

(c)

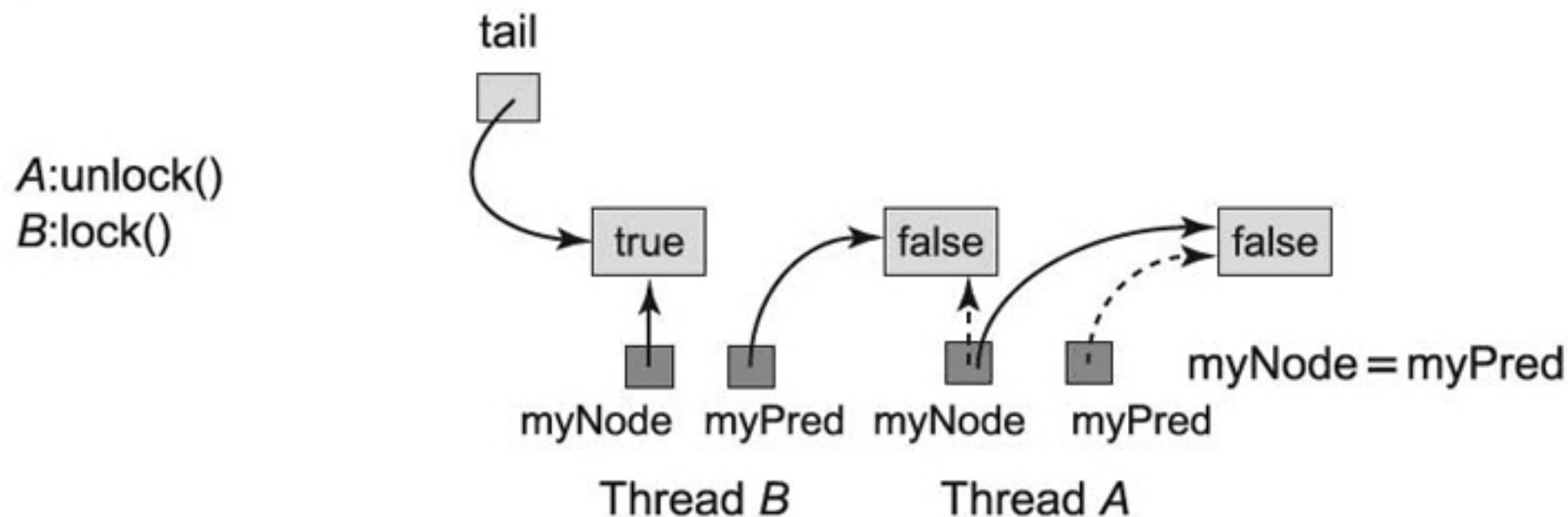


FIGURE 7.10C CLHLock class: lock acquisition and release. Initially the tail field refers to a QNode whose locked field is *false*. Thread A then applies `getAndSet()` to the tail field to insert its QNode at the tail of the queue, simultaneously acquiring a reference to its predecessor's QNode. Next, B does the same to insert its QNode at the tail of the queue. A then releases the lock by setting its node's locked field to *false*. It then recycles the QNode referenced by pred for future lock accesses.