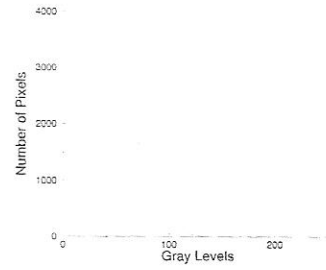


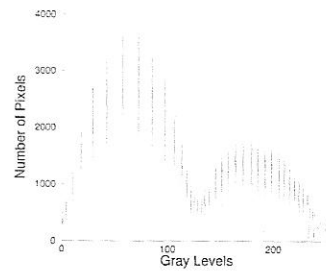
(a) Original image



(b) Original histogram



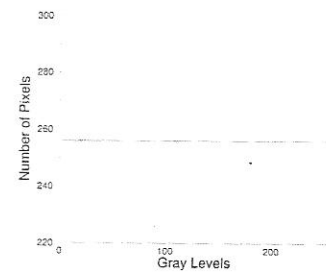
(c) After histogram equalization



(d) Histogram after histogram equalization



(e) After histogram equalization with random additions

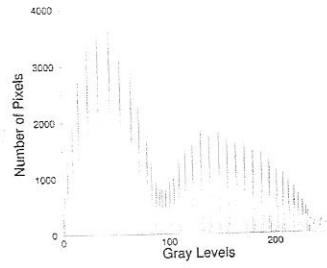


(f) Histogram after histogram equalization with random additions

**Figure 4.2: Enhancing the image of a bathtub cleaner by histogram equalization**



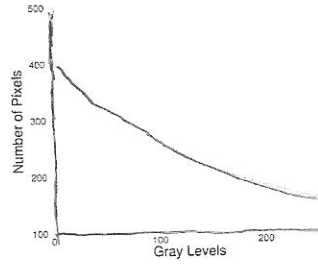
(a) After histogram hyperbolization



(b) Histogram after histogram hyperbolization



(c) After histogram hyperbolization with random additions



(d) Histogram after histogram hyperbolization with random additions

Figure 4.3: Histogram hyperbolization with  $\alpha = 0.5$  applied to the image of Figure 4.2a



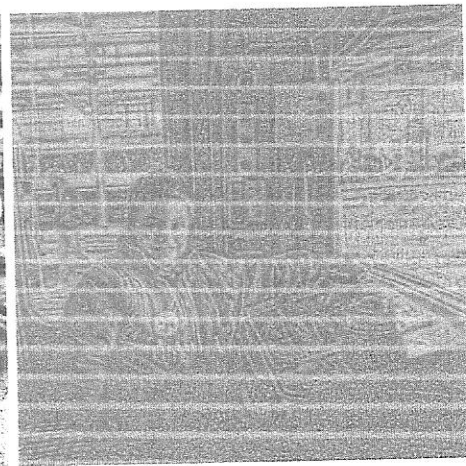
(a) Original image



(b) After global histogram equalization

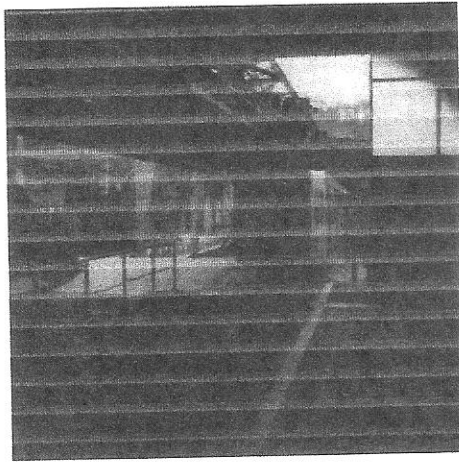


(c) After local histogram equalization

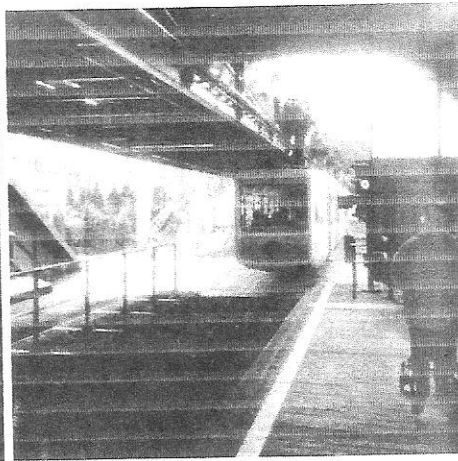


(d) After local enhancement

**Figure 4.4: Enhancing the image of a young train driver.**



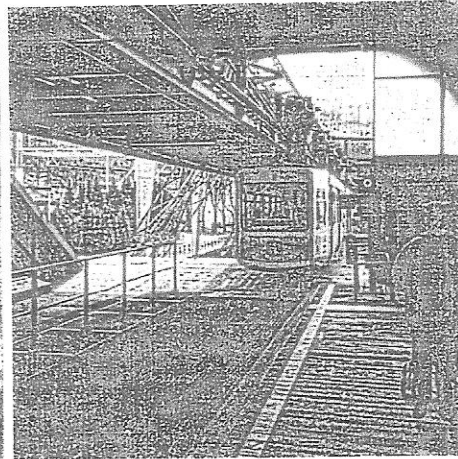
(a) Original image



(b) After global histogram equalization



(c) After local histogram equalization



(d) After local enhancement

**Figure 4.5: Enhancing the image of the hanging train of Wupertal.**



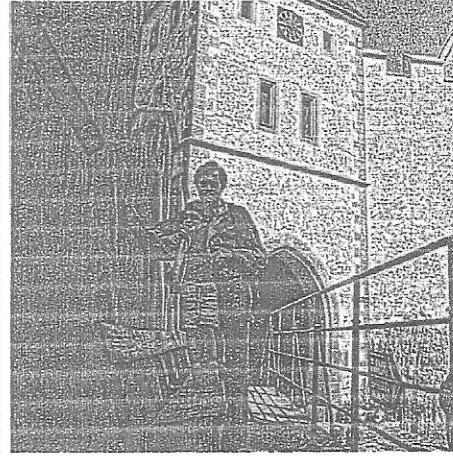
(a) Original image



(b) After global histogram equalization



(c) After local histogram equalization



(d) After local enhancement

Figure 4.6: Enhancing the image at the Karlstejn castle.