

1. The asymmetric solution guarantees that the *philosophers* never enter a deadlocked state by having some of them grab their left chopstick first and some grab their right, using modular arithmetic. This will prevent a state where all the philosophers have possession of their left chopstick, but are left waiting for their right, which will never come.
2. No, the asymmetric solution does not prevent starvation. There still exists the very likely possibility that one *philosopher* has a chopstick that another philosopher needs, and is unwilling to give it up.
3. The waiter solution uses a *waiter*, implemented as a mutex lock that essentially prevents one philosopher from using a chopstick that another philosopher is using. We place the picking up of a chopstick in the critical section of a thread, bounded by a mutex lock. This mutex lock prevents another philosopher thread from accessing a chopstick that another philosopher is using.
4. No, the waiter solution does not prevent starvation. It prevents deadlock. There still exists the very likely possibility that one philosopher thread will try to access a chopstick that has been *blocked* by the waiter mutex.
5. Any philosopher around the table can access only one chopstick of another philosopher, and therefore know whether it is free. So, if a philosopher frees a chopstick and decides to send a signal to Phil, saying, "Hey! Check your chopsticks!", there still exists the possibility that the philosopher on the other side of Phil is using Phil's other chopstick. In this case, it is still possible that Phil will not be able to eat.