

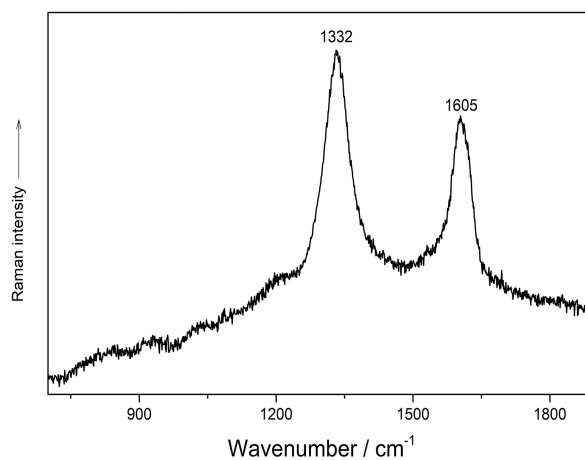
**Figure S1.** Sample MOM-A: (a) PLM micrograph of the ground layer in reflected light; (b) ESEM/BSE micrograph of the microfossil in the ground layer.



**Figure S2.** The “Virgin Hodegetria” panel painting: (a) IR reflectography; (b) IRFC image; (c) historical photo after the restoration carried out in the 19th century; (d) after the recent restoration intervention.

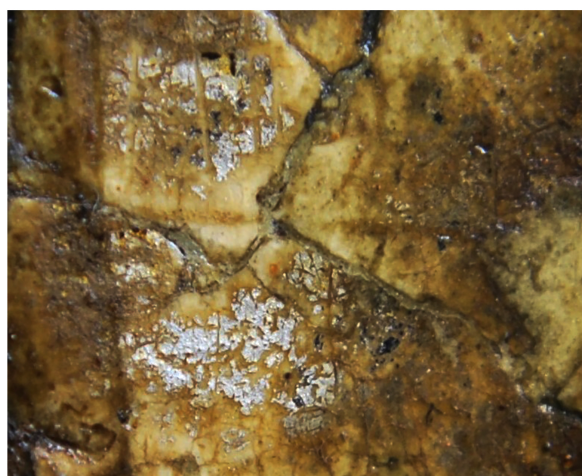


(a)

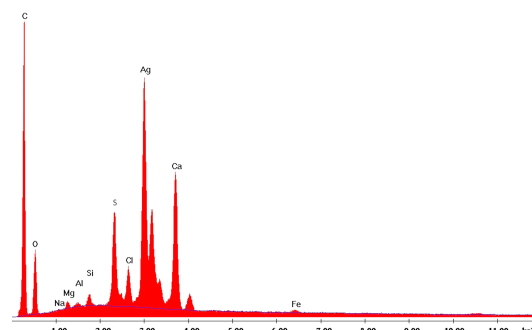


(b)

**Figure S3.** (a) Underdrawing traces in the lacuna of Virgin's shoulder; (b) sample MOM-G:  $\mu$ -Raman spectrum of carbon black.



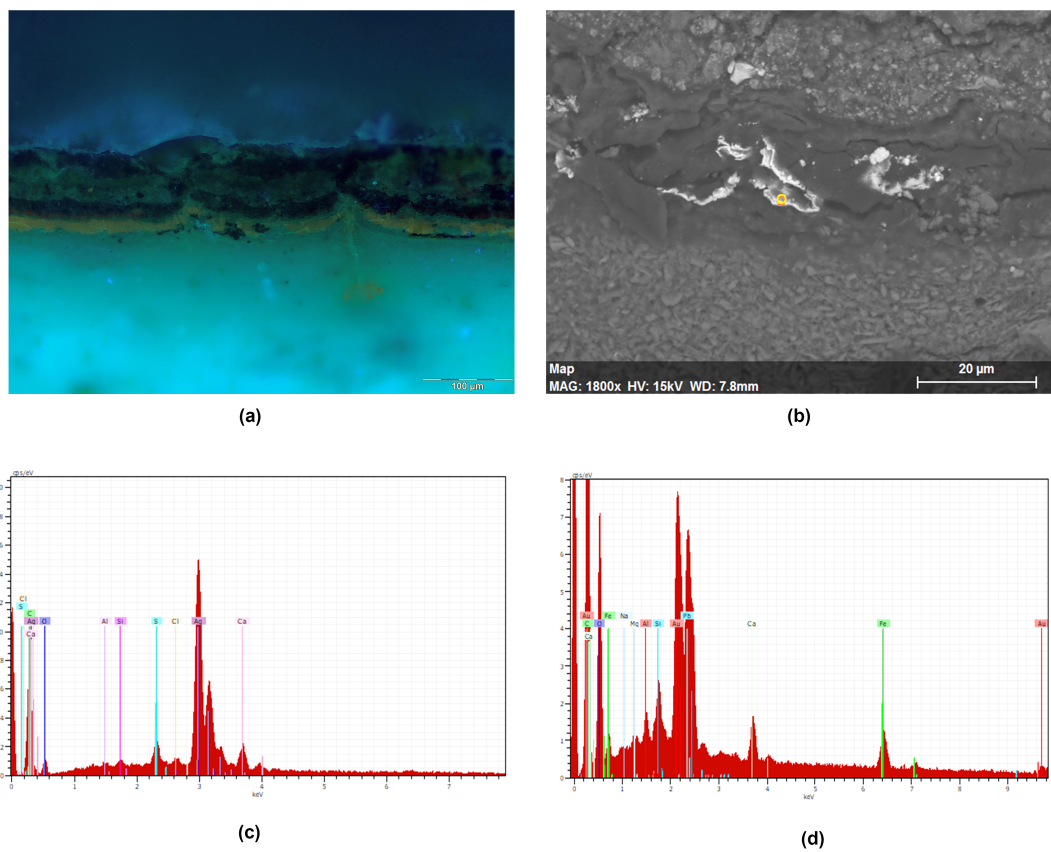
(a)



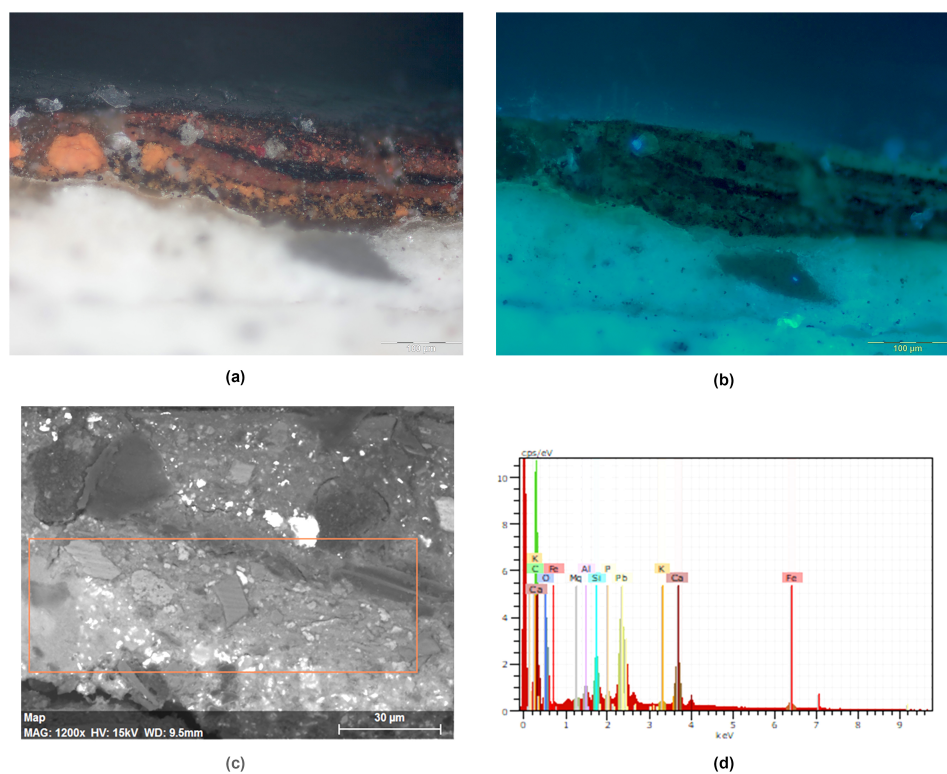
(b)

**Figure S4.** (a) Macro photograph of silver leaf traces on the background; (b) sample MOM-C: ESEM/EDX spectrum of original silver leaf.

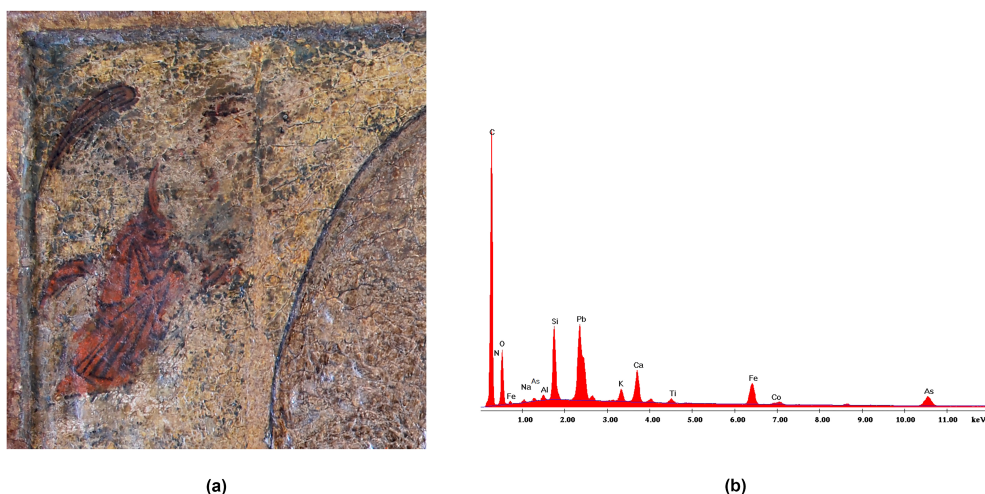




**Figure S5.** Sample MOM-B: (a) PLM micrograph, UV light; (b) ESEM/BSE micrograph: detail of the original Ag leaf on the ground layer; (c) EDX spectrum of Ag leaf; (d) EDX spectrum of Au leaf.



**Figure S6.** Sample MOM-A: (a) PLM micrograph, detail of painting layers; (b) PLM micrograph, UV light; (c) ESEM/EDX micrograph, microanalysis detail; (d) EDX spectrum of red lead-based layer.



**Figure S7.** (a) Blue traces of repainting layer, upper left corner, detail; (b) sample MOM-D: ESEM/EDX spectrum of the repainting layer.

**Table S1.** ED-XRF analysis measurement point (ED-XRF/MP), description and elemental composition of the investigated areas

<i>ED-XRF/PM</i>	<i>Description</i>	<i>ED-XRF detected elements</i>
MO 1	Flesh tone, Virgin's left hand, shadow	Pb, Ca, S, Fe, Hg, Sr, K, Mn, Si
MO 2	Flesh tone, Virgin's left hand midtone	Pb, Ca, Fe, Sr, Mn, Si, Hg
MO 3	Flesh tone, Virgin's left hand, light	Pb, S, Ca, Fe, Sr, Hg
MO 4	Blue, Virgin's sleeve	Pb, Cu, S, Ca, Fe, K, Sr, Ba, Si
MO 6	Dark red, Virgin's mantle right sleeve, shadow	Ca, Pb, S, Hg, Fe, Sr, K, Ba, Si, P, Cu
MO 7	Dark red, Virgin's shoulder mantle fold	Pb, S, Ca, Hg, Fe, Sr, K, Si, Ba
MO 8	Red, Child dress sleeve	Pb, S, Hg, Ca, As, Fe, Sr, Al, K
MO 10	Flesh tone, Virgin's cheek, shadow	Ca, Pb, S, Sr, Fe, K, Si, P
MO 11	Flesh tone, Virgin's cheekbone, light	Ca, Pb, S, Sr, Fe, K, Si
MO 12	Red contour line, Virgin's face	Pb, S, Ca, Sr, Fe, Hg
MO 13	Black, Virgin's left eyebrow, shadow	Pb, Ca, S, Hg, Fe, Sr, K, Cu, Mn
MO 14	Reddish, Virgin's left eyebrow, midtone	Ca, Pb, S, Hg, Fe, Sr, K, Si, P
MO 15	Red, Virgin's left eyebrow	Ca, Pb, S, Hg, Fe, Sr, K, Si
MO 16	Red, Virgin's upper lip, shadow	Pb, Ca, S, Hg, Fe, Sr, K, Si, Al, P
MO 17	Light blue, Virgin's veil	Pb, S, Cu, Ca, Sr, Fe
MO 18	Red, Child halo, dark outline	Ca, S, Pb, Hg, Sr, Ag, Fe, K, Cu, Au
MO 19	Gilding, Child halo	Ca, S, Pb, Sr, Cu, Fe, Ag, Mn, K, Au, Hg
MO 20	Gilding, Virgin's halo, right side	Ca, S, Sr, Fe, Pb, Au
MO 21	Gilding, background on Virgin's right side	Ca, S, Pb, K, Sr, Fe, Si, Cu, Ag
MO 22	Gilding, background on Virgin's right side	Ca, S, Pb, Cl, Ag, K, Cu, Fe
MO 23	Gilding, background on angel base, left	Ca, S, Sr, Pb, K, Fe, Si, Ag
MO 24	Ground layer, lacuna on Virgin's right eyebrow	Ca, S, Sr, Pb, Fe