



Fig. 3 Electron micrograph of a newt platelet crystal viewed along the c axis (A) and schematic tracing of the same [001]projection (B) made approximately to the same scale. It can be seen that only a screw diad (space group $P2_12_12_1$) and not a rotation diad (space group $P22_12_1$) parallel to unit-cell side a correctly describes the matter distribution. Note that positioning of these additional symmetry elements is not deliberate for geometrical reasons¹¹. The rotation diad not consistent with the observed mass distribution is shown dashed on the right half of B. Compare A with the negatively stained preparation in Fig. 1 of the report by Ohlendorf et al.¹. For further details see Fig. 2 legend.

units per unit cell, as in X. laevis¹. There is no evidence that the complex exceeds the length of the b axis¹; however, this point awaits confirmation by further analysis, as does the positioning of a local 2-fold axis¹ of the dimeric structure⁸.

To explain the discrepancies between the findings in X. laevis^{1,7} and our amphibian and teleost data, we should consider the methods used. As shown by investigations using negative staining techniques in electron microscopy of protein molecules⁹, there is commonly an overlap of negative and positive staining of such preparations. Such overlap is inevitable and must be considerable when a highly anionic protein like the phosvitin moiety⁸ of the yolk-platelet subunit is stained with a cationic dye containing uranyl ions¹. The dark spots in the positively stained crystals in [100] and [001] projection (Figs 2, 3)-unrecognizable in unstained sections but quite evident in sections stained with uranyl acetate at low pH (3.5)-give the most probable location of the phosvitin moiety²; in contrast to previous views², however, it accommodates both phosvitin molecules of the dimeric complex⁸. This significant part of the complex may largely have escaped representation in the negatively stained preparations of X. laevis platelets¹. In fact, the negatively stained preparation (Fig. 1 of ref. 1) is almost identical to the [001] projection (Fig. 3) in the three species studied here following positive staining of crystal sections with uranyl acetate and lead citrate. In a negatively stained preparation, the space occupied by stain is interpreted as being void of the macromolecule under study; this makes it very unlikely that the results of the three-dimensional reconstruction of the amphibian lipovitellin-phosvitin complex¹ is reliable.

The procedure used in the present study yields results comparable with X-ray data of protein crystals¹⁰, except that it

produces a reduction in length of some 10% (due partly to dehydration, especially for epoxy-resin embedding), various degrees of distortion (due to sectioning) and a resolution limit between 1.5 and 2 nm. All our findings were reproduced-and most of our work was indeed done-using glutaraldehyde-urea embedding in the partially hydrated state⁶. The original authors of this procedure have proved that the extremely lipid-rich myelin sheath does not lose its natural birefringence and dimensions when subjected to this embedding method⁶. This implies that the material studied in our laboratory has been preserved as adequately as possible. The sectioning process, furthermore, precludes the bias produced by splitting isolated platelets along preferential planes¹ and thus makes all crystal projections available with the same probability.

I conclude that teleost and amphibian yolk platelets are quite similar assemblies of lipoprotein complexes (orthorhombic, P212121, almost identical unit-cell lengths for all species studied so far) and, therefore, contain a macromolecular constituent of highly conserved tertiary structure. Space group P21221 and the three-dimensional shape of the asymmetric unit as described in isolated yolk platelets of X. laevis¹ do not agree with observations made on our comparative material.

I thank Professor S. Haussühl for crystallographic advice, Mr G. Magdowski for technical assistance and the Deutsche Forschungsgemeinschaft for support.

Received 1 July; accepted 20 November 1980.

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Corrigenda

In the letter 'West Antarctic ice sheet fluctuations in the Antarctic Peninsula area' by D. E. Sugden and C. M. Clapperton, Nature 286, 378-381 (1980), the correction factor of ~750 radiocarbon years for Antarctic Peninsula shells was added to rather than subtracted from the Holocene ¹⁴C dates of $6,930 \pm 60$ and $7,200 \pm 50$ yr BP for the outer and inner fractions of SRR-1500. The adjusted dates should be 6,180 and 6,450 radiocarbon years BP respectively. The discussion concerning the possibility of an ice-free George VI Sound in the Holocene thus refers to conditions 6,000-6,500 radiocarbon years ago and not $\sim 8,000$ years ago. This change does not affect the conclusions of the paper.

In the letter 'Selective killing of mycoplasmas from contaminated mammalian cells in cell cultures' by Marcus et al., Nature 285, 659-661 (1980), the footnote to Table 2 should refer to a 400-W lamp, not 40-W as published.

Erratum

In the letter 'Expression of H-2, lamin and SV40T and TASA on differentiation of transformed murine teratocarcinoma cells' by Knowles et al., Nature 288, 615-618 (1980), two lines were omitted from the bottom of the left-hand column on page 617; it should read:

.... differentiates seems to express the H-2D^b private specificity. It has been observed that somatic cell hybrids between F9 and differentiated cells can