

Analysis of Feature Curves in Buddhist Statue Faces

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We propose a quantitative method of studying Buddhist statue faces, employing the logarithmic curvature radius. We select two curves, a lateral curve and an eyebrow curve from Buddhist statue images. The curves are derived from grayscale images, and logarithmic curvature radiuses derived from the curves. The logarithmic curvature radiuses are transformed into Z scores, and the curve is categorized using a hierarchical cluster analysis method. As a result, the statues were divided into three groups based on the lateral aspect curve and the eyebrow curve respectively, and it could be confirmed that each group represents the geometric character in the face of the statue. However, three groups could not be distinguished according to the region or period. In the future we plan to increase the number of statue images and the number of ethnic groups looked at.