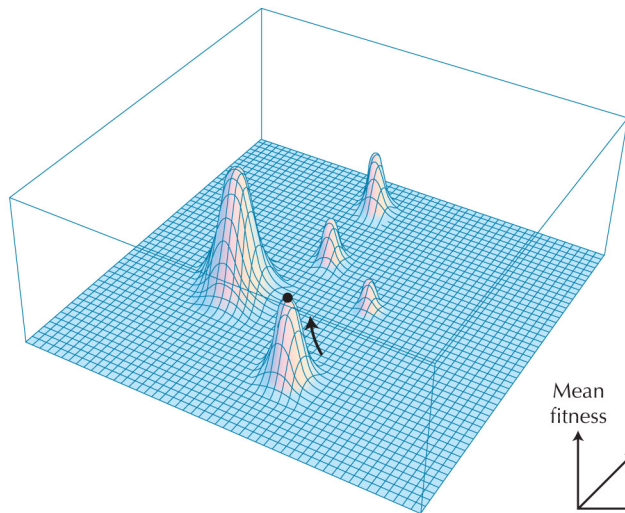
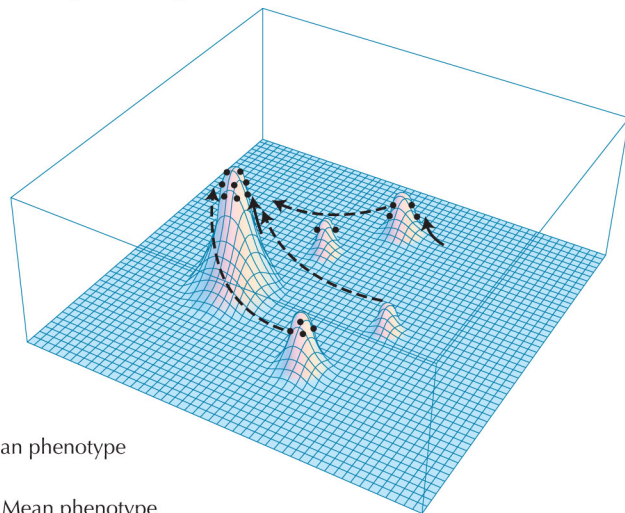


A Mass selection



B Wright's shifting balance



**FIGURE 21.28.** Sewall Wright argued that a network of local populations (demes) can evolve toward the best adaptive peak, through a shifting balance between random drift, selection within demes, and selection between demes. (A) Selection will push a single large population toward the nearest adaptive peak, which is unlikely to be the best possible. (B) If the population is subdivided into many local demes, then random drift scatters demes across the adaptive landscape. Selection within demes causes them to cluster around adaptive peaks (*solid arrows*), and selection between different adaptive peaks allows the whole population to cluster around the highest peak (*dashed arrows*). The diagrams show adaptive landscapes—graphs of mean fitness against the state of the population (e.g., allele frequencies, means of quantitative traits; see pp. 472 and 494). Bear in mind that populations can evolve in very many dimensions, not just two: These figures are caricatures of multidimensional reality.

21.28, based on data from Wright S., *Evolution: Selected Papers*, Fig. 4, © 1986 University of Chicago Press