



**FIGURE 4.18** Here is why a thread *A* that fails to complete a clean double collect cannot simply take the latest snapshot of a thread *B* that performed an `update()` during *A*'s second collect. *B*'s snapshot was taken before *A* started its `scan()`, i.e., *B*'s snapshot did not overlap *A*'s scan. The danger, illustrated here, is that a thread *C* could have called `update()` after *B*'s `scan()` and before *A*'s `scan()`, making it incorrect for *A* to use the results of *B*'s `scan()`.