How to create a machine that can grant all your wishes

That is **science fiction** (Although I think it would actually work)

Many worlds interpretation of quantum physics

Is is well known that the world is probabilistic. That is, it is possible to perform an experiment for which the result will be aleatory. A simple example : you send a photon on a semi-reflecting mirror, and you have exactly one half odd that the photon get through, and one half odd that it is reflected. That's an inherent fact of the universe we are living in. The process that makes the universe "chooses" between the different possibilities is called "quantum decoherence"

Now, many physicists agree with the so called "many worlds interpretation of quantum physics". This says that in fact, there is no quantum decoherence, but instead, every time the universe should collapse into one definite state, is splits into several parallel universes, each one corresponding to one possibility.

Let say you observe a photon scattering with a semi-reflecting mirror. Two universes are created ; in one, you see the photon going through, in the other, you see it being reflected. You have now two instances of yourself, each one thinking that the process was probabilistic. But it was not.

You can't die

An interesting fact about that is that it impossible to die. Why that ? Let's use the photon / mirror experience again, but this time suppose we link it to a special apparatus that will kill you only if the photon pass though the mirror. For everybody else, you have one chance out of two not to survive such an experiment.

But from your point of you, it only makes sense to consider the branches of reality where you are alive, because if you're dead, you won't be there to notice it. Though from *your point of view*, the probability that you survive is one.

You may ask : if we can't die, why everybody does ? That's because you can't die only in your own reality branches, that is the universes where you are here to observe if you are dead or not. This is related to the fact that the reality itself is relative to the observer point of view.

That means, when you say "something append", it actually implies that you are talking of the reality spanned by your own observation. In other people realities, you can -and do- die.

Now if you think I am joking, you can also read these articles :

http://en.wikipedia.org/wiki/Quantum_immortality

http://en.wikipedia.org/wiki/Quantum_suicide

The machine

We can use the fact that we are immortal to create a machine able to realise (almost) everything we want. you remember what we said about the photon / mirror / killing apparatus experiment : if your apparatus kill you only when the photon pass through, then it makes the photon being reflected, because otherwise it would kill you. If the apparatus was programmed to kill you only if the photon is *not* reflected, then you could be sure that it would.

The point is that the machine made a restriction on the possible reality branches you could follow.

And that could work for any kind of events.

Because every possible things happen in some universes, all you need to have is a suicide machine, that is activated only if you are not in the universe you want to.

For example, you want to win one million Euro, so you programme the machine so that its is activated only if you *don't* win the money. Then all you just have to trigger it, and just wait for the infinite universes potential to find a way to make you win your million Euro.

Because you see, there is nothing the reality won't do to prevent you from dying.

Limitations

Ok, to be honest, things are not that good. Because you have also to deal with the probability that the machine itself fails. So if you ask something too difficult (that is : too unlikely to happened naturally), like spontaneous apparition of chicks in your room, it is likely that instead of the wanted result, the machine will just break, and doing so preventing you from dying. Mathematically, you can only ask things that could naturally append with a probability higher that the machine breaks. So the more reliable your machine is, the more you can get.

Commercialisation

We see that creating such a machine is not beyond our technical capacity (all you need is actually the bulls to use it.)

But we need to remind something about the machine : If you use it, it is just great, but if someone else use it, you are almost sure that he will die. That may be a problem if you don't want all your friends to die letting you alone. How to avoid this side effect ? Here is the solution :

If your friends use the machine, you need to program your own machine with the condition that if one of your friends append to die, then it kill you at the same time. It solves the problem because your friends can now use the machine, get all they want, and you won't see them dying.

We see also that such a machine would be perfect for terrorists. Because if someone program his own machine to kill everyone, it is not a big deal : in his reality everyone will die, but in everyone else reality, just the guy will.

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