

This is what I drew by hand. I presented the CPT's by layers. In the 3rd layer, "yes: no"-like layers represent their previous connected conditions. However, while using Samiam, I realized that CPT's are given only for the root's probability (or probabilities, e.g. in the case of "They escape together"). In Samiam, CPT's are implemented accordingly.

### Story is as follows:

Matt is a regular late-shift car garage staff. May-Ling is a Chinese girl that is related to all these sequences through the incidental involvement of Matt to all these serious of actions. Finally, Tchois is the Chinese underworld organization leader in London that wants the possession of the bowl since they claim that the bowl belongs to them.

Samuel Parr is an art-lover and a collectionist. He gathers artifacts that are the most valuable to him and while he pays the highest prices, he also sometimes sells his collection pieces and donates the money received from auctions.

One of these auctions is about a Chinese bowl that is from many years ago and is about to be sold for a record-breaking price. However, Samuel Parr still wants the original even after the auction. He gets someone to make a copy of the bowl and cons people, i.e. makes everybody think that the copy is the original bowl.

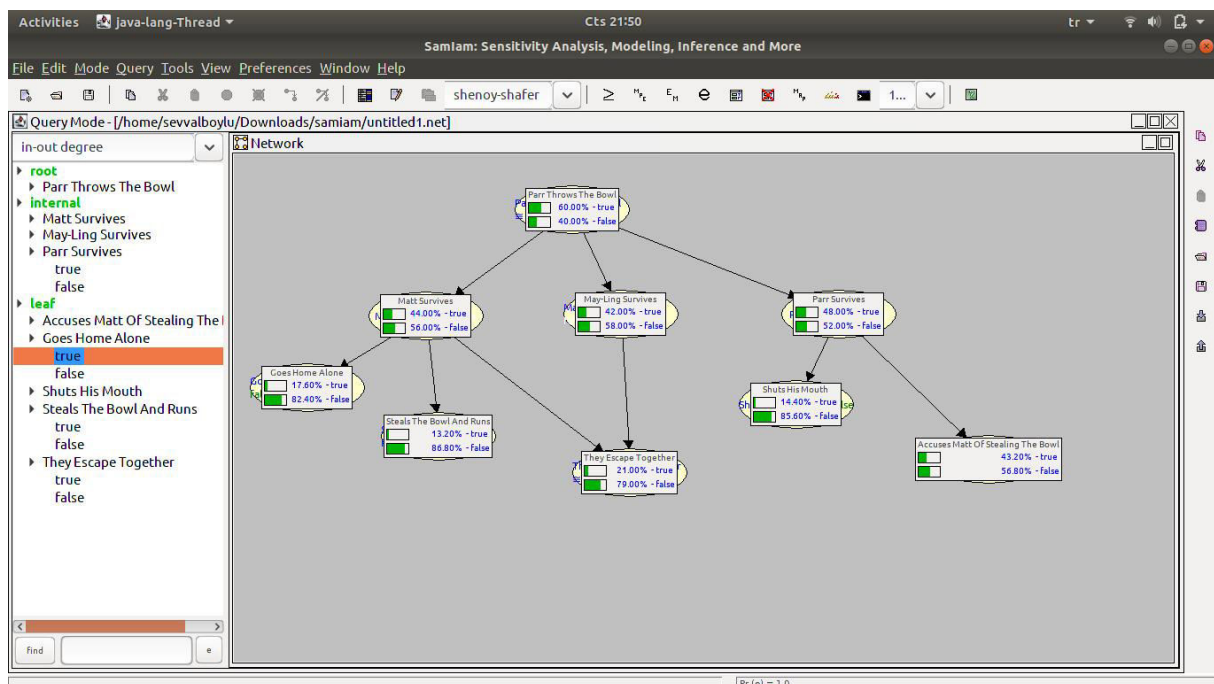
After a series of adventurous events, May-Ling is captured by Tchois and Matt discovers Mr. Parr's fraud before he comes to his house with a bowl. Parr has one too which he thinks is the original. Now, depending on how convincing Matt is, he will throw the bowl to the ground

and breaks it, or will believe Matt and will not throw it, since it is the original bowl. Throwing act will break the bowl.

Depending on whether the bowl is broken and/or who breaks it, Chinese leader will give the order to his goons of death of Matt, May-Ling and/or Mr. Parr himself.

And again, depending on who died and/or who survived, a series of actions will follow. Relations are indicated with the arrows in the diagram.

In the diagram, every case is given with the name of the cell (or circle) and yes/no values represent whether those conditions true (happened) or false (did not happen). “They” refers to May-Ling and Matt. “Steals the bowl and runs” refers to Matt.

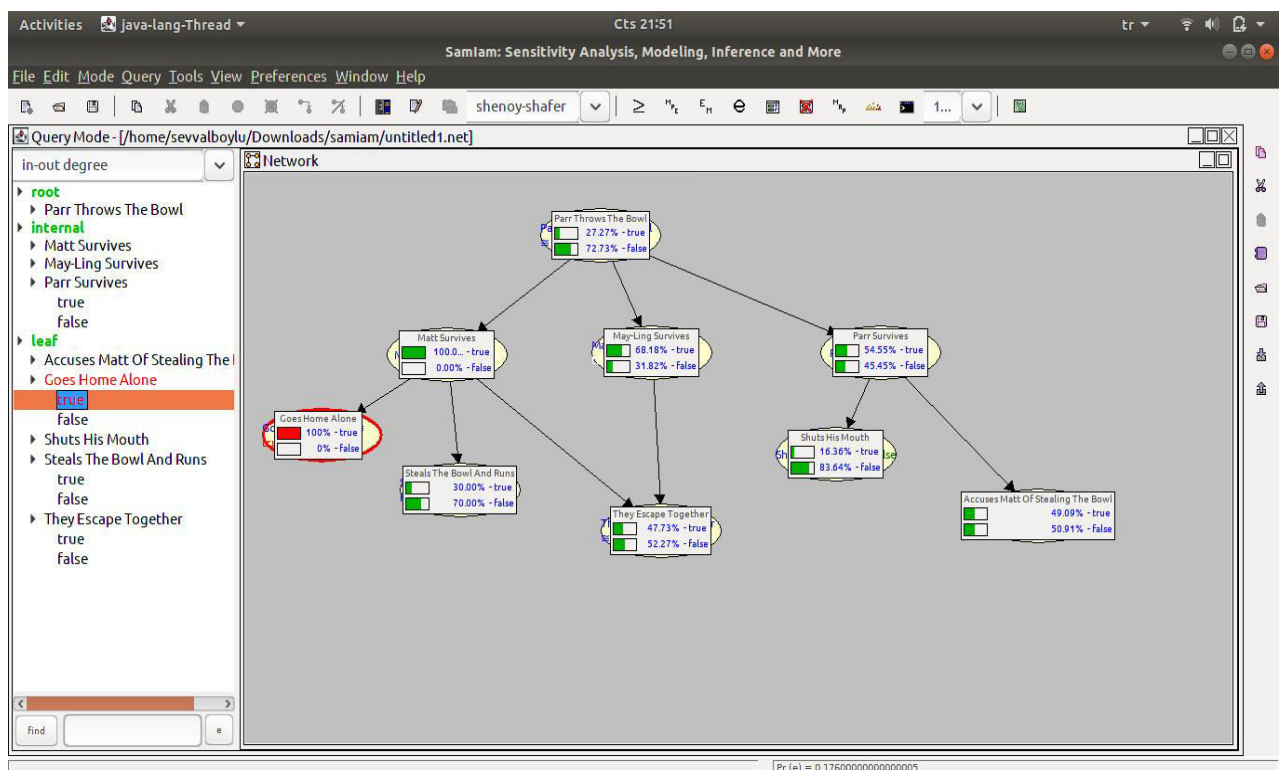


This is how the situation looks before we know anything.

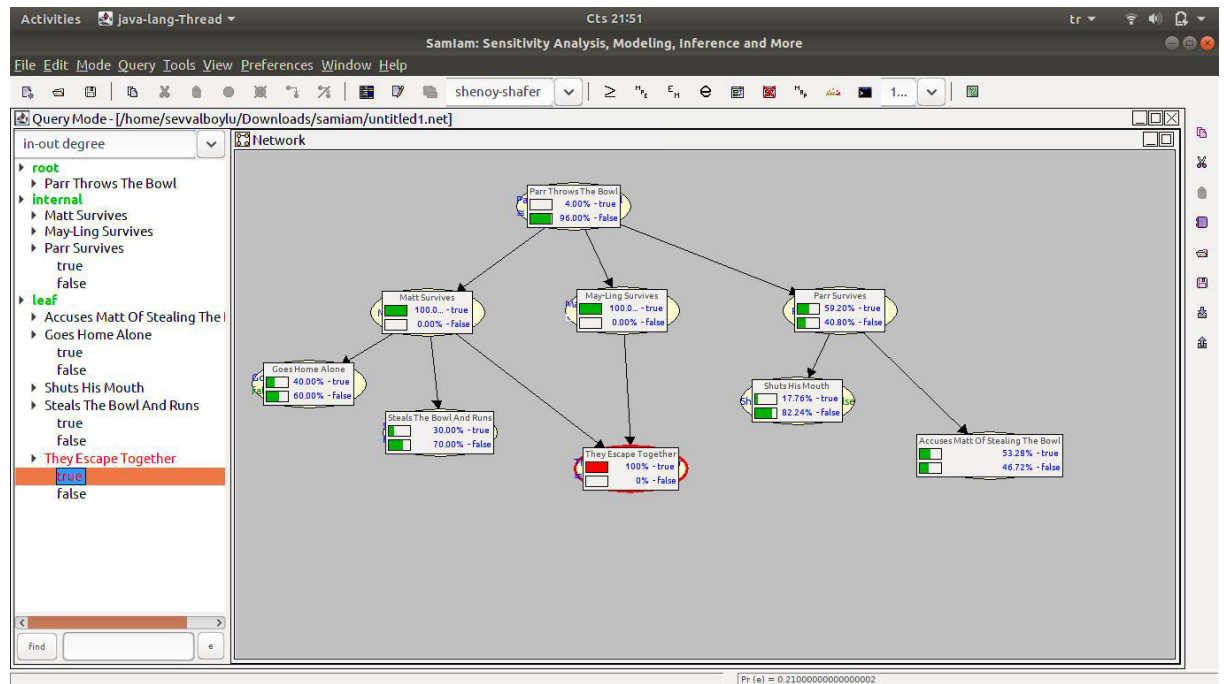
### Let's consider 3 test cases (scenarios):

1) (Which is also an example of explaining away phenomenon)

We now know that Matt went home alone. It increased the probability of Matt has survived (actually it went to 100% because without being alive, obviously, he could not have done anything.) and at the same time it decreased the probability that Parr actually threw the ball. (It was 60 percent true at the beginning, however, after we learnt that Matt went to home alone, now it is 27.27 percent true.) Again, this is intuitive because if Parr did not throw the bowl then perhaps Matt is not getting accused of breaking the bowl which might be an intuitive indicator that he went to home alone.



- 2) Now, we only know that they (May-Ling and Matt) escaped together. This changed the probabilities as shown on the table. Now, May-Ling and Matt has survived for sure (for the same obvious reason explained in first one) and most likely Parr did not throw (and did not break) the bowl. It does not give much idea about Parr's survival, however, since May-Ling and Matt survived and then escaped together, most likely Parr did not speak about the incident.



- 3) We now only know that Parr did not shut his mouth up and spoke about the incident. Now Parr has a slightly higher likelihood of throwing and breaking the bowl while the survival rates of three people differ, with Parr has the lowest survival rate. It is also an indicator that perhaps May-Ling and Matt could not escape together because intuitively, it is natural that gangster leader Tchois might have given the order of death of one of them or both.

Since Parr spoke about the incident, he probably (and naturally) accused Matt of stealing the bowl and as a result, Matt will be killed with a higher rate of probability. An increase in the chance of death of Matt highly decreased the probabilities of Matt going home alone and Matt steals the bowl and runs away, due to the fact that he is most likely dead now and cannot do any of those while dead. (well, again, obviously)

