

THAT the Enkomi silver cup exhibits many fascinating points of technique no one will deny. The suggestion that the black is derived from an inlay of copper is interesting, especially coming from the Department of Mineralogy of the British Museum (Natural History), and it is clear that such a copper-inlay technique would be likely to facilitate manufacture; but, in the absence of the inlays, its presence would be difficult and might even be impossible to prove. The cap at the extremity of the 'wish-bone' handle, referred to above, was scraped and the freshly exposed surface appeared coppery, but whether due to inlay or to staining of the silver alloy (that is, by niello) was not determined. Dr. Claringbull, who examined scrapings by spectrograph, could detect silver, copper and gold only. It is admitted that to obtain a *representative* sample of the black material in question from the bowl, without causing damage, was found to be most difficult. A further examination by X-ray diffraction of a second tiny specimen that was submitted yielded nothing fresh.

The features that led me to consider the Enkomi cup had been decorated with niello may be summarized: black patterns lustrous or splendid and enamel-like; where damaged, brittle and in one case appearing as a charcoal-like powdery stain subsisting from antiquity in contact with massive copper chlorides and carbonates; where undamaged, forming a perfect tracery of shiny jet-black mass-and-line ornament in a groundwork of bright metallic silver; the perfection of line and lustre survived immersion for 20 min. in commercial formic acid (1:2 parts water, by vol.), at boiling temperature, without any sign of loss. The gold-foil patterns that had been applied to this black material were in no way deformed, as one might have expected them to be, had they been mounted on copper inlays that would certainly have become swollen by oxidation during 2,000 years of burial. The cavities cut in the silver to contain the black decoration, where undamaged, were filled flush with the surface contour and the black material did not appear to have increased in bulk. If the results of the X-ray crystallographic examination were considered to be in doubt because of the possible inadequacy of the sample, the above observations—difficult to explain otherwise—had to be taken as straw in the wind suggesting the use of niello.

The weak point in the argument for niello is that although chlorides were present in quantity in the incrustation, no trace of sulphides could be detected. For this reason I agree that the case must be taken to be not proven as regards the presence of stromeyerite and acanthite; and, having regard to the importance of the matter, I would agree further that a re-examination is desirable. I suggest, however, that as we have now a new theory, some preliminary work should be done on black lustrous copper minerals (as exemplified, for example, in Tang mirrors) to determine how far the black compounds can survive treatment with hot formic acid without losing lustre, shape or quality, before contemplating further operations on the cup itself.

HAROLD J. PLENDERLEITH

International Centre for the  
Study of the Preservation and  
Restoration of Cultural Property,  
Rome.

## MISCELLANY

### Cost of Scientific Periodical Publications

I AM writing with reference to the paragraph under the above heading which appeared in *Nature* of April 9, p. 124.

The periodicals mentioned are not similar in matter per page, since some of them contain considerable amounts of what is classed as 'difficult' setting by printers, and this has an appreciable effect on production costs. While it may be broadly true to say that a reduction in price leads to increased circulation, the optimum circulation obviously depends on several other factors; for example, the number of people engaged in research in a particular field. The journal which has the backing of a scientific society is in an advantageous position in that it has a guaranteed circulation to members of that society, as well as a subsidy in most cases.

The figures quoted in the table are approximately correct for 'library subscription rates' of the Pergamon Press journals mentioned, although, on the basis of the volumes completed on 1959 subscriptions, the price of *Physics and Chemistry of Solids* is 3.7d. per page (not 4.1d.), and that of *Reactor Science* is 8.2d. per page (not 8.9d.). However, the table as published is not the whole story so far as Pergamon Press subscription prices are concerned. Pergamon Press, in order to ensure maximum dissemination and to encourage individual scientists to own their own journals, have a specially low subscription price for private individuals, and the effect of comparing these subscription rates against the journals published by other publishers listed in the table is as follows:

Title	Source	Publisher	Price per page
<i>Tetrahedron</i>	U.K.	Pergamon Press	0.7d.
<i>Journal of Inorganic and Nuclear Chemistry</i>	U.K.	Pergamon Press	0.9
<i>Journal of the Chemical Society</i>	U.K.	Chemical Society	1.0
<i>Physics and Chemistry of Solids</i>	U.K.	Pergamon Press	1.0
<i>Chemical Reviews</i>	U.S.A.	American Chemical Society	1.2
<i>Journal of Soil Science</i>	U.K.	Oxford University Press	1.3
<i>Chemical Engineering Science</i>	U.K.	Pergamon Press	1.4
<i>Information and Control</i>	U.S.A.	Academic Press	2.0
<i>Philosophical Magazine</i>	U.K.	Taylor and Francis	2.2
<i>Biochemic</i>	Holland		2.25
<i>Fuel</i>	U.K.	Butterworth	2.5
<i>Journal of Electronics</i>	U.K.	Taylor and Francis	2.8
<i>Chemical Abstracts</i>	U.S.A.	American Chemical Society	3.0
<i>Reactor Science</i>	U.K.	Pergamon Press	4.1

Since this note was written, an amicable and constructive meeting has taken place between representatives of the Pergamon Press and the Standing Conference of National and University Libraries and the Library Association; the latter, although they now have a better appreciation of the reason for the Pergamon Press price differential policy, nevertheless still object to the fact that libraries should have to pay the higher, multi-user price.

I. R. MAXWELL

Pergamon Press, Ltd.,  
Headington Hill Hall,  
Oxford.