Similar to search annealing has two modes **explore** and **exploit**. We head the material until it reaches an annealing temperature. We model the acceptance probability with some function. If the acceptance criteria is not fulfilled we play the lottery and try to go to a random place, else we try to leverage being in a good neighborhood.

When we get to a good neighborhood we keep increasing our threashold so that there is a lower probability of selecting a bad solution. As we bring the temperature down the probability of accepting is lower.

This formula is very important:

$$P = e^{-\frac{\delta c}{t}} \tag{1}$$