



Figure 72. Three possible interpretations of regional structure between Tintina fault and a basal detachment under the Pelly, Selwyn and Mackenzie mountains [original figure].

1. Tintina fault postdates all shortening in the Pelly, Selwyn and Mackenzie mountains, and displaces the imbricated, detached slab and the crystalline basement below by 450 kilometres of dextral slip; or

2. Tintina fault follows telescoping of the Pelly Mountains, but is concurrent with shortening in Selwyn and Mackenzie mountains, during the Late Cretaceous and Early Tertiary. It acts as a giant dextral tear, confined to the detached and imbricated cover strata, and ends on the basal detachment; or

3. Tintina fault slips after shortening in the Pelly Mountains, but before telescoping in the Mackenzie and Selwyn mountains:

3a) It cuts cover and crystalline basement in the Late Cretaceous and/or Early Tertiary, and

3b) it is subsequently beheaded by extension of the basal detachment beneath the Selwyn and Mackenzie mountains.