

Deep Generative Language Models

DGM4NLP

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Outline

- 1 Language Modelling
- 2 Variational Auto-encoder for Sentences
 - Model

Recap Generative Models of Word Representation

Discriminative embedding models
word2vec

*In the event of a chemical spill, most children know they should
evacuate as advised by people in charge.*

Place words in \mathbb{R}^d as to answer questions like

“Have I seen this word in this context?”

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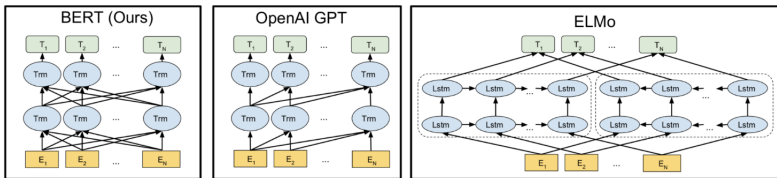
“Have I seen this word in this context?”

Fit a binary classifier

- **positive** examples
- **negative** examples

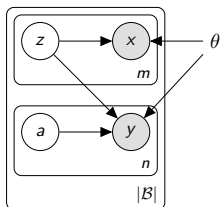
Recap Generative Models of Word Representation

- The models processes a sentence and outputs a word representation:



Recap Generative Models of Word Representation

quickly evacuate the area / deje el lugar rápidamente



X

Z

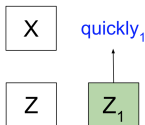
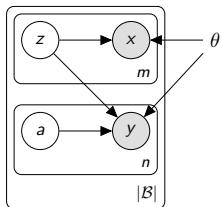
A

Z_a

Y

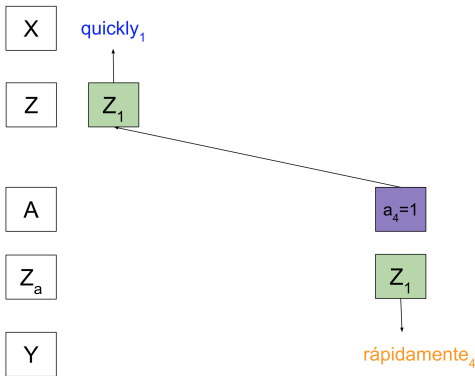
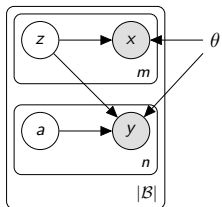
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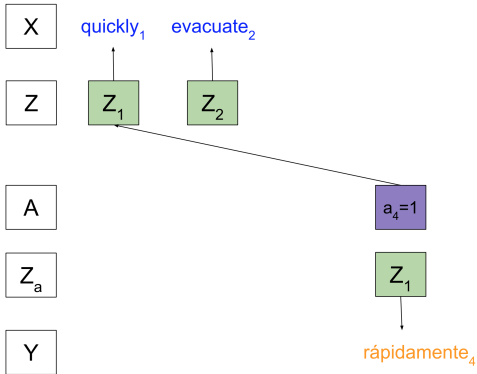
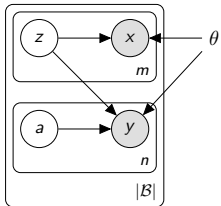
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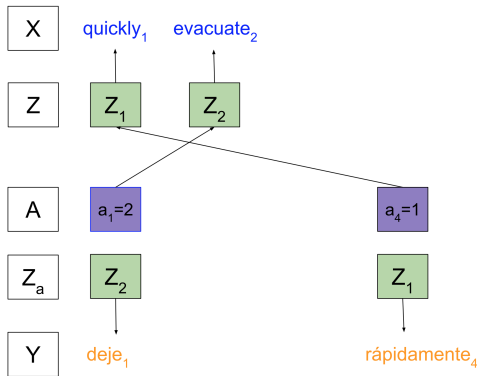
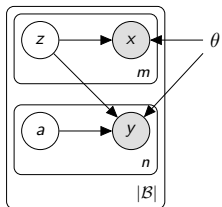
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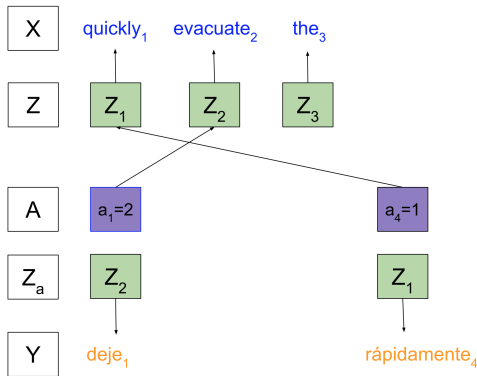
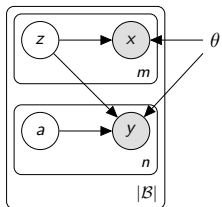
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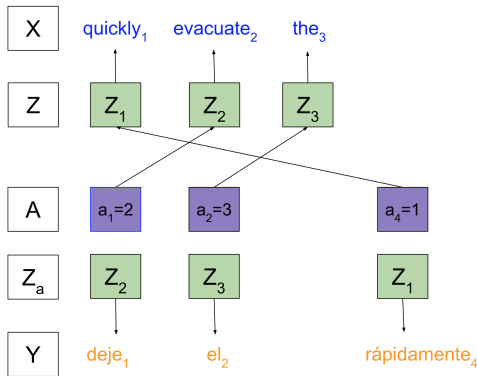
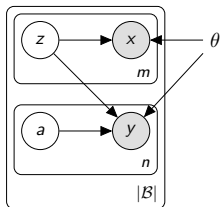
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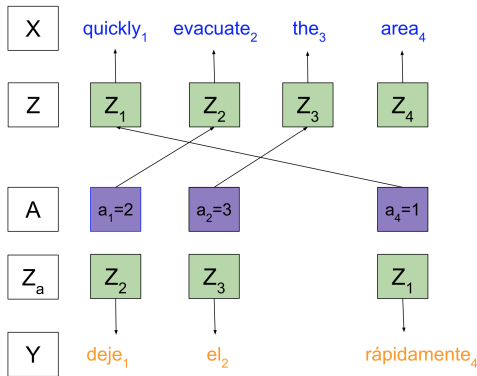
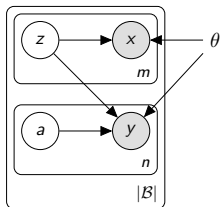
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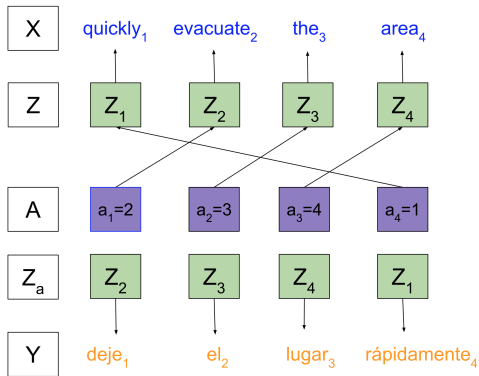
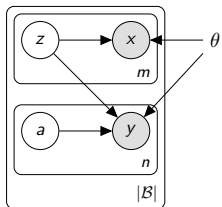
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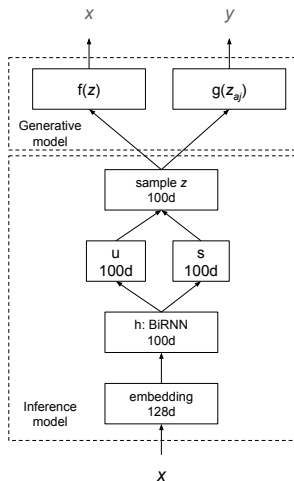


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Introduction















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VAE Recap





References I