These are my "hands-on" observations of the red coloring often seen in the incised lines on jade objects. Since I am a restorer, I have had the opportunity to study closely the apparent red "painting" in the incised designs. Often, collectors and dealers would bring me jade objects which appeared to have traces of red in the incising and wanted them enhanced so the drawing could be seen more clearly. I don't recollect how many objects I've inpainted over time, but it must be close to 100.

The best example I can cite is the work I did on the Leiden Plate, a magnificent Early Classic Maya celt, inscribed with a complex figure on one side and Early Classic glyphs on the other. It was installed at the Kimbell Art Museum in Texas, for the "Blood of Kings" exhibit (curated by Linda Schele and co-authored, with Mary Miller, of the massive catalogue, with photographs by Justin Kerr). Since the museum is lit with soft, natural daylight, the incising seemed to completely disappear. It was Linda Schele's mother, who was visiting to attend the opening of the exhibit, who exclaimed, "Well, what am I looking at?"

When Justin and I first saw the Leiden Plate in the Leiden Museum in Holland, the incised lines had been filled with white talc, most of which had fallen out, making it very difficult to photograph in that condition. However, it was a reversible way to highlight the incising. When it arrived in the USA, it had been cleaned, but we all soon realized that something had to be done to permit the public to see this exquisite and delicate work of art. Linda and I finally convinced the curator of the Leiden Museum, Dr. Ted Leyenaar, that by inpainting with red acrylic paint, which would be totally reversible, the incising would become visible and we would not be violating the way many jade objects looked, when excavated.

Since the opening of the exhibit was the next day, the decision was finally made. I was to do the inpainting of this icon. I had six hours to paint both sides, before it had to be reinstalled. I needed Red Oxide (Indian Red) acrylic paint, which closely resembles the color of cinnabar, red lead or hematite, any of which could have been the original coloring that the Maya used, and some very fine 000 brushes. I had the aid of loupes (magnifiers) and a microscope -- and above all Linda's drawings, which helped speed up the tedious process by clarifying some of the very complicated outlines of the figure and the glyphs. I finished just in time for the celt to be placed back in its case, now fully visible for all to see.

I had always felt that the Maya did not paint in the incised lines with a fine brush, as I was doing. There was no evidence of the short brush strokes or of the continuity a brush full of paint would provide before it thinned out, that one would expect. Then, in a private collection, we were fortunate to see and photograph a large spondylus shell filled with red powder, and containing a jade bead imbedded in it. Before any of us dared to touch it, I took samples and sent them off to a Lab to determine what the red powder was. These could be highly toxic, dangerous substances if handled or inhaled. The answer came back. We were dealing with cinnabar mixed with red lead. When an object is covered with such a heavy powder, enough of the powder will cling to it, particularly in any crevices and scratches. That would account for the spotty distribution of traces of red coloring found on jades and even on bones. It was common practice in a secondary burial, to cover the skeletal remains of the dead with powdered cinnabar.

I was quite satisfied that my theory seemed to be correct, that the red paint was not put in with a brush. Rather, it was the residue left by the red powder found on many objects that had been placed in elite tombs. I am also pleased to report that the Leiden Plate went home after the show, with my red paint intact.