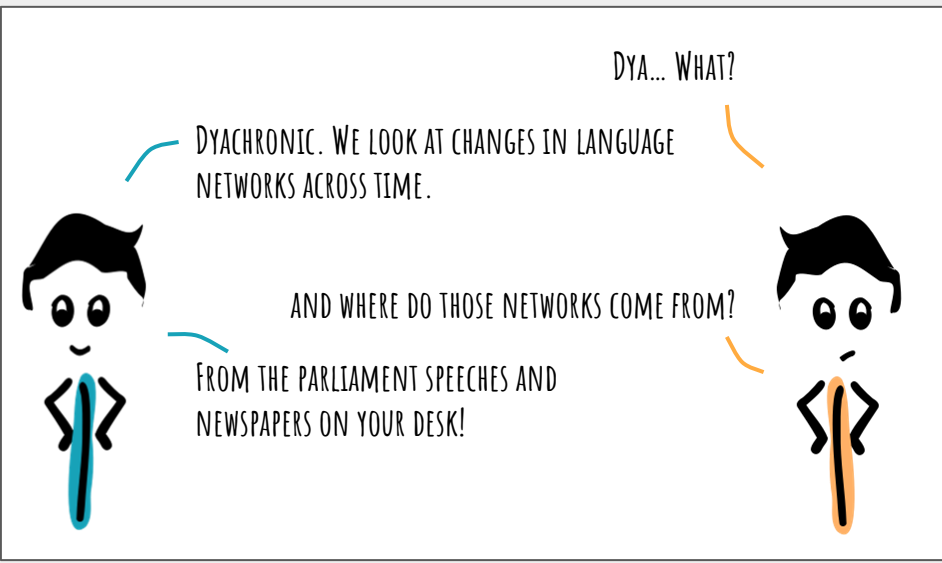
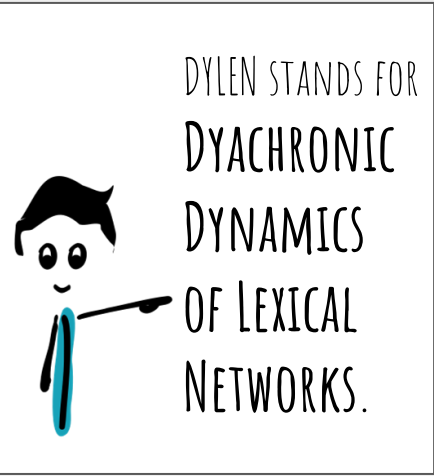
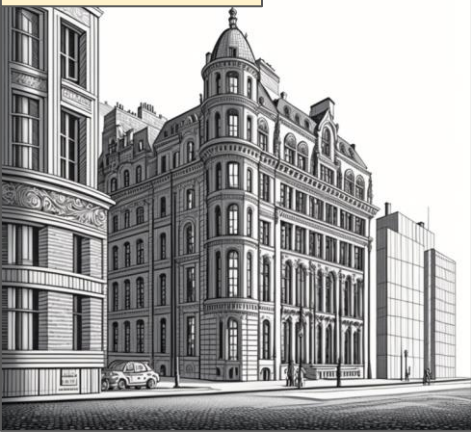
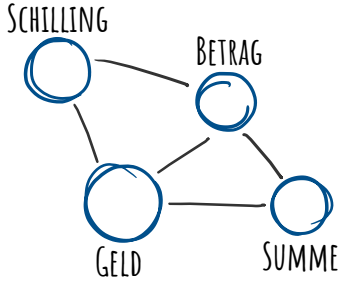


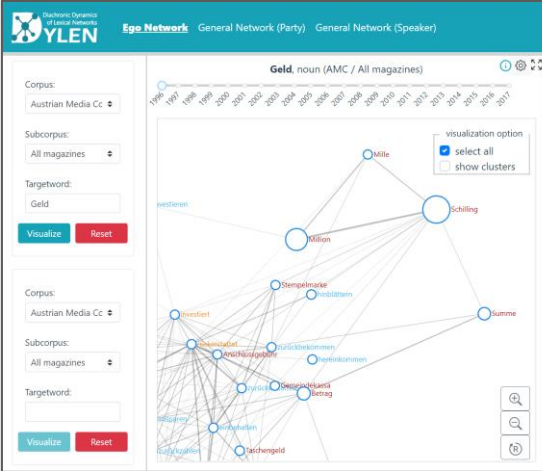
SOMEWHERE IN AUSTRIA...



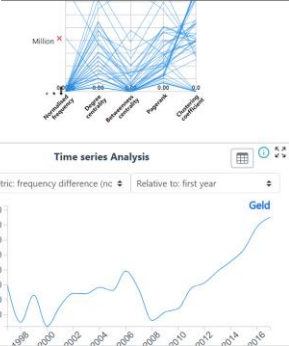
WORD EMBEDDINGS HELP TO GENERATE NETWORKS FROM THESE TEXTS.



WORDS THAT ARE CONNECTED ARE CALLED SEMANTIC NEIGHBOURS. THEY ARE ALSO INTERCHANGABLE.



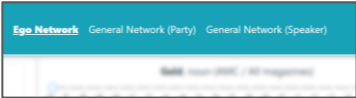
THAT'S THE DYLEN USER INTERFACE. IT'S USED TO VISUALISE NETWORKS.



PHIEW, THAT'S QUITE A LOT TO TAKE IN...



NO WORRIES, LET'S DO IT STEP BY STEP.



ON TOP, YOU CAN CHOOSE BETWEEN EGO-NETWORKS UND GENERAL NETWORKS.



EGO-NETWORKS ARE ABOUT A SPECIFIC WORD, FOR EXAMPLE „GELD“ (MONEY). IT WILL NOT BE SHOWN ITSELF, BECAUSE ALL WORDS IN THE NETWORK ARE CONNECTED TO IT- OTHERWISE YOU COULDN'T SEE ANYTHING ANYMORE BECAUSE OF ALL THE LINES.

IN YOUR INPUT FORM ON THE LEFT, YOU CAN SELECT THE CORPUS (AMC OR PARLAT), THE SUBCORPUS, E.G. A SPECIFIC NEWSPAPER, AND TYPE THE TARGET WORD.

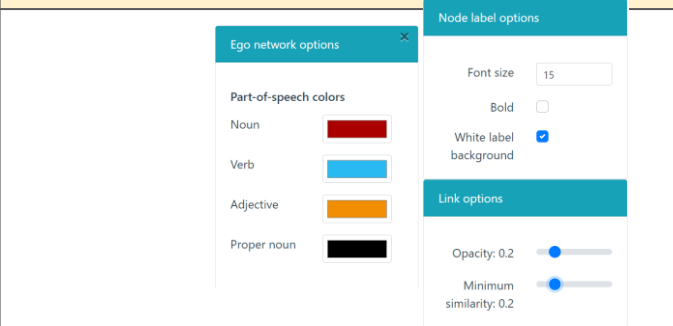
GENERAL NETWORKS COMPRISE THE SPEECHES OF A SPECIFIC POLITICIAN OR A WHOLE PARTY AND ARE MUCH LARGER. YOU NEED TO USE A FILTER TO RESTRICT THE NUMBER OF NODES, BEFORE CAN DISPLAY THE NETWORK.

CHOOSE THE PARTY AND THE POLITICIAN ON THE LEFT. ADDITIONAL FILTERS LIKE IN THE EXAMPLE CAN SHOW ONLY 20% OF THE WORDS WITH THE LOWEST DEGREE CENTRALITY.

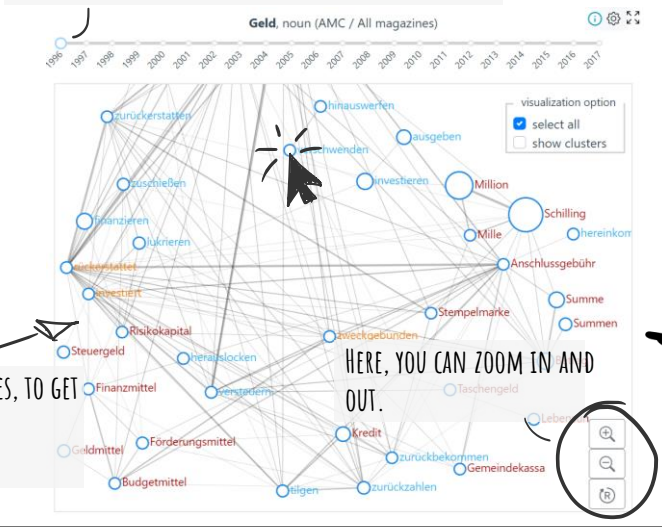
When you click on „VISUALIZE“ IT LOOKS A BIT LIKE THIS:



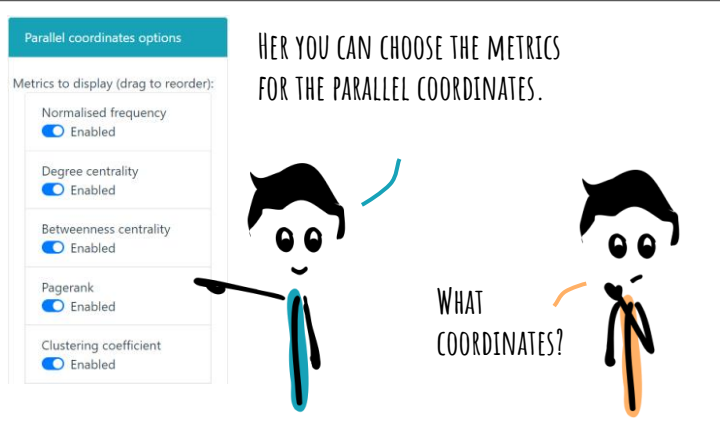
IN THE SIDEBAR THAT OPENS WHEN YOU CLICK THE COGWHEEL, YOU CAN CHANGE THE FORMATTING OF THE ANNOTATION „LINK OPTIONS“ LIGHTENS THE CONNECTIONS BETWEEN THE NODES OR FILTERS THEM.



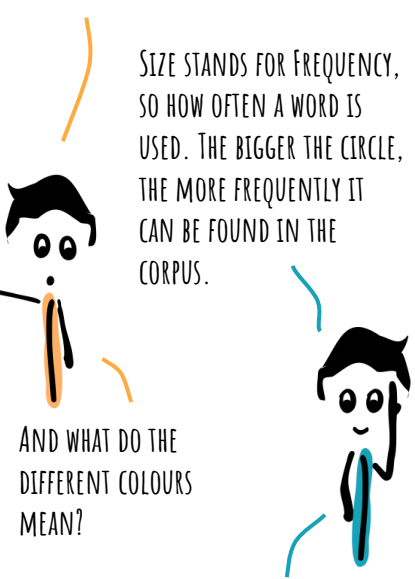
ON TOP ON THE TIMELINE YOU CAN CHOOSE THE YEAR.



HER YOU CAN CHOOSE THE METRICS FOR THE PARALLEL COORDINATES.

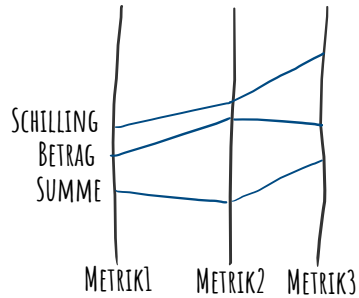


WHY ARE THE CIRCLES A DIFFERENT SIZE?



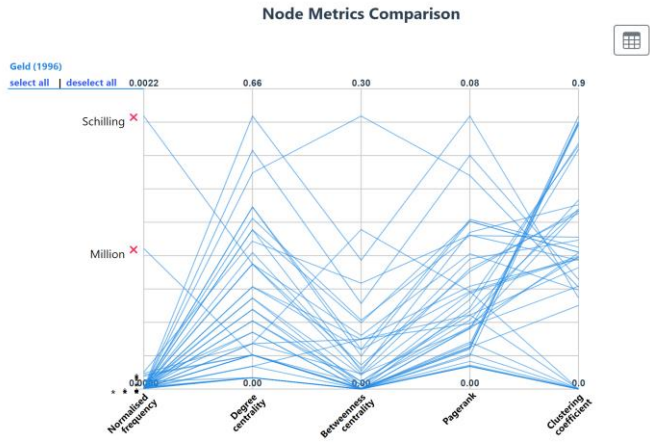
THEY STAND FOR DIFFERENT PARTS OF SPEECH. NOUNS ARE RED, VERBS BLUE, ADJECTIVES YELLOW AND PROPER NAMES ARE BLACK. BUT YOU CAN CHANGE THAT IN THE SETTING IN THE COGWHEEL ON THE TOP RIGHT.

DIFFERENT METRICS ARE CALCULATED FOR EVERY WORD IN THE NETWORK. EACH OF THESE METRICS IS SHOWN ON AN INDIVIDUAL AXIS IN THE PARALLEL COORDINATES PLOT.



SO, EACH LINE STANDS FOR A WORD IN THE NETWORK AND EVERY INTERSECTION WITH A VERTICAL AXIS STANDS FOR THE RESPECTIVE VALUE IN THE METRIC..

IM DYLEN-TOOL FINDET MAN DIESE VISUALISIERUNG OBEN RECHTS:



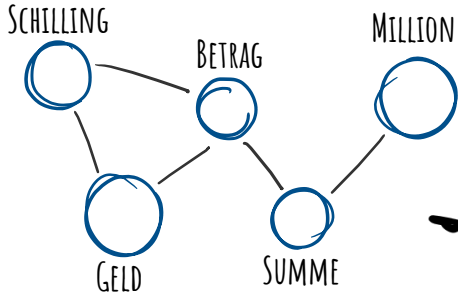
ABER WAS BEDEUTEN DENN DIESE METRIKEN ÜBERHAUPT?



DIE FREQUENCY KENNEN WIR JA SCHON. LASS UNS NOCH EINEN BLICK AUF EIN PAAR DER ANDEREN METRIKEN WERFEN...

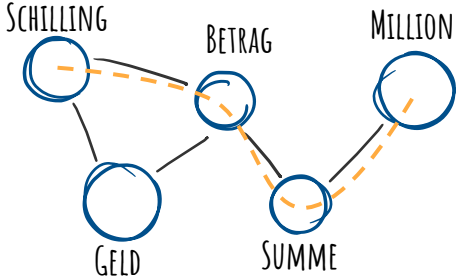


DEGREE CENTRALITY SHOWS THE NUMBER OF CONNECTIONS WITH OTHER WORDS IN THE NETWORK.



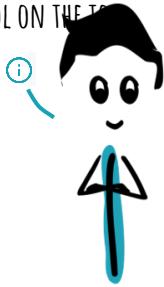
„MILLION“ HAS THE LOWEST DEGREE CENTRALITY, BECAUSE IT'S ONLY CONNECTED TO ONE OTHER WORD („SUMME“-SUM). „BETRAG“(AMOUNT) HAS THREE CONNECTIONS AND THEREFORE THE HIGHEST DEGREE CENTRALITY.

BETWEENNESS CENTRALITY DEFINES HOW MANY OTHER WORDS ARE IN BETWEEN DIFFERENT WORDS IN THE NETWORK.

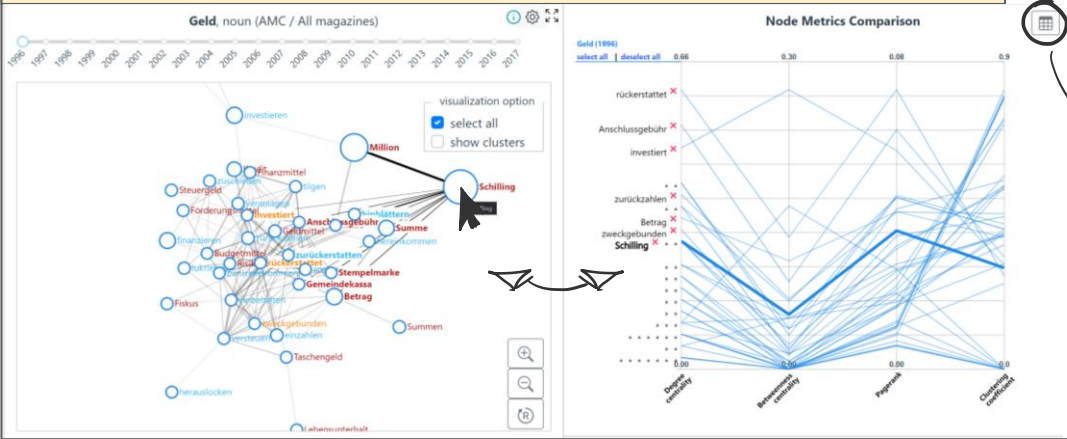


IF WE LOOK FOR THE SHORTEST PATH FROM „SCHILLING“ TO „MILLION“, „BETRAG“ AND „SUMME“ ARE IN BETWEEN. THE MORE PATHS PASS THROUGH A NODE, THE HIGHER ITS BETWEENNESS CENTRALITY.

EVERY METRIC IS EXPLAINED IN THE TOOL IN MORE DETAIL IN THE TOOL. JUST CLICK ON THE INFORMATION SYMBOL ON THE TOP RIGHT.



VISUALISATIONS ARE CONNECTED WITH ONE ANOTHER. WHEN YOU HOVER YOUR MOUSE OVER A NODE IN THE NETWORK, THE WORD IS HIGHLIGHTED IN THE PARALLEL COORDINATES TOO – AND THE OTHER WAY AROUND.

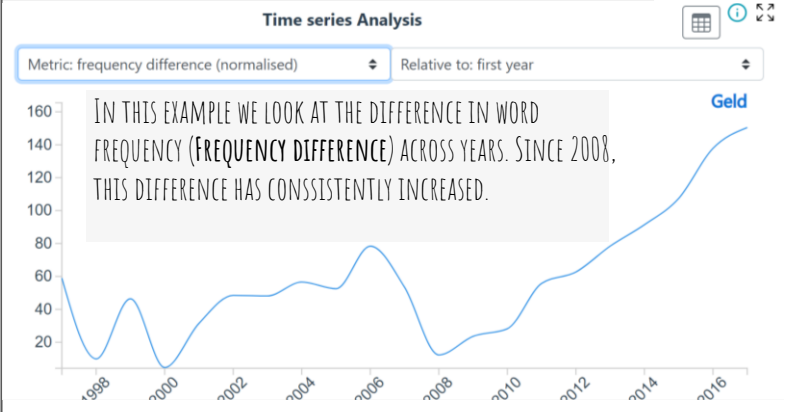


ONE CLICK ON THE TABLE SYMBOL SHOWS ALL WORDS AND METRICS IN DETAIL. YOU CAN SORT, FILTER AND EXPORT THE TABLE.

The table icon in the top right of the previous panel points to this table. The table is titled "Node Metrics Comparison" and has columns for "Word", "Network", "Degree Centrality", "Closeness Centrality", and "Betweenness Centrality". It lists various words and their corresponding metrics for the network "Geld, 1996".

Word	Network	Degree Centrality	Closeness Centrality	Betweenness Centrality
Anschlussgebühr	Geld, 1996	0.525	0.625	0.086
ansparen	Geld, 1996	0.4	0.571	0.033
ausgeben	Geld, 1996	0.025	0.301	0
Betrag	Geld, 1996	0.325	0.556	0.106
Budgetmittel	Geld, 1996	0.2	0.444	0.014
einbehalten	Geld, 1996	0.35	0.548	0.018
einzahlen	Geld, 1996	0.2	0.471	0.004
finanzieren	Geld, 1996	0.075	0.426	0.001

FINALLY, AT THE BOTTOM RIGHT, THERE IS THE TIME SERIES ANALYSIS. HERE YOU CAN INSPECT THE METRICS OF YOUR TARGET WORD.



WELL, WHAT DO YOU THINK? CONVINCED?

YES, THAT TOOL IS REALLY GREAT! AND IT FACILITATES MY WORK IMMENSELY, BUT...

BUT IT WOULD BE FANTASTIC IF YOU COULD COMPARE TWO NETWORKS!

HA, NO PROBLEM! TAKE A CLOSER LOOK AT THE TASK BAR ON THE LEFT...

Corpus:

Austrian Media Corpus (AM)

Subcorpus:

All magazines

Targetword:

Geld

Visualize

Reset

Corpus:

Austrian Media Corpus (AM)

Subcorpus:

All magazines

Targetword:

Euro

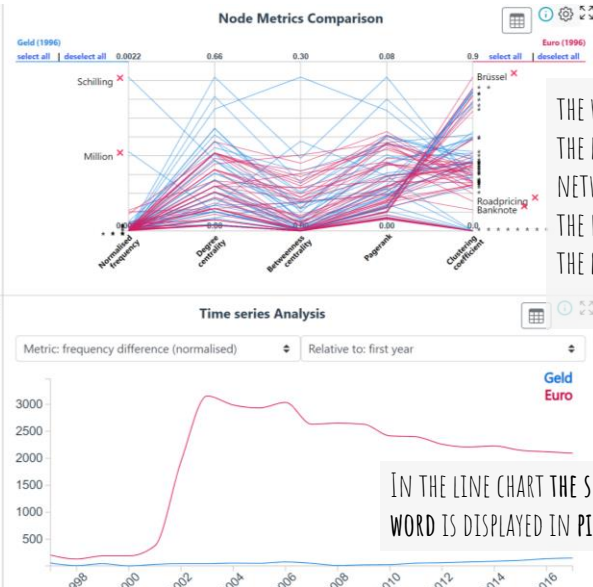
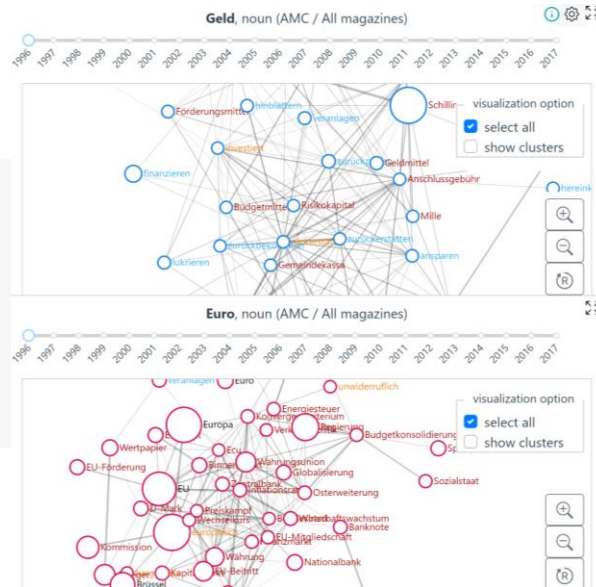
Visualize

Reset

THERE IS A
REASON WHY
THERE ARE
TWO FORMS!

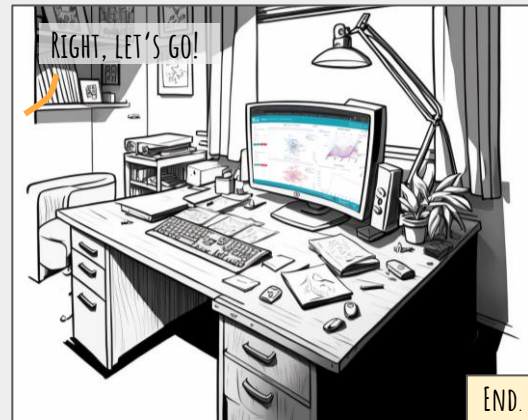
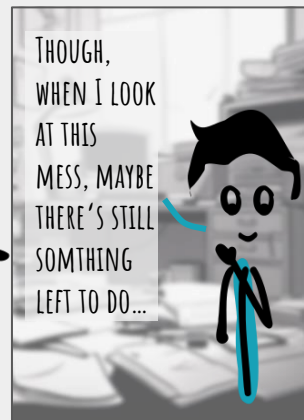


BOTH
NETWORKS
WILL BE
DISPLAYED
ONE BELOW
THE OTHER.



THE WORDS FROM
THE BOTTOM
NETWORK ARE ON
THE RIGHT. IT SHOWS
THE LINES IN PINK.

IN THE LINE CHART THE SECOND TARGET
WORD IS DISPLAYED IN PINK TOO.



END.