

## Supplementary Material

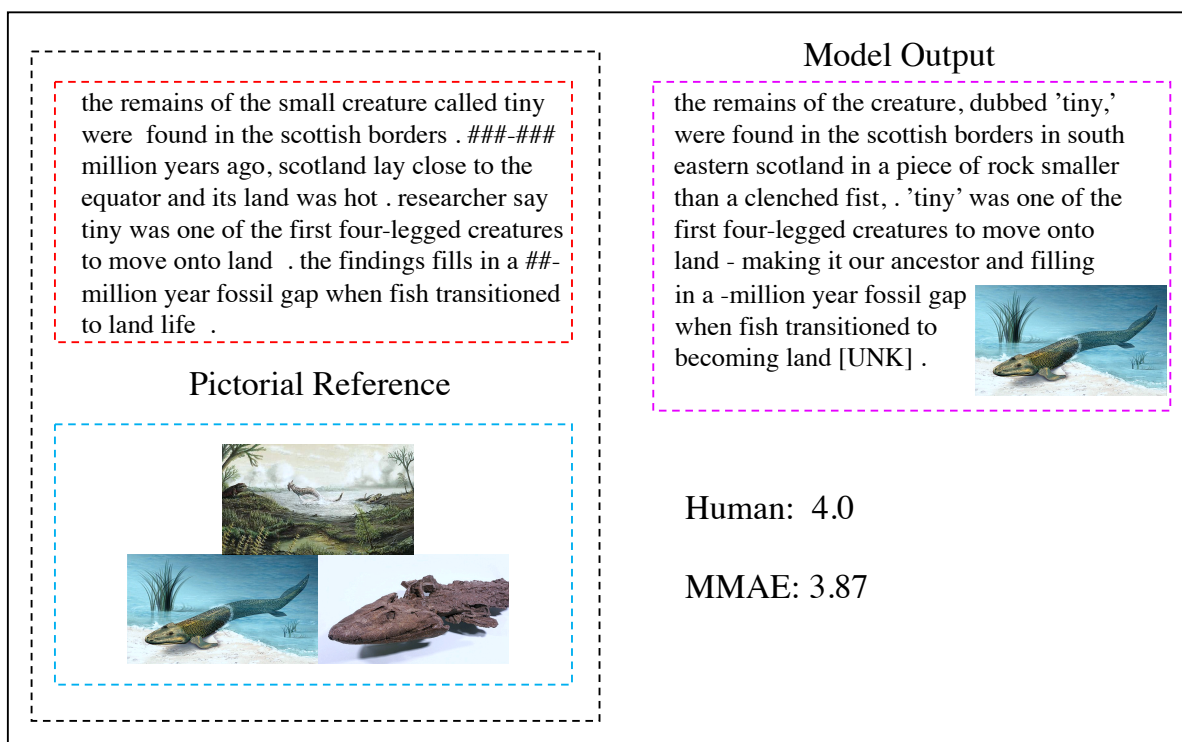


Figure 1: An example for Our MMAE. The left half is the pictorial reference and the right half gives the model output (from ATG), the human judgment score, and MMAE score. “#” denotes the digit number in the articles. In this example, the pictorial reference has three images. The model selects an image related to the topic and outputs a good quality text summary. Meanwhile, the image is also related to the text in the summary. Thus the output get a high human judgment score of 4, and the score by MMAE is 3.87, which is very close to the human judgment score.

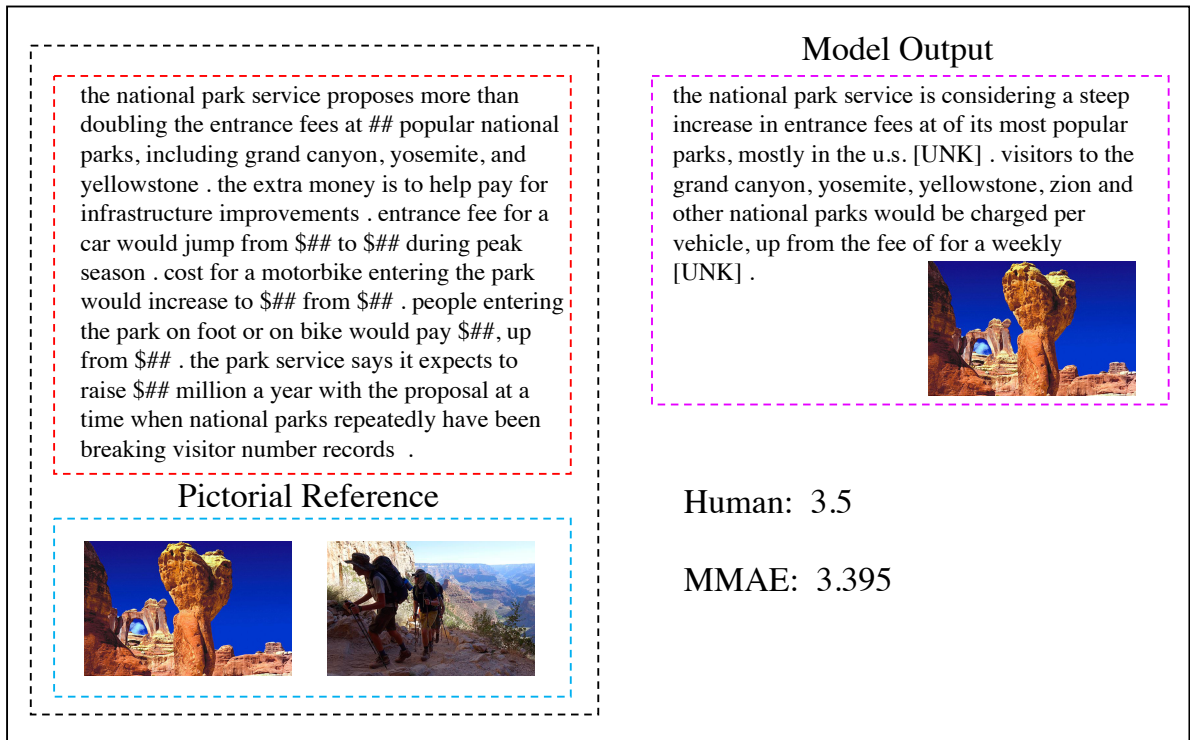


Figure 2: An example for Our MMAE. The left half is the pictorial reference and the right half gives the model pictorial output (from ATG), the human judgment score, and MMAE score. “#” denotes the digit number in the articles. The model selects an image that is very relevant to the topic and most of the contents of the summary are suitable. But the “[UNK]” in the output affects the readability and the quality of the summary. Thus this output gets a moderate human judgment score (3.5), and the score by MMAE is 3.395, which correlates well with the human judgment score.

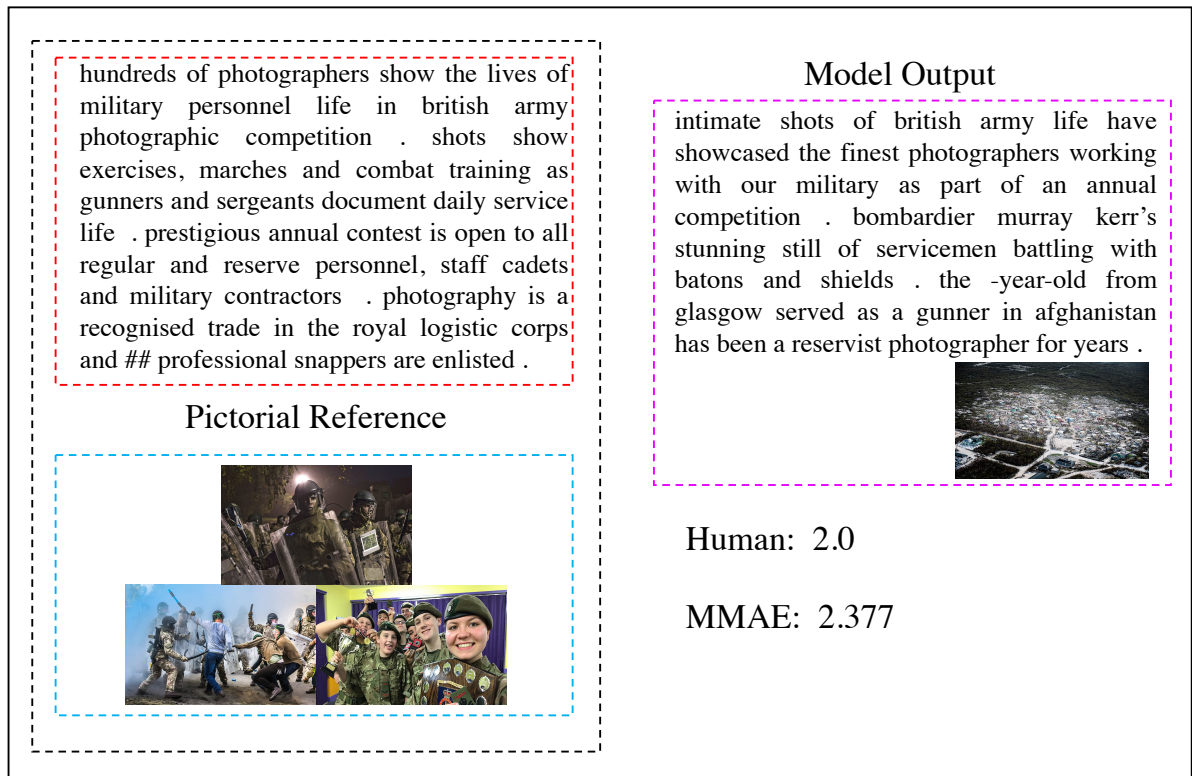


Figure 3: An example for Our MMAE. The left half is the pictorial reference and the right half gives the model pictorial output (from ATG), the human judgment score, and MMAE score. “#” denotes the digit number in the articles. There is no suitable image in the output of the model, and there is no correspondence between the image and the text. Thus our MMAE gives a very low score (2.377) for the output. Meanwhile, the human judgment score of this output is 2.0.