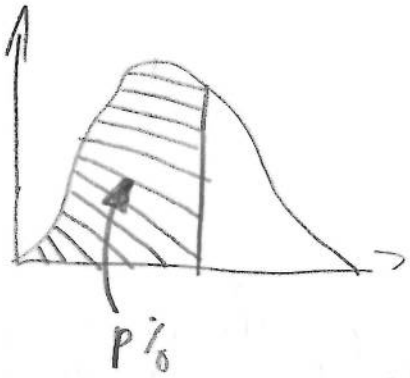
ile

a. We need to know the proportion of the foreground and if it is darker or brighter than the background

b. We find the value of the threshold that divides the area under the histogram into one region containing (100-P)% of the pixels corresponding to the background and a region containing P% of the pixels: the foreground



4) Modal

a. Select the minimum value which lies between the two peaks (background and foreground) of the histogram as our threshold

- this works only if there is a clear division between foreground and background

Problems with above methods (1,2)

- the local average in an image may vary in a systematic manner across the image (i.e. if the scene is illuminated strongly from one side)

Solutions (dynamic threshold)

- estimate the value of the threshold at each pixel - usually achieved by inspecting the pixels in the region surrounding the pixel and computing a threshold using one of the methods discussed.

→ **expensive** (perhaps only perform a subset - intervening thresholds could be interpolated)

→ size of region decided through experimentation.