

Introduction

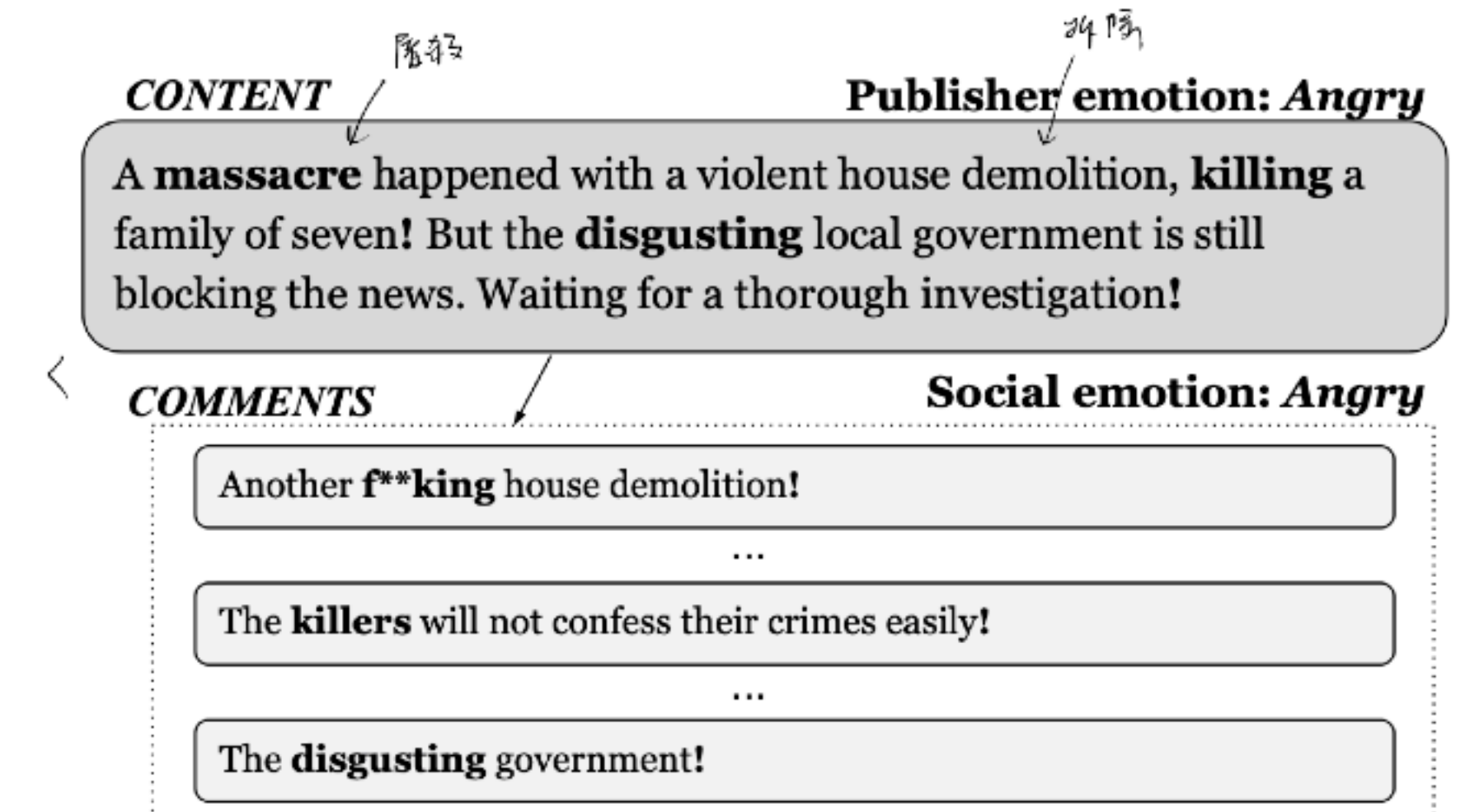
Define the two emotions

- Publisher emotion
 - The emotions conveyed by **publishers** of the news pieces.
- Social emotion
 - The emotions aroused in the **crowd** facing to the news pieces.
- And adopt **dual emotion** as general term of these two emotions.

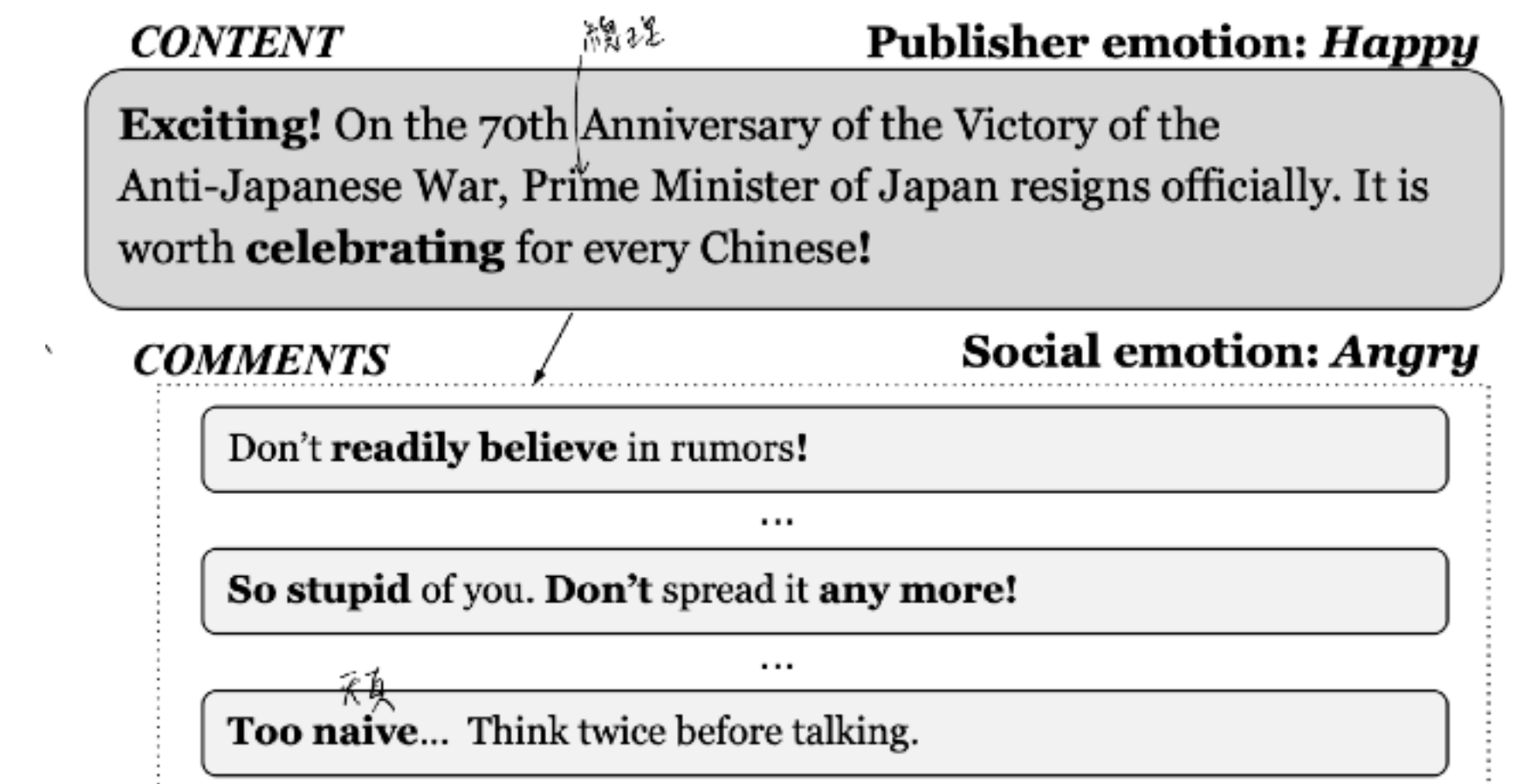
Introduction

Dual emotion appearances

- Emotion **resonances**
 - Publisher emotion is **same or similar** to social emotion.
- Emotion **dissonances**
 - Publisher emotion is **different** from the social emotion.
- The data observation statistical findings highlight that the relationship in dual emotion can be **indicative of the news veracity** and should be considered when modeling.



(a) Emotion resonance in a fake news piece: the *publisher emotion* and *social emotion* are both *angry*.



(b) Emotion dissonance in a fake news piece: the *publisher emotion* is *happy* while the *social emotion* is *angry*.