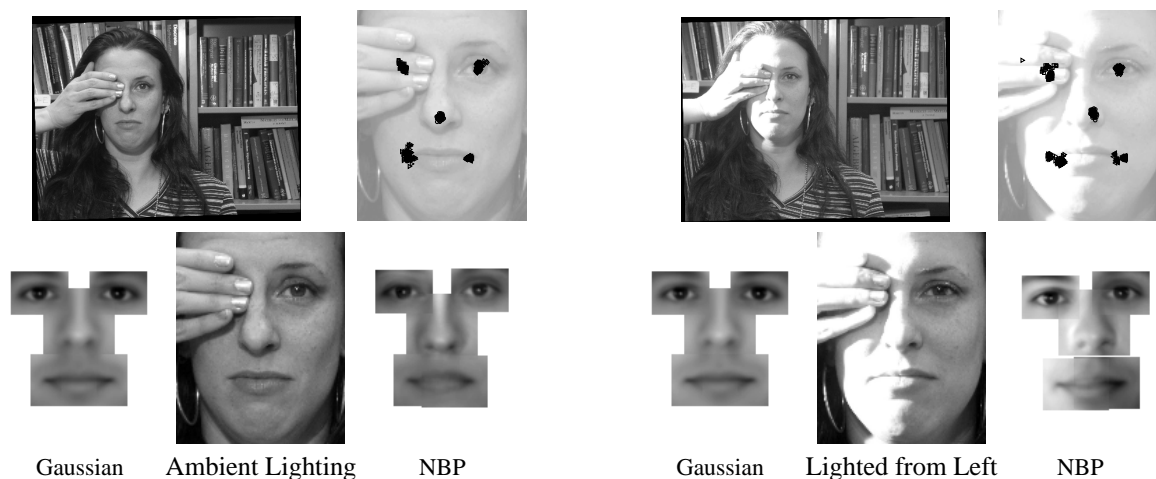


**Figure 7. Simultaneous estimation of location (top row) and appearance (bottom row) of an occluded mouth. Results for the Gaussian approximation are on the left of each panel, and for NBP on the right. By observing the squinting eyes of the subject (right), and exploiting the feature interrelationships represented in the trained graphical model, the NBP algorithm correctly infers that the occluded mouth should be smiling. A parametric Gaussian model doesn't capture these relationships.**



**Figure 8. Simultaneous estimation of location (top row) and appearance (bottom row) of an occluded eye. NBP combines information from the visible eye and mouth to determine both shape and illumination of the occluded eye, correctly inferring that the left eye should brighten under the lighting conditions shown at right.**

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