

# What's the Difference Between Chance and Fate to an Epicurean?

**Post by "Martin" of January 26, 2019 at 4:45 AM**

"Determinism applies to statistics and macroscopic scales. Randomness and probability apply to individual instances.

As individuals we have free will, as a group our behavior is predictable.

This is why the swerve is important on a quantum scale, while macroscopic events obey strict causality."

These assertions are typically adequate but not in general/strictly:

Instead of boiling smoothly at 100 C as usual, a large portion of liquid water may overheat considerably above 100 C and then suddenly evaporate by a large percentage with explosive power.

A totalitarian regime may appear to be stable and invincible for decades and then quickly crumble in an unexpectedly successful revolution (France 1789, East Germany and Romania 1989, in a wider sense the victory of the American independence movement over the UK, the victory of the meager remainder of the Texan "army" against the much larger contingent of the Mexican army at San Jacinto 1836).

So, the swerve may become important for macroscopic events but this is just much less often observed than at a quantum scale (and in complex non-linear systems which by their structure amplify quantum fluctuations or other microscopic fluctuations to macroscopic events), where swerve may happen at a rate of about every millisecond.