

## Jeremy — EIWL Sections 35, 36

```
In[104]:= Interpreter["Location"] ["Eiffel Tower"]
Out[104]= GeoPosition[{48.8583, 2.29444}]

In[105]:= Interpreter["University"] ["U of T"]
Out[105]= University of Toronto

In[106]:= Interpreter["Chemical"] [#] & /@ {"C2H4", "C2H6", "C3H8"}
Out[106]= {ethylene, ethane, propane}

In[107]:= Interpreter["Date"] ["20140108"]
Out[107]= Wed 8 Jan 2014

In[108]:= Cases[Interpreter["University"] [
  StringJoin["U of ", #] & /@ ToUpperCase[Alphabet[]]], _Entity]
Out[108]= {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[109]:= Cases[Interpreter["Movie"] [CommonName[#] & /@
  all US states with District of Columbia ADMINISTRATIVE DIVISIONS [capital city], _Entity]
Out[109]= {Phoenix, Honolulu, Topeka, Annapolis, Lincoln, Santa Fe, Expedition: Bismarck,
  Columbus, Providence, Nashville, Olympia, Madison, Cheyenne}
```

In[110]:=

```
Cases[Interpreter["City"][
  StringJoin[#] & /@ Permutations[{"a", "i", "m", "l"}, 4]], _Entity]
```

Out[110]=

```
{ Los Angeles , Li , Ami , Ali , Ila , Mal , Lai , Lam , Lia , Amli ,
  Alim , Balm , Ilam , Mali , Milah , Mali , Lami , Lima , Lamai }
```

In[111]:=

```
WordCloud[
  Cases[Interpreter["Country"][TextWords[WikipediaData["gunpowder"]]], _Entity]]
```

Out[111]=

Your code produces an empty WordCloud?

Try:

```
WordCloud[TextCases[WikipediaData["gunpowder"], "Country"]]
```

In[112]:=

```
TextCases["She sells seashells by the sea shore", "Noun"]
```

Out[112]=

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

In[113]:=

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

Out[113]=

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

In[114]:=

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

Out[114]=

<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[115]:=

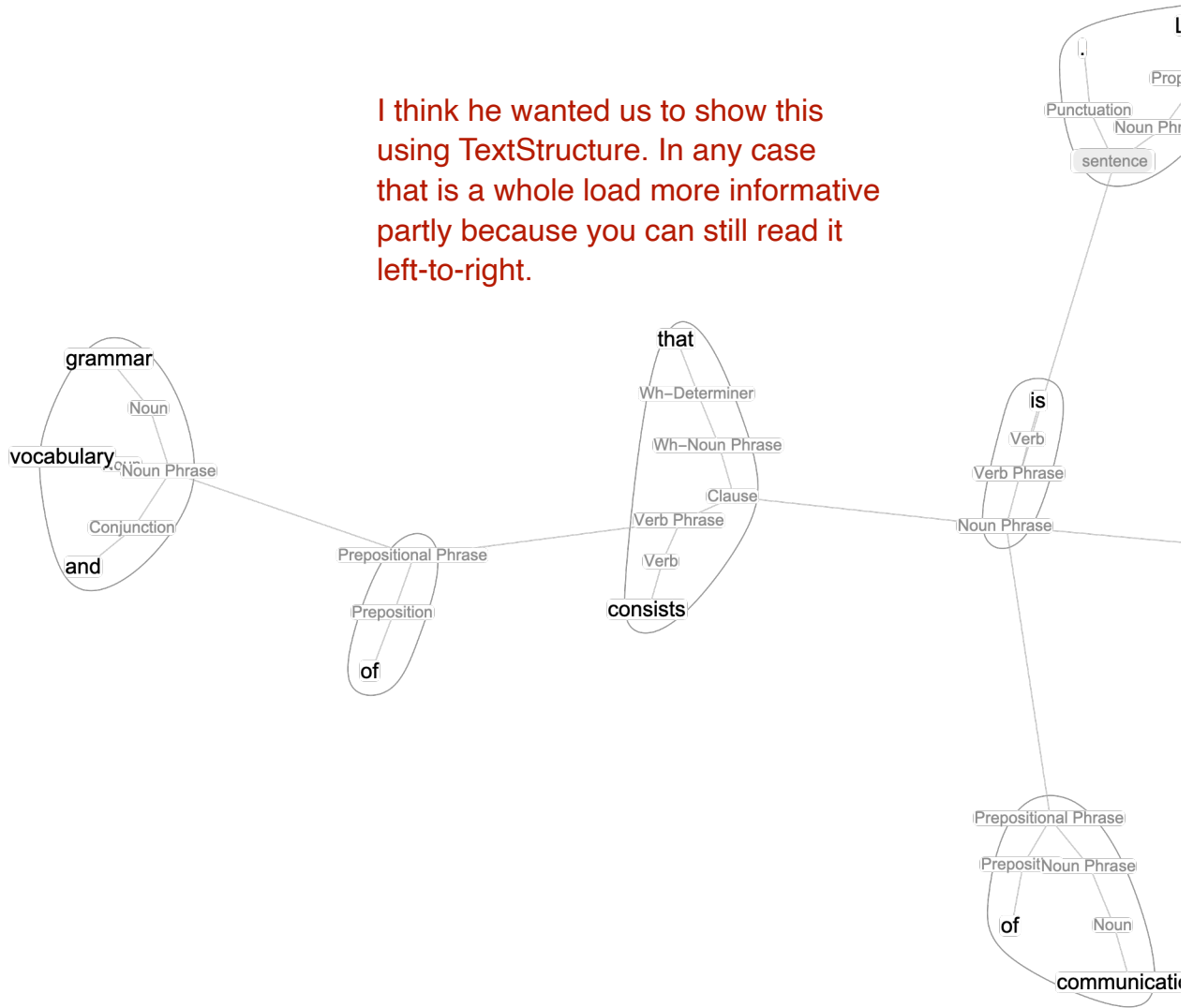
```
Keys[TakeLargest[
  Counts[TextCases[ExampleData[{"Text", "AliceInWonderland"}], "Noun"]], 10]]
```

Out[115]=

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

```
In[116]:=
CommunityGraphPlot[First[TextStructure[
  First[TextSentences[WikipediaData["language"]]], "ConstituentGraphs"]]]
```

```
Out[116]=
```



```
In[117]:=
Length[Flatten[TextCases[WordList[], #]]] & /@ {"Noun", "Verb", "Adjective", "Adverb"}
```

```
Out[117]=
{22 728, 5894, 7146, 2824}
```

```
In[118]:=
Flatten[Table[WordTranslation[IntegerName[n], "French"], {n, 2, 10}]]
```

```
Out[118]=
{deux, trois, quatre, cinq, six, sept, huit, neuf, dix}
```

```

In[119]:=
CloudPublish[Delayed[Style[RandomInteger[1000], 100]]]
Out[119]=
CloudObject[https://www.wolframcloud.com/obj/4b8f5f56-9abd-4402-b6e1-e614d48e0ce5]

In[120]:=
CloudPublish[FormFunction[{"x" → "Number"}, #x^#x &]]
Out[120]=
CloudObject[https://www.wolframcloud.com/obj/21d0a94e-3a6c-4b48-a00a-a6be2387e2df]

In[121]:=
CloudPublish[FormFunction[{"x" → "Number", "y" → "Number"}, #x^#y &]]
Out[121]=
CloudObject[https://www.wolframcloud.com/obj/a88ee3d7-45fc-4d03-9a33-98538660b688]

In[122]:=
CloudPublish[
  FormFunction[{"topic" → "String"}, WordCloud[TextWords[WikipediaData[#topic]]] &]]
Out[122]=
CloudObject[https://www.wolframcloud.com/obj/36a56a45-fe76-48e7-b55e-a87c9057eb9b]

In[123]:=
CloudPublish[
  FormFunction[{"string" → "String"}, Style[StringReverse[#string], 50] &]]
Out[123]=
CloudObject[https://www.wolframcloud.com/obj/841b9f3e-d84f-4e42-9b16-ae3d5857a448]

In[124]:=
CloudPublish[Delayed[FormFunction[{"n" → "Integer"},
  Graphics[Style[RegularPolygon[#n], RandomColor[]]] &]]
Out[124]=
CloudObject[https://www.wolframcloud.com/obj/049a2799-475b-423b-9eaf-c192d7e5c5f8]

In[125]:=
CloudPublish[FormFunction[{"location" → "Location", "n" → "Number"},
  GeoListPlot[GeoNearest["Volcano", #location, #n]] &]]
Out[125]=
CloudObject[https://www.wolframcloud.com/obj/ace4c664-d34f-498b-839e-12c142768659]

```