I Can Has Cheezburger?: An Approach to Meme Translation

Vivian Robison & Lara Martin
Language Technologies Institute, Carnegie Mellon University
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Introduction

Internet Speech & Language Play

People use language to demonstrate "belongingness", such as with subcultures on the internet

With Memes:
• Templative: "Yo dawg" "Y U NO"
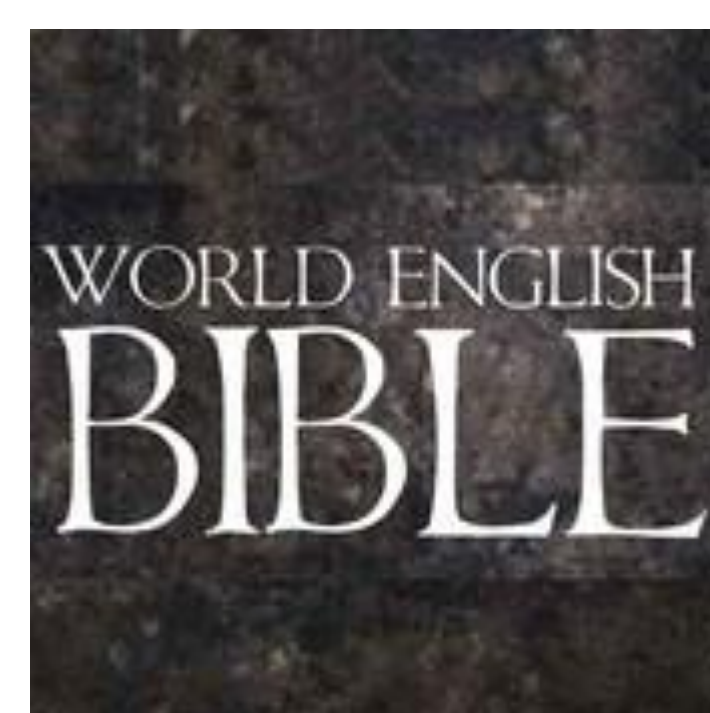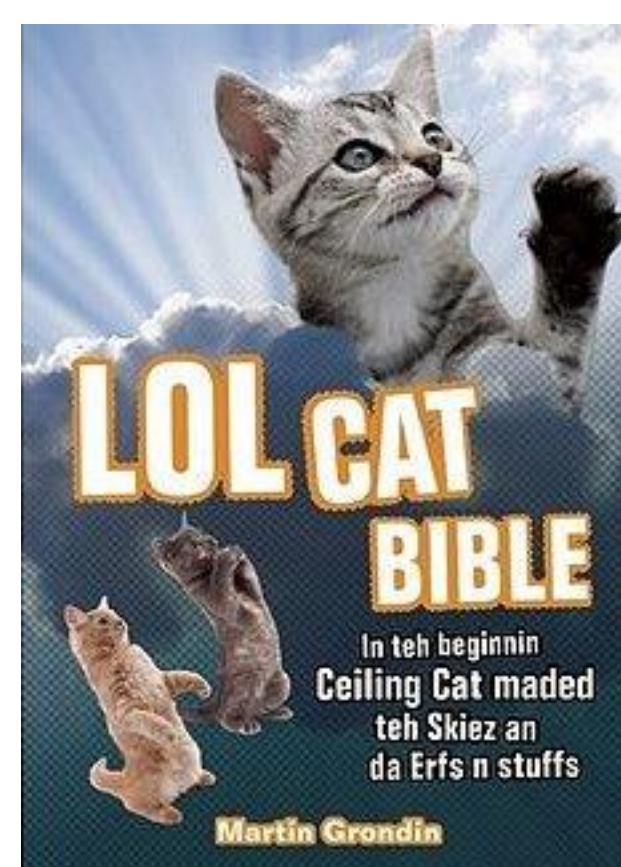• Creative: doge (syntax), ERMAHGERD (phonology)

LOLspeak Characteristics

• Phonological spellings of words
• Atypical syntax[1]
   E.g. non-inverted questions
• Lexical creativity[1]
• Morphological reanalysis of English[1]

Goal

A LOLspeak-to-English (LOL2EN) MT system to aid the meme-illiterate

Experiments

Natural LOL to English

Corpus: LOLcat Bible[2]
• Human-translated lines from the Bible into LOLspeak

Example from Genesis 1:10
Original Modern English:
God called the dry land Earth, and the gathering together of the waters he called Seas. God saw that it was good.

LOLspeak:
An Ceiling Cat called no waterz urth and waters oshun. Iz good.

MT Hypothesis:
Yahweh called the name of the earth , and there is no water oshun . it is good .

Synthetic LOL to English

Corpus: Translated WEB using LOLspeak translator[3]
• A program created to systematically change English into LOLspeak using rules
CEILIN CAT CALLD TEH DRY LAND EARTH, AN TEH GATHERIN TOGETHR OV TEH WATERS HE CALLD SEAS. CEILIN CAT SAW DAT IT WUZ GUD.

Non-Biblical LOLspeak

Corpus: tech forum, LOLcat thread
• Naturally-occurring LOLspeak outside of the Bible domain

takes wun to know wun.
↓
shall take one to know one .

Yuz promized!.......
↓
you have sworn ....

Results

Synthetic Model

Test Set	BLEU	METEOR	TER
Synthetic	96.8	67.0	46.1
Natural	6.5	13.5	109.1

Natural Model

Test Set	BLEU	METEOR	TER
Synthetic	17.0	29.1	107.5
Natural	20.53	22.9	108.8

Future Work

• Work with a variety of features
   • Letter-based translation
• OOV handling
   • LOL-standardization
   • Spell checking
• Training a model on forum data
   • Need English parallel corpus

References

[1] Gawne, L. & Vaughan, J. (2012). I can haz language play: The construction of language and identity in LOLspeak. In M. Ponsonnet, L. Dao & M. Bowler (Eds), Proceedings of the 42nd Australian Linguistic Society Conference – 2011, Australian National University, Canberra ACT, 24 December 2011 (pp. 97122)
[2] http://www.lolcatbible.com
[3] http://speaklolcat.com/