

# Walker — Problem Set 14

## Section 35

In[23]:= Interpreter["Location"] ["Eiffel Tower"]

Out[23]=  
GeoPosition[{48.8583, 2.29444}]

In[24]:= Interpreter["University"] ["U of T"]

Out[24]=  
University of Toronto

In[25]:= Interpreter["Chemical"] [{"C2H4", "C2H6", "C3H8"}]

Out[25]=  
{ethylene, ethane, propane}

In[26]:= Interpreter["Date"] ["20140108"]

Out[26]=  
Wed 8 Jan 2014

In[27]:= Cases[Interpreter["University"] [  
StringJoin["U of ", #] & /@ ToUpperCase[Alphabet[]]], \_Entity]

Out[27]=  
{University of Birjand, University of California-Berkeley, The University of Edinburgh,  
University of Georgia, University of Houston, University of Illinois at Urbana-Champaign,  
University of Lethbridge, University of Michigan-Ann Arbor, University of Phoenix-Online Campus,  
University of Regina, University of Saskatchewan, University of Toronto}

In[28]:= Cases[Interpreter["Movie"] [CommonName /@  
all US states with District of Columbia ADMINISTRATIVE DIVISIONS [capital city], \_Entity]

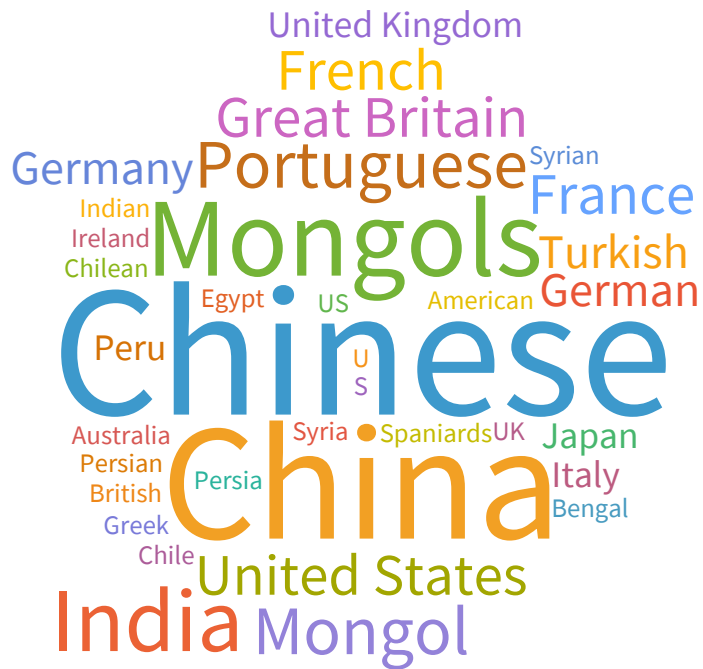
Out[28]=  
{Phoenix, Honolulu, Topeka, Annapolis, Lincoln, Santa Fe, Expedition: Bismarck,  
Columbus, Providence, Nashville, Olympia, Madison, Cheyenne}

In[29]:= Cases[Interpreter["City"] [StringJoin /@ Permutations[{"l", "i", "m", "a"}]], \_Entity]

Out[29]=  
{Lima, Lamai, Lami, Ilam, Balm, Mali, Milah, Mali, Alim, Amli}

```
In[30]:= WordCloud[TextCases[WikipediaData["gunpowder"], "Country"]]
```

```
Out[30]=
```



```
In[31]:= TextCases["She sells seashells by the sea shore.", "Noun"]
```

```
Out[31]=
```

```
{seashells, sea, shore}
```

```
In[32]:= Length[TextCases[StringTake[WikipediaData["computers"], 1000], #] & /@  
{"Noun", "Verb", "Adjective"}]
```

```
Out[32]=
```

```
{54, 23, 20}
```

```
In[33]:= TextStructure[TextSentences[WikipediaData["computers"]][[1]]]
```

```
Out[33]=
```

<u>A</u>	<u>computer</u>	<u>is</u>	<u>a</u>	<u>machine</u>	<u>that</u>	<u>can</u>	<u>be</u>	<u>programmed</u>	<u>to</u>	<u>automate</u>
Determiner	Noun	Verb	Determiner	Noun	Wh-Determiner	Verb	Verb	Verb	Preposition	Adverb
Noun Phrase			Noun Phrase		Wh-Noun Phrase					

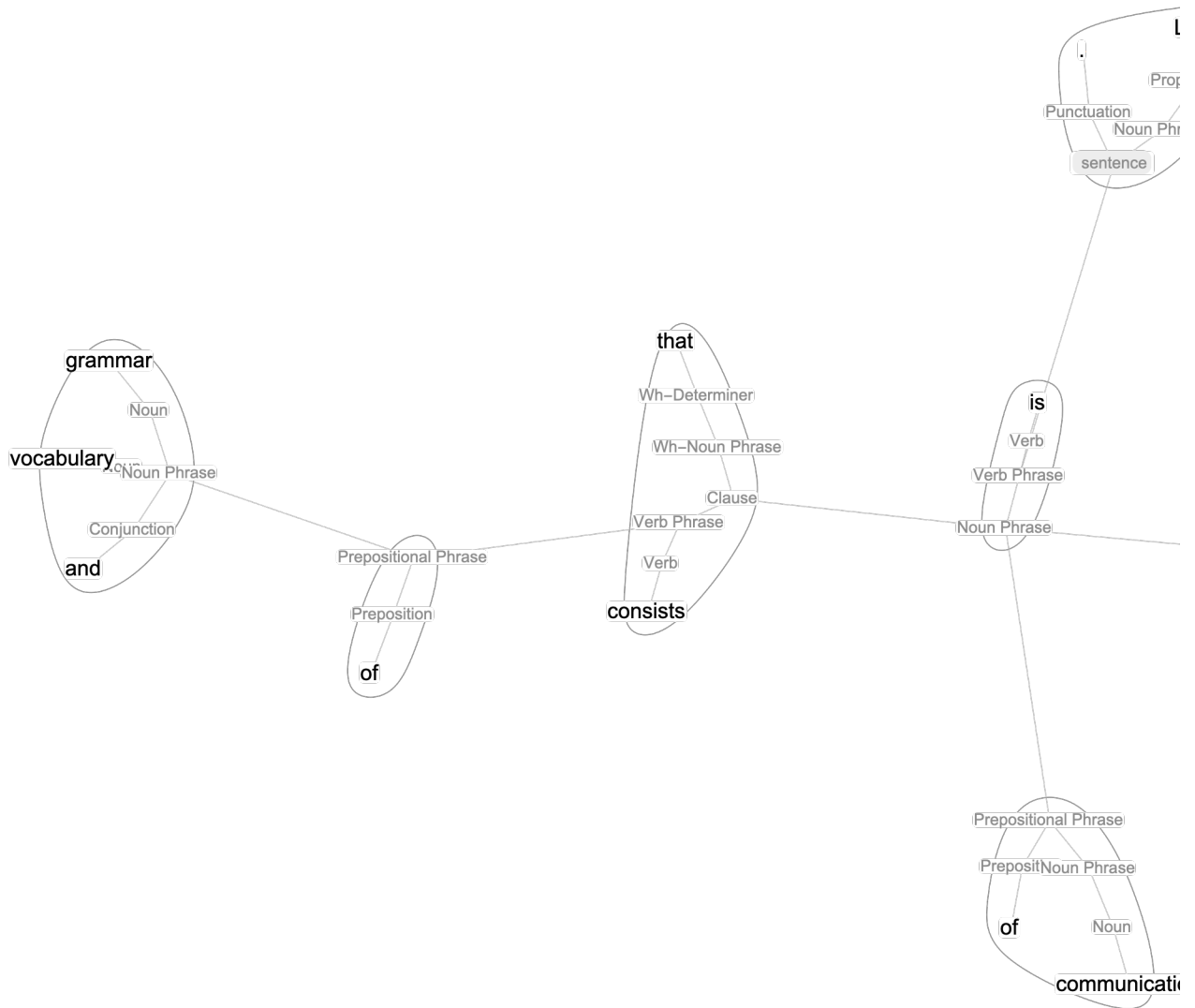
```
In[34]:= Keys[TakeLargest[
  Counts[TextCases[ExampleData[{"Text", "AliceInWonderland"}], "Noun"]], 10]]
```

```
Out[34]=
```

```
{Rabbit, door, voice, time, way, Mouse, moment, thing, head, table}
```

```
In[35]:= CommunityGraphPlot[First[TextStructure[
      First[TextSentences[WikipediaData["language"]]], "ConstituentGraphs"]]]
```

Out[35]=



```
In[36]:= Length[WordList[#]] & /@ {"Noun", "Verb", "Adjective", "Adverb"}
```

Out[36]=

```
{24 493, 6503, 11 392, 3120}
```

```
In[37]:= Flatten[Table[WordTranslation[IntegerName[n], "French"], {n, 2, 10}]]
```

Out[37]=

```
{deux, trois, quatre, cinq, six, sept, huit, neuf, dix}
```

## Section 36

```

In[38]:= CloudPublish[Delayed[Style[RandomInteger[1000], 100]]]
Out[38]= CloudObject[https://www.wolframcloud.com/obj/c2e563f3-f02d-4576-82c9-0a86db7cbecc]

In[39]:= CloudPublish[FormFunction[{"n" → "Number"}, #n^#n &]]
Out[39]= CloudObject[https://www.wolframcloud.com/obj/9e5406e5-23d3-4938-bc2d-9bf649964bb7]

In[40]:= CloudPublish[FormFunction[{"n" → "Number", "n" → "Number"}, #n^#p &]]
Out[40]= CloudObject[https://www.wolframcloud.com/obj/404bc3fb-46b5-4219-983e-5042f652dc0e]

In[41]:= CloudPublish[FormFunction[{"Topic" → "String"}, WordCloud[WikipediaData[#Topic]] &]]
Out[41]= CloudObject[https://www.wolframcloud.com/obj/5ba286b6-f52e-4131-a70d-ebc6c258ee1a]

In[42]:= CloudPublish[FormPage[{"string" → "String"}, Style[StringReverse[#string], 50] &]]
Out[42]= CloudObject[https://www.wolframcloud.com/obj/858549a0-97ed-423a-b132-7ce037bb82b9]

In[43]:= CloudPublish[
  FormPage[{"n" → "Number"}, Graphics[Style[RegularPolygon[#n], RandomColor[]]] &]]
Out[43]= CloudObject[https://www.wolframcloud.com/obj/ac646f15-43e7-43ee-b1bf-ccfbb73eafed]

In[44]:= CloudPublish[FormPage[{"location" → "Location", "n" → "Number"},
  GeoListPlot[GeoNearest["Volcano", #location, #n]] &]]
Out[44]= CloudObject[https://www.wolframcloud.com/obj/eb197c6c-05b6-4f56-a656-9e96fb064c94]

```