Methodology
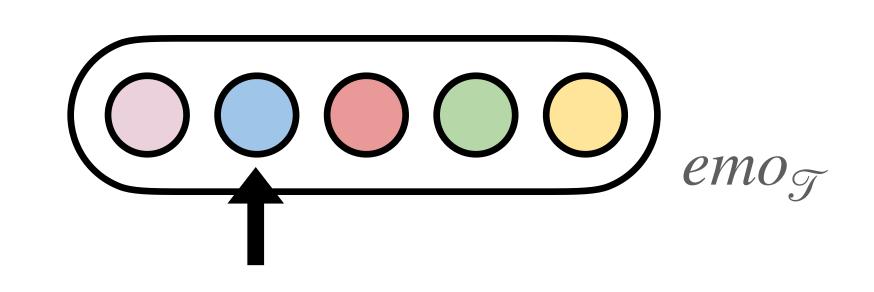## Emotion Lexicon ▪
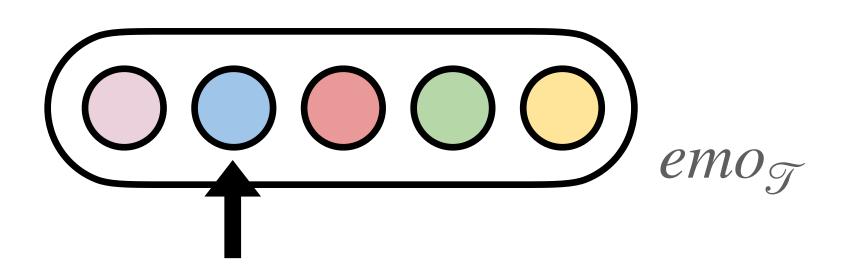
- $s\left(t_i, e\right) = \dfrac{1_{\mathscr{E}_e}\left(t_i\right) \times \mathrm{neg}\left(t_i, w\right) \times \mathrm{deg}\left(t_i, w\right)}{L}$

- $\mathrm{neg}\left(t_i, w\right) = \displaystyle\prod_{j=i-w}^{i-1} \mathrm{neg}\left(t_j\right), \mathrm{deg}\left(t_i, w\right) = \displaystyle\prod_{j=i-w}^{i-1} \mathrm{deg}\left(t_j\right)$

- Example: "I am <u>not very joyful</u> today." $\mathrm{neg(not)} = -1, \mathrm{deg(very)} = 2$

- $s(\mathrm{joyful}, e_{happy}) = -1 \times 2 \times (1/6) = -1/3$

$emo_{\mathscr{T}}$

17

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Emotion Lexicon ▪

$emo_{\mathcal{T}}$

- Then summing the scores of each word in the text, as follow:

$$s(\mathcal{T}, e) = \sum_{i=1}^{L} s\left(t_i, e\right), \quad \forall e \in E$$

- Finally, the emotional lexicon features $emo_{\mathcal{T}}^{lex}$ are obtained by concatenating all scores of the d_e emotions.

$$emo_{\mathcal{T}}^{lex} = s\left(\mathcal{T}, e_1\right) \oplus s\left(\mathcal{T}, e_2\right) \oplus \cdots \oplus s\left(\mathcal{T}, e_{d_e}\right)$$