Proverb Analysis

translating between english and mandarin with proverb

BACKGROUND

/We often use proverb in PowerPoint or daily communication when we are to perform more like authentic people or showing closer culture relationship.
/However, it is difficult for us to translate proverb that we are familiar with.
/When we are using translate application, we found out that the system often mistranslates the meaning of the proverb we use in the paragraph or sentence. So, we are willing to know what kind of trainings do the companies do to arise their accuracy of translation.

PRESENTATION

GOOGLE TRANSLATE

/Statistical Probability calculation algorithm (統計機率計算)
/Sequence to Sequence (Seq2Seq 序列模型) turns the text into vector and throws into the encoder and recoder
/Google Neural Machine Translation System (GNMT Google 神經機器翻譯系統) consider the context and the fluency of the sentence

DEEPL TRANSLATE

/Convolutional Neural Network (CNN 卷積神經網路)
/Well improved construct of neural network to replace oridanary matrix multiplication
/The system will debug itself by looking in a database over billions of translate results

MICROSOFT TRANSLATE

/Semi-supervised Learning (半監督式學習)
/Statical Machine Translation(統計機器翻譯)
/Thousands of parallel structure to train the system
/Transfer learning let the machines share data and enhance the languages that is low in resources

AMAMZON TRANSLATE

/Continuously supplementing new expansion database
/Referencing the whole content and the translation has made before to make the translate more readable

SOLUTION

/When translating a sentence or proverb, we should focus on how to connect each word instead of trying to translate every single word inside the proverb.
/It is possible for a translate system to correctively translate a proverb, but we need to create a huge database for the system to look into.
/Rather than directly translate the proverb, we should work on the task to make the translate system learn the story and the origin of the proverb.

FUTURE

/increase the accuracy of the translation
  >enlarge the database
  >let the computers understand the cultural and history background of the proverbs
/combine the application with speech analysis to gain the convenience for people to translate proverbs by just saying it out