



**FIGURE 13.13.** Different parts of a recombining genome have different genealogies. The diagram shows a simple example, with three genomes (*red, blue, green*). Tracing back through time, the *red* and *green* lineages **coalesce** (*top filled circle*) without experiencing recombination. However, the *blue* genome traces back to a recombination event (*open circle*) so that the left part is inherited from one parental genome and the right part from another. The left lineage coalesces with the *red* lineage, whereas the right lineage coalesces with the *green* lineage (*dashed blue lines*). As a result, the two sections of genome have different genealogies (*top left* and *top right* diagrams). This process of coalescence with recombination will be discussed in more detail on pp. 427–432.