1. Introduction
This poster reports on the discovery, analysis and conservation of an artistic sculpture which features traditional Chinese craftsmanship and was originally located in the Tiger Balm Garden.

The Tiger Balm Garden
The Tiger Balm Garden, once the only thematical garden in Hong Kong, was constructed in 1933-1936. It was decorated with numerous statues and animal sculptures depicting Chinese folklore about compassion and honesty. Due to their important historical value, around 100 pieces of sculpture were salvaged by the Hong Kong Antiquity Authority before the garden was demolished in 2004 for a residential development.

Initial Condition
Amongst the salvaged series, a lion sculpture which measured 120(H) x 150(W) x 70(D) cm came into the laboratory for conservation in 2015. Constructed in 2004 for a residential development.

2. Inspection
Upon close inspection, the sculpture displayed different shades of colour and glossiness between the flaking surface paint and its under-surface. The under-surface was found to be smooth compared with the textured surface paint. Minor surface paint removal in some inconspicuous areas revealed that the original surface of the sculpture was fully covered with ceramic sherds. As some of these pieces had been lost with the passage of time, the lion sculpture’s former owner had tried to mask such losses with heavy over-paint.

3. Cleaning
The heavy over-paint was removed by benzyl-alcohol-based paint remover and the underlying surface was thoroughly steam cleaned. Six colours (blue, yellow, green, orange, pink and light green) on the ceramic sherds were revealed after cleaning.

4. Fabrication: the Jiǎn Cí Diāo Technique
After a literature survey, the fabrication technique of the sculpture was identified as Jiǎn Cí Diāo (剪瓷雕) which has been popular in China since the Ming (1368-1644) and Qing dynasties (1644-1913). Similar to Trencadís, as practiced in Catalan Modernism since 1900, Jiǎn Cí Diāo makes use of ceramic sherds to form mosaic artworks. While Trencadís makes use of flat tiles, Jiǎn Cí Diāo makes use of sherds cut out from ceramic bowls with various curvatures. Sherds adhered to the surface in a convex form create a three-dimensional effect.

5. Glaze Analysis
High power microscopic study indicated that all colours except orange were an over-glaze. The composition of the colourants was confirmed by scanning electron microscopy with energy dispersive x-ray spectroscopy (SEM/EDX).

<table>
<thead>
<tr>
<th>Colourants on Glazes</th>
<th>SEM/EDX result of glazes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blue</td>
<td>Cobalt Blue</td>
</tr>
<tr>
<td>Yellow</td>
<td>Lead Tin Yellow (Naple Yellow)</td>
</tr>
<tr>
<td>Green</td>
<td>Cobalt, Chromium &amp; Zinc Green</td>
</tr>
<tr>
<td>Orange</td>
<td>Red Lead (paint film)</td>
</tr>
<tr>
<td>Pink</td>
<td>Iron Red (still uncertain)</td>
</tr>
<tr>
<td>Light Green</td>
<td>Chromium Green</td>
</tr>
</tbody>
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6. Replication of Glazes and Fragments
As many ceramic sherds had been lost, giving the object a dilapidated look, it was necessary to replicate the lost fragments in order to reinstate the integrity of the sculpture. Glaze recipes were simulated and tested on white bowls. A coloured glaze layer was replicated after firing. Using modified pliers, pieces of sherds were cut out from the new colour-glazed bowls and attached in position using natural hydraulic lime.

7. Other Treatment Procedures
Other treatment procedures included rejoining broken parts by welding the metal components, in-filling the lost substrate with cement and natural hydraulic lime and consolidating the sculpture using CaLoSil E25 (70%) + ethyl silicate (Remmers KSE 300) (30%).

The treated sculpture was then welded onto a metal supporting platform as the last step of restoration.

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