Points in “A Simple Model of Herd Behavior”

URL: <https://economics.mit.edu/sites/default/files/publications/banerjee92herd.pdf>

1. Herd behavior = “everyone is doing what everyone else is doing”
2. A lot of people choice >> personal choice with personal information -> inefficient equilibrium -> herd behavior in economics is bad?
3. Happens in all sorts of subjects like how many kids to do, what type of research should I investigate (what is “hot” these days), what restaurants should I go to
4. Assumption: Actions are based on an information we have hence they are rational
5. There is an effect of the first/few people who are choosing because based on their choice the rest would probably choose as well.
6. Nash equilibrium = an outcome in a non-cooperative game for 2 or more players in which no player’s expected outcome can be improved by changing his own strategy.
7. Bayesian-Nash equilibrium = a strategy profile that maximizes the expected payoff for each player based on their own beliefs and given strategies of other players.
8. Ex-ante = future events that are based on forecasts or predictions rather than results
9. a(i) = asset i
10. z(i) = what person I receives from asset i -> a(i)
11. there is an optimal asset i\* so z(i\*) > z(i) = 0 -> only one asset worth something
12. alpha = probability of getting a signal that leads to choose i’ and it turns out that i’ = i\*
13. 1-beta = same scenario as alpha but it turns out that i’ != i\*
14. beta = getting a sign that says i’ is not i\* but it is actually i\*
15. the model the article presents is a sequential (a -> b -> c -> …)
16. each person starting b can see what the prior to him chose, but not to be aware of the signal (the information that led the choosing)
17. stopped at page 11

Questions:

1. Our research is specifically about economics / stocks?
2. Is herd behavior related to strategy proof voting rule?
3. I saw (page 6) that the writer mentioned “correct choice”, but how can we say there is a correct choice? In terms of stocks or restaurants or such
4. Clarifications about alpha, beta (is is like mistake level 1 and 2 from אמידה?)
5. Isn’t the assumption mentioned on page 10 (prob of 2 people to get the same signal and yet both are wrong is zero) isn’t too much broad?
6. Lemma 1 proof