1. Through k1 we know that a->b holds for all events local to that process which means we only need to consider interactions between processes. K2 tells us any event sent from p1 to p2 will have a have a higher C(x) at the receiver. If we have a scenario a->b at process p1 and we want to send both of these to p2. When we send a to p2 we know that C(a)p2>C(a)p1, and when we send b to p2 we know C(b)p1 > C(b)p2. We also know that a would be sent before b which means on the receiving side C(a)p1<C(b)p2.