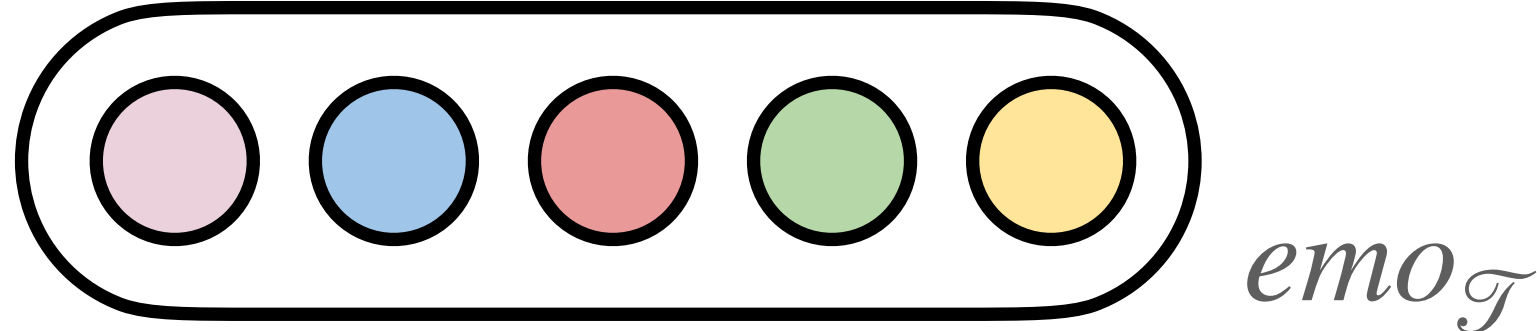


# Methodology

## Publisher Emotion

- Given the input sequence of the textual content with length  $L$ ,  $\mathcal{T} = [t_1, t_2, \dots, t_L]$ , where  $t_i$  is the  $i^{th}$  word in the text, the goal is to extract emotion features  $emo_{\mathcal{T}}$  from  $\mathcal{T}$ .
- To comprehensively represent the Publisher Emotion, use **variety of features extracted** from news contents.
  - Emotion **category** ■
  - Emotion **lexicon** ■
  - Emotion **intensity** ■
  - **Sentiment** score ■
  - Other **auxiliary** features ■

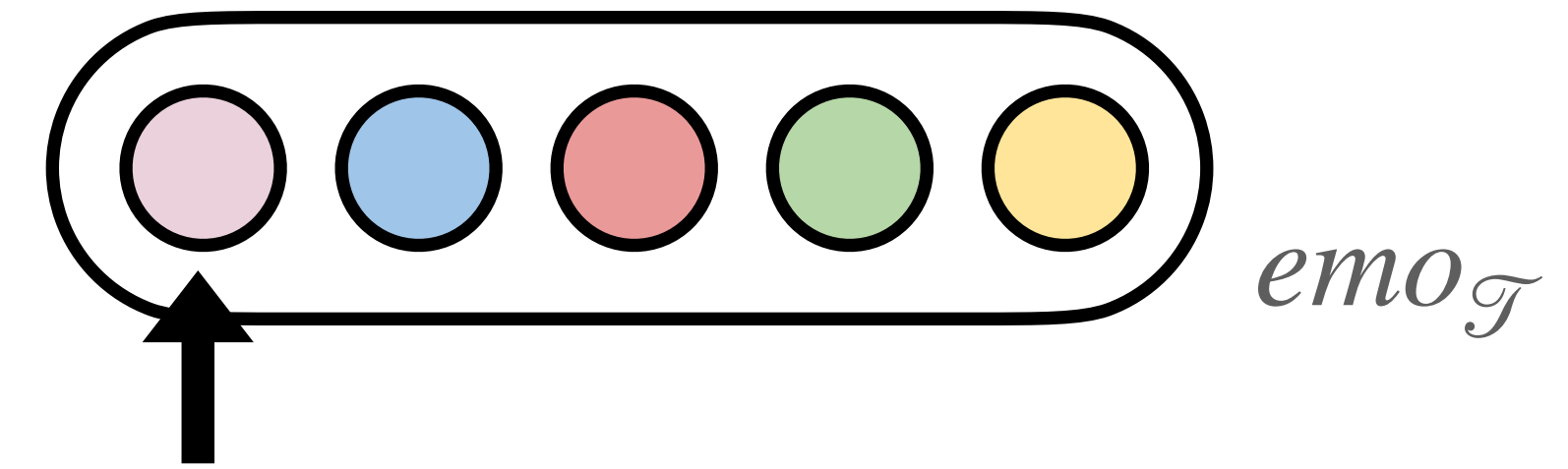


The diagram shows a horizontal capsule containing five colored circles: light purple, light blue, light red, light green, and light yellow. To the right of the capsule is the label  $emo_{\mathcal{T}}$ .

$$emo_{\mathcal{T}} = emo_{\mathcal{T}}^{cate} \oplus emo_{\mathcal{T}}^{lex} \oplus emo_{\mathcal{T}}^{int} \oplus emo_{\mathcal{T}}^{senti} \oplus emo_{\mathcal{T}}^{aux}$$

# Methodology

## Emotion Category ■



- Use public emotion classifiers (will intro later) to get emotion **category features**.
- Usually, the output of an emotion classifier is the **probabilities** that the given text contains certain emotions.
- So obtain the emotion category features  $emo_{\mathcal{T}}^{cate} = f(\mathcal{T})$ .