

# Sheet 2: Techniques of Examination

## INFRA-RED REFLECTOGRAPHY

Fig. 1



416 Henry VII



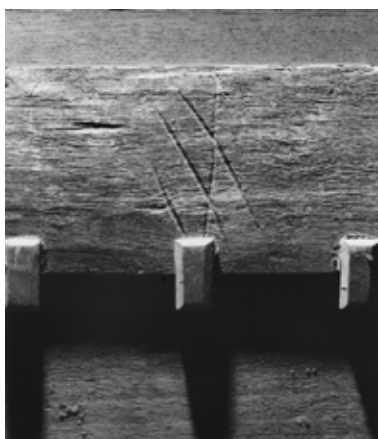
The underdrawing evident here in IR reflectography shows the way the face was originally built up from a drawn pattern with some freehand additions. It is very likely the original drawing derives from a sitting from the life.

## DENDROCHRONOLOGY & PANEL EXAMINATION

Fig. 3



4451 Catherine Parr



Dendrochronology can also provide clear evidence of when a tree was felled, which can help to date pictures. Examination of the backs of the panel paintings has led to the identification of 'cargo' marks on the wooden boards, probably trade marks placed on the oak planks for transport from the Baltic region, although further investigation is needed.

## MICROSCOPIC EXAMINATION

Fig.5



4861 Mary I



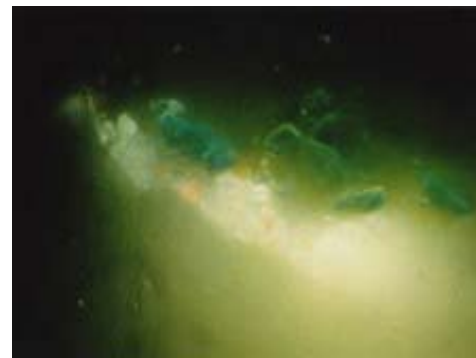
High magnification photography can show characteristic techniques and how artists built up shading with complex glazes and painted transitions in decorative surfaces. In this portrait of Mary I by the highly talented Netherlandish émigré Hans Eworth examination by microscope shows distinctive means of blending.

## PIGMENT AND MEDIA ANALYSIS

Fig. 2



2457 Henry VI



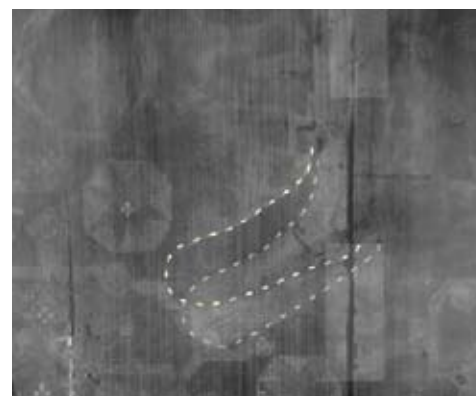
In this portrait the pigment on Henry VI's tunic today appears green, but pigment analysis has shown it was originally dark blue, having changed chemically on ageing. This confirms contemporary criticism of the king as a man who dressed like a 'farmer', (blue being a colour associated with working life). The type of binding medium used by artists influenced their ability to render the texture and surface. Analysis of the oil, egg resin and other media will use techniques including gas chromatography and Fourier transform infrared spectroscopy.

## X-RAY PHOTOGRAPHY

Fig. 4



5511 Edward VI



The x-ray showing the foot of Edward VI indicates that his feet were originally further apart, showing that the artist had attempted to replicate the wide legged posture of Edward's father, Henry VIII in the earlier painting by Hans Holbein to increase the prestige of a 9-year-old King. (See also case study on NPG website).

## ULTRA VIOLET EXAMINATION

Fig. 6



442 Edward VI



Tudor paintings have often been significantly restored and deciphering original work from later additions is critical. This picture has suffered from small damages and UV light shows it has been restored (shown as dark areas across the face and costume).