What's Wrong with Interpretations of Quantum Mechanics

Copenhagen: this is not an interpretation but rather a prescription, one that highlights the need for an interpretation.

GRW: contradicts the fact that the state of the cat collapses when and only when the top of the box is opened. It implies the cat state could collapse before the box is opened and that in other cases the cat could remain in a superposition after the lid is opened. Neither of these are ever observed (in the sense of applying this principle to actually done experiments).

Superdeterminism: if all correlations were formed at the big bang there would often be stronger-than-quantum correlations among systems. But they are never observed. So in some sense superdeterminism has already been falsified.

QBism: a 4 year old does not stop living in a quantum universe if they don't calculate Bayesian probabilities.

Many-wolds: it is important to think about because it is an extremal point in possible interpretations. But as a proposal for how the world actually is, it's silly. We are interested in *this* universe.

Bohmian: it adds a lot of baggage for no real gain. In QM there is a non-classical wave that evolves. In Bohm there is a non-classical particle that is rigidly told how to move by a non-classical wave, one which continues to exist and evolve long after it was relevant.

Retrocausality: the state of a system depends on states at earlier times. But it also depends on states at later times. But then *those* states depend on states that are later than them, and on and on, so one is lead to an infinite regress into the future just to specify the current state of a system.

Presentist Fragmentalism is however based on the two pre-quantum observations that
1. it is possible to distinguish between one's ideas about one's experience of time, and one's experience of time.
2. Alice cannot determine whether Bob's red (for example) is qualitatively the same as hers.