

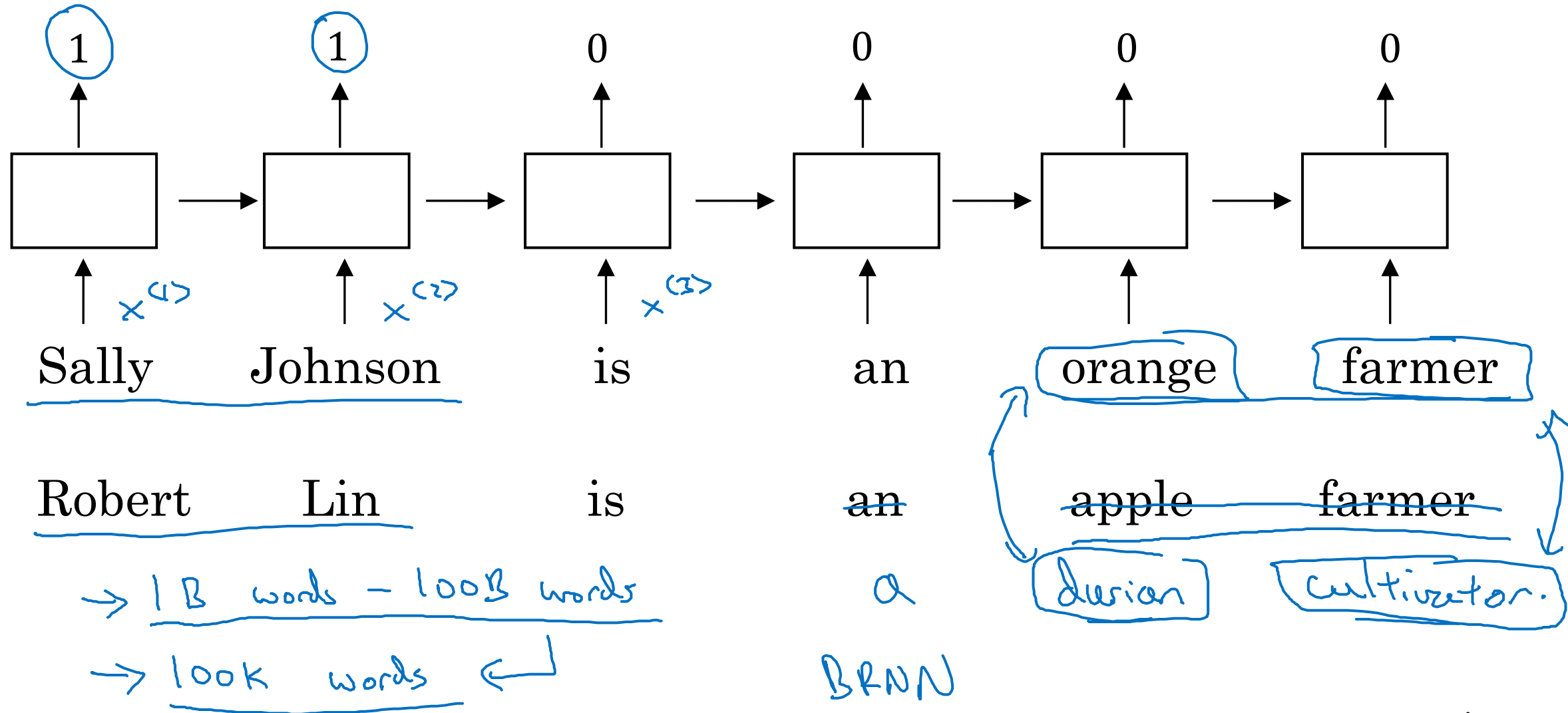


deeplearning.ai


NLP and Word Embeddings

Using word
embeddings

Named entity recognition example



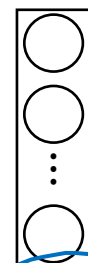
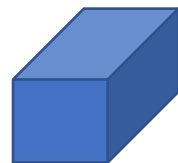
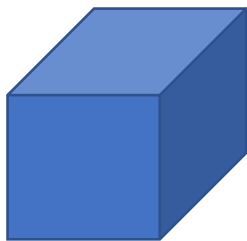
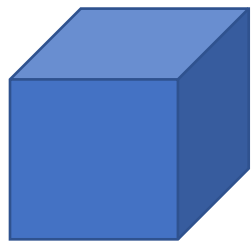
Transfer learning and word embeddings

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1. Learn word embeddings from large text corpus. (1-100B words)
(Or download pre-trained embedding online.)
 2. Transfer embedding to new task with smaller training set.
(say, 100k words) → 10,000 → 300
 3. Optional: Continue to finetune the word embeddings with new data.

Relation to face encoding (embedding) 128D



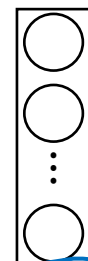
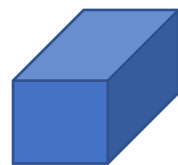
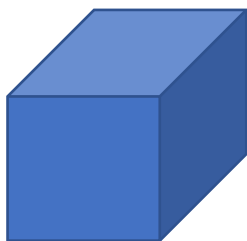
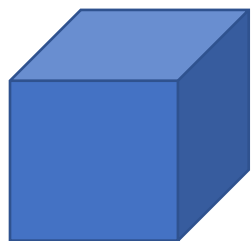
$x^{(i)}$



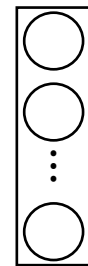
$f(x^{(i)})$



$x^{(j)}$



$f(x^{(j)})$



\hat{y}

$|V| = 10,000$

$e_1, \dots, e_{10,000}$