

1. They do have the same semantics because neither will skip a seed. The isolated one doesn't need to do the compareAndSet check because it knows it is the only one accessing the field seed.
2. The purpose of the while true loop is to continue until compareAndSet is successful, because break is called only in that condition. If it is only executed once it's possible that the seed has already been used by another concurrently running call.
3. Deadlock is not possible. If the special philosopher is not able to pick up his right fork then he won't pick up his left fork, so that right fork is available for another philosopher. If he has his right chopstick his left will be or will become available because the person left of him is either eating or done.
4. A livelock is possible but very improbable because it would only occur if two philosophers keep releasing their forks at the exact same time over and over. This is unlikely to happen though and usually one will happen before the other allowing one philosopher to acquire both forks and eat.