Linck and Langevin, Vol. 89, No. 2, May 1981

Page 335, Fig. 13 should appear as follows:

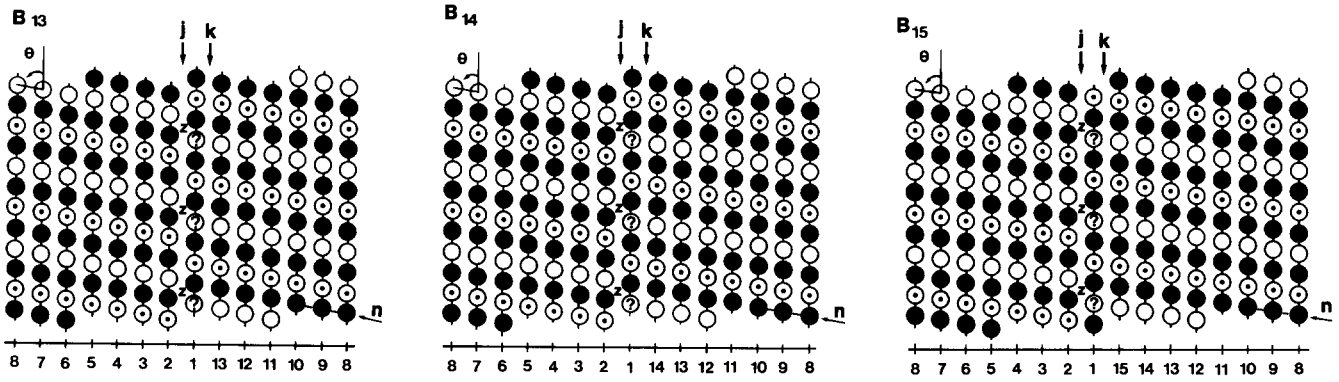

FIGURE 13 The models describe the simplest of several possible lattices of purified B tubulin polymerized in vitro into "microtubules" of 13, 14, and 15 protofilaments. The details are similar to those of model B_{13} in Fig. 13 of the accompanying paper (40): the longitudinal (numbered) protofilaments are composed of α (open circles) and β tubulin (filled circles), thought to form $\alpha\beta$ heterodimers (2, 44). All models possess a left-handed, three-start helical family (*n* arrows) which, with the protofilaments, defines the lattice of monomers and a ~4-nm axial × 5-nm equatorial unit cell (2, 13, 38, 49). θ is the smaller bond angle of the tubulin monomer unit cell. Open circles with dots designate a unique population of α_2 tubulin subunits whose existence, particularly in the B subfiber, is supported by this and other reports (5, 69), although the heterogeneity of tubulins in microtubules appears to be even more complicated (4, 33, 41, 69, 71). For simplicity, we illustrate only the different α_1 (open circles) and α_2 subunits (circles designated by . or ?). For reasons given in the Discussion, we believe that purified B tubulin polymerizes in vitro into its native B lattice configuration, as defined by Amos and Klug (2), with the additional details described above. It has been shown that brain tubulin also assembles in vitro into microtubules with a B lattice (49). Such an arrangement of dimers requires that there be a helical dislocation in the form of a seam between two of the protofilaments bonded in a A lattice-like manner (1, 28, 49); this dislocation is designated here as a j seam (*j* arrow). In the in vitro polymerization of these and brain microtubules, two mechanisms of assembly can be envisaged: first, bonding and elongation of protofilaments 1 and 2 (formation of the j seam) may precede that of the remaining protofilaments. Second, formation of a continuous B lattice may precede the final formation of the j seam. Thus, depending on where α_2 tubulin assembles in protofilament 1 (at . or ?), a second, unique k seam may be formed. These models automatically generate a series of stereospecific sites (e.g., z sites) that repeat at 16 nm along the j seams. The significance of these models to native microtubules is discussed in the text.

Page 336, the reference in the Note Added in Proof should read:

R. Linck, D. Albertini, G. Langevin, G. Olson, and D. Woodrum. 1981. *Biophys. J.* 33:215*a*.