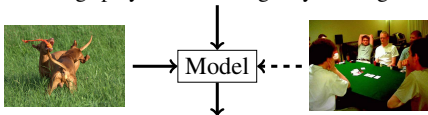


Is Visual Information Needed? (1/2)

- Our text-only English→Hindi was perfect on the “challenge” words.
- Elliott (2018) used MM systems with shuffled, incongruent images.

Two dogs play with an orange toy in tall grass.



Zwei Hunde spielen im hohen Gras
mit einem orangen Spielzeug.

- Only the hierarchical attention was sensitive to images
other multi-modal systems performed equally with congruent and incongruent images.
- Caglayan et al. (2019) list other papers where images have not helped much.