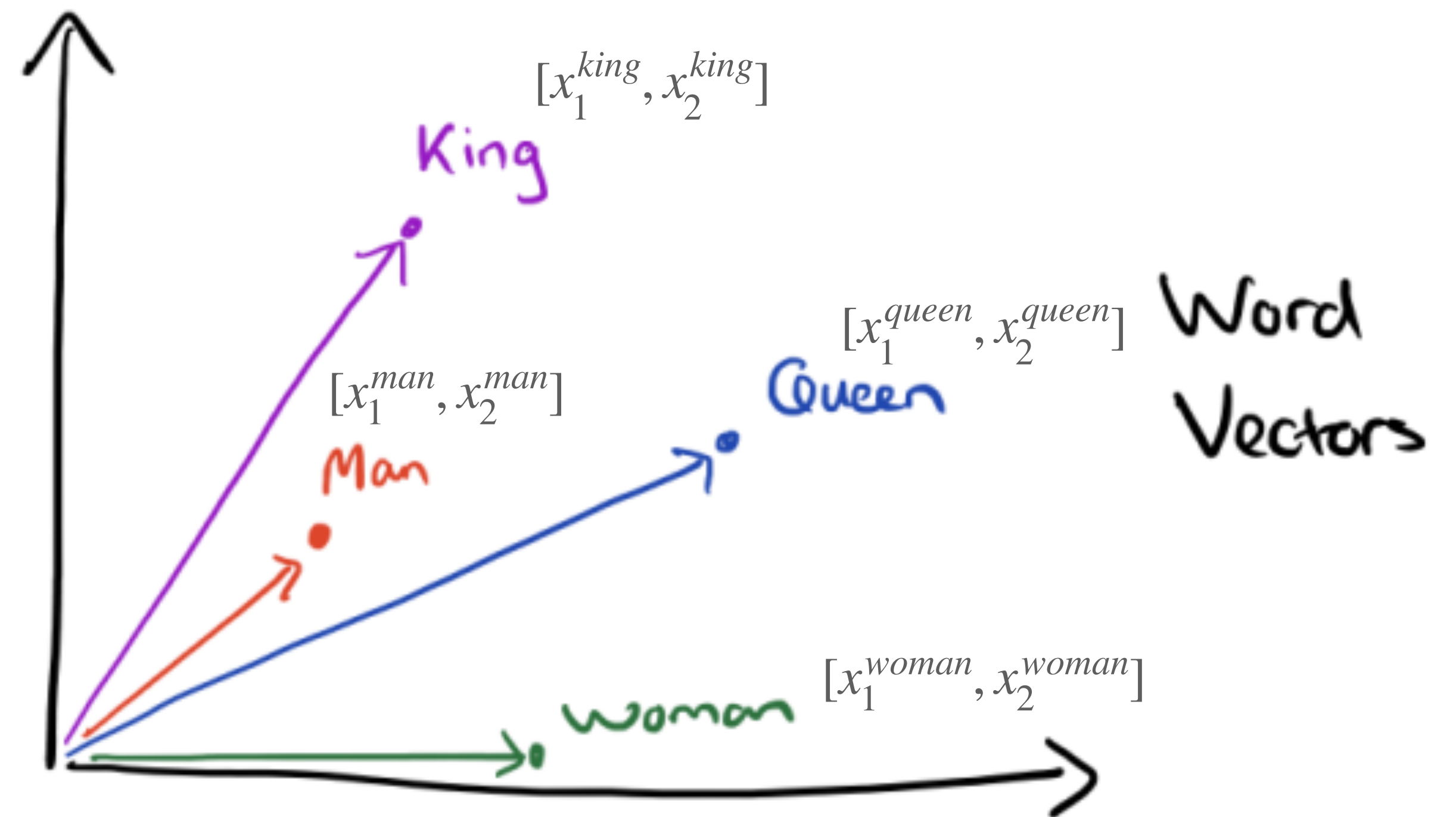


# Language data

## Representing words

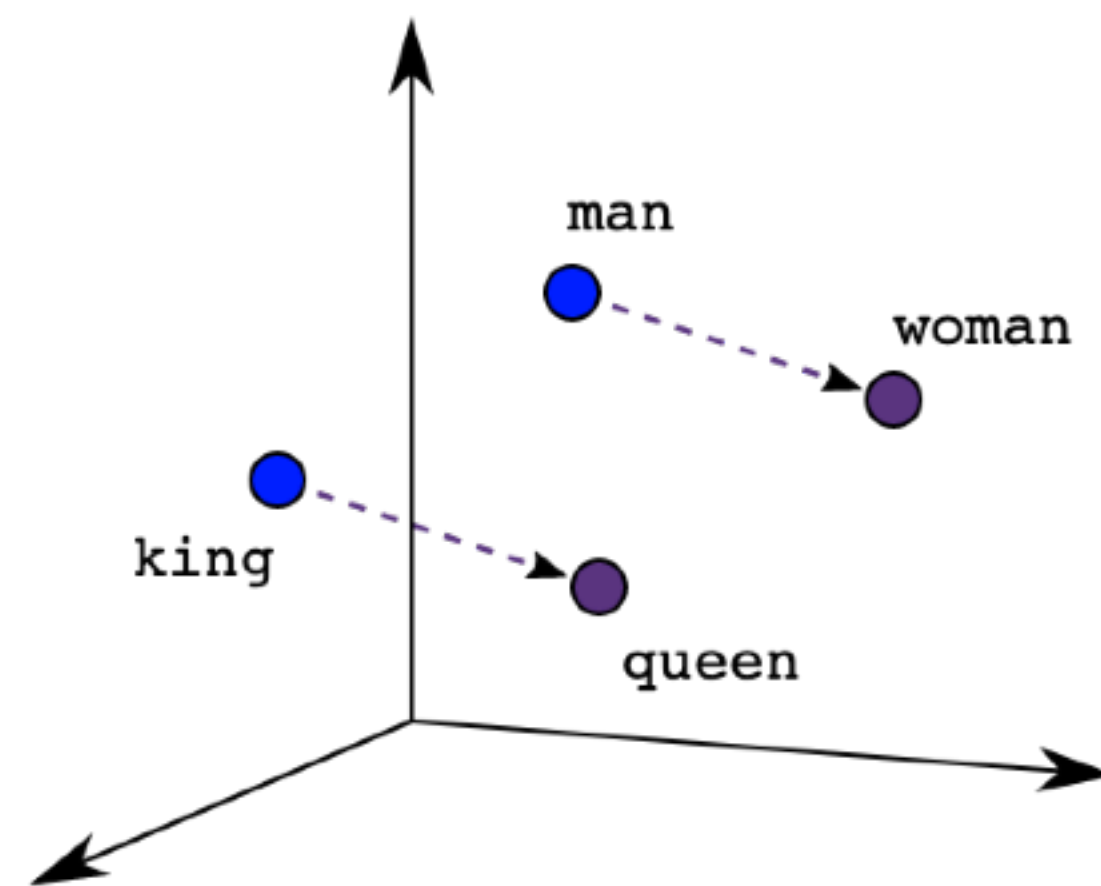
- Words can be represented as  $n$ -dimensional vectors (eg. 2-dimensional vector of  $[x_1, x_2]$ )
- Vectors preserve “word-to-word” relationships
- $v^{king} - v^{queen} \approx v^{man} - v^{woman}$



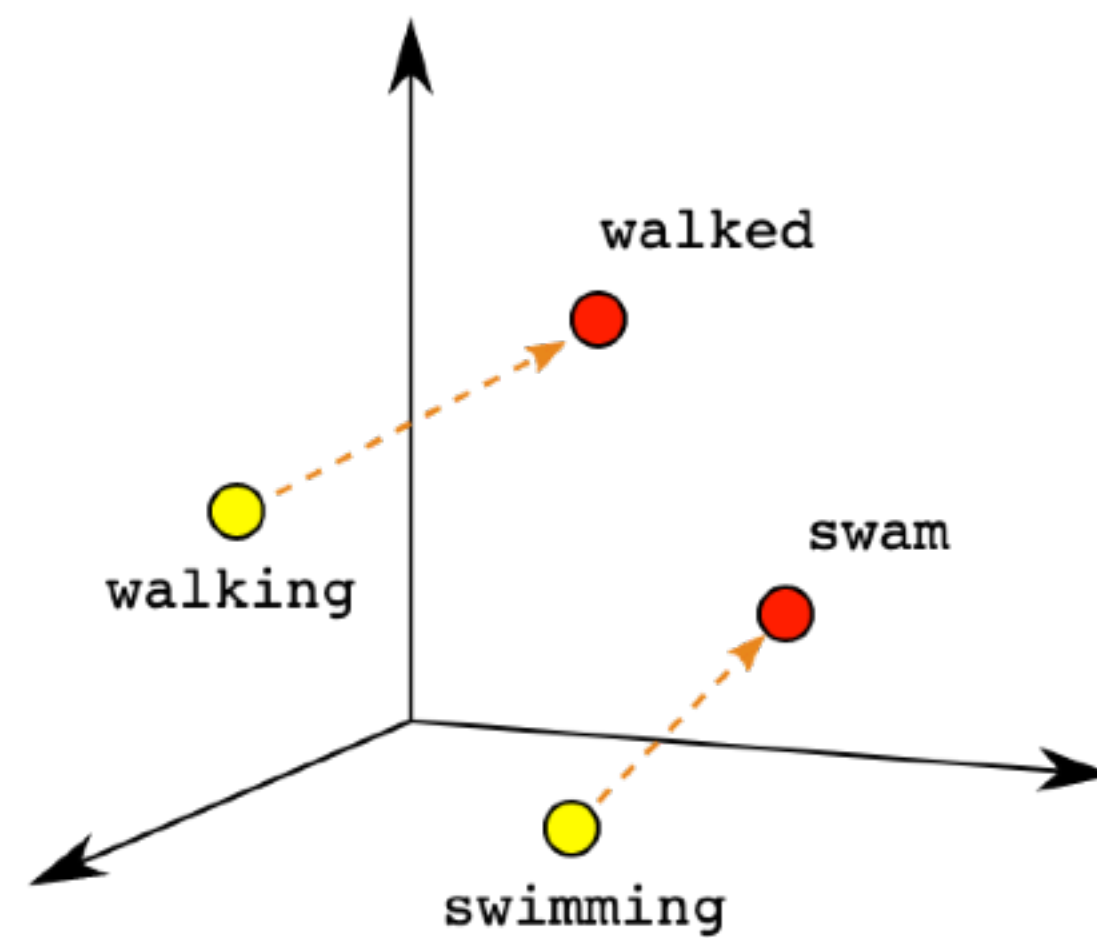
<https://www.depends-on-the-definition.com/guide-to-word-vectors-with-gensim-and-keras/>

# Language data

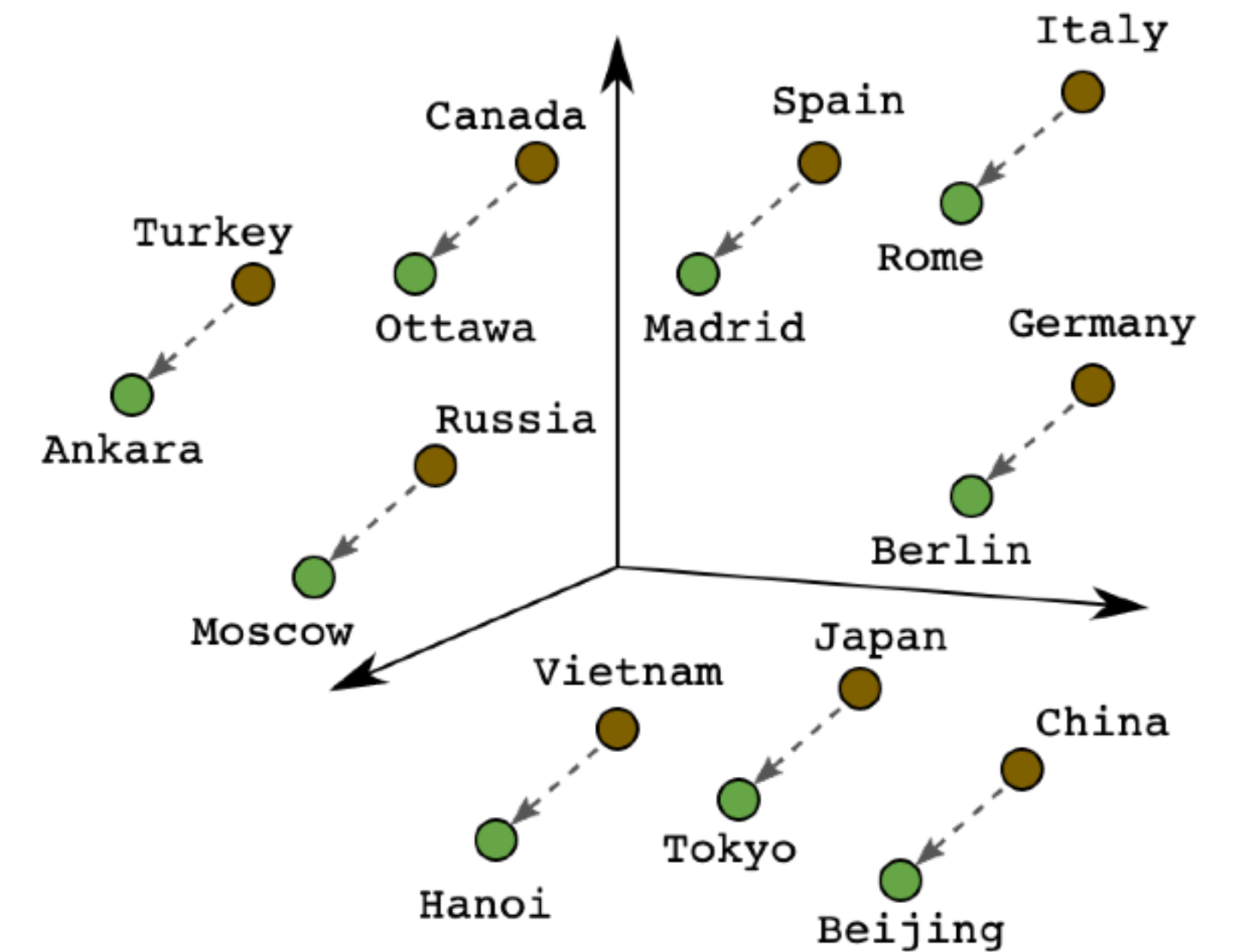
## Inter-word relationships



Male-Female



Verb Tense



Country-Capital

[https://medium.com/@h\\_bushroh/text-similarity-with-fasttext-word-embeddings-c765d97df682](https://medium.com/@h_bushroh/text-similarity-with-fasttext-word-embeddings-c765d97df682)