3D Geometric Transformation based View Synthesis for Wide Angle View

$$\widetilde{\mathbf{u}} = s\mathbf{K}_t\mathbf{R}\left(\theta_x, \theta_y, \theta_z\right)^{-1}(\widetilde{\mathbf{H}} - \mathbf{T}_t)$$

Scale   3D Rotation   Translation

Warped image (**I**)   Geometric transformed image (**I'**)

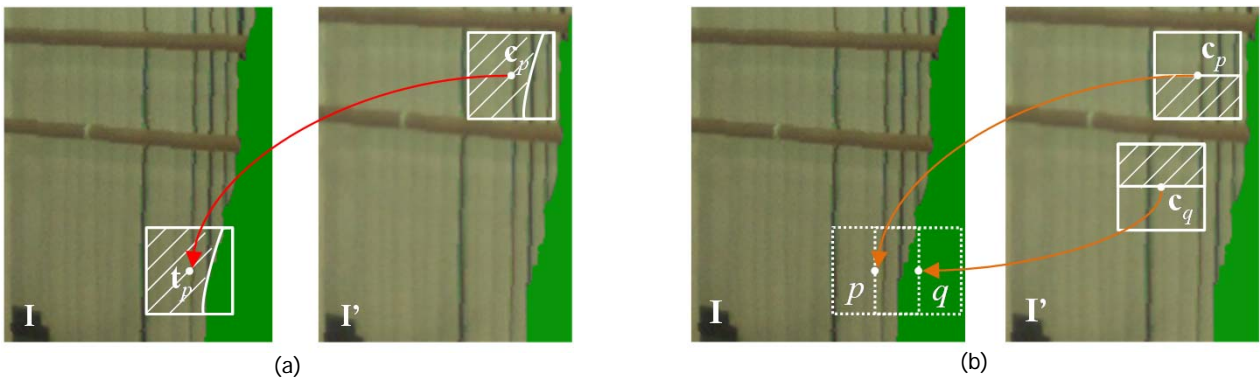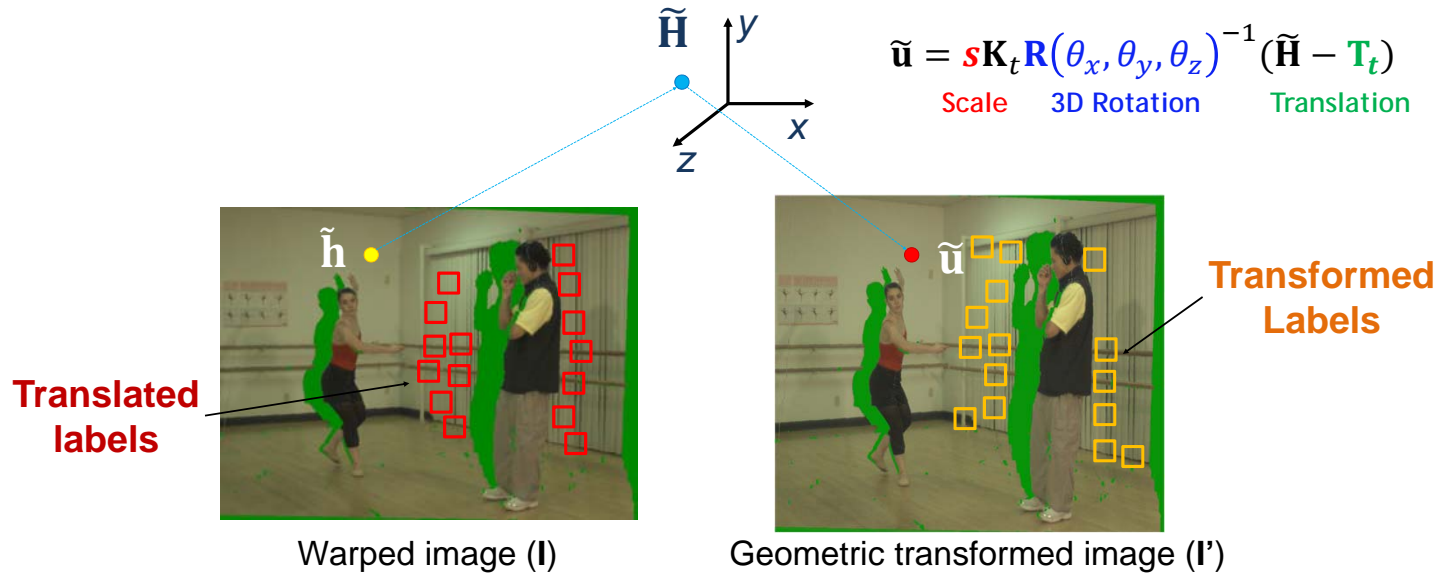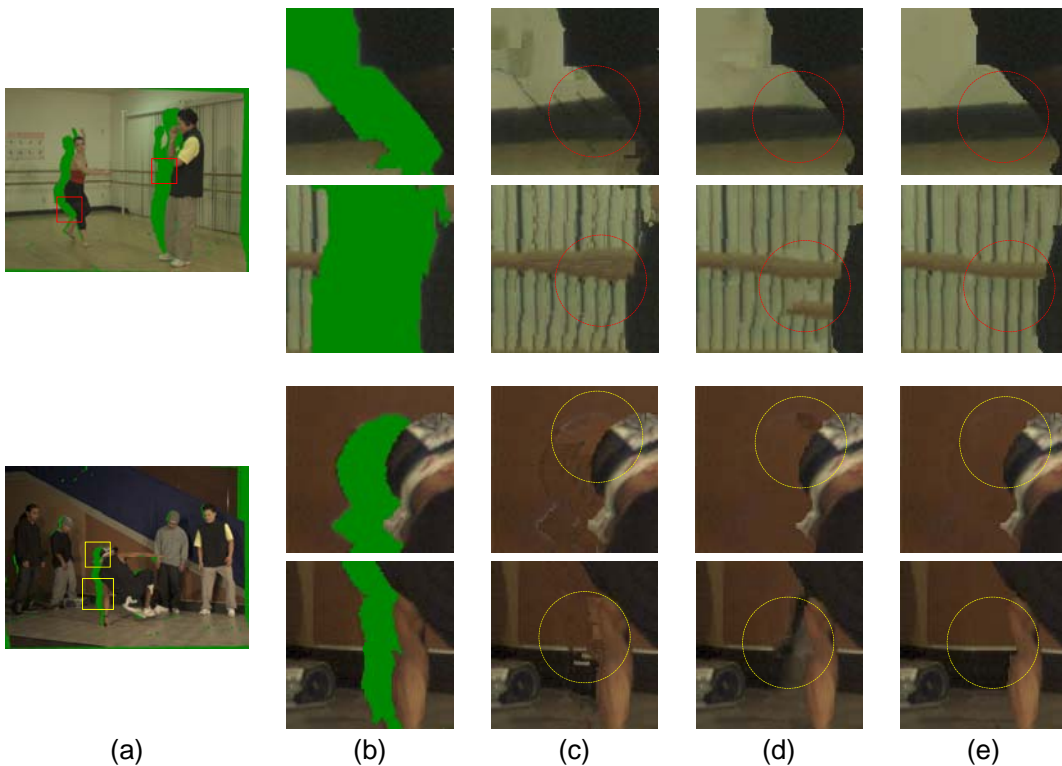Translated labels   Transformed Labels

(a)   (b)

Illustration of the proposed 3D geometric transformation based view synthesis method for wide angle view.
(a) The calculation of the data cost term. (b) The calculation of the smoothness cost term for structural consistency.

3D view synthesis results for "Ballet" and "Breakdancer".
(a) Wide angle virtual view.
(b) Magnified parts of (a).
(c) Local greedy based method.
(d) Global optimization based method.
(e) Proposed method.

(a)   (b)   (c)   (d)   (e)