



Figure 9. Comparison of view-dependent and view-independent streaming with a fixed communication data size (0.5MB): The images in the left column are generated by our view-dependent streaming technique. The center images are generated by a variation of our technique, where only the cut vertices are transmitted, instead of the fundamental cut vertices with the information for view-dependent refinement, as discussed in Section 7. The right images are generated by view-independent streaming. In (a), although the mesh in the left column has a smaller number of faces than that in the right column, the left column shows a better image quality than the right one because the triangles that really help the visual quality have been transmitted. When the viewpoint is far from the model as in (b), the left column shows a worse image quality than the right one because the amount of additional information for view-dependent refinement overwhelms the amount of data for triangles which does not contribute the screen-space image quality. However, in both case (a) and (b), the numbers of transmitted triangles in the middle and right columns are the same and the middle column shows a much better image quality because most of the transmitted triangles really help to improve the visual quality.