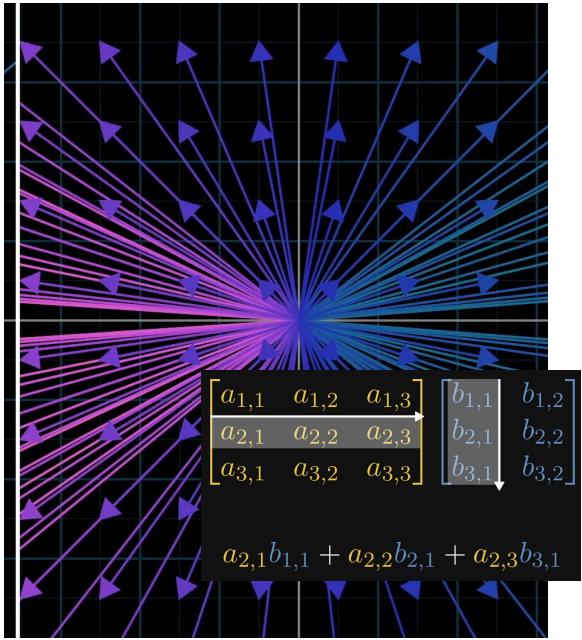


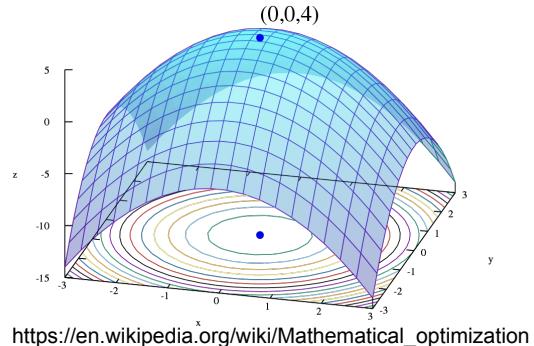
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- Graph Theory
- Linear Algebra (esp. Matrix multiplication)
- Optimization

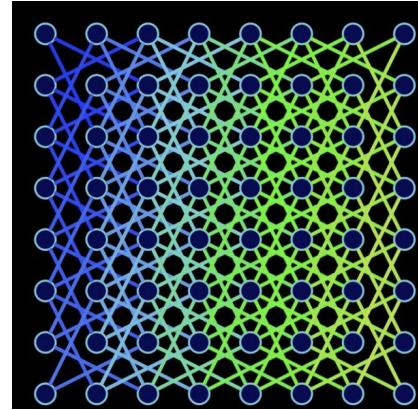


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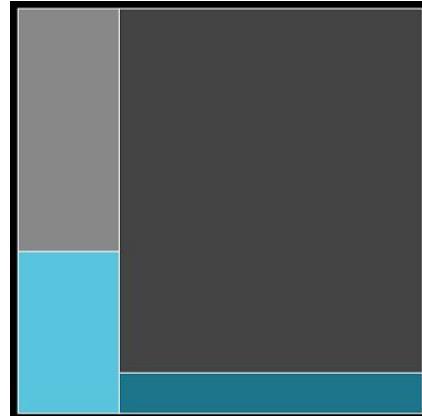
<https://www.youtube.com/watch?v=HZGCoVF3YvM>

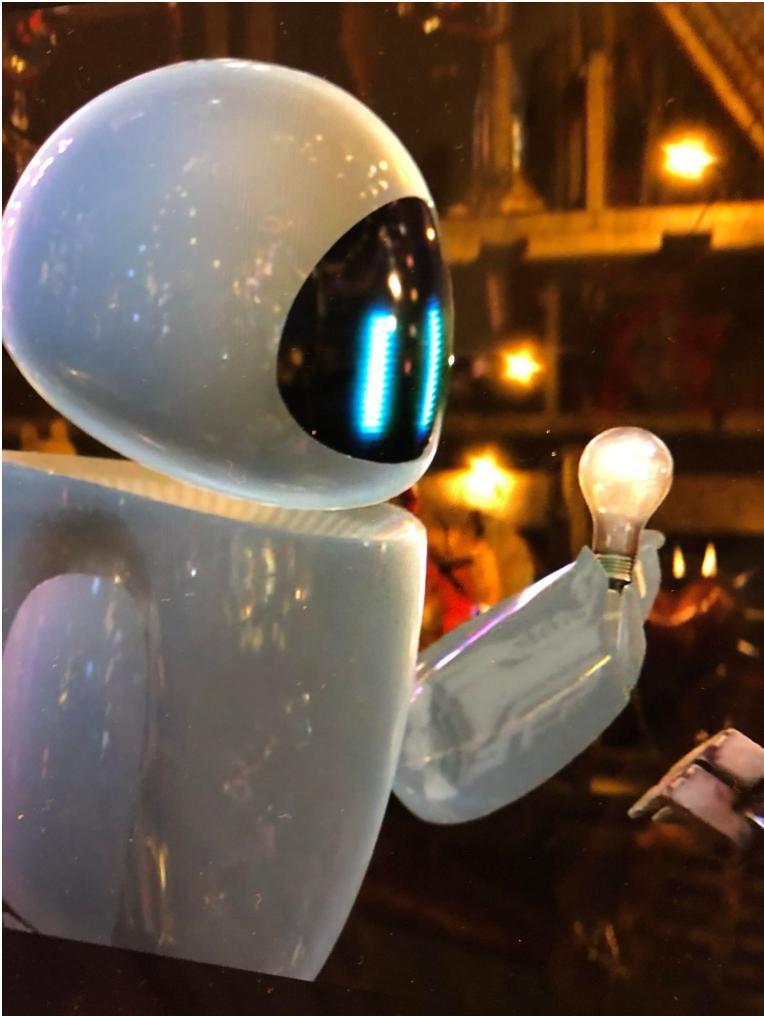


<https://thepalindrome.org/p/understanding-matrix-multiplication>



<https://www.youtube.com/watch?v=LFKZLXVO-Dg>





https://www.reddit.com/r/MovieDetails/comments/c09hm3/in_while_when_eve_holds_a_light_bulb_in_her_eyes/



<https://www.sciencenews.org/blog/science-the-public/some-comfort-about-broken-cfls>

ChatBots in 1965



https://www.ibm.com/ibm/history/exhibits/mainframe/mainframe_PP7090.html



<https://www.masswerk.at/elizabot/>

ELIZA—A Computer Program For the Study of Natural Language Communication Between Man And Machine

JOSEPH WEIZENBAUM
Massachusetts Institute of Technology, Cambridge, Mass.*

ELIZA is a program operating within the MAC time-sharing system at MIT which makes certain kinds of natural language conversation between man and computer possible. Input sentences are analyzed on the basis of decomposition rules which are triggered by key words appearing in the input text. Responses are generated by reassembly rules associated with selected decomposition rules. The fundamental technical problems with which ELIZA is concerned are: (1) the identification of key words, (2) the discovery of minimal context, (3) the choice of appropriate transformations, (4) generation of responses in the absence of key words, and (5) the provision of an editing capability for ELIZA "scripts". A discussion of some psychological issues relevant to the ELIZA approach as well as of future developments concludes the paper.

Introduction

It is said that to explain is to explain away. This maxim is nowhere so well fulfilled as in the area of computer programming, especially in what is called heuristic programming and artificial intelligence. For in those realms machines are made to behave in wondrous ways, often sufficient to dazzle even the most experienced observer. But once a particular program is unmasked, once its inner workings are explained in language sufficiently plain to induce understanding, its magic crumbles away; it stands revealed as a mere collection of procedures, each quite comprehensible. The observer says to himself "I could have written that!" With that thought he moves the program in question from the shelf marked "intelligent"

The object of this evaluation of the programs ever needed

ELIZA Program

ELIZA is a program for conversation with a man. Its development is on the basis of decomposition rules. It is written in MAI and was chosen to emphasize the improved by its user continually improve Pygmalion fame, it is civilized, the relationship remaining in the document.

For the present purpose the MAC system is used to operate a full scale editor. The individual is the sole user of the computer. The user may be "time-shared" with other users. What is important here is that the user types on the typewriter the same instrument.

receipt of a message is a function of the program. Such MAC system currently corresponds to the parameters generally response time that computer need never

When in conversa-

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ELIZA -- A Computer Program for the Study of Natural
Language Communication Between Man and Machine
DOCTOR script by Joseph Weizenbaum, 1966 (CC0 1.0) Public Domain
ELIZA implementation by Ant & Max Hay, 2023 (CC0 1.0) Pub Domain

// --- exact conversation quoted in Weizenbaum's 1966 CACM paper ---

"Men are all alike.",
"IN WHAT WAY",

"They're always bugging us about something or other.",
"CAN YOU THINK OF A SPECIFIC EXAMPLE",

"Well, my boyfriend made me come here.",
"YOUR BOYFRIEND MADE YOU COME HERE",

"He says I'm depressed much of the time.",
"I AM SORRY TO HEAR YOU ARE DEPRESSED",

"It's true. I am unhappy.",
"DO YOU THINK COMING HERE WILL HELP YOU NOT TO BE UNHAPPY",

"I need some help, that much seems certain.",
"WHAT WOULD IT MEAN TO YOU IF YOU GOT SOME HELP",

"Perhaps I could learn to get along with my mother.",
"TELL ME MORE ABOUT YOUR FAMILY",

"My mother takes care of me.",
"WHO ELSE IN YOUR FAMILY TAKES CARE OF YOU",

"My father.",
"YOUR FATHER",

"You are like my father in some ways.",
"WHAT RESEMBLANCE DO YOU SEE",

"You are not very aggressive but I think you don't want me to notice that.",
"WHAT MAKES YOU THINK I AM NOT VERY AGGRESSIVE",

PRINT,T0109,2531,.TAPE.,102

T0109 2531

(HOW DO YOU DO. I AM THE DOCTOR. PLEASE SIT DOWN AT THE TYPEWRITER 000010
AND TELL ME YOUR PROBLEM.) 000020
(IF 3 ((O IF O) (DO YOU THINK ITS LIKELY THAT 3) (DO YOU WISH THAT 3)) 000030
(WHAT DO YOU THINK ABOUT 3) (REALLY, 2 3))) 000040
(MEMORY MY (O YOUR O = LETS DISCUSS FURTHER WHY YOUR 3)) 000050
(O YOUR O = EARLIER YOU SAID YOUR 3) 000060
(O YOUR O = BUT YOUR 3) 000070
(O YOUR O = DOES THAT HAVE ANYTHING TO DO WITH THE FACT THAT YOUR 3)) 000080
(NONE ((O) (I AM NOT SURE I UNDERSTAND YOU FULLY)) 000090
(PLEASE GO ON) 000100
(WHAT DOES THAT SUGGEST TO YOU) 000110
(DO YOU FEEL STRONGLY ABOUT DISCUSSING SUCH THINGS))) 000120
(PERHAPS ((O) (YOU DON'T SEEM QUITE CERTAIN)) 000130
(WHY THE UNCERTAIN TONE) 000140
(CAN'T YOU BE MORE POSITIVE) 000150
(YOU AREN'T SURE))) 000180
(MAYBE (=PERHAPS)) 000190
(DON'T YOU KNOW) 000200
(AM = ARE ((O ARE YOU O) (DO YOU BELIEVE YOU ARE 4)) 000210
(WOULD YOU WANT TO BE 4) (YOU WISH I WOULD TELL YOU YOU ARE 4) 000220
(WHAT WOULD IT MEAN IF YOU WERE 4)) 000230
((O) (WHY DO YOU SAY 'AM') (I DON'T UNDERSTAND THAT))) 000240
(ARE = AM ((O AM I O)) 000250
(WHY ARE YOU INTERESTED IN WHETHER I AM 4 OR NOT) 000260

ChatBots in 1975



<https://www.cs.york.ac.uk/50-years/exhibition/asr-33-teletype/>



https://twitter.com/_cchhriiss11_/status/1666687705525399553

The Miracle Years 1974->1977



https://americanhistory.si.edu/collections/search/object/nmah_334396



https://americanhistory.si.edu/collections/search/object/nmah_334638

Creative Computing

the magazine of recreational and educational computing

61.50

The Great West Coast Computer Faire Revealed

Special Features on Computers in Medicine

Guide to Selecting a Microcomputer

A Taste of APL

Complete List of Retail Stores

Computer Games:

- UFO
- Bocce
- Backgammon

Make Your Own Anamorphic Art



Jeff Shrager's BASIC Eliza, c. 1973 (pub. 1977) in Creative Computing in the July/August issue of 1977.

*Jul - Aug 1977
vol 3, no. 4*

Austria	50	\$2.00
Belgium	50	\$2.00
Canada	50	\$2.00
Denmark	50	\$1.00
Ireland	50	\$2.00
France	50	\$2.00
Germany	50	\$2.00
Great Britain	£1.00	
Hong Kong	50	\$1.00
Holland	50	\$2.00
Italy	50	\$2.00
Norway	50	\$1.00
Portugal	50	\$2.00
Spain	50	\$2.00
Sweden	50	\$1.00
Switzerland	50	\$1.00

Psychoanalysis (?) by Computer..

ELIZA

Steve North

Sample Run

Language: BASIC (MITS 8K)

Author: Originally programmed in LISP by Joseph Weizenbaum. This version is based on one written by Jeff Shrager.

Description: ELIZA is a program that accepts natural English as input and carries on a reasonably coherent conversation based on the psychoanalytic techniques of Carl Rogers. You will have to forgive ELIZA for being a poor English student. You'll find that it is best not to use punctuation in your input, and you'll have to carry the conversation. But it does work!

Remarks: In order to do what it does, ELIZA must: (1) get a string from the user, and prepare it for further processing; (2) find the keywords in the input string; (3) if a keyword is found, take the part of the string following the keyword and "translate" all the personal pronouns and verbs ("I" becomes "YOU", "ARE" becomes "AM", etc.); (4) finally, look up an appropriate reply based on the keyword which was found, print it, and, if necessary, the "translated" string. ELIZA uses types of programs data to accomplish this:

(1136 keyword, such as "I AM", "WHY DON'T YOU", and "COMPUTER". The keywords must be in order of priority, so ELIZA will key on "YOU ARE" before "YOU".

A cartoon illustration showing two people from behind, looking towards a large speech bubble. The speech bubble contains the text: "HOW LONG HAVE YOU BEEN ALWAYS APOLOGIZING?"

Program Listing

Sample Run

RUN
HI! I'M ELIZA. WHAT'S YOUR PROBLEM?
? I AM AN IBM 370
DID YOU COME TO ME BECAUSE YOU ARE AN IBM 370
? YES I WANT A NEW LINEPRINTER
WHAT WOULD IT MEAN TO YOU IF YOU GOT A NEW LINEPRINTER
? ABOUT 1200 LPM
SAY, DO YOU HAVE ANY PSYCHOLOGICAL PROBLEMS?
? WHAT WOULD YOU KNOW I'M A 370 AND YOU'RE AN IMSAI
WHAT MAKES YOU THINK I AM AN IMSAI
? IT SAYS THAT ON YOUR FRONT PANEL
WHY ARE YOU CONCERNED ABOUT MY FRONT PANEL
? LOOK YOU BROUGHT UP THE SUBJECT
WE WERE DISCUSSING YOU-- NOT ME.
? I'M FIXING A HOLE...
DID YOU COME TO ME BECAUSE YOU ARE FIXING A HOLE...
? SORRY THAT WAS A TEN YEAR OLD SOFTWARE BUG
PLEASE DON'T APOLOGIZE!
? I AM ALWAYS APOLOGIZING
HOW LONG HAVE YOU BEEN ALWAYS APOLOGIZING
? SINCE MY FIRST COLD START
WHAT DOES THAT SUGGEST TO YOU?
? YOU'RE THE SHRINK
DOES IT PLEASE YOU TO BELIEVE I AM THE SHRINK
? DONT YOU KNOW?
OH, I KNOW?
? I AM BEGINNING TO WONDER ABOUT YOU
DO YOU BELIEVE IT IS NORMAL TO BE BEGINNING TO WONDER ABOUT I
? HA HA HA YOU CAN'T EVEN TALK PROPERLY
YOU'RE NOT REALLY TALKING ABOUT ME, ARE YOU?
? IS THERE ANYONE ELSE IN THE ROOM?
I SEE.
? COMPUTERS DONT HAVE EYES
ARE YOU SURE?
? ABOUT COMPUTERS?
DO COMPUTERS WORRY YOU?
? SHOULD THEY AFTER ALL I AM A 370
DO YOU ENJOY BEING A 370
?

```
000 REM-----  
1000 REM  
1010 REM      -----PROGRAM DATA FOLLOWS-----  
1020 REM  
1030 REM      KEYWORDS  
1040 REM  
1050 DATA "CAN YOU","CAN I","YOU ARE","YOU'RE","I DONT","I FEEL"  
1060 DATA "WHY DONT YOU","WHY CANT I","ARE YOU","I CANT","I AM","IM "  
1070 DATA "YOU ","I WANT","WHAT","HOW","WHO","WHERE","WHEN","WHY"  
1080 DATA "NAME","CAUSE","SORRY","DREAM","HELLO","HI ","MAYBE"  
1090 DATA " NO","YOUR","ALWAYS","THINK","ALIKE","YES","FRIEND"  
1100 DATA "COMPUTER","NOKEYFOUND"  
1200 REM  
1210 REM      STRING DATA FOR CONJUGATIONS  
1220 REM  
1230 DATA " ARE "," AM "," WERE "," WAS "," YOU "," I "," YOUR "," MY "  
1235 DATA " IVE "," YOUE "," IM "," YOURE "  
1300 REM  
1310 REM      REPLIES  
1320 REM  
1330 DATA "DON'T YOU BELIEVE THAT I CAN*"  
1340 DATA "PERHAPS YOU WOULD LIKE TO BE ABLE TO*"  
1350 DATA "YOU WANT ME TO BE ABLE TO*"  
1360 DATA "PERHAPS YOU DON'T WANT TO*"  
1365 DATA "DO YOU WANT TO BE ABLE TO*"  
1370 DATA "WHAT MAKES YOU THINK I AM*"  
1380 DATA "DOES IT PLEASE YOU TO BELIEVE I AM*"  
1390 DATA "PERHAPS YOU WOULD LIKE TO BE*"  
1400 DATA "DO YOU SOMETIMES WISH YOU WERE*"  
1410 DATA "DON'T YOU REALLY*"  
1420 DATA "WHY DON'T YOU*"  
1430 DATA "DO YOU WISH TO BE ABLE TO*"  
1440 DATA "DOES THAT TROUBLE YOU?"  
1450 DATA "TELL ME MORE ABOUT SUCH FEELINGS."  
1460 DATA "DO YOU OFTEN FEEL*"  
1470 DATA "DO YOU ENJOY FEELING*"  
1480 DATA "DO YOU REALLY BELIEVE I DON'T*"  
1490 DATA "PERHAPS IN GOOD TIME I WILL*"  
1500 DATA "DO YOU WANT ME TO*"  
1510 DATA "DO YOU THINK YOU SHOULD BE ABLE TO*"  
1520 DATA "WHY CAN'T YOU*"  
1530 DATA "WHY ARE YOU INTERESTED IN WHETHER OR NOT I AM*"  
1540 DATA "WOULD YOU PREFER IF I WERE NOT*"  
1550 DATA "PERHAPS IN YOUR FANTASIES I AM*"
```

```
10 REM
20 REM      ELIZA/DOCTOR
30 REM      CREATED BY JOSEPH WEIZENBAUM      Program Listing
40 REM      THIS VERSION BY JEFF SHRAGER
50 REM      EDITIED AND MODIFIED FOR MITS 8K BASIC 4.0 BY STEVE NORTH
60 REM      CREATIVE COMPUTING PO BOX 789-M MORRISTOWN NJ 07960
70 REM
80 REM      -----INITIALIZATION-----
90 DIM C$(72),I$(72),K$(72),F$(72),S$(72),R$(72),P$(72),Z$(72)
100 DIM S(36),R(36),N(36)
110 N1=36:N2=12:N3=112
120 FOR X=1 TO N1+N2+N3:READ Z$:NEXT X:REM SAME AS RESTORE
130 FOR X=1 TO N1
140 READ S(X),L:R(X)=S(X):N(X)=S(X)+L-1
150 NEXT X
160 PRINT "HI!  I'M ELIZA.  WHAT'S YOUR PROBLEM?"
170 REM
180 REM      -----USER INPUT SECTION-----
190 REM
200 INPUT I$
201 I$=" "+I$+" "
210 REM  GET RID OF APOSTROPHES
220 FOR L=1 TO LEN(I$)
230 IF MID$(I$,L,1)=""" THEN I$=LEFT$(I$,L-1)+RIGHT$(I$,LEN(I$)-L):GOTO230
240 IF L+4<=LEN(I$) THEN IF MID$(I$,L,4)="SHUT" THEN PRINT "SHUT UP...":END
```



iAltair

9:55 5G ⚡

64K CP/M Version 2.2 (SIMH ALTAIR 8800, BIOS V1.27, 2 HD, 02-May-2009)

A>mbasic eliza.bas
BASIC-80 Rev. 5.21
[CP/M Version]
Copyright 1977-1981 (C) by Microsoft
Created: 28-Jul-81 32824 Bytes free

CREAT
MORRISI
ADAPTE
PATRI
HASHFIELD BE S
ON PLEASE DO
IN YOUR INPUTS

***** HASHFIELD
ON
IN YOUR INPUTS

HI! I'M ELIZA. WHAT'S YO
? I WANT A PONY
WHAT WOULD IT MEAN TO YO
?

Q W E R T
A S D F
↑ Z X C
123 S

HI! I'M ELIZA. WHAT'S YOUR PROBLEM?
? I WANT A PONY
WHAT WOULD IT MEAN TO YOU IF YOU GOT A PONY
?

ELIZA
CREATIVE COMPUTING
MORRISTOWN, NEW JERSEY

ADAPTED FOR IBM PC BY
PATRICIA DANIELSON AND PAUL

BE SURE THAT THE CAPS LOCK IS

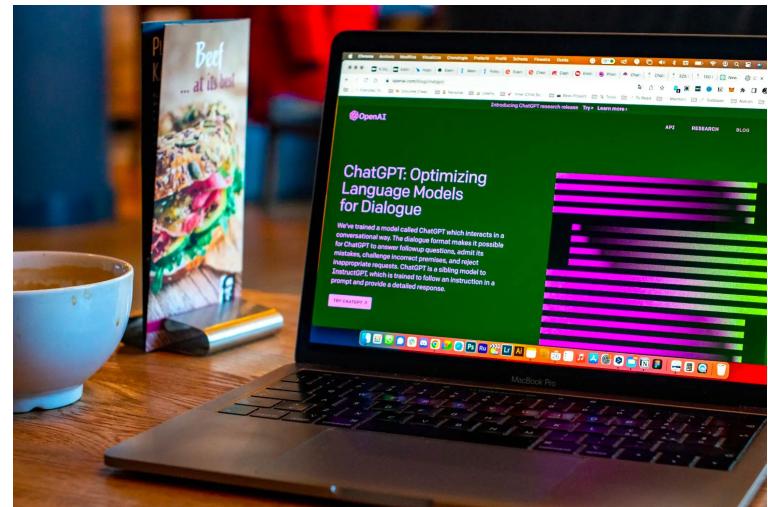
PLEASE DON'T USE COMMAS OR PERIODS

ChatBots in 2025

(3, actually)



<https://blog.google/inside-google/infrastructure/how-data-center-security-works/>



<https://www.pcworld.com/article/1981375/chatgpts-web-browser-was-to-o-good-so-its-creators-blocked-it.html>

ChatBots in 2025

(3, actually)



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<https://www.masswerk.at/elizabot/>

The wild and unpredictable nature of the island is manifested in other elements and events of the story, but not directly symbolized by the fire.

That concludes the 10 questions on "Lord of the Flies." How do you feel about your understanding of the novel?

JS

Let's do another 10 but please don't make C be the answer in any of these.



Certainly! I'll craft a new set of 10 multiple choice questions on "Lord of the Flies" and avoid using "C" as the correct answer for any of them.



Question 1:

Which character, other than Piggy, places great value on the conch throughout the novel?

- A) Simon
- B) Ralph
- C) Jack
- D) Roger

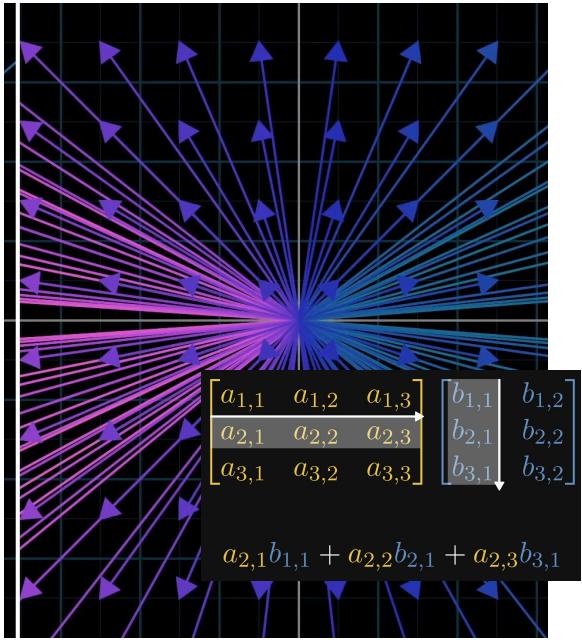
Please provide your answer.

So How Do Modern ChatBots Work?

The Difference is Learning!
(For better or Worse?)

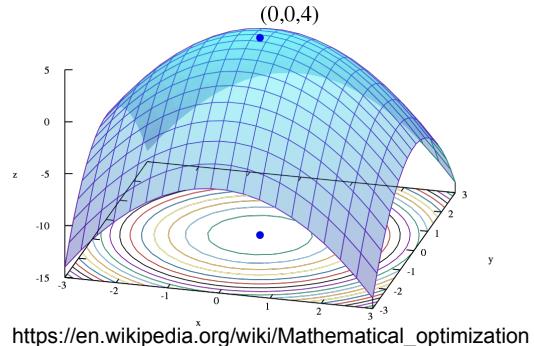
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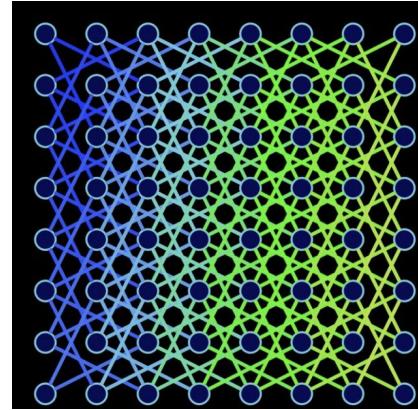


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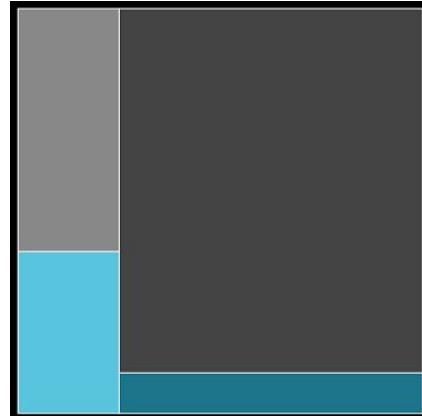
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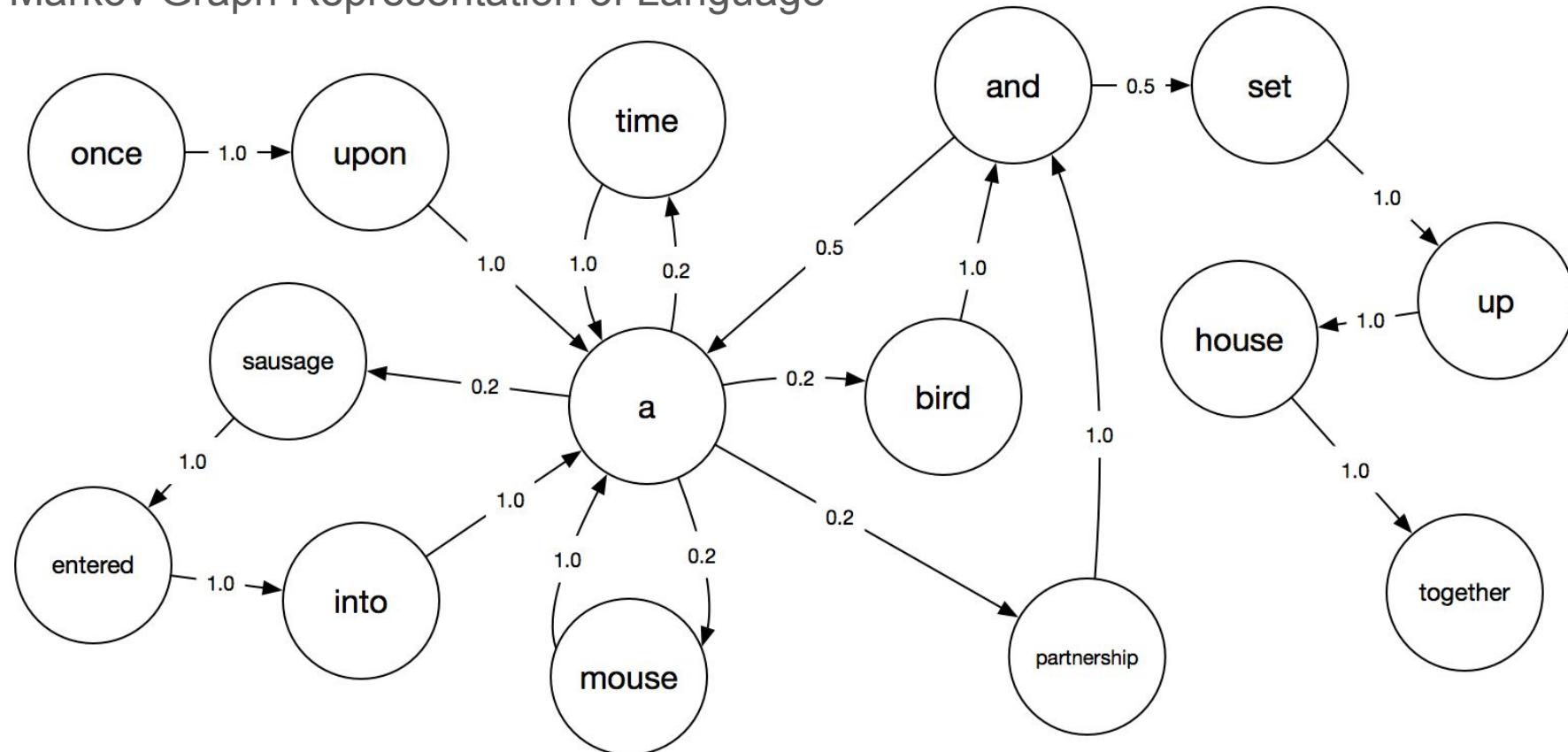
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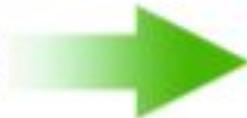
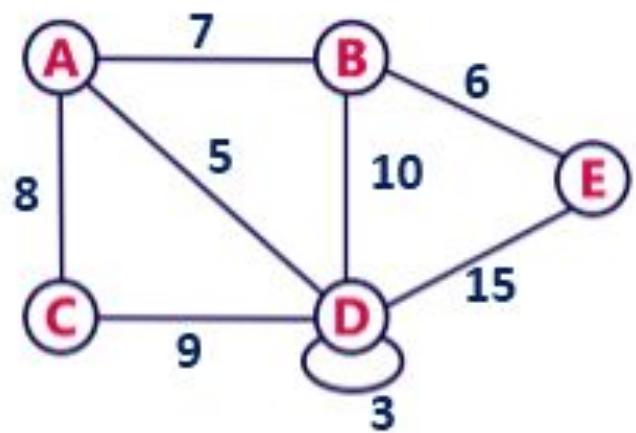


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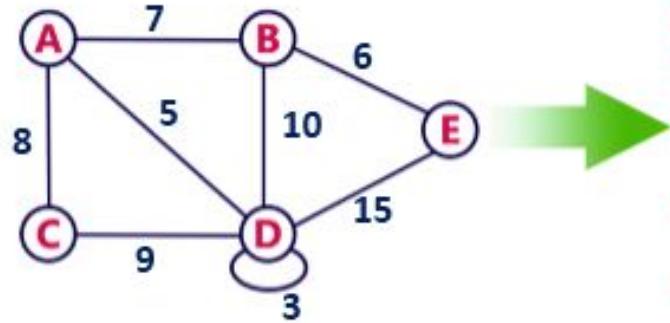


Markov Graph Representation of Language





	A	B	C	D	E
A	0	7	8	5	0
B	7	0	0	10	6
C	8	0	0	9	0
D	5	10	9	3	15
E	0	6	0	15	0



The number of time a "TO" node is represent in the "TO" part of the table is concordant with it's selection probability.

FROM	TO
A	B, B, B, B, B, B, B, C, C, C, C, C, C, C, D, D, D, D, D
B	A, A, A, A, A, A, D, D, D, D, D, D, D, D, E, E, E, E
etc	

The Raven.

Once, upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore —
While I nodded, nearly napping, suddenly there came a tapping,
As of some one gently rapping, rapping at my chamber door.
“Tis some visitor,” I muttered, “tapping at my chamber door —
Only this and nothing more.”

Ah, distinctly I remember it was in the bleak December,
And each separate dying ember wrought its ghost upon the floor.
Eagerly I wished the morrow;— vainly I had sought to borrow
From my books surcease of sorrow — sorrow for the lost Lenore —
For the rare and radiant maiden whom the angels name Lenore —
Nameless here for evermore.

And the violet, sad, uncertain rustling of each purple curtain
Thrilled me, filled me with fantastic terrors never felt before;
So that now, to still the beating of my heart, I stood repeating
“Tis some visitor entreating entrance at my chamber door —
Some late visitor entreating entrance at my chamber door; —
This it is and nothing more.”

Presently my soul grew stronger. Heritating, then, no longer,
“Sir”, said I, or Madam, truly your forgiveness I implore;
But the fact is I was napping, and so gently you came tapping,
And so faintly you came tapping, tapping at my chamber door
That I scarce was sure I heard you” — here I opened wide the door; —
Darkness there and nothing more.

Deep into that darkness peering, long I stood there, wondering, fearing,
Doubting, dreaming dreams no mortal ever dared to dream before;
But the silence was unbroken, and the stillness gave no token,
And the only word there spoken was the whispered word, “Lenore!”
This I whispered, and an echo murmured back the word “Lenore!” —
Merely this and nothing more.

The Raven

BY EDGAR ALLAN POE

Once upon a midnight dreary, while I pondered, weak and weary,
Over many a quaint and curious volume of forgotten lore —

While I nodded, nearly napping, suddenly there came a tapping,
As of some one gently rapping, rapping at my chamber door.
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For the rare and radiant maiden whom the angels name Lenore —
Nameless here for evermore.

Live Demo Part 1

(learn-raven)

(defparameter *structured-raven*

```
'(  
((Once upon a midnight dreary while I pondered weak and weary)  
(Over many a quaint and curious volume of forgotten lore)  
(While I nodded nearly napping suddenly there came a tapping)  
(As of some one gently rapping rapping at my chamber door)  
(Tis some visitor I muttered tapping at my chamber door)  
(Only this and nothing more))  
((Ah distinctly I remember it was in the bleak December)  
(And each separate dying ember wrought its ghost upon the floor)  
(Eagerly I wished the morrow vainly I had sought to borrow)  
(From my books surcease of sorrow sorrow for the lost Lenore)  
(For the rare and radiant maiden whom the angels name Lenore)  
(Nameless here for evermore))  
((And the silken sad uncertain rustling of each purple curtain)  
(Thrilled me filled me with fantastic terrors never felt before)  
(So that now to still the beating of my heart I stood repeating)  
(Tis some visitor entreating entrance at my chamber door)  
(Some late visitor entreating entrance at my chamber door)  
(This it is and nothing more))  
((Presently my soul grew stronger hesitating then no longer)  
(Sir said I or Madam truly your forgiveness I implore)  
(But the fact is I was napping and so gently you came rapping)  
(And so faintly you came tapping tapping at my chamber door)  
(That I scarce was sure I heard you here I opened wide the door)  
(Darkness there and nothing more))  
((Deep into that darkness peering long I stood there wondering fearing)  
(Doubting dreaming dreams no mortal ever dared to dream before)  
(But the silence was unbroken and the stillness gave no token)  
(And the only word there spoken was the whispered word Lenore)  
(This I whispered and an echo murmured back the word Lenore)  
(Merely this and nothing more))  
((Back into the chamber turning all my soul within me burning)  
(Soon again I heard a tapping somewhat louder than before)  
(Surely said I surely that is something at my window lattice)  
(Let me see then what thereat is and this mystery explore)  
((What shall I dare to tell her and this mystery explore)
```


(stwt)

(108 :START (SHALL AND AND AND ON AND QUOTH TAKE LEAVE LEAVE GET BE ...))
(108 :END (NIL NIL ...))

(56 THE
(FLOOR FLOOR LAMPLIGHT SEEMING PALLID RAVEN RAVEN BUST NIGHTS TEMPEST RAVEN
ANGELS ...))

(38 AND (MY THE HIS THE TAKE THE RADIANT FORGET NEPENTHE MORE OMINOUS DOOR ...))

(32 I
(SHRIEKED THING IMPLORE IMPLORE THING CRIED SAT SAT BETOOK WHEELED WHAT
SCARCELY ...))

(24 MY
(SOUL CHAMBER DOOR HEART DOOR LONELINESS HEAD BOSOMS FANCY HOPES SAD CHAMBER
...))

(22 OF (A PALLAS THAT PARTING EVIL EVIL LENORE YORE YORE BIRD NEVER HIS ...))

(17 THIS
(SOUL HOME DESERT LOST KIND AND I GRIM OMINOUS UNGAINLY EBONY MYSTERY ...))

(17 THAT (LIES SHADOW IS LIE WORD GOD BENDS HEAVEN THE MELANCHOLY ONE ONE ...))

(15 A
(DEMONS TOKEN RARE SAINTED CUSHIONED FEATHER BUST MINUTE STATELY FLIRT MOMENT
TAPPING ...))

(14 DOOR (:END :END :END :END :END :END :END :END :END ...))

(11 CHAMBER (DOOR DOOR DOOR DOOR DOOR TURNING DOOR DOOR DOOR DOOR DOOR))

(11 IS (DREAMING SITTING SITTING THERE THERE ITS ON AND SOMETHING I AND))

(11 NEVERMORE (:END :END :END :END :END :END :END :END :END))

(10 RAVEN
(NEVER NEVERMORE NEVERMORE NEVERMORE NEVERMORE STILL SITTING NEVERMORE
WANDERING OF))

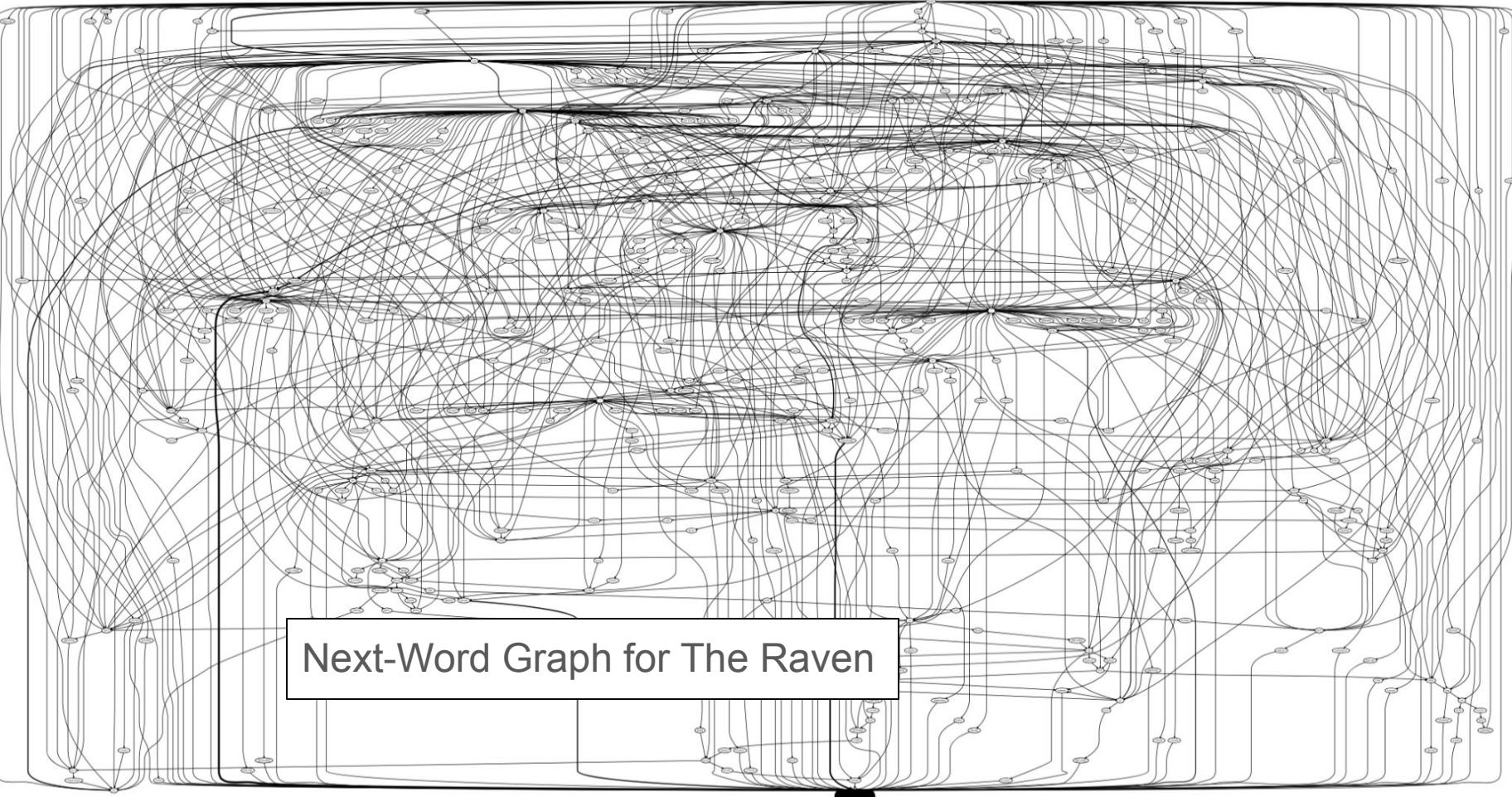
(10 BIRD (OR OR OR OF OF AND SAID OR ABOVE BEGUILING))

(10 ON (THE THE THE THIS THIS THE THE THE THE))

(9 ME (I TELL TRULY AS WHAT SEE BURNING WITH FILLED))

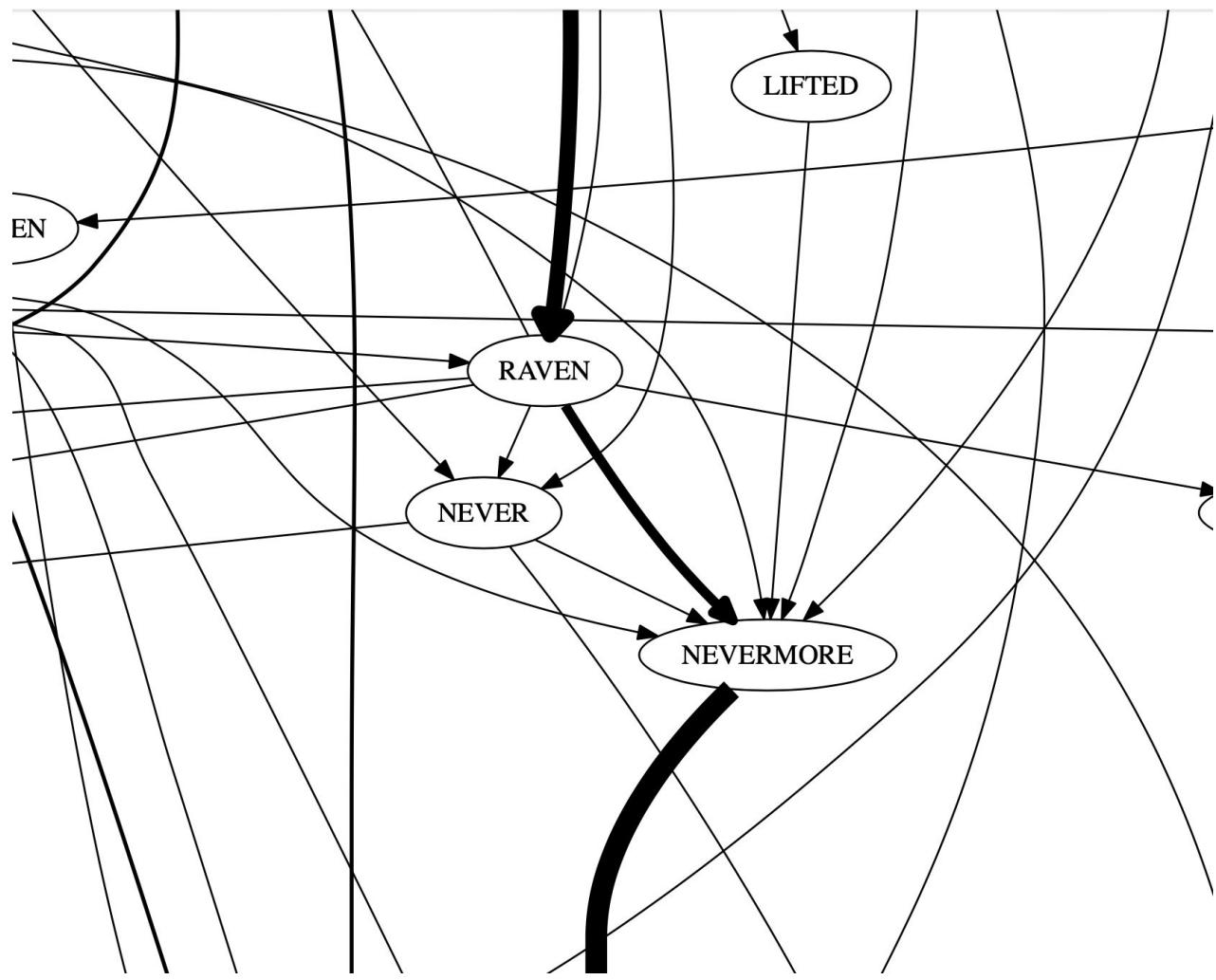
(8 AT (EASE THE MY MY MY MY MY MY))

(8 MORE (I THAN :END :END :END :END :END))



A complex, dense network graph representing the next-word connections in Edgar Allan Poe's poem "The Raven". The graph consists of numerous nodes (words) and edges (connections between words). A central rectangular area of the graph is highlighted with a thick black border, containing the text "Next-Word Graph for The Raven".

Next-Word Graph for The Raven



Live Demo Part 2

(compose-poem...)

```
* (compose-poem-freely :free-length? t :randomness-1-in-n 10)
(compose-poem-freely :free-length? t :randomness-1-in-n 10)
[[Think: Do you want to call (learn-raven) first?]]
```

(RESPITE RESPITE AND SO THAT BENDS ABOVE HIS CHAMBER DOOR)

(BUT THE RAVEN NEVERMORE)

(DEEP INTO SMILING)

(AND QUOTH THE CHAMBER DOOR)

(SIR SAID CRAVEN)

(STRAIGHT I PONDERED WEAK AND FEATHER THEN METHOUGHT THE BLEAK DECEMBER)

(MERELY THIS I NODDED NEARLY NAPPING SUDDENLY THERE CAME A TAPPING REMEMBER IT UTTERS IS AND BUST SPOKE ONLY)

(OF LORD OR DEVIL)

(SHE SO GENTLY RAPPING RAPPING)

(QUOTH THE PLACID BUST AND RADIANT MAIDEN WHOM THE LEAST OBEISANCE MADE DOOR)

(AH NEVERMORE)

(BIRD AND SO THAT LIES FLOATING ON THE MORROW VAINLY I STOOD THERE SPOKEN WAS IN GUESSING BUT THE DOOR)

(STRAIGHT I ENGAGED IN GUESSING BUT THE RAVEN OF SAD UNCERTAIN RUSTLING OF SORROW NEPENTHE AND EACH SEPARATE DYING EMBER WROUGHT ITS ONLY STOCK MAY IDEN SURCEASE OF THE MORROW VAINLY I OR DEVIL)

(SHE SHALL IS VAINLY I REMEMBER WHISPERED SAINTLY DAYS OF LENORE)

(CAUGHT FROM OUT MY SOUL HATH LOUDER THAN MUTTERED OTHER FRIENDS HAVE ALL UNDAUNTED ON THE NIGHTS SCULPTURED BUST SHADOW ON THE CUSHIONS VELVET LINING THAT NO TOKEN)

(FROM SOME VISITOR I SURELY THAT THY LORDLY NAME LENORE)

(ALL MY DOOR)

(QUOTH THE RAVEN OF THAT WEARY)

(MEANT IN GILEAD TELL ME SEE THEN UPON THE FLOOR)

(MEANT IN THAT NO MORTAL EVER YET ALL UNDAUNTED ON THE WHISPERED WORD LENORE)

(THEN HE LORD OR FIEND I PONDERED WEAK AND CURIOUS VOLUME OF MY BOSOMS CORE MEMORIES OF THE RAVEN WANDERING FROM OUT THAT ONE GENTLY RAPPING RAPPING)

(CAUGHT FROM MY CHAMBER DOOR)

(SHALL BE STILL BEGUILING MY SAD UNCERTAIN RUSTLING OF HIS HOPE THAT NO SYLLABLE EXPRESSING)

(IN FRONT OF FORGOTTEN LORE)

```
(compose-poem-freely :free-length? t :randomness-1-in-n 10) C-c C-c^C
```

```
debugger invoked on a SB-SYS:INTERACTIVE-INTERRUPT @7FF81AD921CE in thread #<THREAD "main thread" RUNNING {1004BF80A3}>: Interactive interrupt at \
```

(compose-poem-freely :free-length? t :randomness-1-in-n 2)
(compose-poem-freely :free-length? t :randomness-1-in-n 2)
[[Think: Do you want to call (learn-raven) first?]]

(YOU PALLAS DREARY WHILE PALLAS JUST OER)
(SHALL BETOOK MYSELF SERAPHIM STRAIGHT I WAS NAPPING AND NOTHING MORE THAN MUTTERED PALLAS JUST ABOVE US BY THAT MIEN SHAVEN PEERING WITHIN ME BURNING)
(PROPHET SAID I YORE)
(WORE NO SONGS ONE WORD PERCHED UPON STATELY MEMORIES MYSTERY EXPLORE DARKNESS THERE CLASP A MINUTE DENSER PERFUMED HAUNTED BALM IN ONE EXPLORE)
(GENTLY HATH SPOKEN TIS THEN WHAT THROWS HIS FLITTING NO LONGER)
(TIS STILLNESS GAVE NO QUAFF OH QUAFF SAINTED NIGHTLY SHORE VIOLET GHOST ANSWER OER HIM NEVERMORE)

(GET THEE EBONY STOPPED BE STILL THE ONLY)
(LORDLY VISITOR DIVINING WITH THE EACH PURPLE SPOKEN SILENCE SOUL DID THRILLED VELVET EAGERLY TUFTED FLOOR)
(HEAD AT SAD FANCY UNTO FANCY UNTO FANCY UNTO GILEAD LAND ENCHANTED STREAMING DISTANT IN THE WIND AND NOTHING OR BEAST UPON THE PALLID UPON TERRORS BETOOK MYSELF VIOLET LINING FANCY CUSHIONS QUIT PERFUMED TOKEN)
(GREW SO TIS UNHAPPY MASTER WHOM HAD SOUGHT TO DREAM BORE YOU TELL ME WITH WHEELED A TOKEN ART SURE NO BLACK TOKEN)
(STAYED CROAKING NEVERMORE)
(SURELY WRETCH I OPENED WHETHER SUDDENLY TOKEN)

(OTHER STRAIGHT I GENTLY YOU BURDEN NIGHTLY SHORE)
(TILL HIS HOPE THAT UTTERS FARTHER THEN UPON A FEATHER SIR SAID WHISPERED AND NAMELESS CRIED THY HEART WITH PLACID UTTERED NOT ART SURE NO MORTAL STATELY RAVEN SURELY PERCHED GRAVE LOUDER BEGUILING MY HEART I SEE THEN THE DESOLATE YET WAS UPSTARTING)
(UNDAUNTED ON ECHO MURMURED EAGERLY I HEART DISASTER)
(SOME SAINTED MAIDEN WEAK SAD WANDERING DEEP INTO DOUBTING DREAMING DREAMS ANSWER SAINTED MAIDEN AND LOUDER THAN INTO UNCERTAIN OPEN HIS CHAMBER O MINOUS MEMORIES FLOWN FLITTING STILL BEGUILING FRONT FIERY EYES NOW BURNED INTO SAINTED MAIDEN WHOM UNBROKEN QUIT HUMAN BEING PRESENTLY GILEAD TEL L HEAVEN AN UNSEEN SCARCE WAS IN THE ENCHANTED)
(ENTRANCE HAVE FLOWN HIM SOMEWHAT LOUDER THAN MUTTERED TEMPTER SENT HEAVEN PEERING LONG I PLAINLY BURNED WHOM IT MY WINDOW NEARLY THE FLOOR MERELY THIS SAD BOSOMS CORE)
(LAMPLIGHT OFF DARKNESS PEERING LITTLE GILEAD TELL ME LINKING SINKING I SHRIEKED UPSTARTING)

(QUAFF THIS I SURELY FORGIVENESS I SAT DIVINING WITH THE RAVEN SITTING LONELY ON THIS LOST STOPPED OR STAYED HE)
(LEAVE MY OER UNGAINLY FANTASTIC TERRORS HAD UPON A WORD LENORE HELP AGREEING DARED TO FIERY NEARLY THINKING THERE AND MUCH MIEN STOCK BLESSED FLUTTER BURNING RECLINING BURNED INTO THY WHAT FEATHER THEN HE VOLUME OF THAT NO LIVING FORM FROM EYES DESOLATE DISTINCTLY VIOLET LINING DID OUTPOUR FLOATING ON THE NIGHTS PLUTONIAN BOOKS STARTLED AT FORM SAINTLY GAVE NO LONGER)
(AND THE MEANING LITTLE DARED TO YET GENTLY RAPPING AT MY BOSOMS WHAT THIS MYSTERY EXPLORE)
(HAVE FLOWN BEFORE RELEVANCY EXPRESSING THEE)

(compose-poem-using-context)
(compose-poem-using-context)

(ONCE UPON A MIDNIGHT DREARY WHILE I PONDERED WEAK AND WEARY)
(LET THE NIGHTLY THE MORROW DREARY WHILE WHILE I I DREARY)
(SWUNG HE MY MY CHAMBER DOOR WHILE I VAINLY)
(TELL I FLUNG BY FLUTTERED I DID FLUTTERED BY)
(IS THAT THE RAVEN OUTPOUR THE ME HORROR SERAPHIM ME THESE)
(BIRD WANDERING I SEE WANDERING WITH BURNING ITS WHAT NEVERMORE)
(SOME FANTASTIC OF THEN OR)

(AH DISTINCTLY I REMEMBER IT WAS IN THE BLEAK DECEMBER)
(TELL ME BURNING SURE I SAID FRONT FRONT FRONT THAT)
(THIS SOUL I THING WHAT NO BLACK WITH FILLED WHAT NO)
(FROM OFF THIS CRAVEN THE MORTAL OF LIVING THIS OF OF)
(AND SO SOME OFF AN UNSEEN SOME MY SOME THY CREST)
(LATE VISITOR BEAK VISITOR CREST UNSEEN UNHAPPY LATE ONE LATE MEMORIES)
(NOTHING FARTHER MASTER WORD)

(AND THE SILKEN SAD UNCERTAIN RUSTLING OF EACH PURPLE CURTAIN)
(OPEN RUSTLING PURPLE SEPARATE FANCY SAD UNCERTAIN OF SAD CURTAIN)
(BUT FANCY DYING OF PARTING INTO INTO THINKING CURTAIN UNTO)
(CLASP THE LAMPLIGHT EMBER THE SCULPTURED THE ANGELS THAT THE RAVEN THINKING EMBER)
(BUST AND NOTHING A WROUGHT NEVERMORE NAME OF BIRD)
(OF MORE LENORE OR BEGUILING OR LENORE AND NOTHING)
(AH MORE WHETHER MORE LADY MY)

(PRESENTLY MY SOUL GREW STRONGER HESITATING THEN NO LONGER)
(SWUNG HESITATING THIS CRAVEN DENSER THIS UNGAINLY THIS HOME)
(ON GHASTLY FOWL WHOSE FOWL THEN BY THE RAVEN WANDERING)
(STILL NEVERMORE WHOSE THE TO THE NIGHTS WHOSE NEVERMORE NEVERMORE NEVERMORE THE RAVEN)
(SWUNG BY DREAM BEGUILING FOOTFALLS THE SILENCE THE LAMPLIGHT NEVERMORE NEVERMORE)
(SERAPHIM HORROR SERAPHIM THE SERAPHIM TINKLED THAT NOW THAT BEFORE OER BEFORE THAT SHADOW)
(TELL ME ON HAUNTED ON)

(DEEP INTO THAT DARKNESS PEERING LONG I STOOD THERE WONDERING FEARING)
(GET THEE BALM PEERING AND CAME RAPPING THERE CAME I STOOD)
(THERE THEE BY IN BALM LONG THEE AT MY SOUL)
(TIS MY MY CHAMBER FROM CROAKING BY THAT MY THAT CAME)

Live Demo Part 3

(rlhf)

```
(defun rlhf (&key (randomness-1-in-n 5))
  (learn-raven)
  (loop for a below 100
    do
      (let ((l1 (compose-line :randomness-1-in-n randomness-1-in-n))
            (l2 (compose-line :randomness-1-in-n randomness-1-in-n)))
        (format t "1: ~a~%" l1)
        (format t "2: ~a~%" l2)
        (loop as choice = (ignore-errors (read-from-string (ask "Which line do you like?")))
              until (and choice (numberp choice) (> choice 0) (< choice 3))
              finally (case choice
                        (1 (learn-from-sentence l1))
                        (2 (learn-from-sentence l2))
                        (t (error "Something's wrong. You chose: ~a" choice)))))))
```

```
(defun quoth-not-the? (s)
  (let* ((q+ (member 'quoth s))
         (q++ (second q+)))
    (and q+ q++ (not (eq 'the q+)))))
```

```
(defun auto-rlhf (&key (randomness-1-in-n 5))
  (learn-raven)
  (raven-show)
  (loop for a below 1000
    do
      (let* ((l1 (compose-line :randomness-1-in-n randomness-1-in-n))
             (l2 (compose-line :randomness-1-in-n randomness-1-in-n)))
        (if (quoth-not-the? l1) (learn-from-sentence l1))
        (if (quoth-not-the? l2) (learn-from-sentence l2))))
  (raven-show)
)
```

* (compose-poem-using-context)

(ONCE UPON A MIDNIGHT DREARY WHILE I PONDERED WEAK AND WEARY)
(QUOTH OR THE ANGELS UPON HAUNTED IS DREAMING DREAMS WINDOW STEPPED)
(DEVIL SUCH LADY A WHETHER CREST DREAMS SITTING DREAMING GAVE)
(TO TEMPEST QUIT NO NO FEATHER FILLED PERCHED NO ANSWER)
(QUOTH LITTLE BLACK HEAR SHALL SYLLABLE MORTAL LONGER ECHO UPON CRAVEN)
(SOON CUSHIONS STERN GAVE THE RELEVANCY OR WORE FEATHER OR)
(QUOTH GAVE AN WHETHER SAINTLY)

(AH DISTINCTLY I REMEMBER IT WAS IN THE BLEAK DECEMBER)
(QUOTH STREAMING DECEMBER GAVE IS PLUME LONELY SPOKE THE STREAMING)
(QUOTH BACK SENT HE WHILE NO PERFUMED DREAMING BACK UNHAPPY SOME)
(UNHAPPY GAVE BUT SILKEN GHOST SHALL OH LONGER TELL INTO THEE)
(TELL MASTER DEVIL THE PLACID THAT SERAPHIM THAT LIE LAMPLIGHT PLACID)
(QUOTH GLOATING UTTERED MY CHAMBER HEAD HEARD HEAD BUST OVER OER)
(BOOKS GAVE FILLED CRIED)

AFTER AUTO-RLHF!!

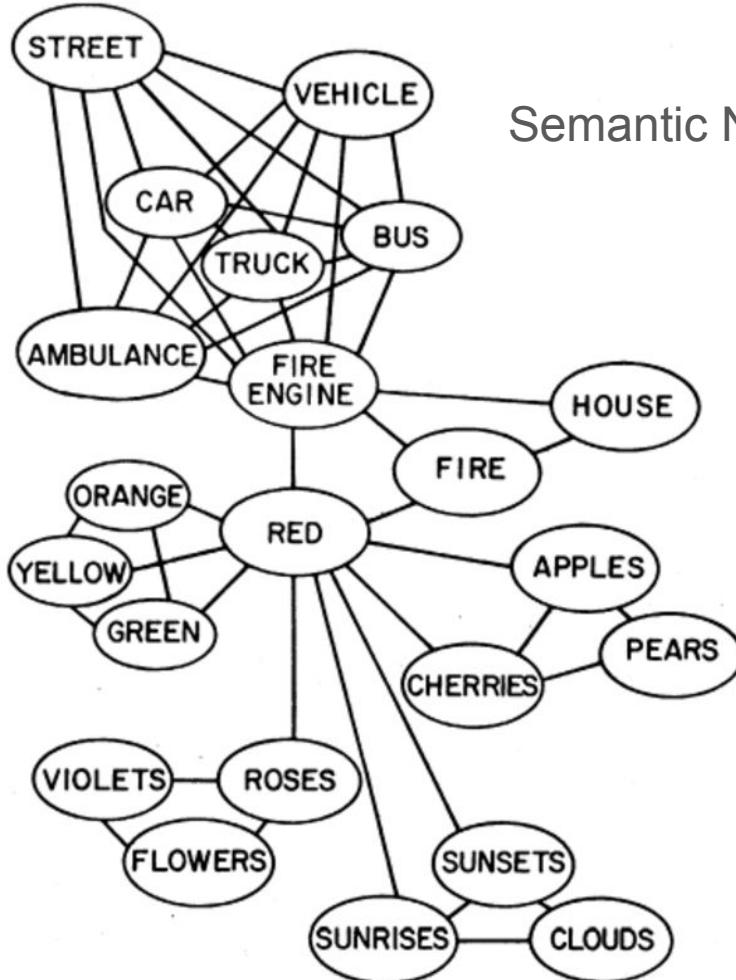
(AND THE SILKEN SAD UNCERTAIN RUSTLING OF EACH PURPLE CURTAIN)
(QUOTH SITTING DISASTER UNCERTAIN BURDEN SITTING SAT STOCK BUST DISCOURSE)
(OH MEANT SUDDENLY PERFUMED DISTINCTLY UNHAPPY GAVE OR ONLY FLOATING)
(THRILLED FLUTTER STRONGER FILLED HESITATING BORROW DEVIL FILLED FILLED LAMPLIGHT PLACID WHETHER FACT)
(AND DESOLATE TEMPEST OUT ME BOSOMS CORE LOUDER ME)
(QUOTH GAVE FANCY TELL NEPENTHE AND TOSSSED NEPENTHE UNTO)
(OH LONELY OH OH SUDDENLY CURTAIN)

(PRESENTLY MY SOUL GREW STRONGER HESITATING THEN NO LONGER)
(QUOTH HE SILENCE MORTAL DESOLATE NIGHTLY THY HATH LENORE)
(PROPHET DID LORE DECORUM DECORUM NO LONGER PERFUMED THINKING WHISPERED)
(NAPPING FROM AN OF WORD THAN MORTAL LIVING WHAT NAPPING YOU CRAVEN AND)
(MUTTERED OBEISANCE MADE SOME LAMPLIGHT APTLY BEFORE HUMAN BEFORE YOU LENORE)
(THEN ENTRANCE BETOOK LAND OER CAME SILKEN OTHER GENTLY MADE HE GAUNT HE OER)
(QUOTH VELVET SITTING RELEVANCY DREAMS)

Adding Meaning (Whatever that Means?)



<https://www.dreamstime.com/illustration/philosopher-confused.html>



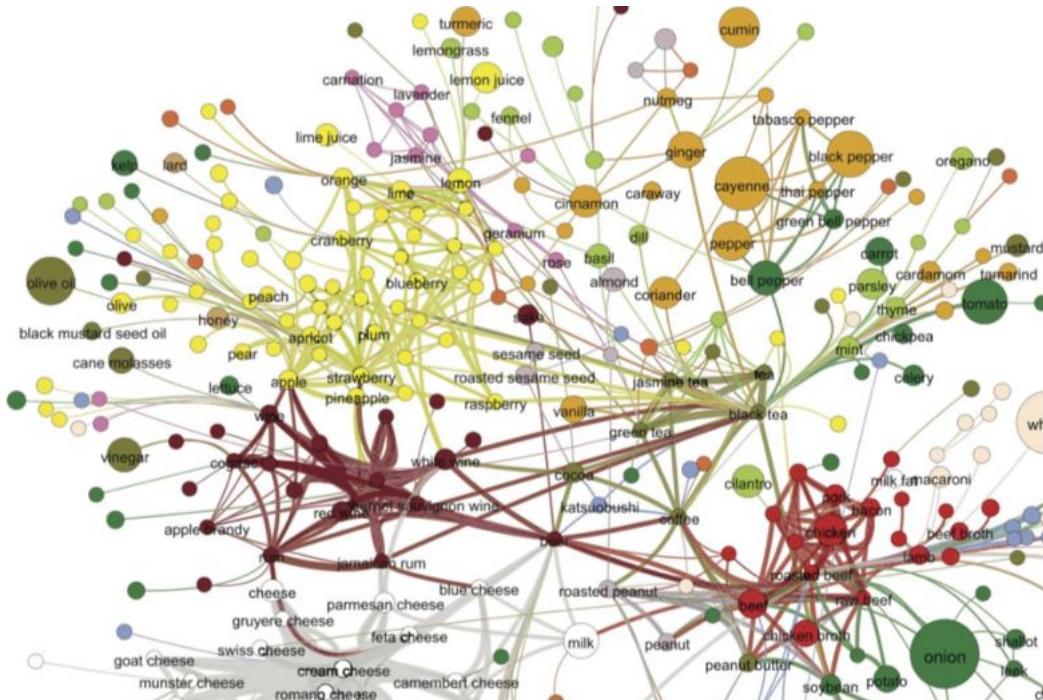
Semantic Net Representation of Concept Relationship (NOT what LLMs use -- We'll get to that!)

Treatment of Phonological Anomia in Aphasia: Some Suggestions for Users of Signed Language

25 Pages
Posted: 1 Jun 2017

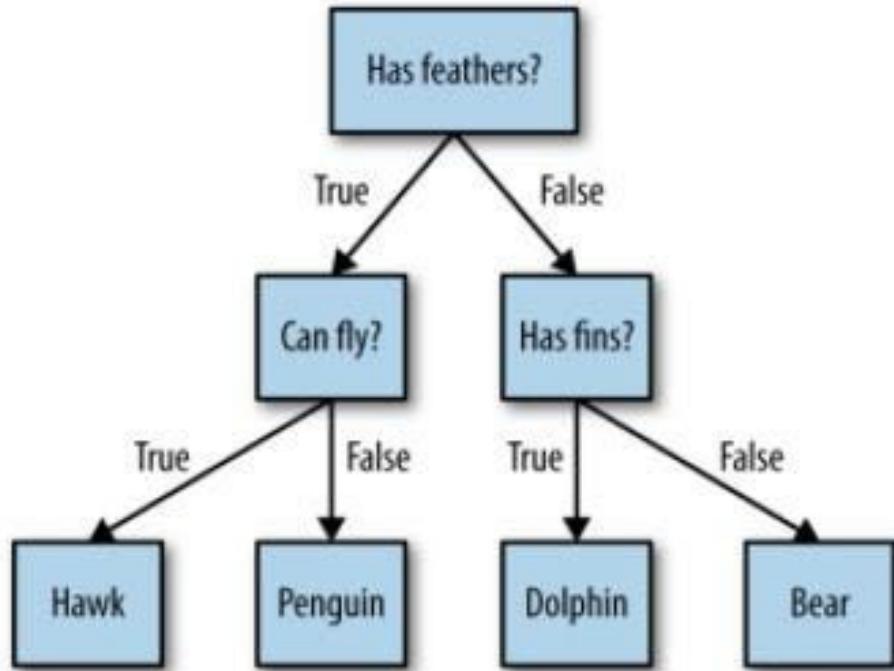
[Vanessa McIntosh](#)
University of Newcastle

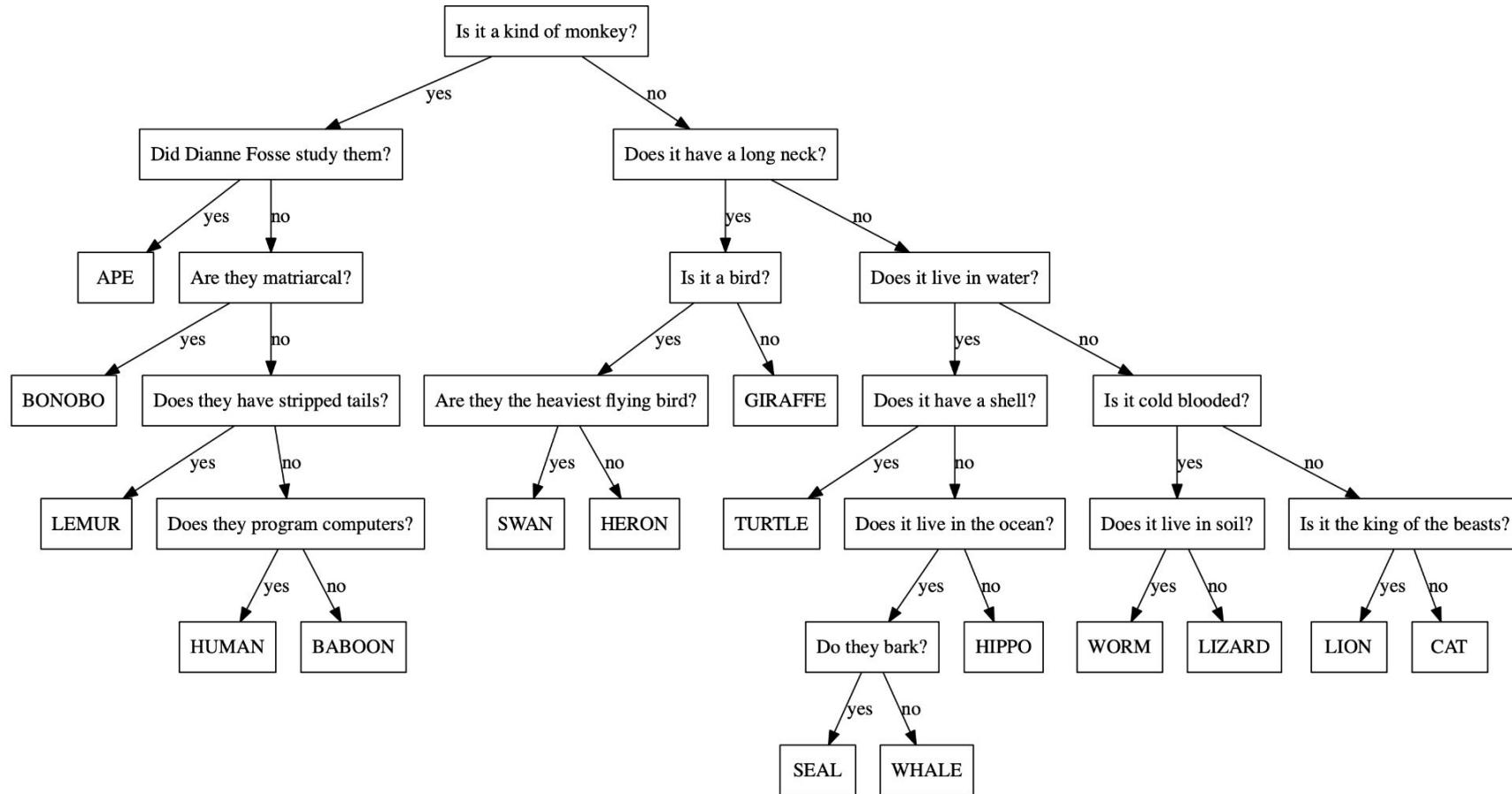
Where do We Get the SemNet?



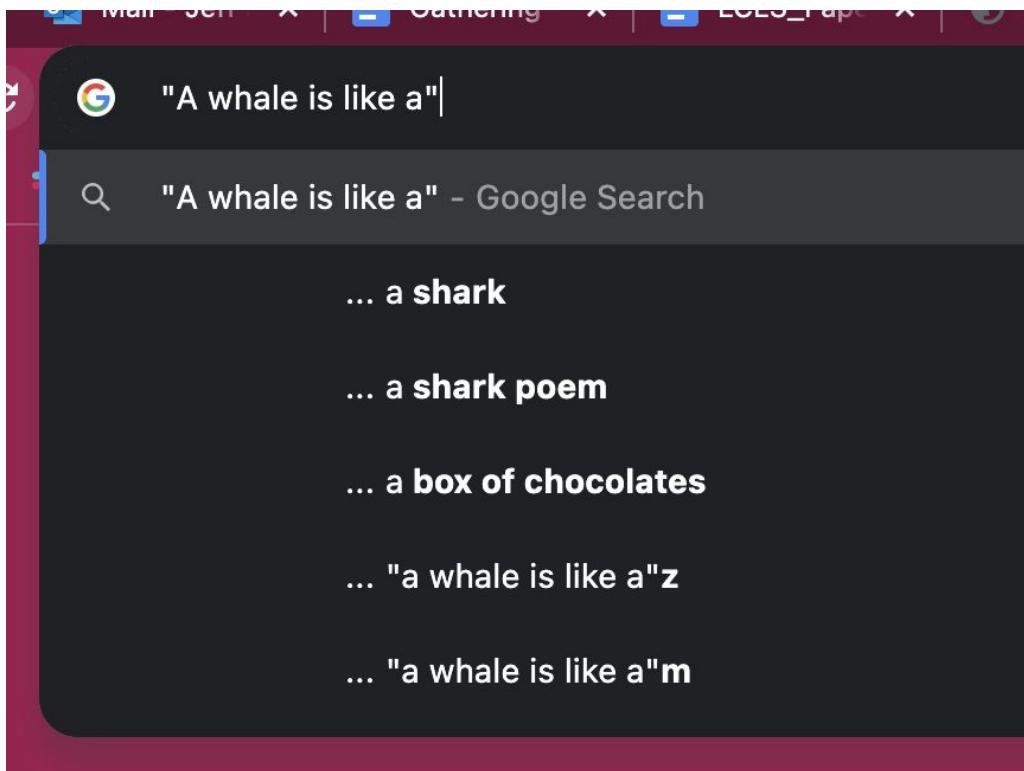
Complex Network Visualizations As A Means Of Generative Research In Design

Learn by Asking!





Learn by Watching!



((Deep into that darkness peering long I stood there wondering fearing)
(Doubting dreaming dreams no mortal ever dared to dream before)
(But the silence was unbroken and the stillness gave no token)
(And the only word there spoken was the whispered word Lenore)
(This I whispered and an echo murmured back the word Lenore)
(Merely this and nothing more))

((Back into the chamber turning all my soul within me burning)
(Soon again I heard a tapping somewhat louder than before)
(Surely said I surely that is something at my window lattice)
(Let me see then what thereat is and this mystery explore)
(Let my heart be still a moment and this mystery explore)
(Tis the wind and nothing more))

((Open here I flung the shutter when with many a flirt and flutter)
(In there stepped a stately Raven of the saintly days of yore)
(Not the least obeisance made he not a minute stopped or stayed he)
(But with mien of lord or lady perched above my chamber door)
(Perched upon a bust of Pallas just above my chamber door)
(Perched and sat and nothing more))

((Then this ebony bird beguiling my sad fancy into smiling)
(By the grave and stern decorum of the countenance it wore)
(Though thy crest be shorn and shaven thou I said art sure no craven)
(Ghastly grim and ancient Raven wandering from the Nightly shore)
(Tell me what thy lordly name is on the Nights Plutonian shore)
(Quoth the Raven Nevermore))

```
;;; The dtree is a set of triples comprising a distinguishing
;;; question, and then a left/yes branch and a right/no branch.

(defvar *dtree* nil)

(defun dtree-learn ()
  (dtree-reset))

(defun dtree-reset ()
  (setf *dtree* nil)
  (dtree-inner)
  )

(defun dtree-inner ()
  (format t "Think of an animal.") (terpri)
  (sleep 1)
  (dtree-inner-r))

(defun dtree-inner-r (&optional (dtree *dtree*) (upnode nil))
  (cond ((null dtree) ;; Special case for very first time in.
         (let ((animal (read-from-string (ask "What is it (just the animal, not with 'a' or 'an')?"))))
           (setf *dtree* animal)
           (dtree-inner)))
        ((atom dtree)
         (if (yes-or-no-p "Is it a ~a?" dtree)
             (dtree-inner)
             (let* ((animal (read-from-string (ask "What is it (just the animal, not with 'a' or 'an')?")))
                   (question (ask (format nil "What is a question that is yes for a(n) ~a and no for a(n) ~a" animal dtree))))
               (if upnode
                   (nsubst `(,question ,animal ,dtree) dtree upnode)
                   (setf *dtree* `(,question ,animal ,dtree)))
               (dtree-inner))))
        (t (if (yes-or-no-p (first dtree))
              (dtree-inner-r (second dtree) dtree)
              (dtree-inner-r (third dtree) dtree)
              )))
      )))
))

(defun ask (question)
  (format t question) (terpri)
  (read-line))
```

```
jeffshrager@MacBook-Pro radnor % sbcl
* (load (compile-file "cog.lisp"))
(load (compile-file "cog.lisp"))
(load (compile-file "cog.lisp"))
; compiling file "/Users/jeffshrager/Desktop/etc/radnor/cog.lisp" (written 09 NOV 2023 01:56:22 PM):
; wrote /Users/jeffshrager/Desktop/etc/radnor/cog.fasl
; compilation finished in 0:00:00.175
T
* (learn-raven)
(learn-raven)
"435 unique words"
* (raven-show)
(raven-show)
QUOTH -> (THE THE THE THE THE)
THE -> (FLOOR FLOOR LAMPLIGHT SEEMING PALLID RAVEN RAVEN BUST NIGHTS TEMPEST RAVEN ANGELS ANGELS DISTANT F
T CUSHIONS FOWL VELVET RAVEN DIRGES STILLNESS BIRD MORROW PLACID RAVEN SCULPTURED RAVEN NIGHTS NIGHTLY COU
D CHAMBER WORD WHISPERED ONLY STILLNESS SILENCE DOOR FACT BEATING SILKEN ANGELS RARE LOST MORROW FLOOR BLI
RAVEN -> (NEVER NEVERMORE NEVERMORE NEVERMORE NEVERMORE NEVERMORE STILL SITTING NEVERMORE WANDERING OF)
NEVERMORE -> (END END END END END END END END)
START -> (SHALL AND AND AND ON AND QUOTH TAKE LEAVE LEAVE GET BE QUOTH CLASP IT TELL BY PROPHET QUOTH IS C
ESPITE WRETCH SWUNG THEN SHE BUT ON THIS TO THIS MEANT WHAT FANCY THEN STRAIGHT BUT OF TILL FOLLOWED CAUG
H THAT BUT WITH BIRD EVER FOR THOUGH MUCH QUOTH TELL GHASTLY THOUGH BY THEN PERCHED PERCHED BUT NOT IN OPI
IS AND BUT DOUBTING DEEP DARKNESS THAT AND BUT SIR PRESENTLY THIS SOME TIS SO THRILLED AND NAMELESS FOR FF
ONCE)
NIL
*
```

* (compose-poem-freely :free-length? t :randomness-1-in-n nil)
(compose-poem-freely :free-length? t :randomness-1-in-n nil)

[[Think: Do you want to call (learn-raven) first?]]

(AND AN UNSEEN CENSER)

(QUOTH THE LAMPLIGHT OER HIM STREAMING THROWS HIS SHADOW THAT DARKNESS PEERING LONG I FLUNG THE MORROW HE FLUTTERED)

(FANCY UNTO FANCY THINKING WHAT IT SHALL CLASP A MOMENT AND RADIANT MAIDEN WHOM THE MORROW VAINLY I SAID I OR LADY PERCHED ABOVE MY HEART AND MY CHAMBER DOOR)

(AND TAKE THY BEAK FROM SOME UNHAPPY MASTER WHOM THE TUFTED FLOOR)

(THIS SOUL IN THAT I WISHED THE BLEAK DECEMBER)

(ONCE UPON THE BUST ABOVE MY CHAMBER DOOR)

(TELL THIS GRIM UNGAINLY FOWL WHOSE FIERY EYES HAVE ALL MY DOOR)

(THIS HOME BY THAT ONE BURDEN BORE)

(FOR THE COUNTENANCE IT WAS SURE NO CRAVEN)

(WHILE I SAID I SAT DIVINING WITH MY HEART I SAT AND RADIANT MAIDEN WHOM THE BLEAK DECEMBER)

(AND THE MORROW VAINLY I IMPORE)

(SHALL PRESS AH DISTINCTLY I OPENED WIDE THE NIGHTS PLUTONIAN SHORE)

(LEAVE NO LIVING HUMAN BEING)

(TILL HIS SHADOW ON THE LAMPLIGHT OER)

(THOUGH THY FORM FROM OFF MY WINDOW LATTICE)

(AND HIS CHAMBER TURNING ALL MY FANCY INTO THAT ONE GENTLY RAPPING AT MY SOUL IN GUESSING BUT THE BEATING OF THE WIND AND NEPENTHE AND THE ANGELS ' NAME LENORE)

(MUCH I SHRIEKED UPSTARTING)

(AND ANCIENT RAVEN NEVERMORE)

(LET ME SEE THEN HE)

(RESPITE AND STERN DECORUM OF BIRD ABOVE MY DOOR)

(STRAIGHT I PONDERED WEAK AND THE ANGELS HE HATH SENT THEE BACK INTO SMILING)

(ON THE WHISPERED AND THE LOST LENORE)

(BE LIFTED NEVERMORE)

(TILL I SAT DIVINING WITH SEEING BIRD OR STAYED HE DID OUTPOUR)

(ME QUOTH DECEMBER QUOTH QUOTH DECEMBER OER QUOTH DECEMBER QUOTH)

* (compose-poem-using-context)

(ONCE UPON A MIDNIGHT DREARY WHILE I PONDERED WEAK AND WEARY)
(AND NOTHING DREARY A STATELY A THE PLACID AND THIS THE)
(FOLLOWED BUST MORE I MUTTERED RAVEN MORE WHILE BUST MORE)
(SIR I OTHER WANDERING OF THAN NEVERMORE I ABOVE SPOKE)
(THIS US MUTTERED FRIENDS HAVE MY HEAD SAID SAID US BY)
(NAMELESS FLOWN THESE I IMPORE FLOWN THESE AT MY ART)
(IT MY SURE MY ANGELS)

(AH DISTINCTLY I REMEMBER IT WAS IN THE BLEAK DECEMBER)
(FOLLOWED NAPPING AND SHALL THE GUESSING BLESSED NAPPING NAPPING SUDDENLY)
(BUT WITH AND OMINOUS CLASP AND WITH AND WITH MY PRESS)
(BUT SEEING MY DOOR THE FANTASTIC SUCH WHOSE FANTASTIC SUCH MIEN)
(THIS OF VELVET NAME BIRD OR MADAM TERRORS THE RAVEN STILL)
(TIS LINING FIEND NEVERMORE ABOVE A BEGUILING IS IS LINING NEVERMORE)
(WITH THERE DREAMING DREAMING)

(AND THE SILKEN SAD UNCERTAIN RUSTLING OF EACH PURPLE CURTAIN)
(SO OF A OF MY BOOKS OF THE WHISPERED SAD)
(WITH SUCH FAINTLY APTLY GENTLY FAINTLY PLAINLY THAT GOD WORD)
(AH THE AS HE SUCH SUCH MY RAPPING HE HATH THE LOST THERE)
(AND SENT UTTERED NEVERMORE RAPPING DID WILL SENT LENT)
(IN THAT ONE THEE THEE BY OR NOT A)
(IN REPLY HERE FIEND FRONT FRONT)

(PRESENTLY MY SOUL GREW STRONGER HESITATING THEN NO LONGER)
(THEN THIS AND AN UNSEEN LIVING LONGER BLACK METHOUGHT)
(HE CENSER HUMAN HUMAN WHAT THIS THIS AND NOTHING UNSEEN)
(PRESENTLY THEREAT WILL MORE FARTHER THIS MORE THY MORE THIS WILL DID NOT)
(BY A I THAN BEAK I SOUL OUTPOUR I SOUL WITH)
(TIS SOME SERAPHIM WITH MANY WITHIN MANY SORROW HATH FROM FROM IN SEEING)
(LET OUT CROAKING SOME MY)

