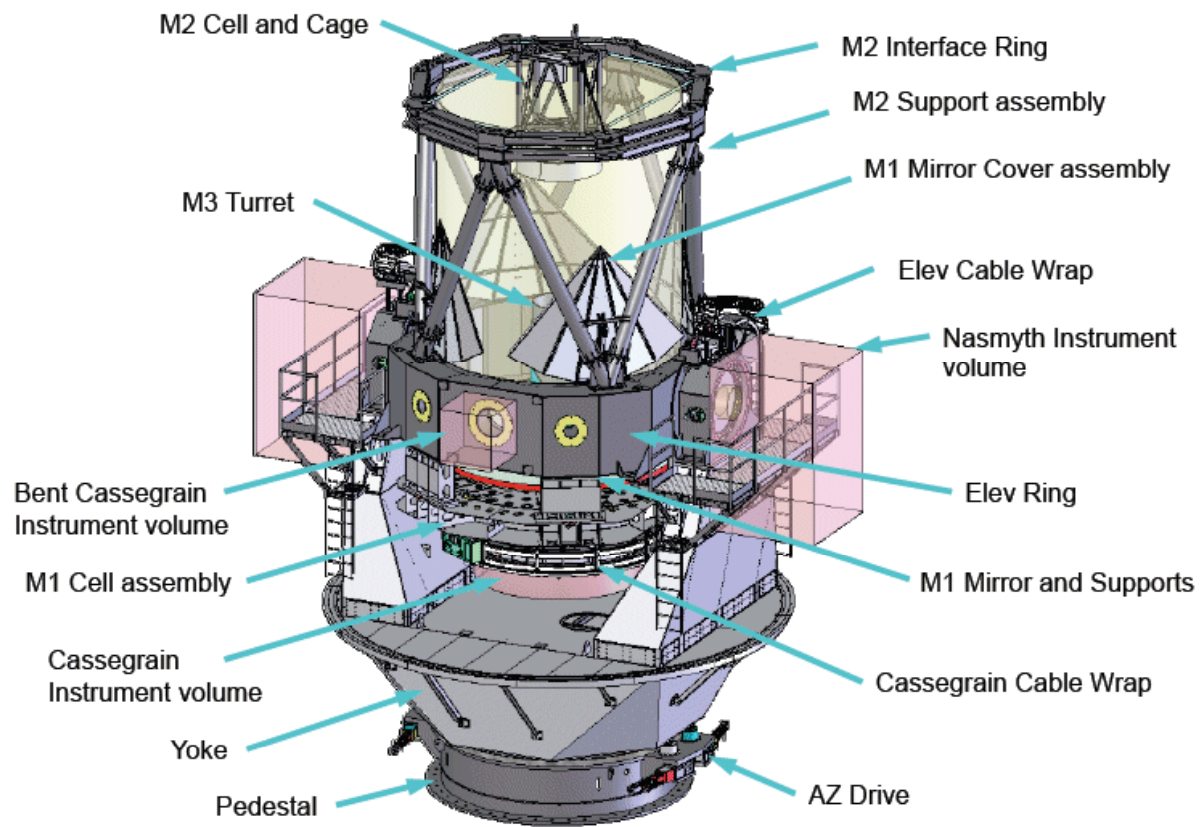
Newtonian

Cassegrain

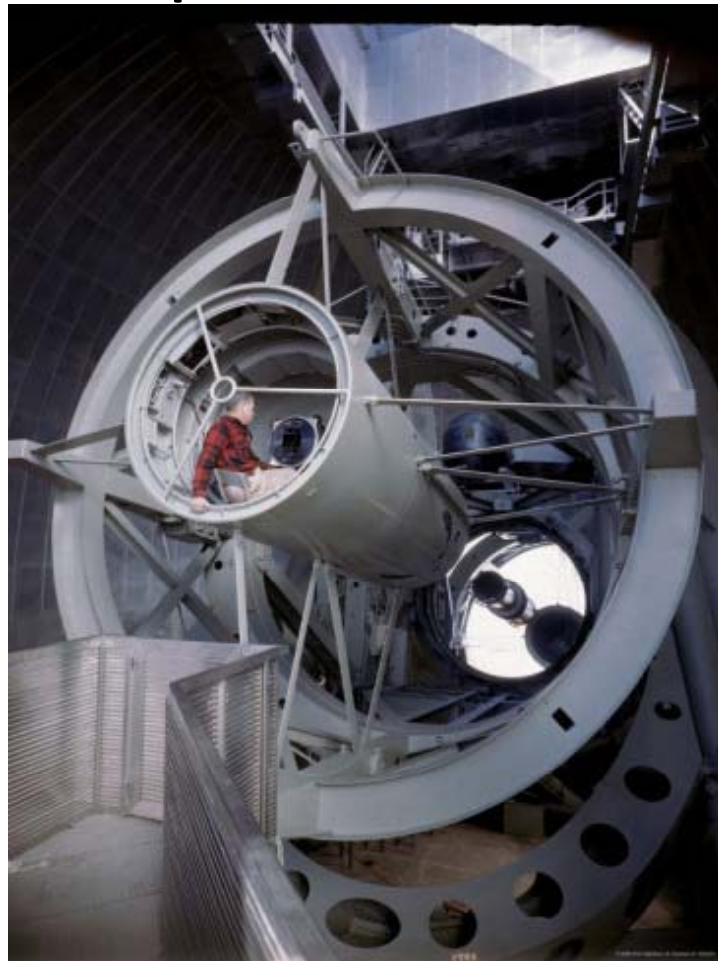
Bent Cass or
Nasmyth

Coude

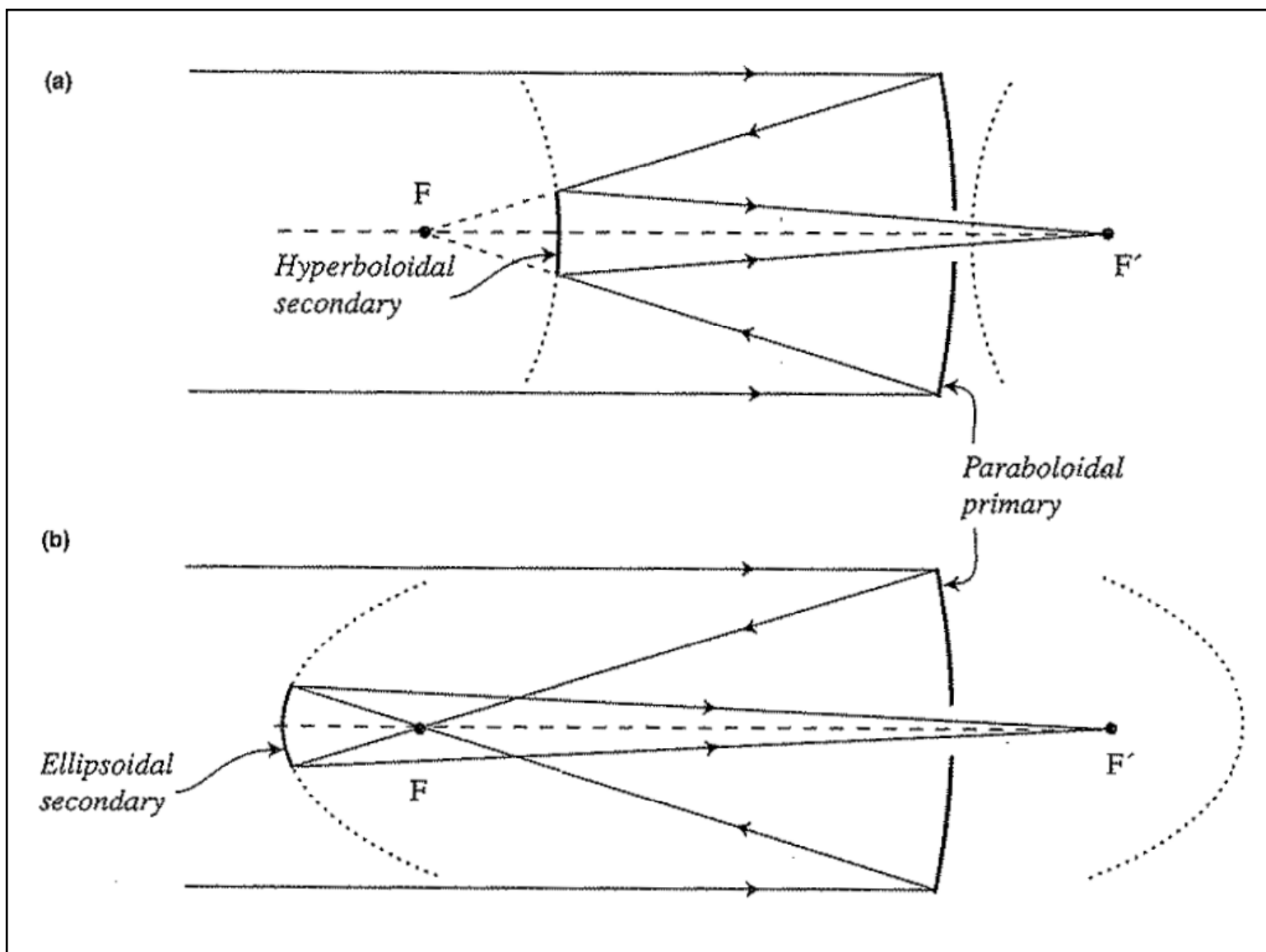
Discovery Channel Telescope



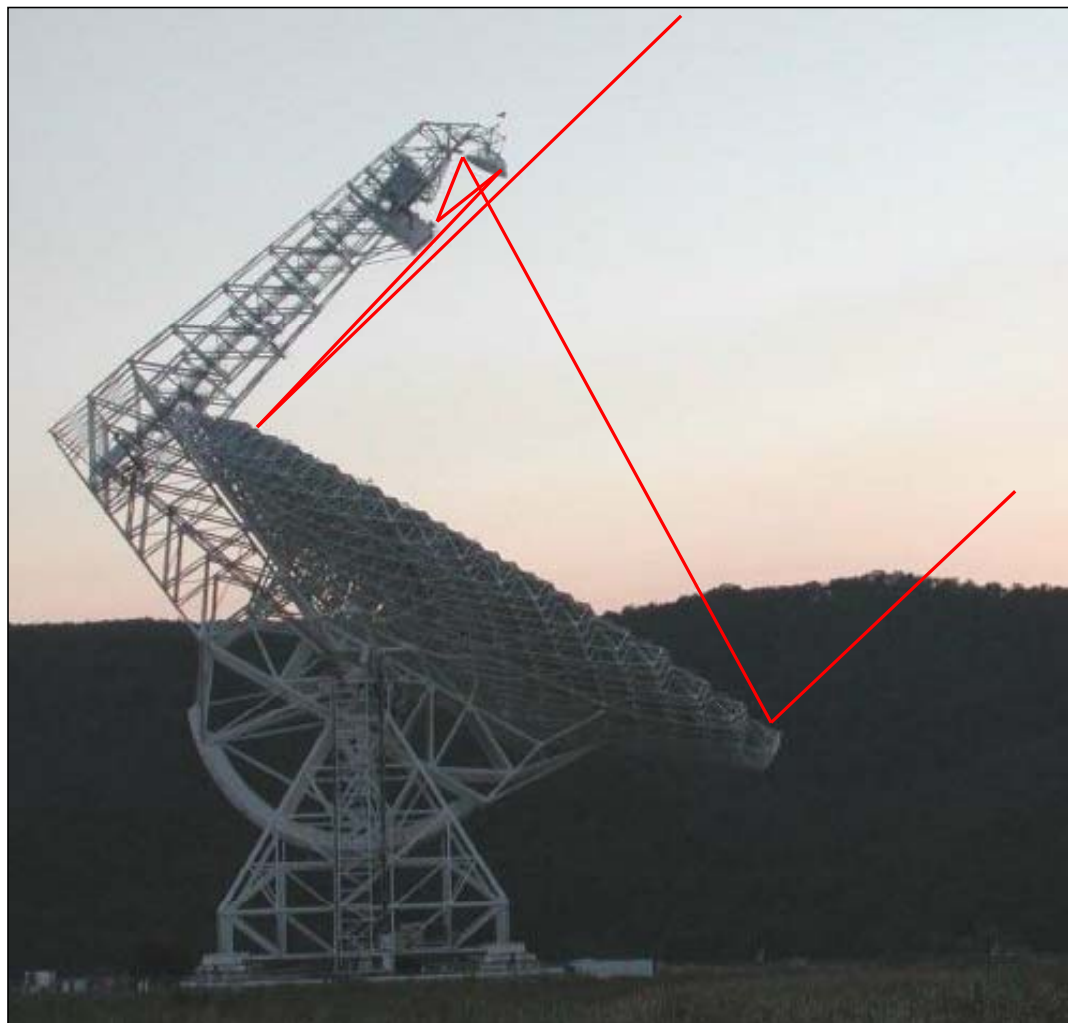
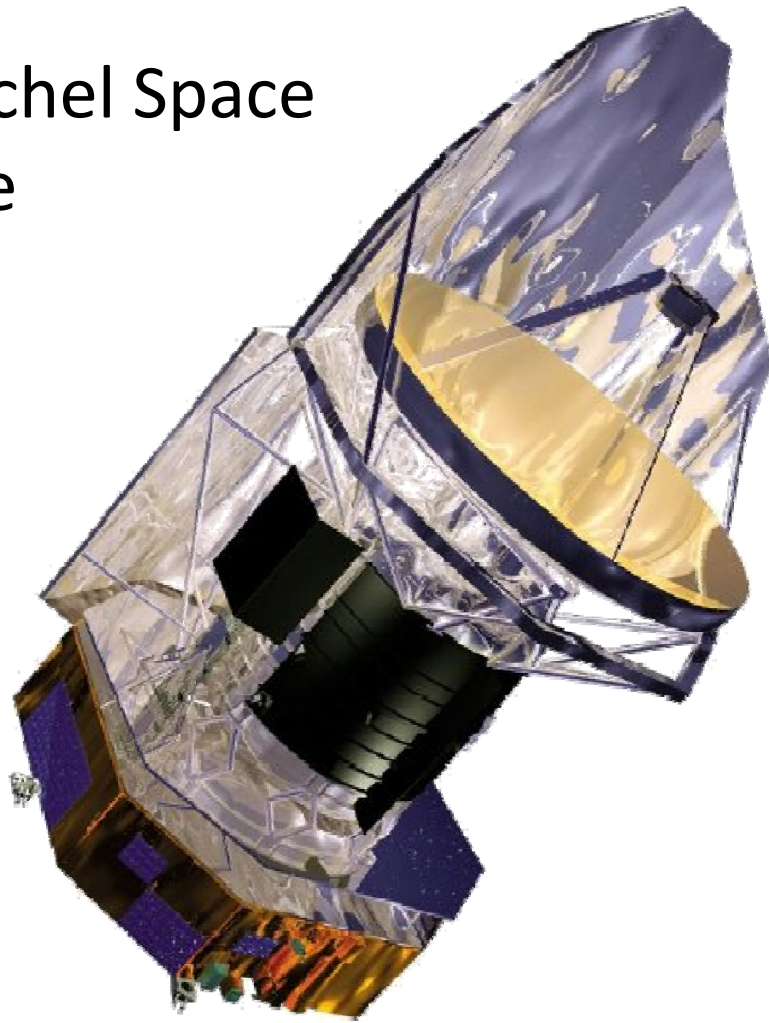
In the prime focus cage



Reber telescope



The Herschel Space Telescope



X-ray telescopes: grazing incidence

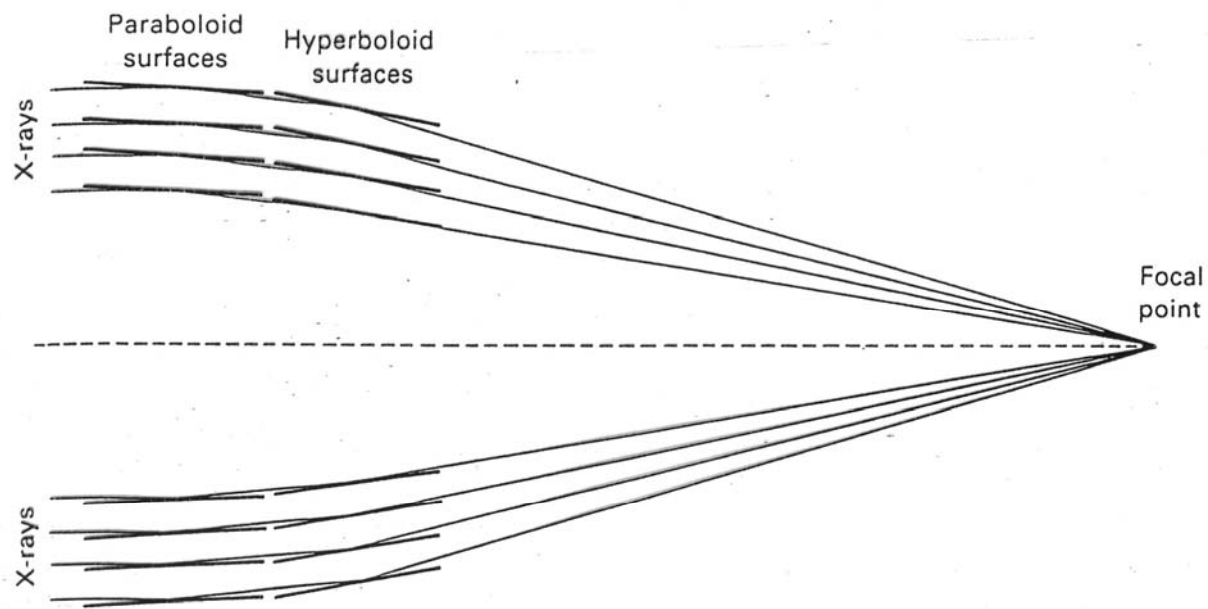
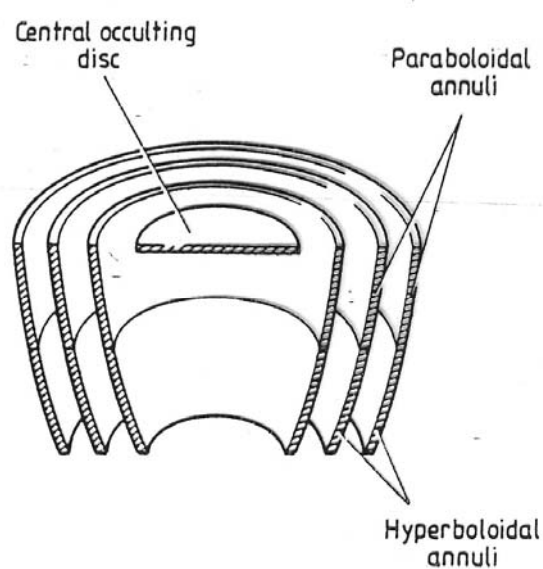


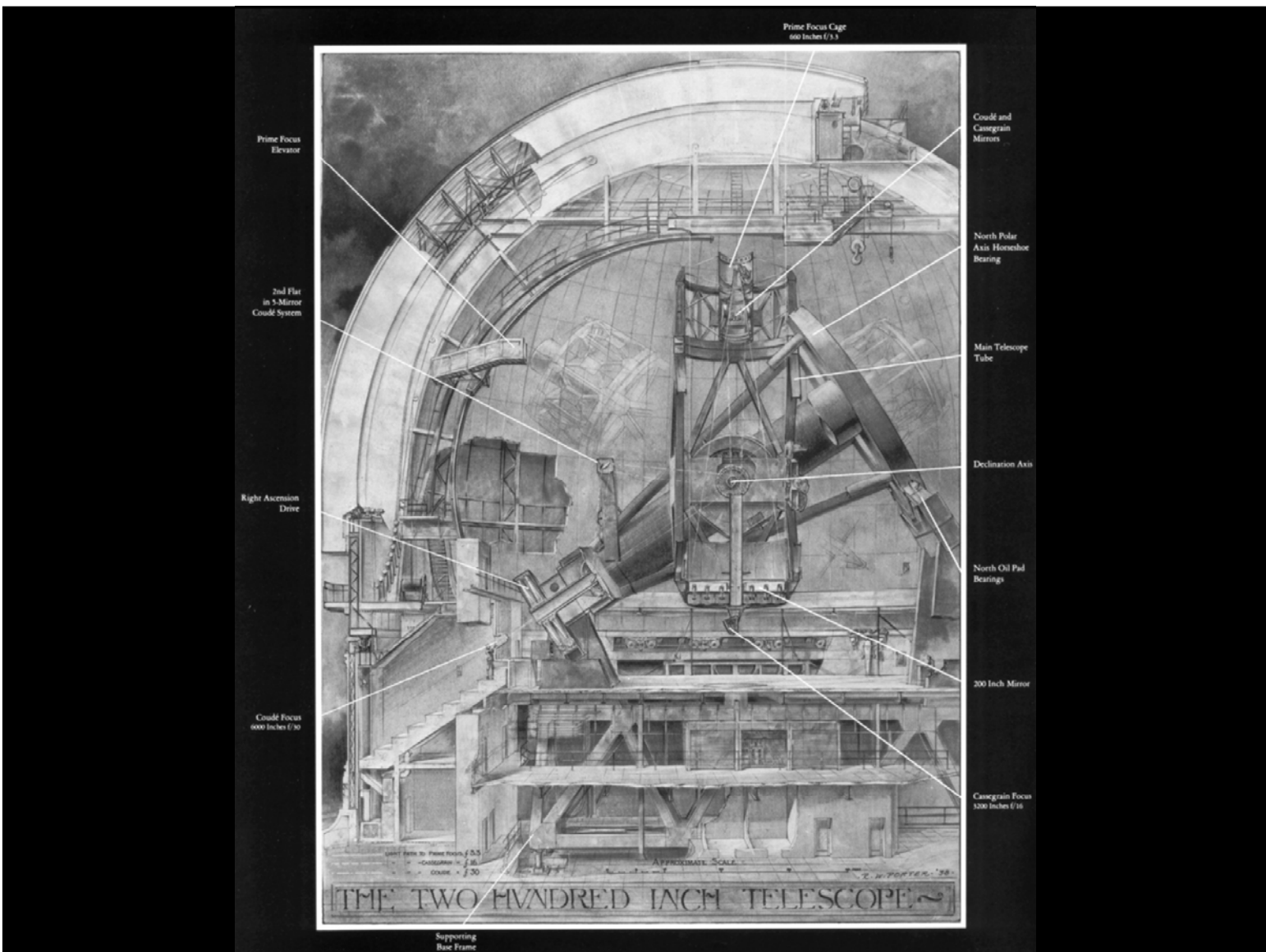
Figure 7.12. Illustrating the focussing of X-rays by a nested set of paraboloid-hyperboloid mirrors. This is the arrangement which was used in the Einstein X-ray Observatory. (From W. Tucker and R. Giacconi (1985). *The X-ray universe*, page 105, Cambridge: Harvard University Press.)

Nested mirrors, central block

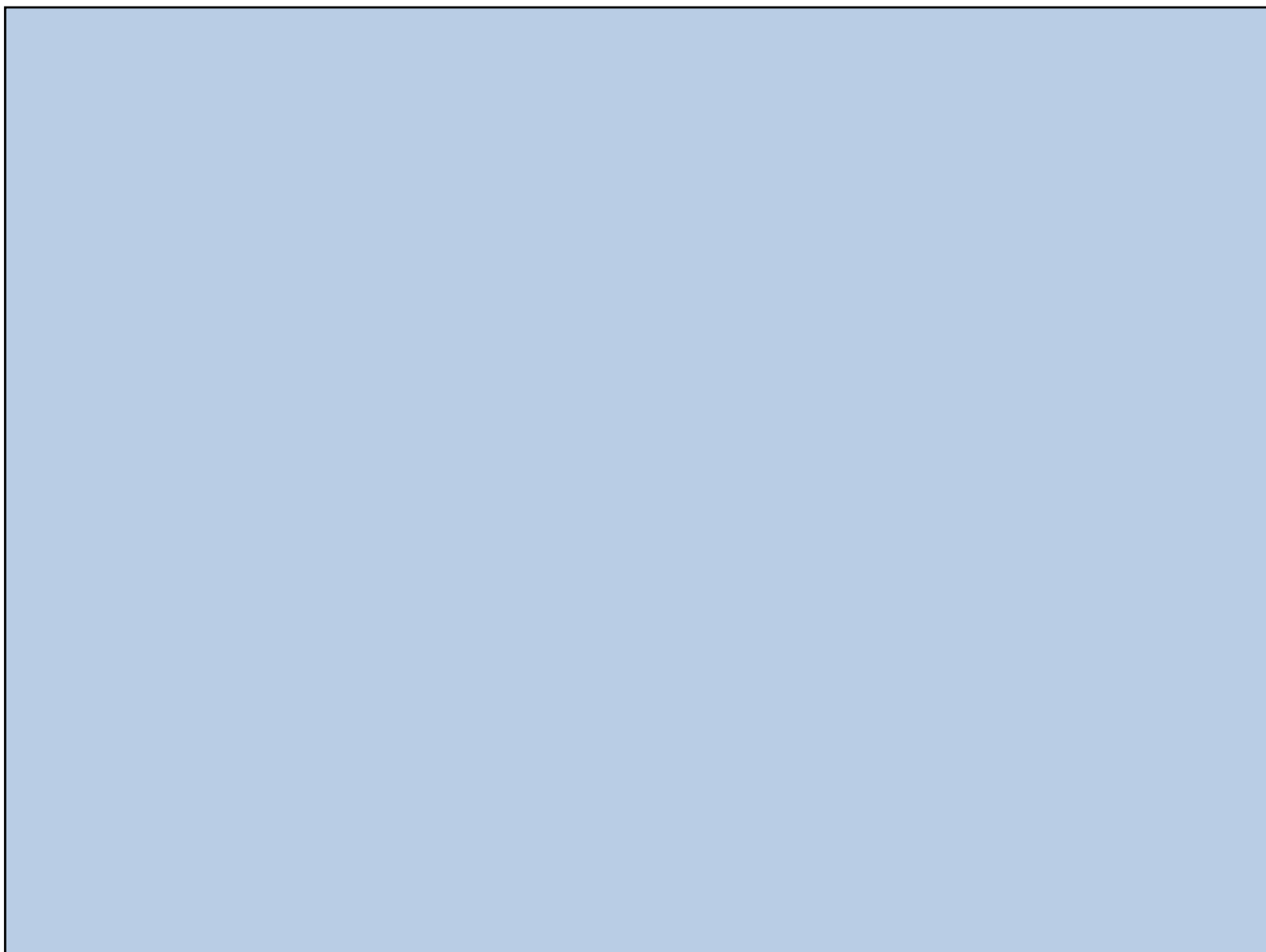
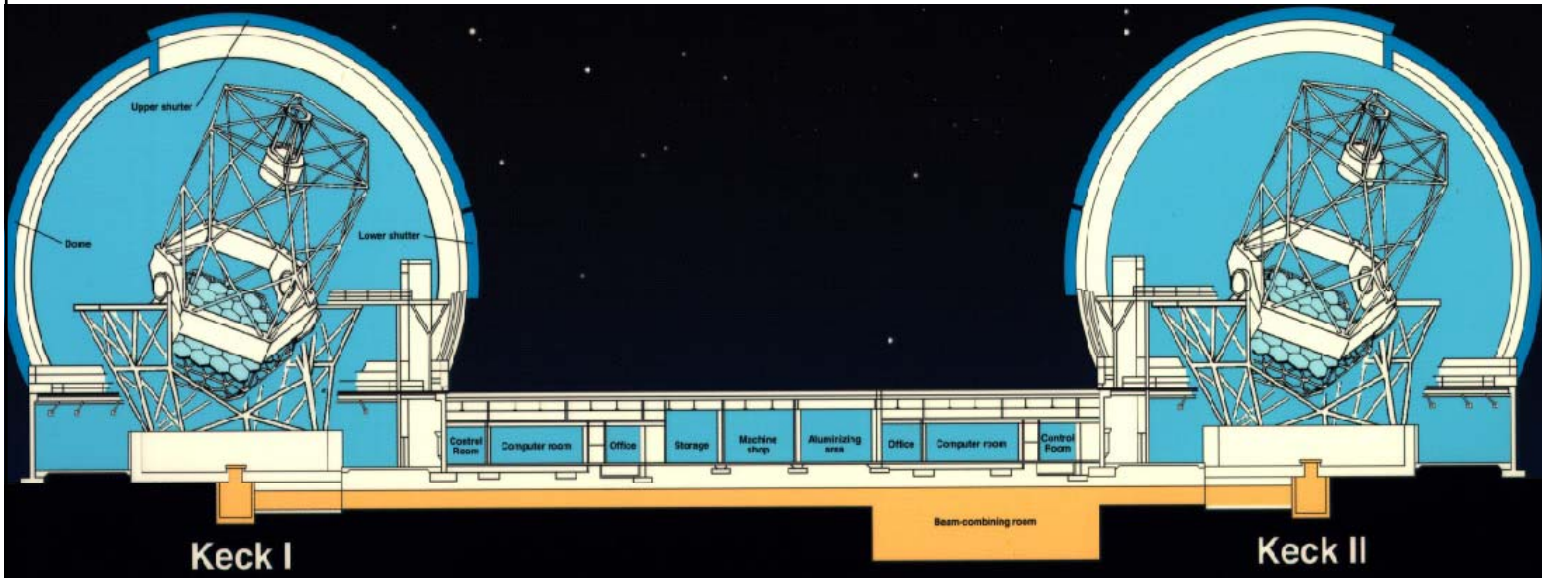


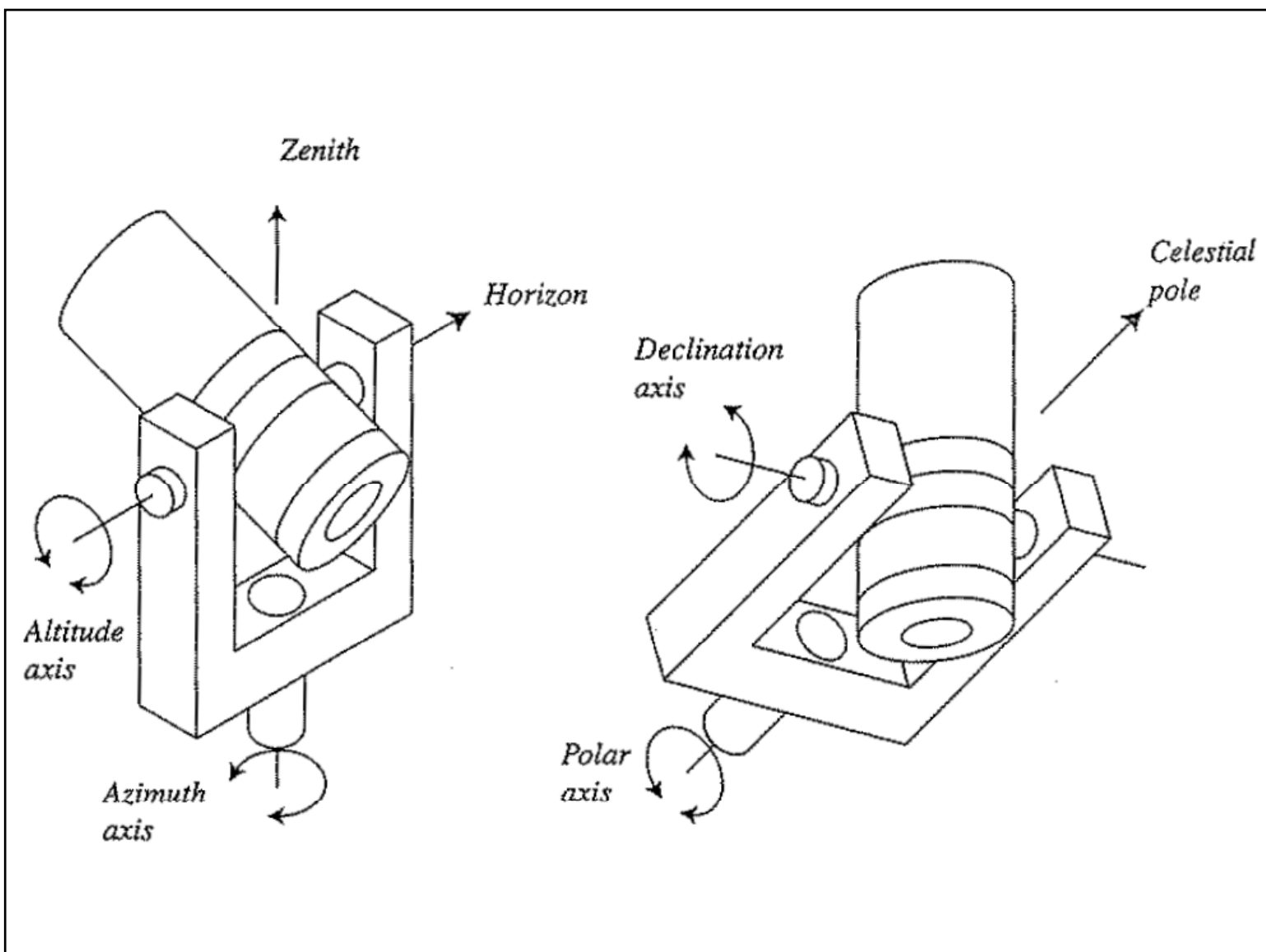
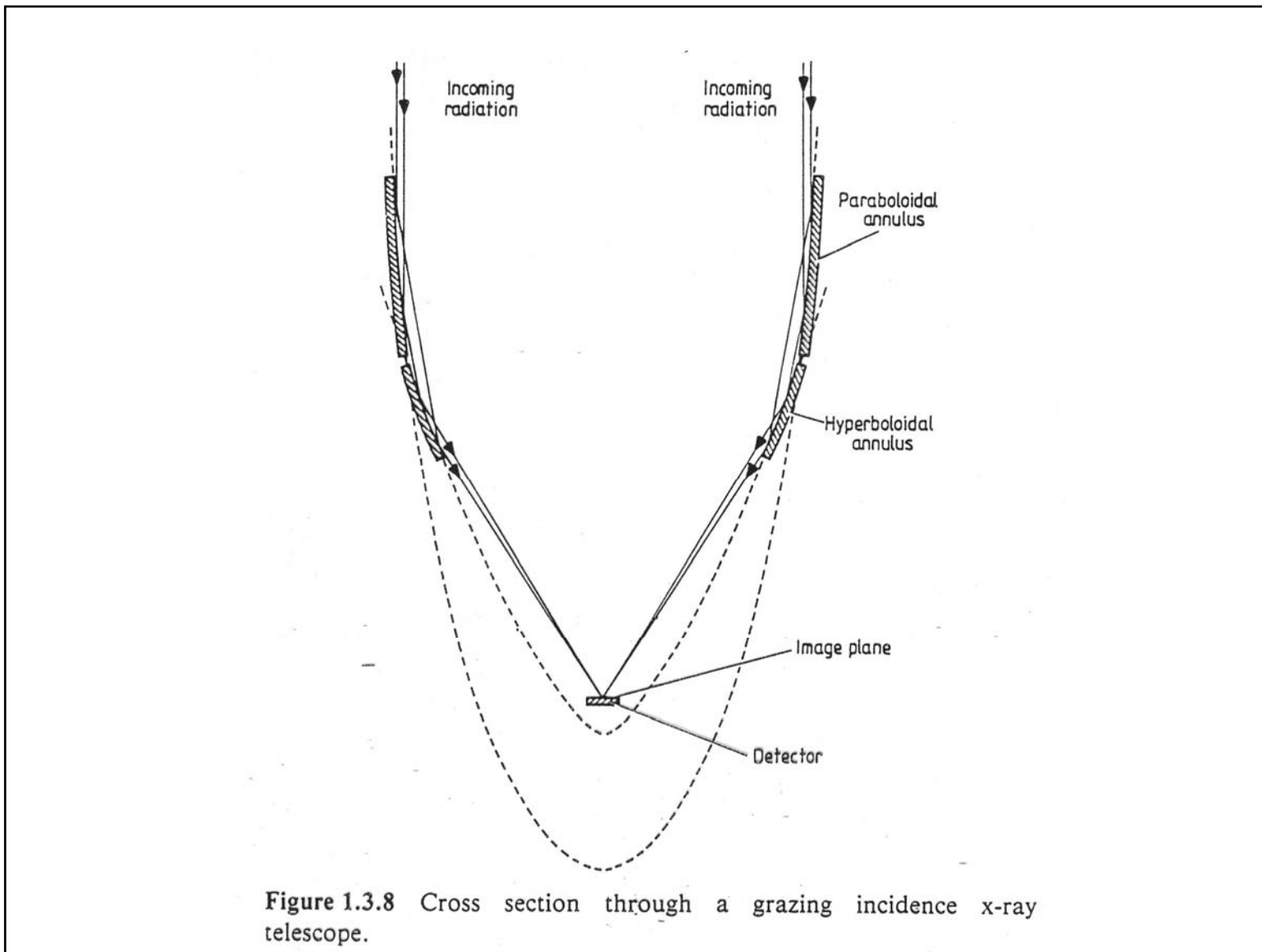
• Common focus

Figure 1.3.10 Section through a nested grazing incidence x-ray telescope.

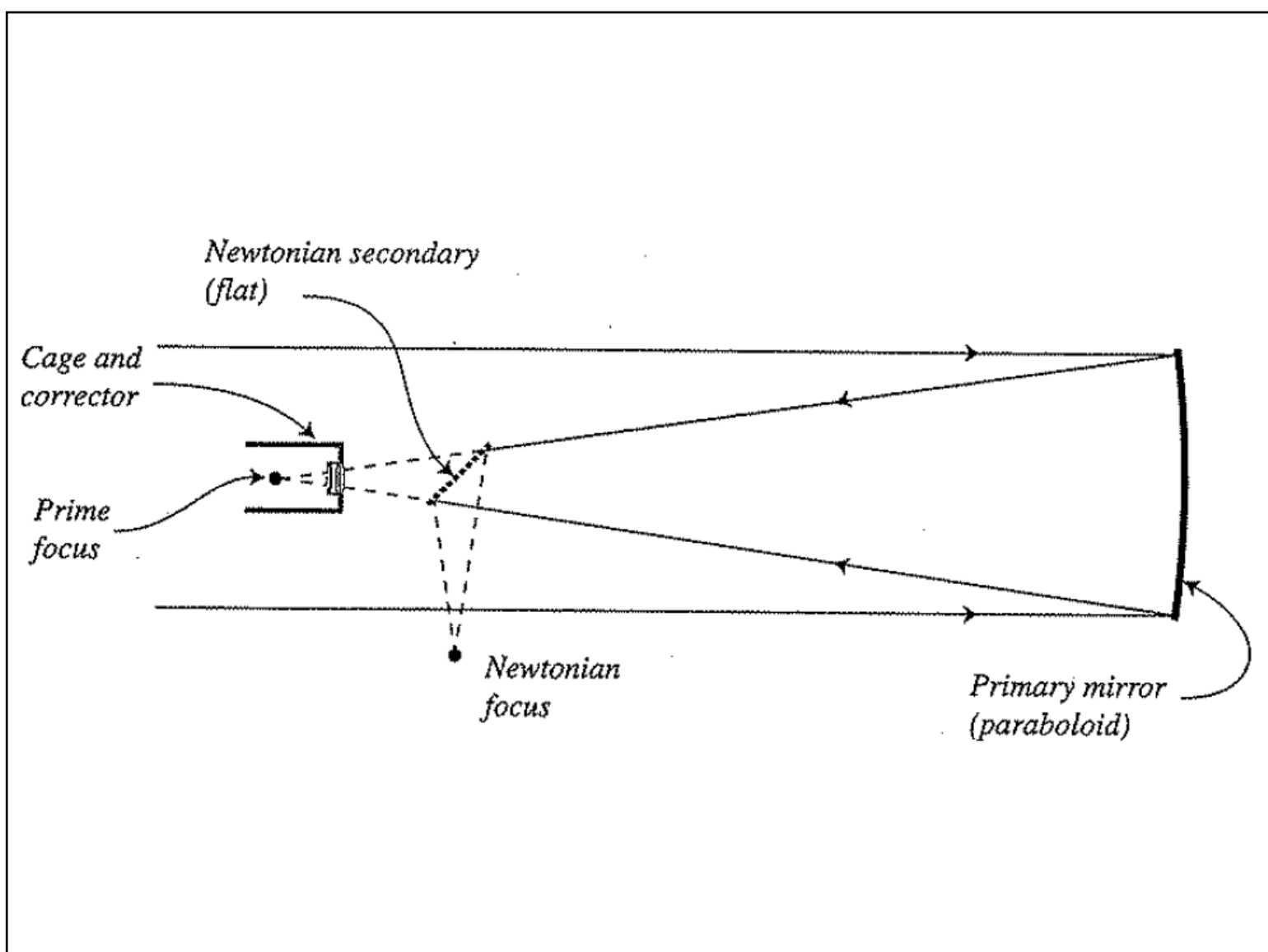


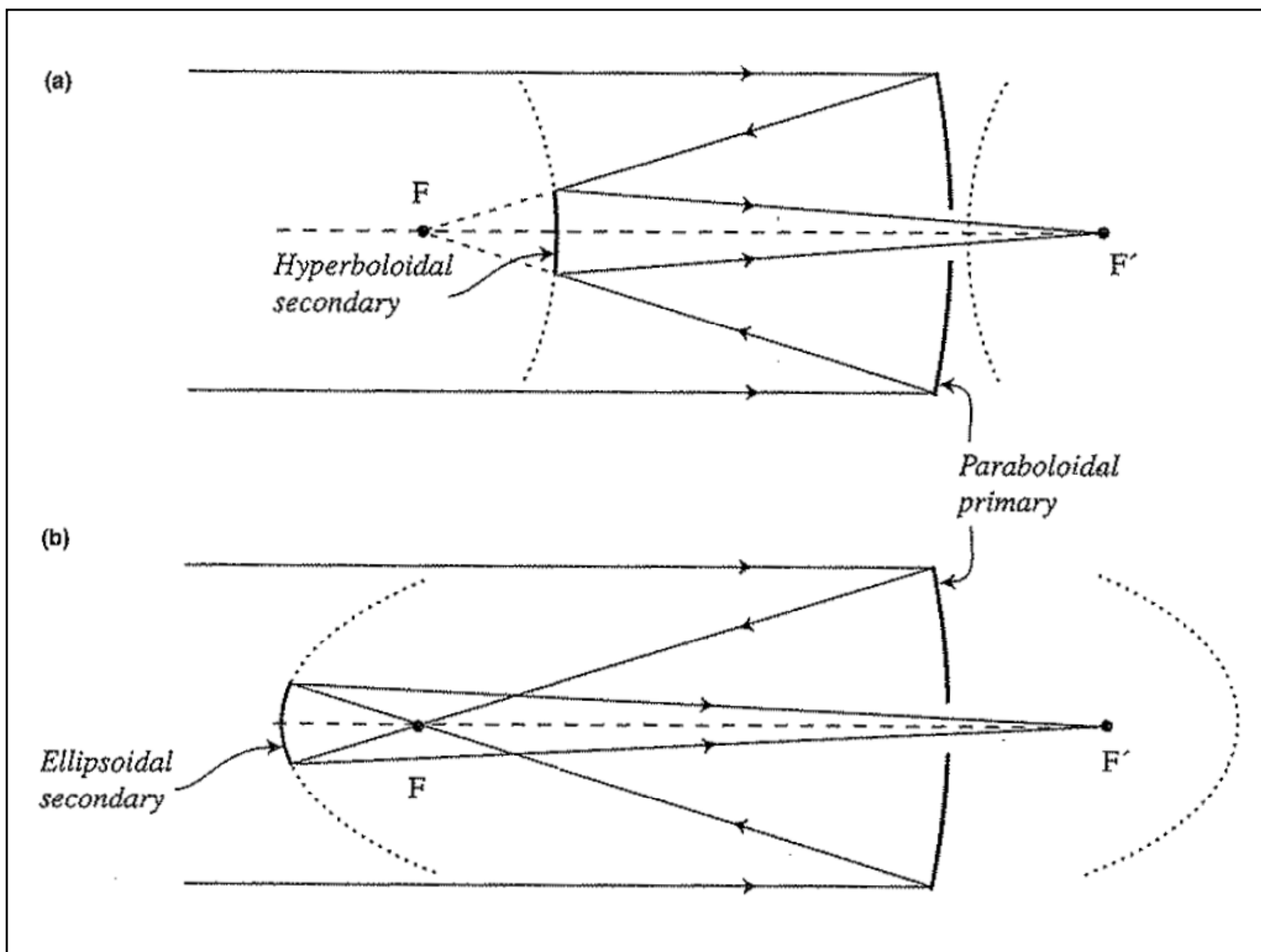
Keck telescopes and interferometer



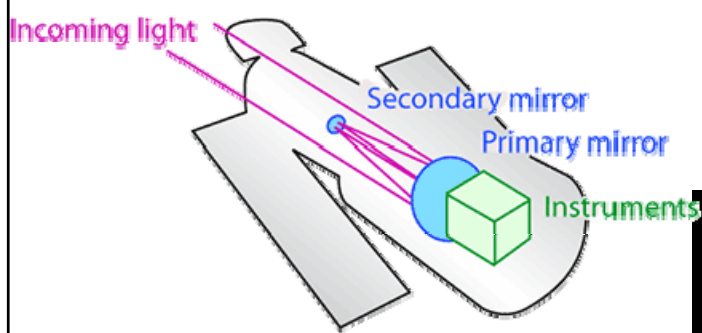
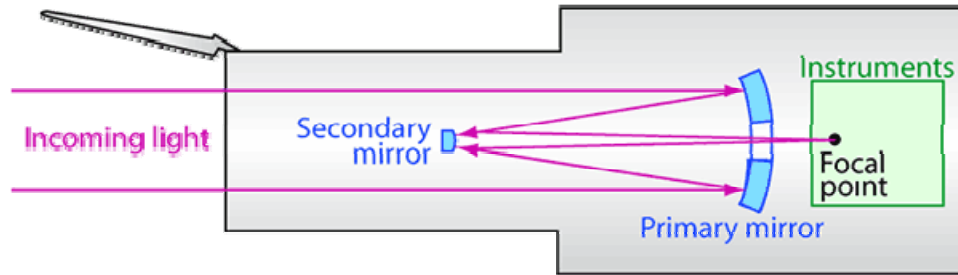


Hale 200" telescope, Mt. Palomar





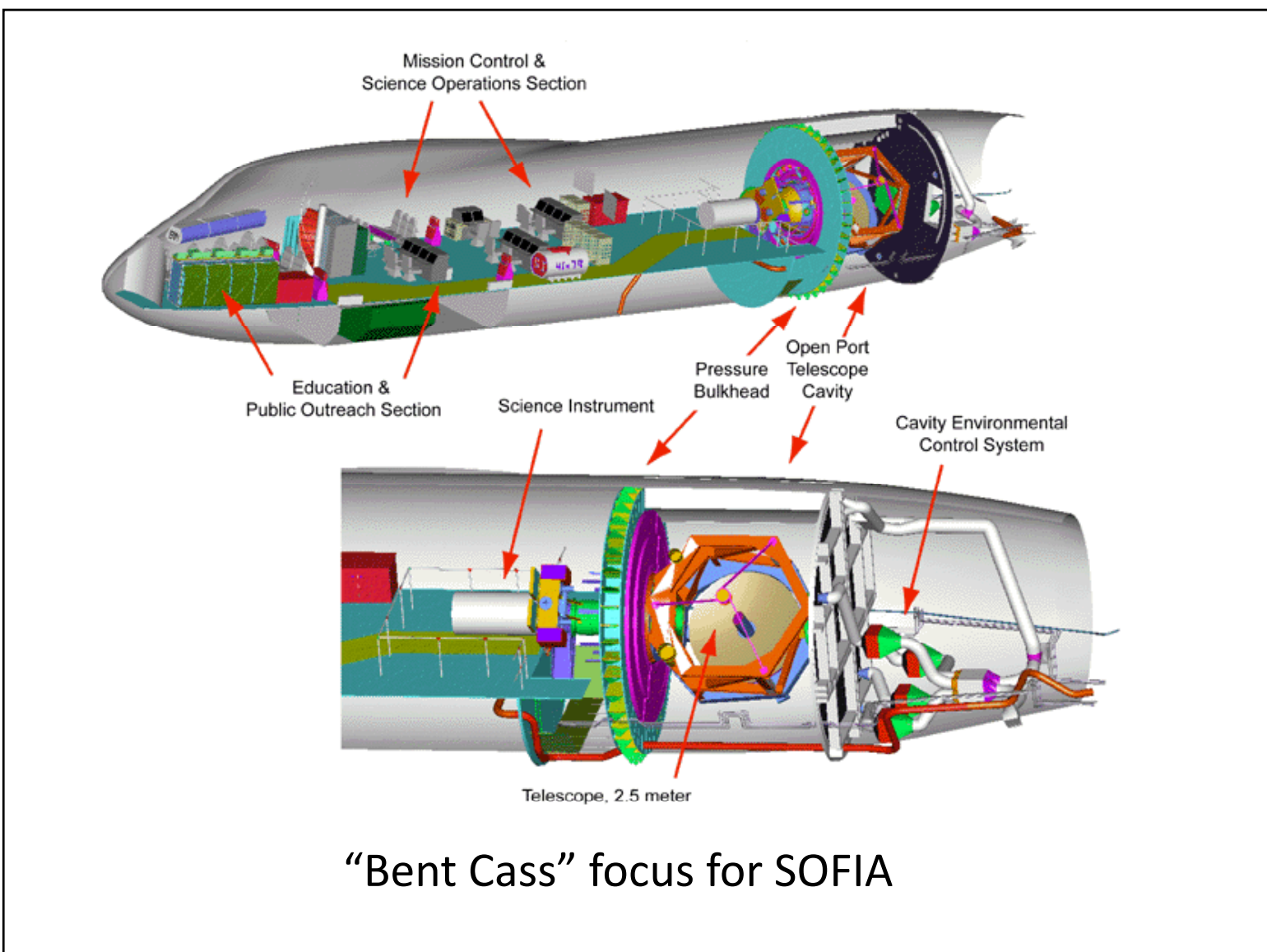
Hubble's optics

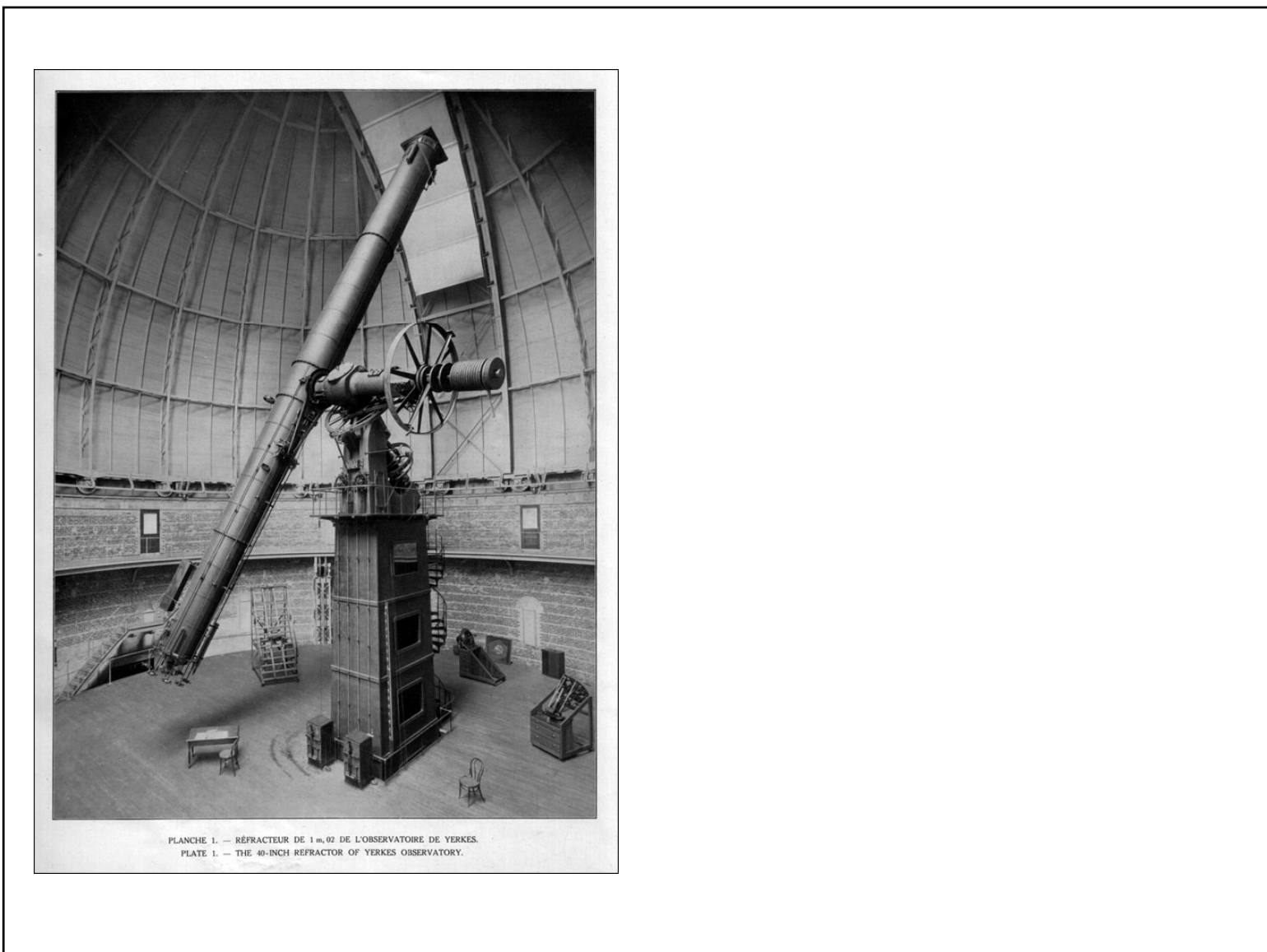


Spherical aberration before and after COSTAR



Lots of bulky equipment at the Cassegrain focus, out of the light path





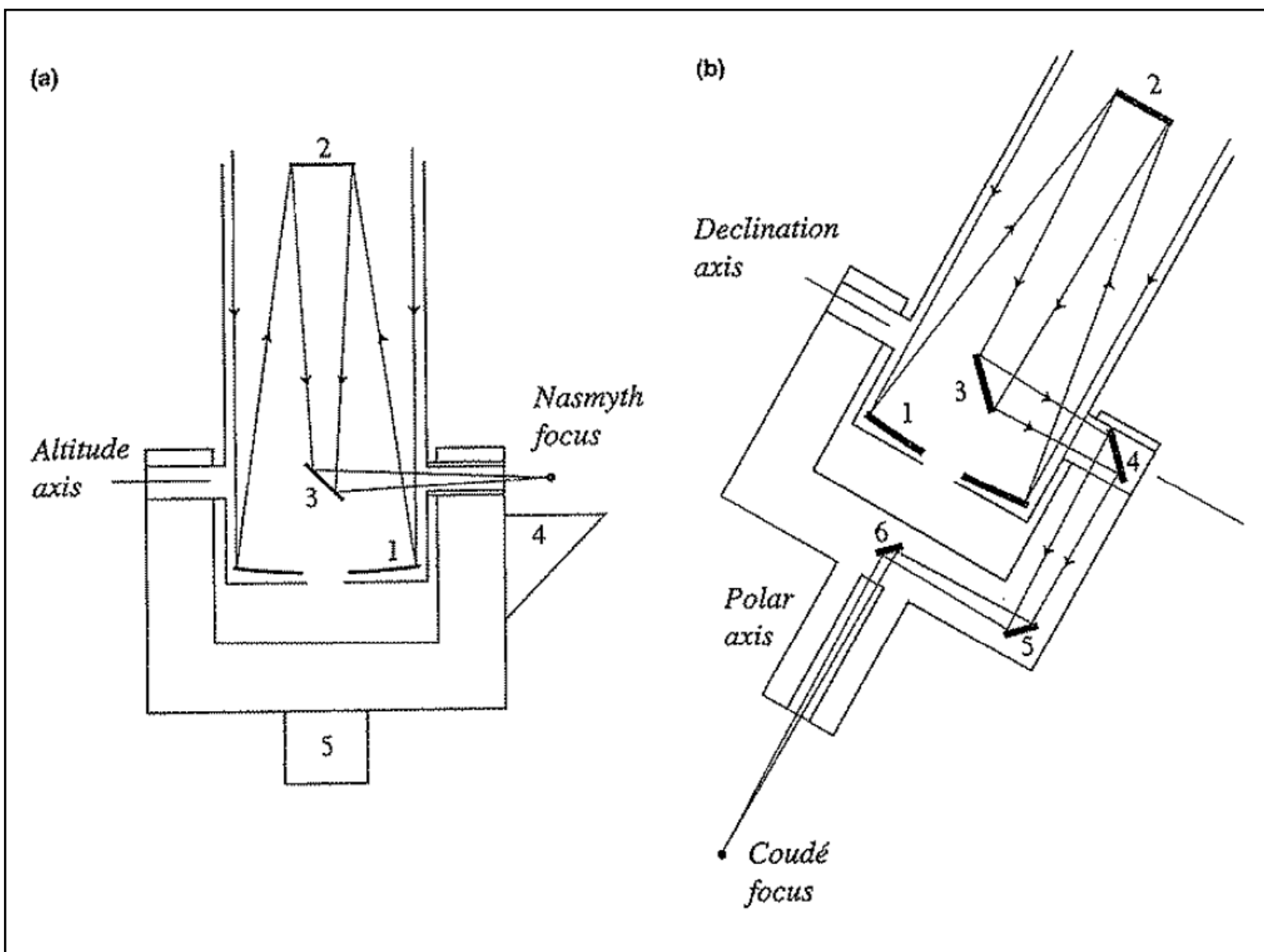
Fork and yoke mounts

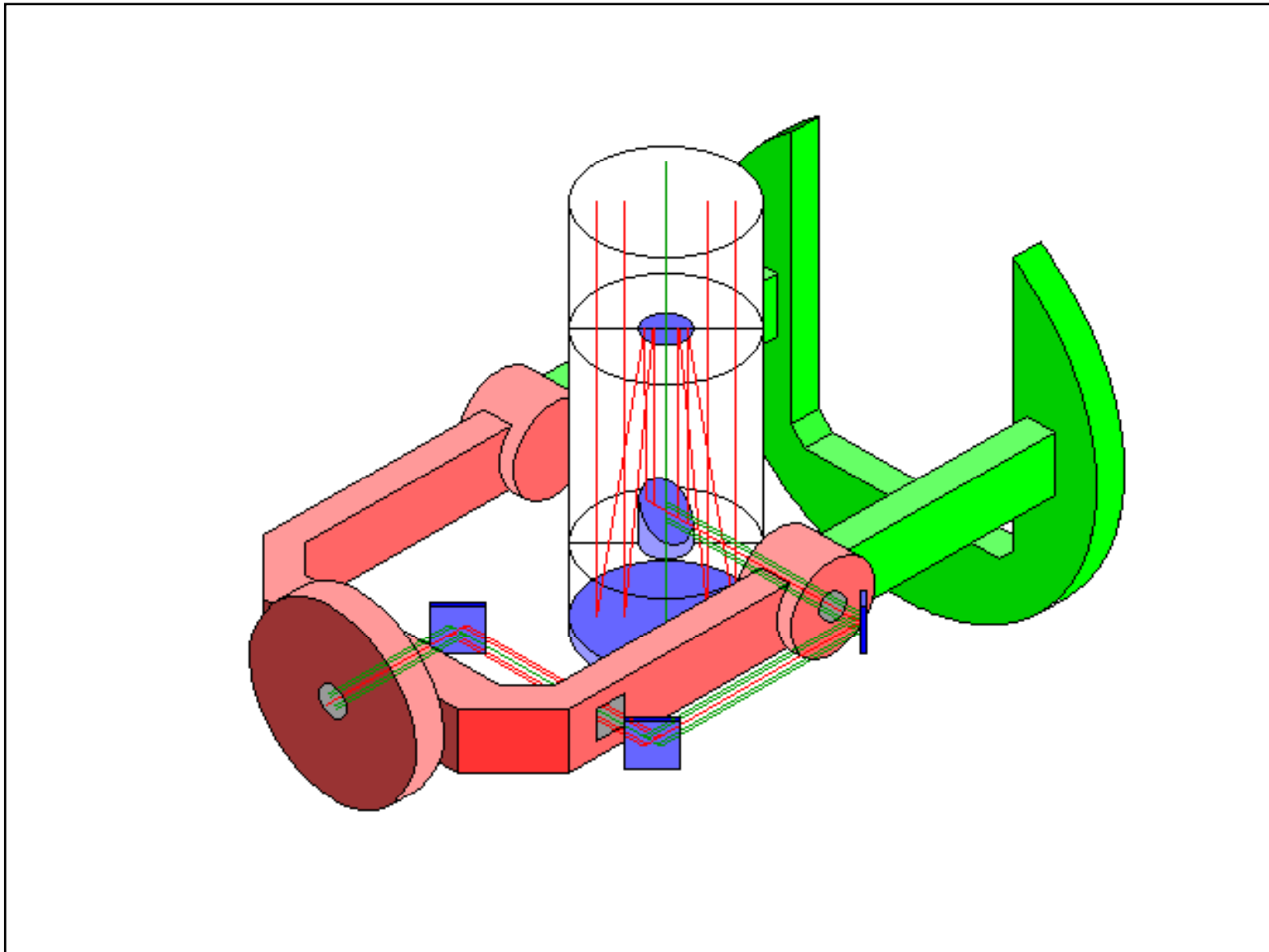


Shane 120"
Lick Observatory, CA



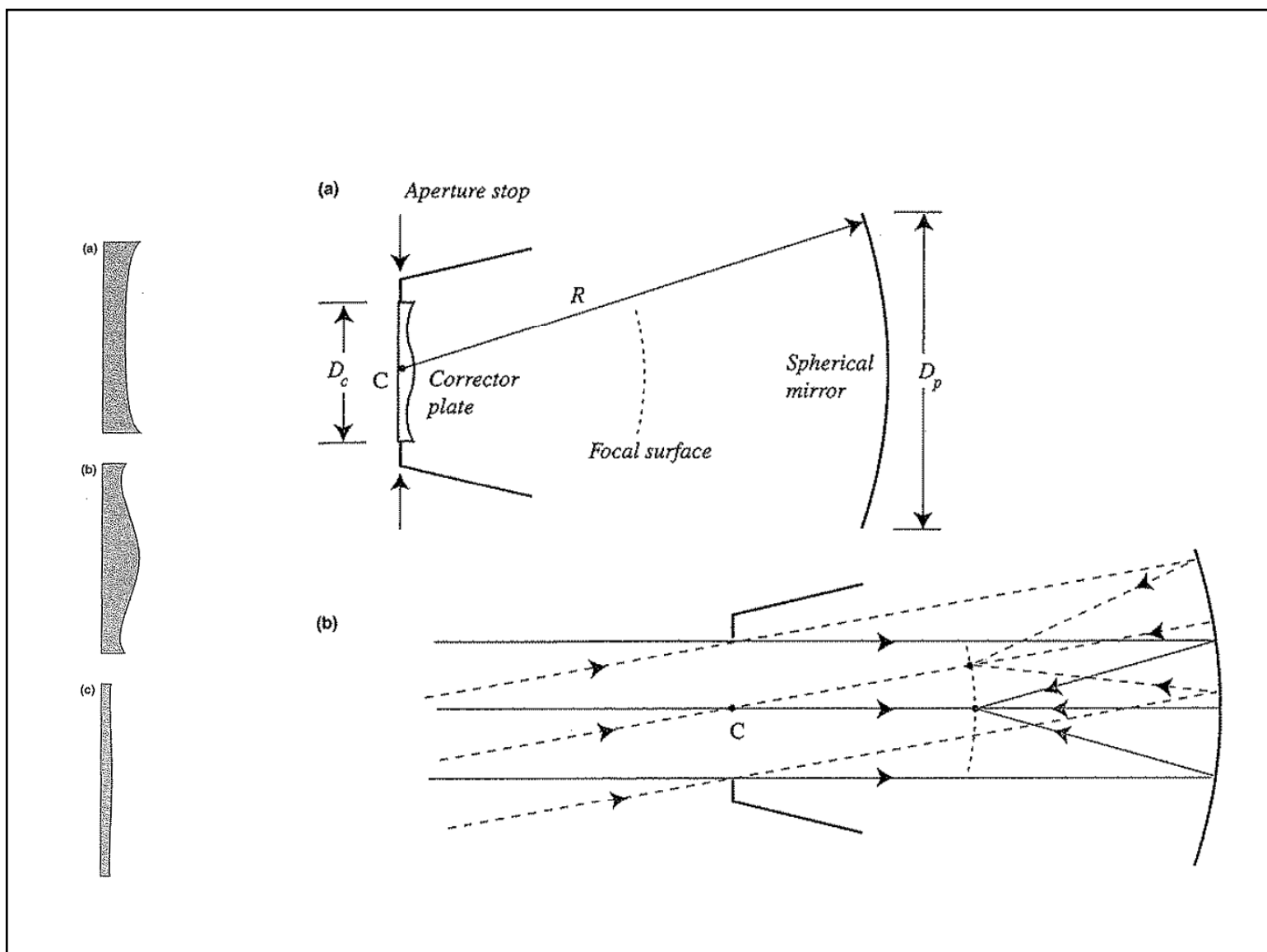
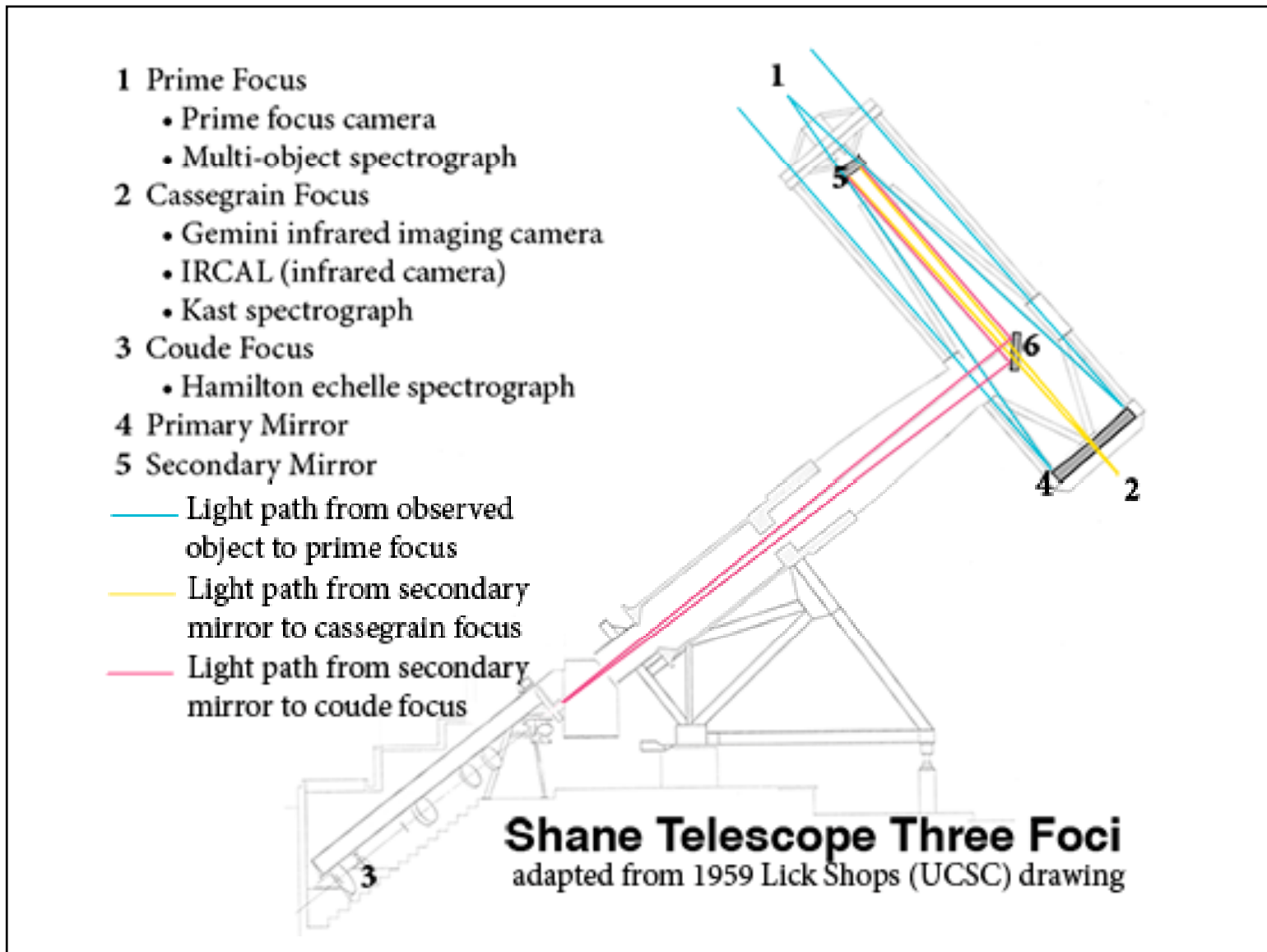
United Kingdom Infrared Telescope
(UKIRT), Mauna Kea



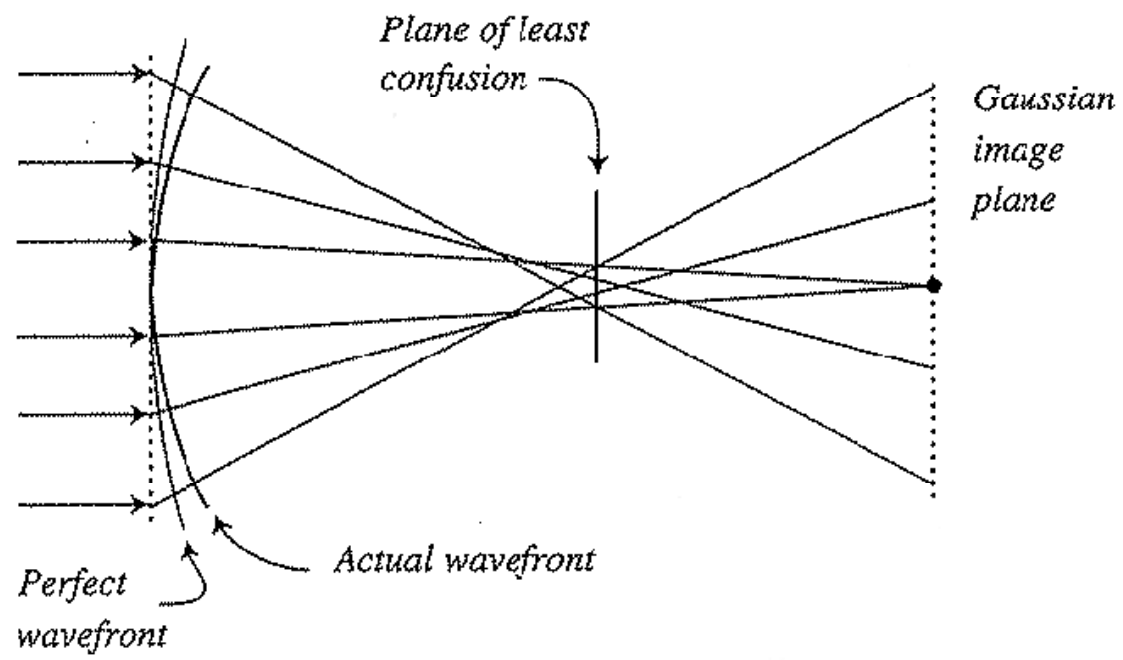


Coude spectrograph room McDonald Observatory





Spherical aberration



48" Schmidt telescope on Mt. Palomar



