## Safety

- If some round has a majority (i.e., quorum) hearing proposed value v' and accepting it, then subsequently at each round either: 1) the round chooses v' as decision or 2) the round fails
- Proof:
  - Potential leader waits for majority of OKs in Phase 1
  - At least one will contain v' (because two majorities or quorums always intersect)
  - It will choose to send out v' in Phase 2
- Success requires a majority, and any two majority sets intersect

