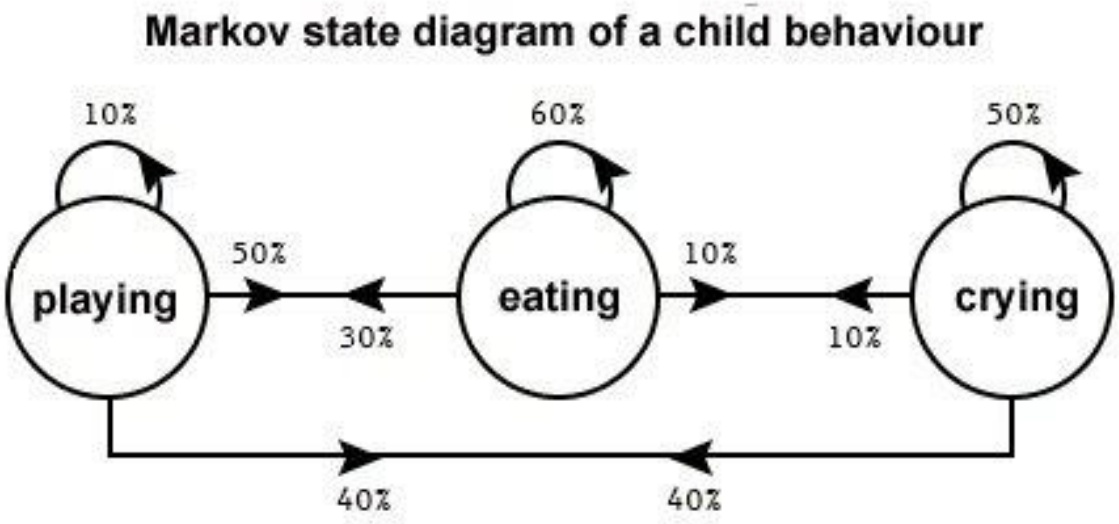


Markov chains, named after Andrey Markov, are mathematical systems that hop from one "**state**" (a situation or set of values) to another.

Markov chains have a set of states, S ={s1,s2,...,sr}. The process starts in one of these states and moves from one state to another. Each move is called a **step**. An initial probability distribution, defined on S, specifies the starting state.

If you made a Markov chain model of a child's behavior, you might include "playing", "eating" and "crying" as states, which together with other behaviors form a **state space** or list of all possible states. In addition, on top of the state space, a Markov chain tells you the probability of hopping, or "stepping," from one state to any other state; that is, the chance that a child currently playing will start crying in the next five minutes without eating first.

Source: https://www.quora.com/What-is-a-state-of-Markov-chain