



a = action space: $-5, \dots, 5$

e = emotions vector

$a_{t_{n+1}} = \text{Math.round}(e_{t_{n+1}}[\epsilon] - e_{t_n}[\epsilon]) * 5$, where ϵ is a specific emotion.

This equation transfers the variation of emotions into the action space. $[-1..1] \rightarrow [-5..5]$

It means that a bigger variation in the player's emotions will cause a steeper change in difficulty.

At each step of the game, difficulty $d_{t_{n+1}} = d_{t_n} + a_{t_n}$