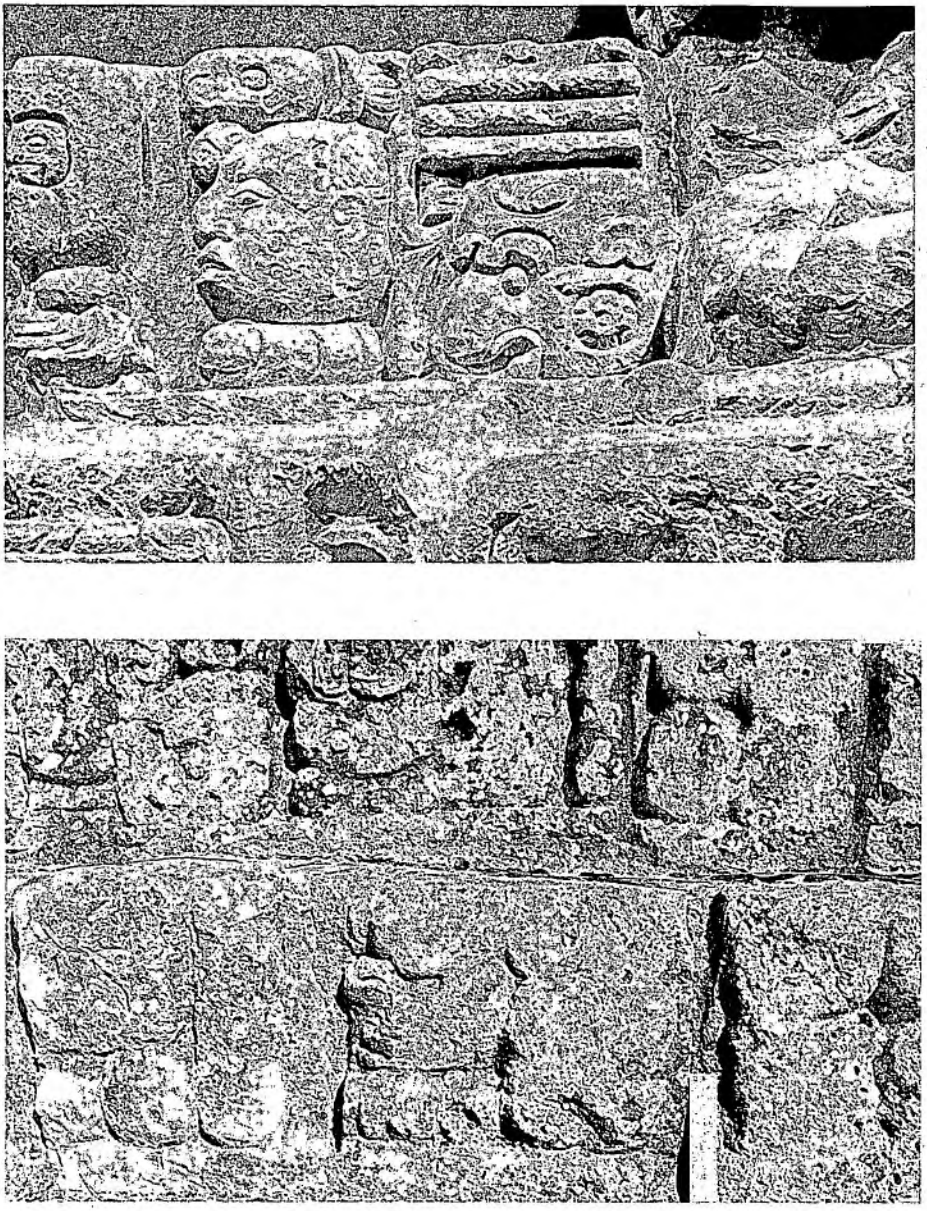
working name.

Just after midday, out of the clear summer sky freezing rain started to fall, soon a wind sprang up and the cloud descended. We put on gloves and pulled up our hoods but by 1.00 pm it was impossible to work effectively. As we stumbled back down the ridge I was already planning where to recommence once the weather improved.

Control of lichen growths on Mayan archaeological ruins

During the period 1895-1935 many archaeological ruins were rescued from dense jungle growth and opened up for tourism. As a consequence of the new light regime lichens, mosses, and algae started to flourish on the walls, altars, steps, buildings etc, obscuring features carved on the surfaces and, most importantly, contributing to weathering and breakdown of the stone. In this respect lichens are particularly troublesome. The photographs compare a portion of stairway preserved in a museum with a comparable stair in situ. Mechanical brushing to keep the stonework clean causes as much damage as the organisms. Mason Hale has been examining the problem in Guatemala and Honduras. The dominant lichen species are Phyllopsora corallina, Chiodecton antillarum, Physcia sorediosa, Leptotrema santense, Dirinaria piata and D. confluens. These were removed by spraying with biocidal solutions such as 'Clorox' or borates which act primarily on the algal component. Non-wettable crusts require several treatments. After observing trial plots a regime of three sprays at 6 month intervals was found to be effective in cleaning the monuments. Respraying with any one of the solutions every 2 - 8 years is thought to be adequate to prevent reinvasion. To complete the conservation programme consolidation solutions are applied.



Portion of an elaborately carved stairway preserved at Peabody Museum, Harvard (upper photo), compared with a similar stair *in situ*.

Photo: Mason Hale