

```

1  public void enq(T x) {
2      lock.lock();
3      try {
4          while (count == items.length)
5              notFull.await();
6          items[tail] = x;
7          if (++tail == items.length)
8              tail = 0;
9          ++count;
10         if (count == 1) { // Wrong!
11             notEmpty.signal();
12         }
13     } finally {
14         lock.unlock();
15     }
16 }

```

FIGURE 8.6 This example is *incorrect*. It suffers from lost wakeups. The `enq()` method signals `notEmpty` only if it is the first to place an item in an empty buffer. A lost wakeup occurs if multiple consumers are waiting, but only the first is awakened to consume an item.