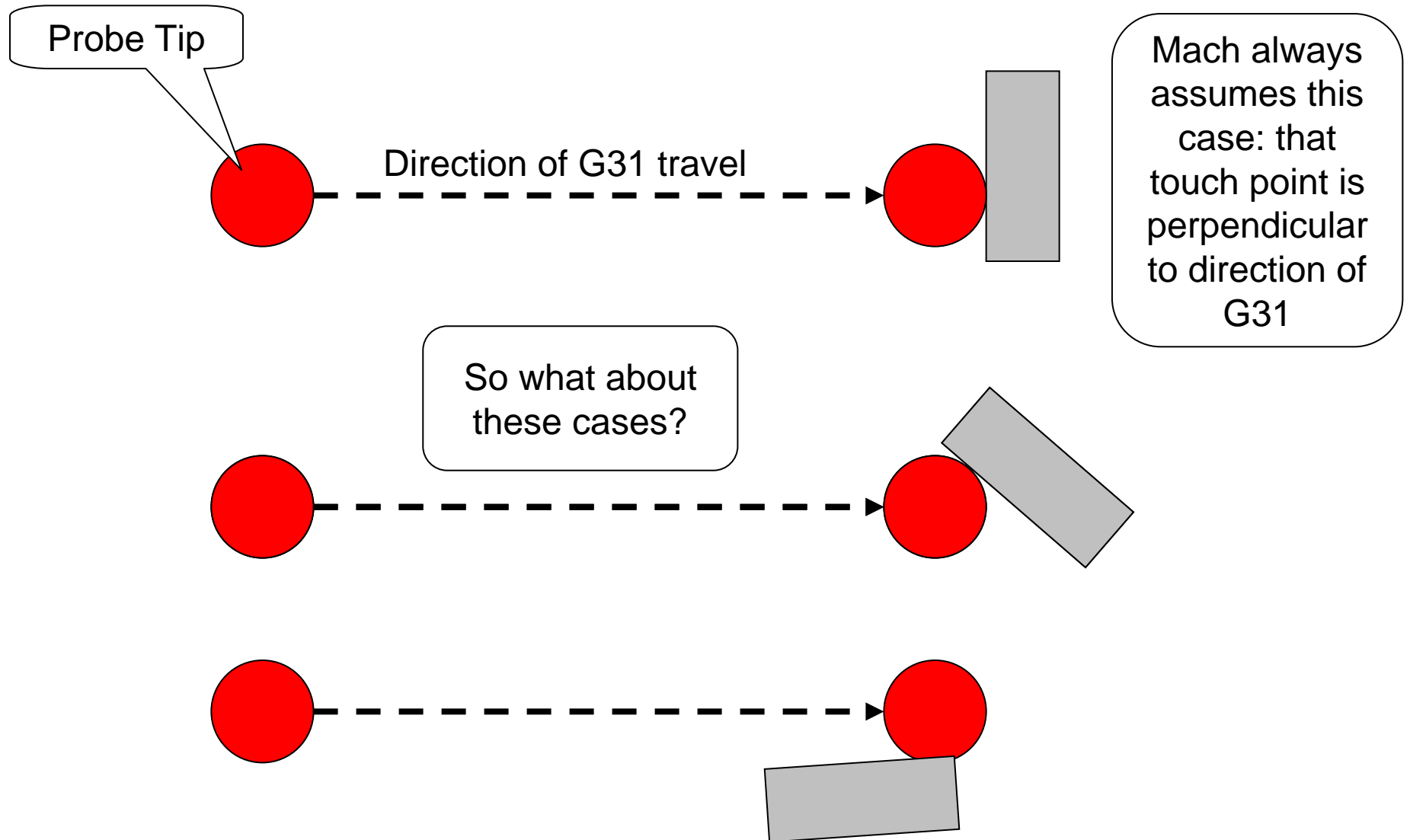
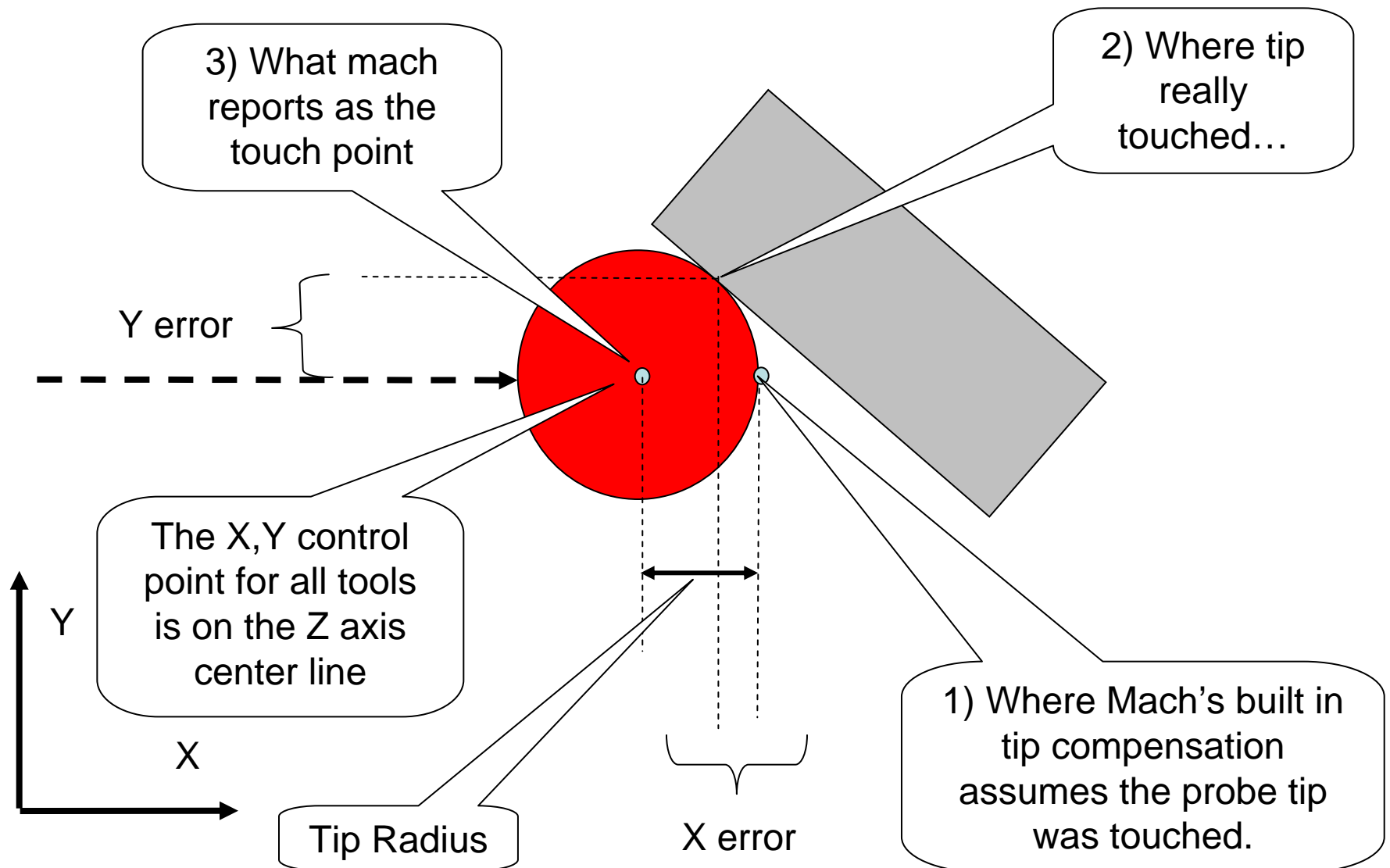


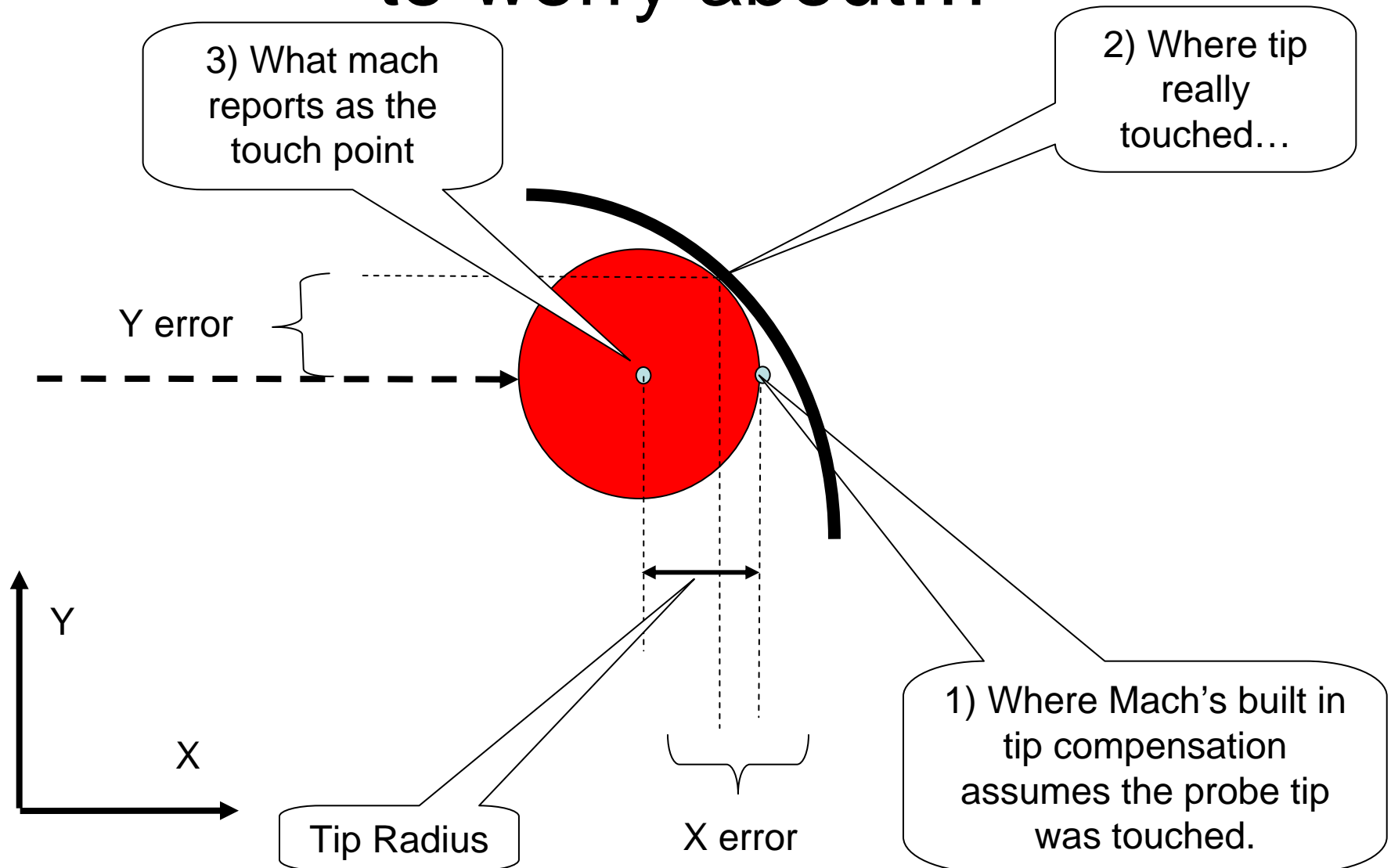
Cosine trigger point error due to direction of probe vs. surface contact point



Expanded view: Touch point error



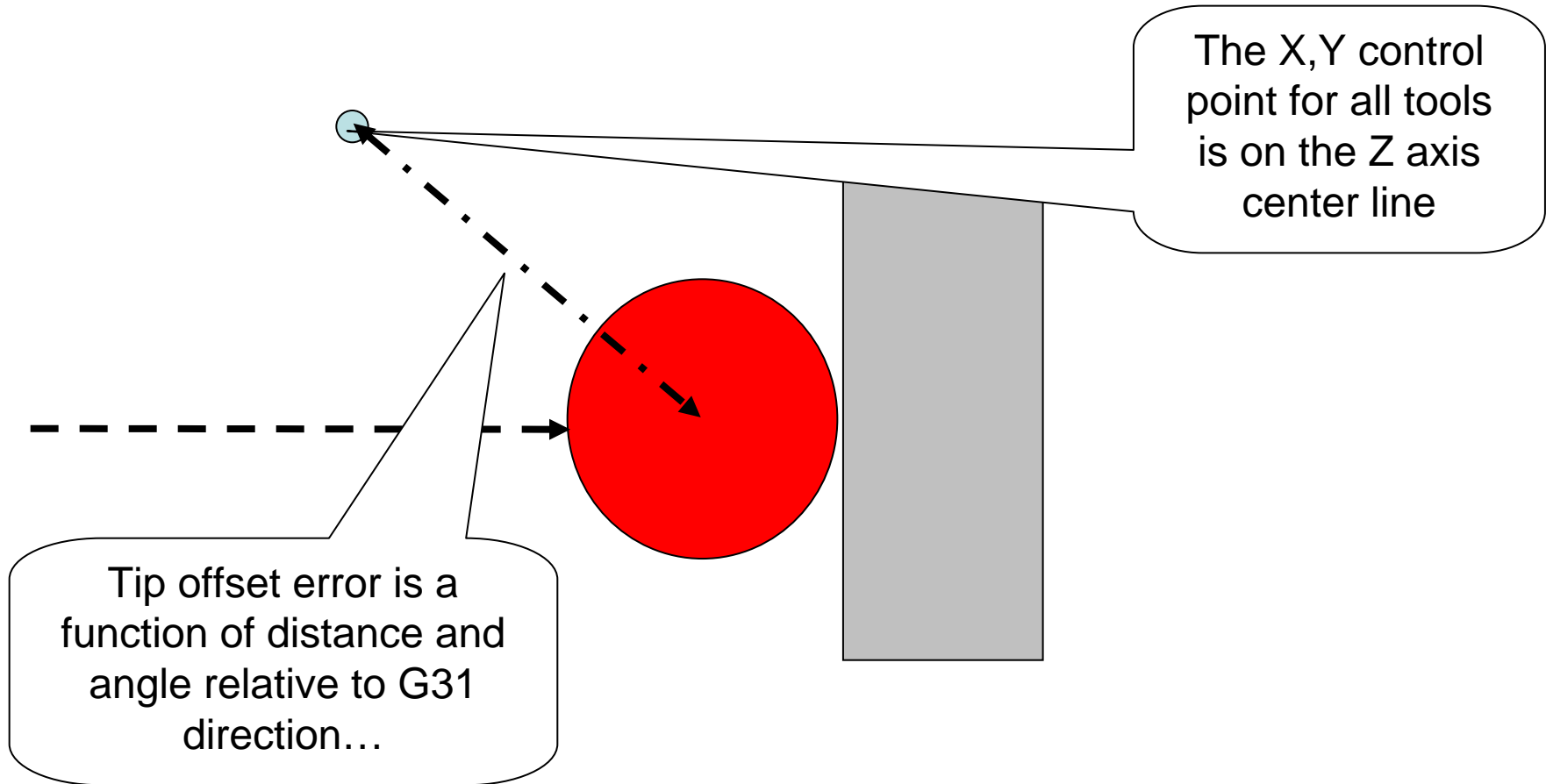
Probing a bore has similar details to worry about...



Only on the major diameters is the probe contact point perpendicular to the probe travel direction.

This is why the MSM circular bore probe routines determine the diameter of the bore from probes done along the X & Y major diameters and not from probes along an arbitrary chord of the bore.

Non-concentric probe tip problems



When the tip is not centered on the G31 control point, additional error is created...
Even for the case that Mach assumes is the right one.