



figure 8.1. *Interpolation via PDE's. From left to right, top to bottom: Original image, level lines for $\delta = 30$, quantized image for $\delta = 20$, the interpolant for $\delta = 20$, quantized image for $\delta = 30$, the interpolant for $\delta = 30$.*

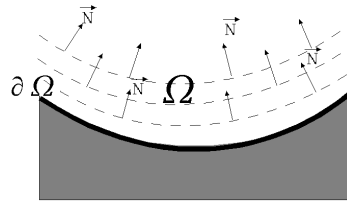


figure 8.2. Propagation direction as the normal to the signed distance to the boundary of the region to be inpainted.

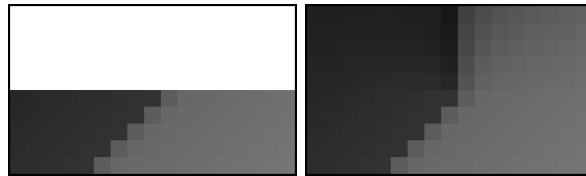


figure 8.3. Unsuccessful choice of the information propagation direction. Left: detail of the original image, region to be inpainted is in white. Right: restoration.

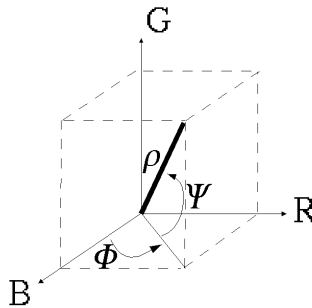


figure 8.4. Relation between the (R, G, B) color model and the one used in this section, $(\rho, \sin\phi, \sin\psi)$.

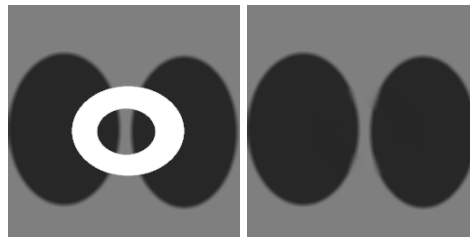


figure 8.5. *Synthetic example: Ω is shown in white. Topology is not an issue, and the recovered contours smoothly continue the isophotes.*



figure 8.6. *Restoration of an old photograph.*

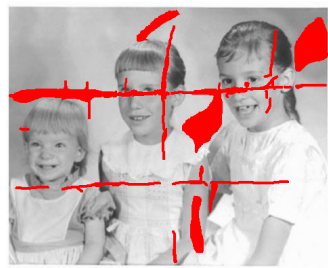


figure 8.7. *The user defines the region to inpaint (here shown in red).*



figure 8.8. Restoration of a color image and removal of superimposed text.



figure 8.9. *Progressive nature of the algorithm: several intermediate steps of the reconstruction of the previous figure.*



figure 8.10. *The bungee cord and the knot tying the man's feet have been removed.*

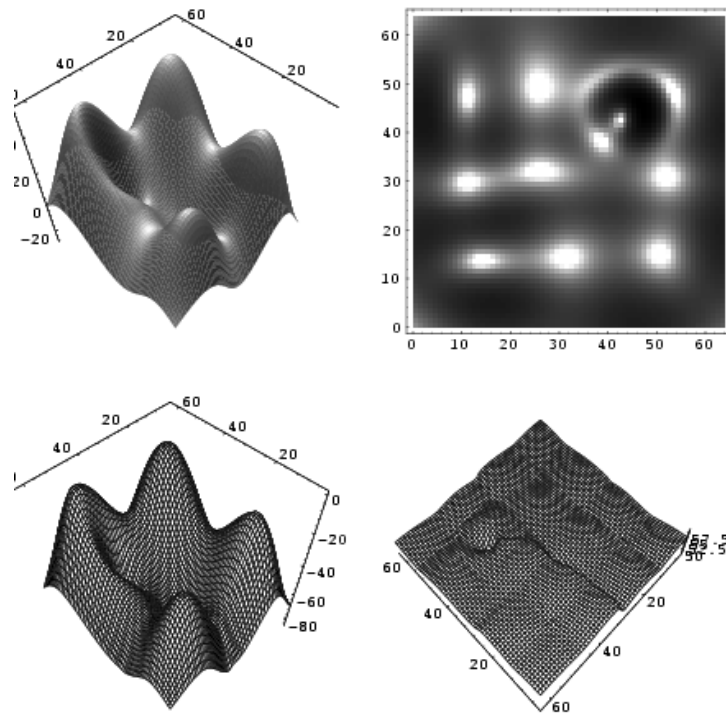


figure 8.11. *Example of shape from shading via curve evolution. The figure shows the original surface, the simulated shading, the reconstructed surface, and the reconstruction error.*

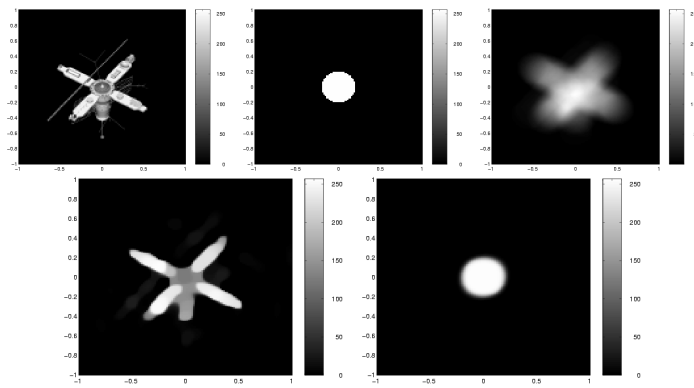


figure 8.12. *Edge preserving blind deconvolution. The first row shows from left to right the original image, the out-of-focus blur, and the blurred image. The recovered image and blurring function are shown on the second row.*