Harper — EIWL Sections 35, 36

Section 35

In[176]:=
```
Interpreter["Location"]["Eiffel Tower"]
```
Out[176]=
```
GeoPosition[{48.8583, 2.29444}]
```

In[177]:=
```
Interpreter["University"]["U of T"]
```
Out[177]=

University of Toronto

In[178]:=
```
Interpreter["Chemical"][{"C2H4", "C2H6", "C3H8"}]
```
Out[178]=

{ ethylene , ethane , propane }

In[179]:=
```
Interpreter["Date"]["20140108"]
```
Out[179]=

Wed 8 Jan 2014

In[180]:=
```
Cases[Interpreter["University"][
  StringJoin["U of ", #] & /@ ToUpperCase[Alphabet[]]], _Entity]
```
Out[180]=

{ 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[181]:=
```
Cases[Interpreter["Movie"][CommonName /@
```
all US states with District of Columbia ADMINISTRATIVE DIVISIONS [capital city]]
```
, _Entity]
```
Out[181]=

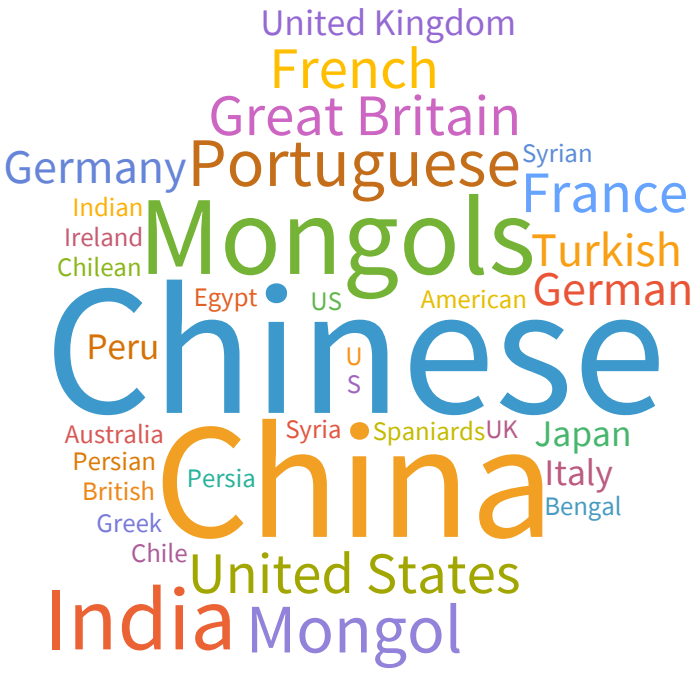
{ Phoenix , Honolulu , Topeka , Annapolis , Lincoln , Santa Fe , Expedition: Bismarck ,
Columbus , Providence , Nashville , Olympia , Madison , Cheyenne }

In[182]:=
```
Cases[Interpreter["City"][StringJoin /@ Permutations[{"a", "i", "l", "m"}]], _Entity]
```

Out[182]=
```
{Alim, Amli, Balm, Ilam, Lami, Lima, Lamai, Mali, Milah, Mali}
```

In[183]:=
```
WordCloud[TextCases[WikipediaData["gunpowder"], "Country"]]
```

Out[183]=



In[184]:=
```
TextCases["She sells seashells by the seashore", "Noun"]
```

Out[184]=
```
{seashells, seashore}
```

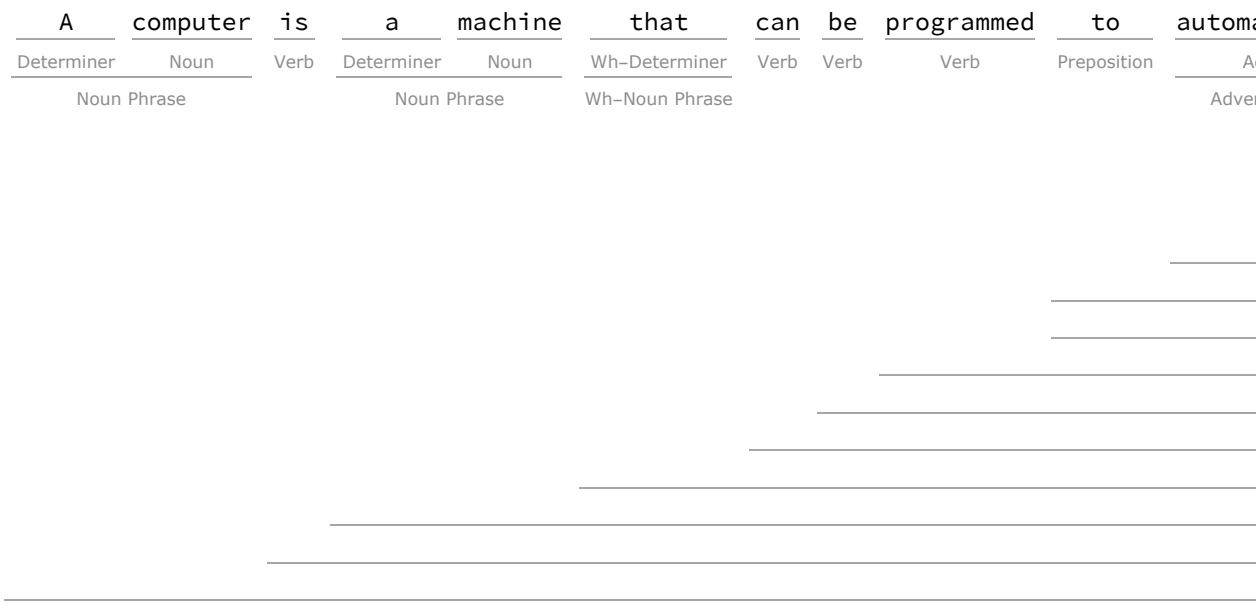
In[185]:=
```
Length[TextCases[StringTake[WikipediaData["computers"], 1000], #]] & /@
 {"Noun", "Verb", "Adjective"}
```

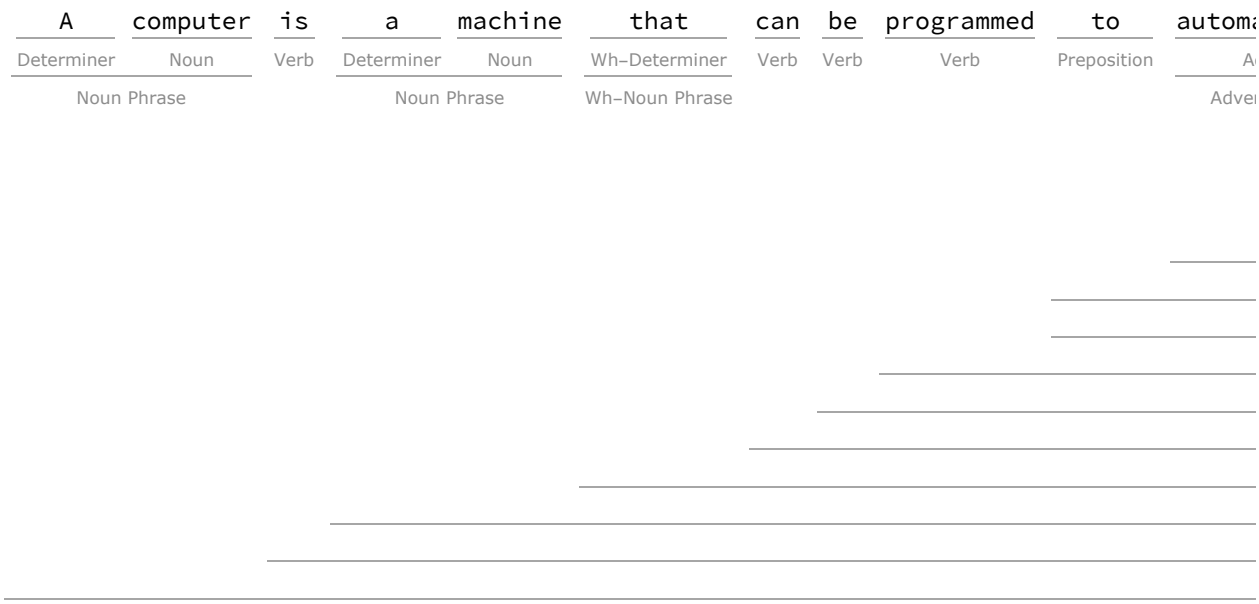
Out[185]=
```
{54, 23, 20}
```

In[186]:=

```
TextStructure[TextSentences[WikipediaData["computers"]][[1]]]
```

Out[186]=





In[187]:=

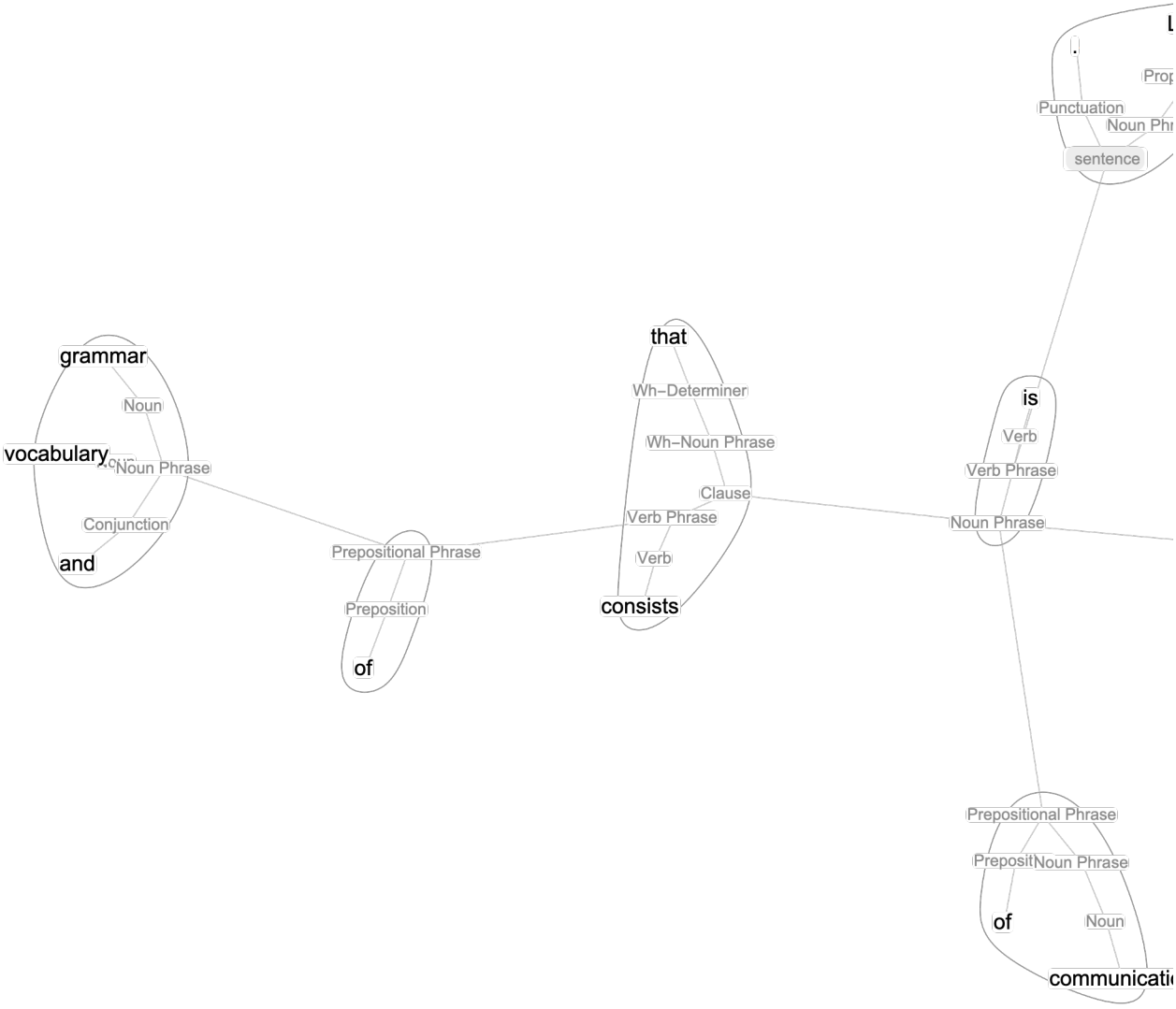
```
TakeLargest[Counts[TextWords[ExampleData[{"Text", "AliceInWonderland"}]]], 10]
```

Out[187]=

```
⟨| the → 573, and → 319, a → 269, to → 248, she → 203,
 of → 194, was → 166, Alice → 161, in → 155, it → 154 |⟩
```

In[188]:=
```
CommunityGraphPlot[First[TextStructure[
   TextSentences[WikipediaData["language"]][[1]], "ConstituentGraphs"]]]
```

Out[188]=



In[189]:=

In[190]:=
```
Length[TextCases[WordList[], #]] & /@ {"Noun", "Verb", "Adjective", "Adverb"};
```

In[191]:=
```
(*This won't evaluate, but I think it's right*)
```

In[192]:=
```
WordTranslation[#, "French"] & /@ IntegerName[Range[2, 10]]
```

Out[192]=
```
{{deux}, {trois}, {quatre}, {cinq}, {six}, {sept}, {huit}, {neuf}, {dix}}
```

Section 36

In[193]:=
```
CloudPublish[Style[RandomInteger[1000], 100]]
```
Out[193]=
```
CloudObject[https://www.wolframcloud.com/obj/b00c72b4-e52b-447a-a3e1-f26f67a62add]
```

In[194]:=
```
CloudPublish[FormFunction[{"x" → "Number"}, #x^#x &]]
```
Out[194]=
```
CloudObject[https://www.wolframcloud.com/obj/859215c3-20ea-477b-9f3f-53e2e0658be2]
```

In[195]:=
```
CloudPublish[FormFunction[{"x" → "Number", "y" → "Number"}, #x^#y &]]
```
Out[195]=
```
CloudObject[https://www.wolframcloud.com/obj/6dbd8f6b-630e-49ac-b772-a55f628f5f8c]
```

In[196]:=
```
CloudPublish[FormFunction[{"topic" → "String"}, WordCloud[WikipediaData[#topic]] &]]
```
Out[196]=
```
CloudObject[https://www.wolframcloud.com/obj/c040c97b-165b-4d79-9eea-787cfb4fe3de]
```

In[197]:=
```
CloudPublish[FormFunction[{"word" → "String"}, Style[StringReverse[#word], 50] &]]
```
Out[197]=
```
CloudObject[https://www.wolframcloud.com/obj/a5028ea5-6a90-4bf7-b843-42bd98207692]
```

In[198]:=
```
FormFunction[{"sides" → "Integer"},
 Graphics[Style[RegularPolygon[#sides], RandomColor[]]] &]
```
Out[198]=

FormFunction[sides [ ] Submit]

In[199]:=
```
CloudPublish[FormFunction[{"where" → "Location", "number" → "Integer"},
  GeoListPlot[GeoNearest["Volcano", #where, #number]] &]]
```
Out[199]=
```
CloudObject[https://www.wolframcloud.com/obj/81e60f99-610b-44e3-8bdc-4bd68770c741]
```