



FIGURE 20.4. Problems with interpretation of vertical changes in lithofacies. (A) Progradation of a sloping surface across which lithofacies change produces a vertical sequence of lithofacies, according to Walther's law. Facies boundaries are diachronous in the view parallel to the dip, but are isochronous in the view parallel to the strike. (B) A vertical sequence of lithofacies produced by an abrupt temporal change in depositional conditions on a flat surface. Facies boundaries are isochronous everywhere. (C) A vertical sequence of facies produced by both spatial and temporal changes in depositional conditions (the most likely case).