[Paul Erdős](https://en.wikipedia.org/wiki/Paul_Erd%C5%91s) and I have one thing in common, well maybe two we are both Jews, but one very important and significant thing in common; We were both very sceptical of the Monty Hall Problem until we saw a computer simulation of the problem. At face value the Monty Hall Problem is hard to swallow. One major reasons is cognitive tunnels. This is to say that we are programmed to make quick logical responses even if they are not the best decision in retrospect. This can be seen in birds. When they are startled they fly up, even if flying or jumping to the side would work better and use less energy. In order to survive it is better for the bird to elicit the first response that comes to mind and survive rather than ponder the most effective response and die due to the result. The idea that we are preprogrammed to think that our first response is the correct response is constantly being reinforced both in our culture and in our DNA. For these reasons I don’t feel so bad that this problem has haunted me for the past few months. (Risinger, D. Michael and Loop, Jeffrey L., 2002)

How the problem works:

1. The person is presented with three doors that are equally likely to be chosen.
2. The person the selects one of the three doors (⅓ chance of picking the right door)
3. One of the two remaining doors is presented to the person showing them that the prize is not behind that particular door.
4. The person is then given the option to switch doors(⅔ chance of picking the correct door).

In a study done by Goldberg, Donald, and Brown they found that only 13% of people presented with the problem switched. This fact puts my initial response in the majority, but why? Why did so many people stay? Was it because they felt like there was no difference if they stayed or was it because they felt ownership over their first pick? Studies show that people feel that their first response is the correct response more times than not (Granberg, Donald & Brown, Thad A., 1995). In a very small sample of people around my Thanksgiving table, the majority of people stayed as well. I could not believe how true this phenomenon was. In what other ways is this affecting our society?

I can not help but apply this school of thought to the current refugee debate. The likelihood that a researched and vetted person is a terrorist is very low. The likelihood that any human on the planet is a terrorist is very low. So why are we keeping people out of the country when there is so much suffering? It seems that people would rather stick to door number one, the status quo, rather than go with the logical and better odds door of the switch. It is better to keep people out than allow even a half of a percent of a chance that we might be letting in the next big terrorist of our time.

It can also be applied to the current police shootings. The cops would rather shoot a person than take the one percent chance that the person in question will kill them. So many times in our culture we take the door we know rather than the better door. Maybe we are right maybe we have chosen correctly and we can say in some way that we were destined to have that door, but more likely than not (according to the math) we are wrong and need to be shown the error of our ways. If only mathematicians ruled the world and made law based on science rather than emotion we would live in a less violent society.

The idea that so many people feel that their first idea is the right one in spite of time and thought that may lead to better outcomes has really helped me to see past my own nose. It is now so clear to be where math and philosophy meet. I can honestly say that this problem and my subsequent computer program has affected the way that I perceive my decisions.

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