Dutch Strategy 1:
On Sunday, place Bet 1.
On Monday, place Bet 2.

Dutch Strategy 2:
On Sunday, place Bet 1’.
On Monday, place Bet 2’.
If tails, on Tuesday place Bet 3’ (just like Bet 2’).

To avoid book, agent who bases Bet 1 on 1/2 credence in H also bases Bet 2 on 1/2 credence in H.
To avoid book, agent who bases Bet 1’ on 1/2 credence in H bases Bet 2’ (and Bet 3’, if necessary) on 1/3 credence in H.

Hitchcock: “If the bookie can achieve his certain gain only by exploiting information that is unavailable to the agent, then the Dutch Book reflects an evaluation of the system of bets that is not the agent’s own.”

According to Hitchcock, Strategy 1 fulfills the antecedent because it has Feature H: To implement the strategy, Bookie must have information when he offers a bet not available to Beauty when she accepts it.

Instructions to the Bookie:
Dutch Strategy 1:
If it’s Sunday, place Bet 1.
If it’s Monday, place Bet 2.

Dutch Strategy 2:
If it’s Sunday, place Bet 1’.
If you find yourself awake after Sunday, place Bet 2’.

Vineberg notes that Strategy 2 has Feature V1: The structure of the bets depends on information not available to Beauty.

Feature V2: When Beauty places Bet 2’ (and Bet 3’, if needed), she doesn’t know which bet she’s placing.

Feature V3: When Beauty considers the entire betting structure at time 0, she doesn’t know how many bets she will wind up placing.

A thought: Perhaps we should require both Feature T1: Both when she is considering all bets and when she is placing each bet, Beauty knows the entire strategy being used against her.

Feature T2: Beauty bases all bets on credences conditionalized on (a) the entire strategy being used against her, and (b) the fact that that bet is being offered.