Processing Text with NNs

- Map each word to a vector of 0s and 1s ("1-hot repr."):

$$\text{cat} \mapsto (0, 0, \dots, 0, 1, 0, \dots, 0)$$

- Sentence is then a matrix:

		the	cat	is	on	the	mat
↑	a	0	0	0	0	0	0
	about	0	0	0	0	0	0
	…	…	…	…	…	…	…
	cat	0	**1**	0	0	0	0
Vocabulary size:	…	…	…	…	…	…	…
1.3M English	is	0	0	**1**	0	0	0
2.2M Czech	…	…	…	…	…	…	…
	the	**1**	0	0	0	**1**	0
	…	…	…	…	…	…	…
↓	zebra	0	0	0	0	0	0

Main drawback: No relations, all words equally close/far.