

PERSONALITY & NETWORK IMPORTANCE

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How everything depends on the size of your network.

BIG 5 - PERSONALITY

Openness

Conscientiousness

Extraversion

Agreeableness

Neuroticism

“EXTROVERSION”

INTROVERSION

1

Energized by
being alone



Tentative

Drained by
social
interaction

Reserved

Sociable

Talkative

Energized by
social interaction



Potentially Assertive

EXTROVERSION

5

"AGREEABLENESS"

IRRITABLE

1

Short-tempered

Uncooperative

Antagonistic



AGREEABLE

5

Gentle

Good-natured

Understanding

Forgiving



“NEUROTICISM” → SECURENESS

(EMOTIONAL STABILITY)

NEUROTIC

1

Depressed

Reactive

Insecure

Anxious



Poised

Resilient

Calm



SECURE

5

"CONSCIENTIOUSNESS"

CARELESS

1

Many Goals

Careless

Irresponsible

Disorganized



CONSCIENTIOUS

5

Few Goals

Systematic

Organized

Self-disciplined

Careful

Responsible



"OPENNESS"

CONVENTIONAL

1

Avoids Thrill-Seeking
Behaviors

Conservative

Dogmatic

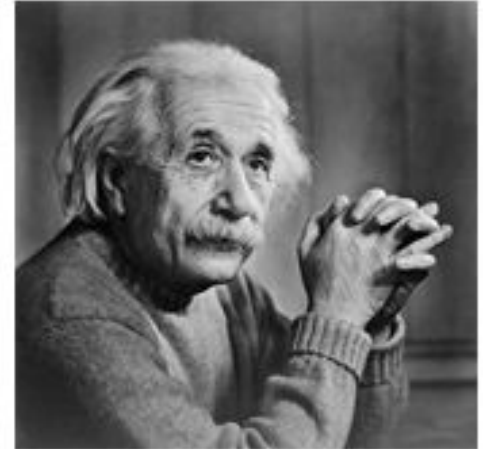


OPEN

5

Imaginative

Curious



Creative

Potential Thrill-seeker

facebook

Log In Here

Email or Phone

Password

Log In

☐ Keep me logged in

[Forgotten your password?](#)

Facebook helps you connect and share with the people in your life.



Register a new Account Here

Create an account

It's free and always will be.

First name

Surname

Email or mobile number

Re-enter email or mobile number

New password

Birthday

Day ▼

Month ▼

Year ▼

[Why do I need to provide my date of birth?](#)

☐

Female

☐

Male

By clicking Create an account, you agree to our [Terms](#) and that you have read our [Data Policy](#), including our [Cookie Use](#).

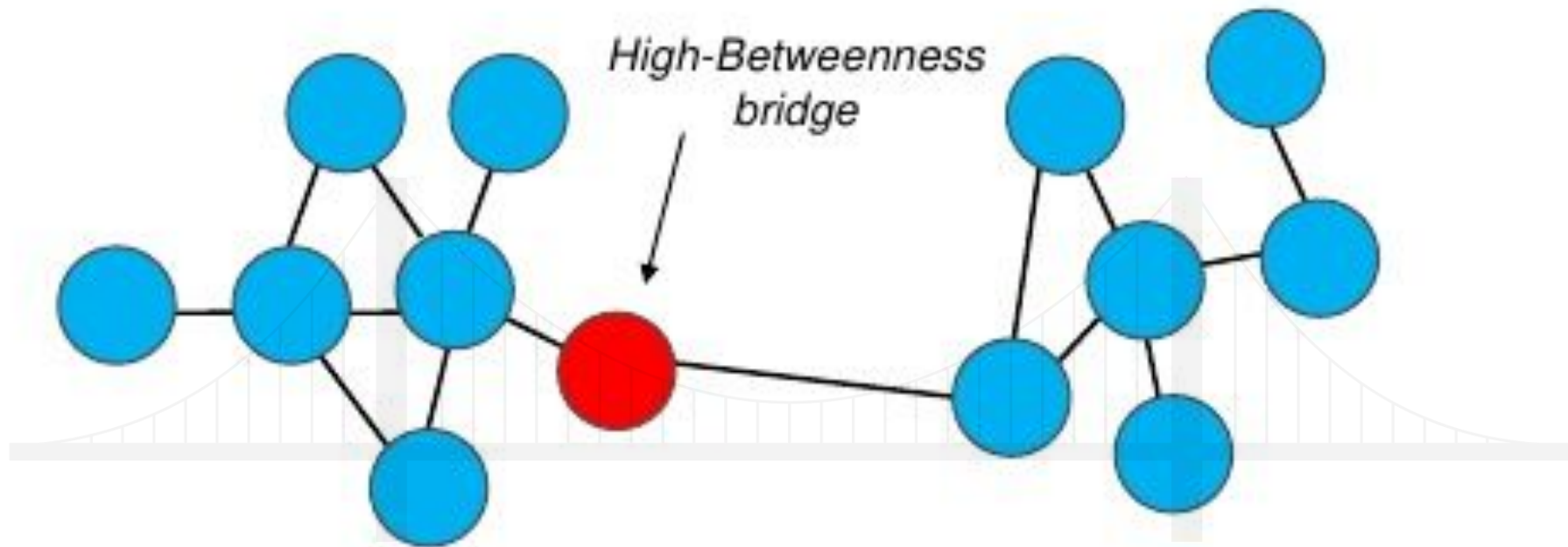
Create an account

[Create a Page](#) for a celebrity, band or business.

FACEBOOK - “BETWEENNESS CENTRALITY”



BETWEENNESS CENTRALITY -- ARE YOU A "BRIDGE"?



MyPERSONALITY (BY DAVID STILLWELL)



myPersonality

My Personality Profile Compare to Friends More Tests Options

Latest news: [New Schwartz's Values Survey](#). [\[View All News\]](#)

Below, there are phrases describing people's behaviours. Please use the rating scale to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Rate yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. If you are unsure of which response to choose (e.g. you act one way in a certain situation, and another way in a different situation), choose the response which feels most "natural" to you.

So that you can describe yourself in an honest manner, your answers to individual questions cannot be seen by others, only the overall calculation of your personality traits.

Answer Questions (if you don't want to do 100 now, you can always answer more later)

Phrase:	Very Inaccurate	Moderately Inaccurate	Neither Inaccurate nor Accurate	Moderately Accurate	Very Accurate
I...					
Have a vivid imagination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hold a grudge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do not mind being the centre of attention.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do not like poetry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Complete tasks successfully.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Believe that others have good intentions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Avoid philosophical discussions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The Big Five Personality Test Interact

Trait	0	25	50	75	100	Percentage
Openness						50%
Conscientiousness						81%
Extraversion						75%
Agreeableness						63%
Neuroticism						56%

Your Friends' Personalities

Most Like Me

Your Personality Soulmate



Sofie Jansson

Similarity Score: **85.77%**
(How was this calculated?)

Trait	0	50	100	% (diff.)
O				50% (-)
C				56% (-25%)
E				88% (+13%)
A				56% (-7%)
N				69% (+13%)

Least Like Me

Maybe Opposites Attract?



Damon Alexander Young

Similarity Score: **75.87%**
(How was this calculated?)

Trait	0	50	100	% (diff.)
O				94% (+44%)
C				56% (-25%)
E				88% (+13%)
A				69% (+6%)
N				44% (-12%)

Friend's Name	Personality					Similarity Score	View Comparison Graph	View Full Personality Profile	Friend Rating Status
	O	C	E	A	N				
You	50%	81%	75%	63%	56%				
Sofie Jansson	50%	56%	88%	56%	69%	86%			
Sara Lee	88%	63%	63%	69%	56%	80%			
Damon Alexander Young	94%	56%	88%	69%	44%	76%			

INTROVERTED <---> EXTROVERTED

NEUROTIC <-----> SECURE

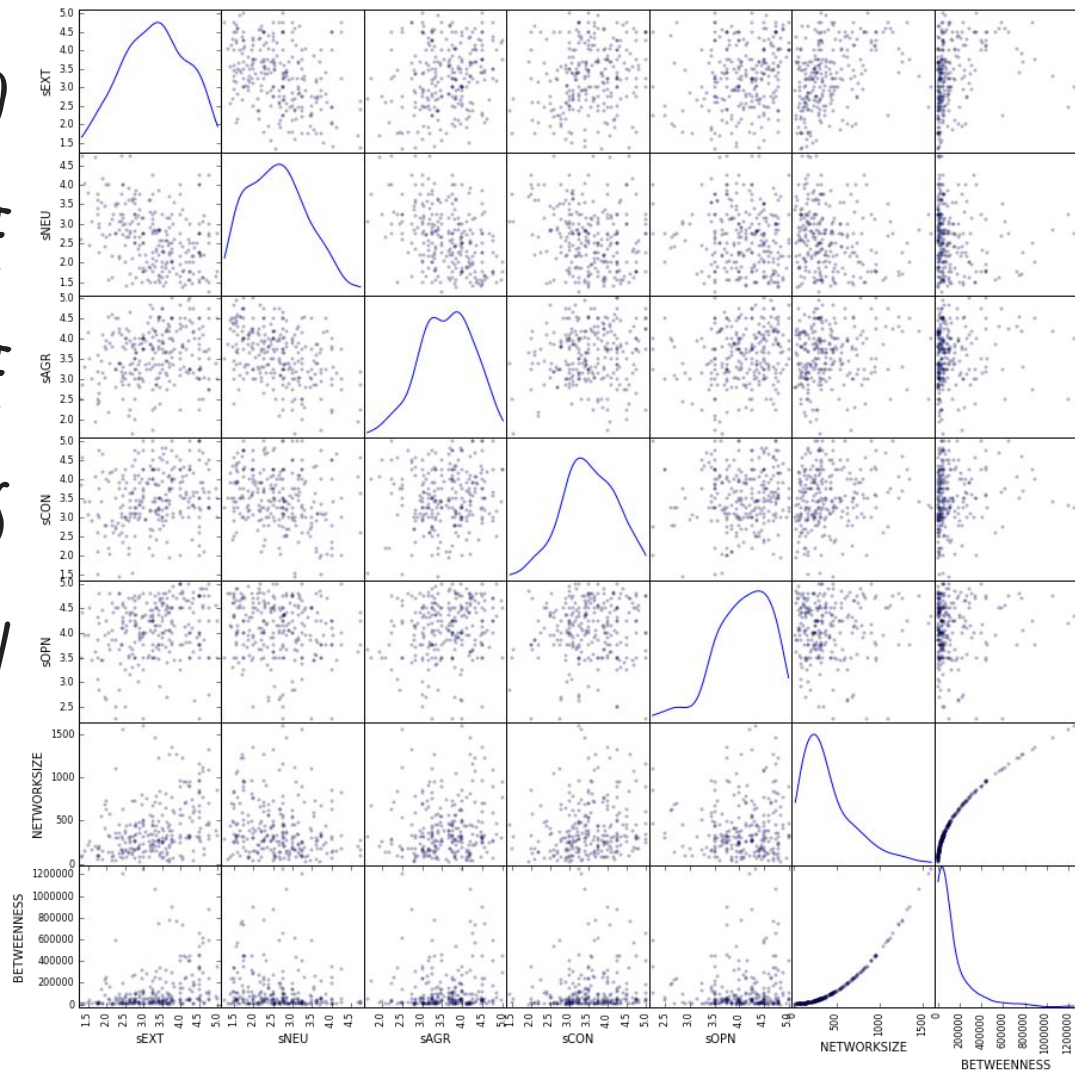
IRRITABLE <-----> AGREEABLE

CARELESS <--> CONSCIENTIOUS

CONVENTIONAL <-----> OPEN

NETWORK SIZE

NETWORK "BRIDGE-NESS"



“BIG FIVE”

INTROVERTED <-----> EXTROVERTED

NEUROTIC <-----> SECURE

IRRITABLE <-----> AGREEABLE

CARELESS <-----> CONSCIENTIOUS

CONVENTIONAL <-----> OPEN

NETWORK “BRIDGE-NESS”

BOTTOM 10%

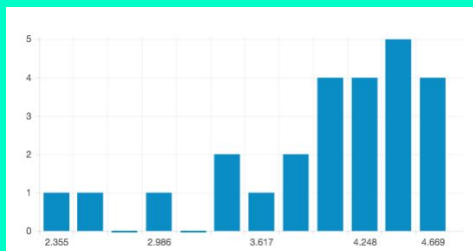
TOP 10%

2.8784	3.2136
2.6932	2.6535
3.6492	3.5721
3.1572	3.4944
4.2032	4.0764

NETWORK

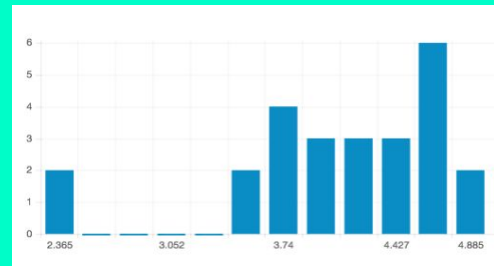
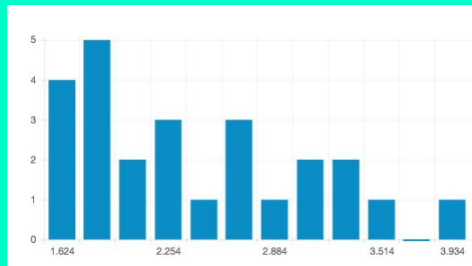
“BRIDGE-NESS” EXTROVERSION

TOP 10%

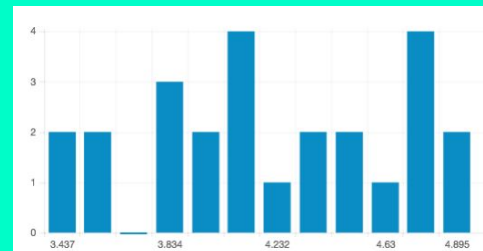
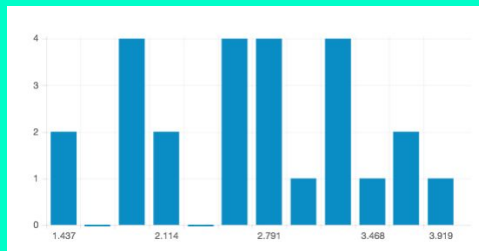
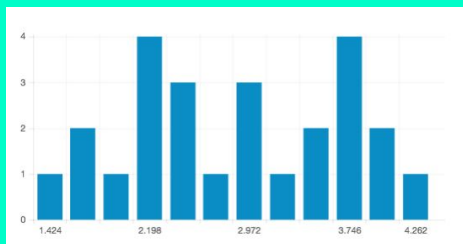


SECURENESS

OPENNESS



BOTTOM 10%



LASSO & K-FOLDS CROSS VALIDATION

CONSTANT TERM

EXT^1

NEU^1

AGR^1

CON^1

OPN^1

$NETWORK\ SIZE^1$

EXT^2

$EXT^1 \times NEU^1$

$EXT^1 \times AGR^1$

$EXT^1 \times CON^1$

$EXT^1 \times OPN^1$

$EXT^1 \times NETWORK\ SIZE^1$

NEU^2

$NEU^1 \times AGR^1$

$NEU^1 \times CON^1$

$NEU^1 \times OPN^1$

$NEU^1 \times NETWORK\ SIZE^1$

AGR^2

$AGR^1 \times CON^1$

$AGR^1 \times OPN^1$

$AGR^1 \times NETWORK\ SIZE^1$

CON^2

$CON^1 \times OPN^1$

$CON^1 \times NETWORK\ SIZE^1$

OPN^2

$OPN^1 \times NETWORK\ SIZE^1$

$NETWORK\ SIZE^2$

LAMBDA WAS HUGE: 10990.74!

Coeff. Estimate	Coeff. Name
-4.84297	NETWORKSIZE^1
-0.103446	sEXT^1 x NETWORKSIZE^1
-0.105269	sNEU^1 x NETWORKSIZE^1
-0.897459	sAGR^1 x NETWORKSIZE^1
-0.859546	sCON^1 x NETWORKSIZE^1
0.699387	sOPN^1 x NETWORKSIZE^1
0.49827	NETWORKSIZE^2

OLS Regression Results

```

=====
Dep. Variable:          BETWEENNESS      R-squared:                1.000
Model:                  OLS              Adj. R-squared:           1.000
Method:                 Least Squares    F-statistic:             6.629e+04
Date:                   Fri, 22 Apr 2016  Prob (F-statistic):      3.56e-292
Time:                   09:52:53         Log-Likelihood:          -1638.8
No. Observations:      175              AIC:                    3304.
Df Residuals:          162              BIC:                    3345.
Df Model:               12
Covariance Type:       nonrobust
=====

```

	coef	std err	t	P> t	[95.0% Conf. Int.]	
Constant Term	1389.8891	4952.622	0.281	0.779	-8390.132	1.12e+04
sEXT^1	-723.6418	542.016	-1.335	0.184	-1793.970	346.686
sNEU^1	-371.5730	582.502	-0.638	0.524	-1521.849	778.703
sAGR^1	826.1710	667.193	1.238	0.217	-491.345	2143.687
sCON^1	1098.9569	533.857	2.059	0.041	44.740	2153.173
sOPN^1	-1138.8219	732.277	-1.555	0.122	-2584.862	307.218
NETWORKSIZE^1	-18.2611	10.614	-1.720	0.087	-39.220	2.698
sEXT^1 x NETWORKSIZE^1	2.7140	1.156	2.348	0.020	0.431	4.997
sNEU^1 x NETWORKSIZE^1	1.4514	1.276	1.137	0.257	-1.069	3.972
sAGR^1 x NETWORKSIZE^1	-2.4186	1.357	-1.782	0.077	-5.099	0.261
sCON^1 x NETWORKSIZE^1	-3.4249	1.173	-2.919	0.004	-5.742	-1.108
sOPN^1 x NETWORKSIZE^1	4.1071	1.457	2.819	0.005	1.230	6.984
NETWORKSIZE^2	0.4985	0.002	263.601	0.000	0.495	0.502

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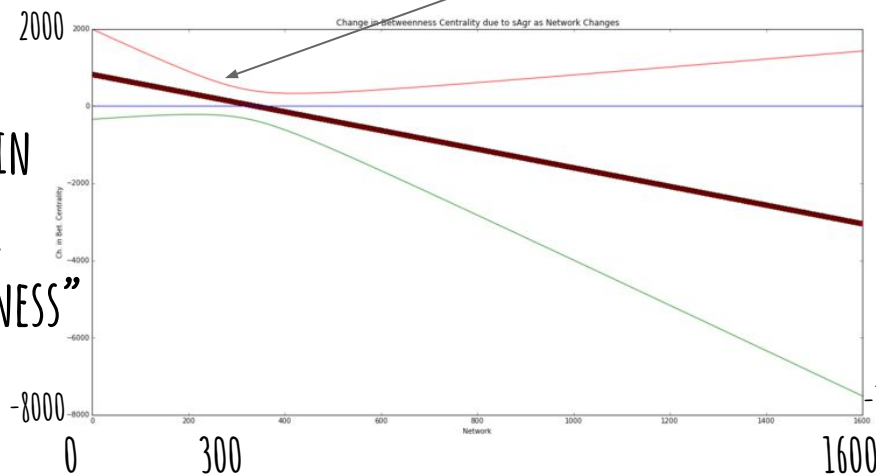
=====
Omnibus:                150.801      Durbin-Watson:           1.813
Prob(Omnibus):          0.000       Jarque-Bera (JB):        2944.173
Skew:                   -3.023      Prob(JB):                0.00
Kurtosis:               22.163      Cond. No.                1.06e+07
=====

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AGREEABLENESS

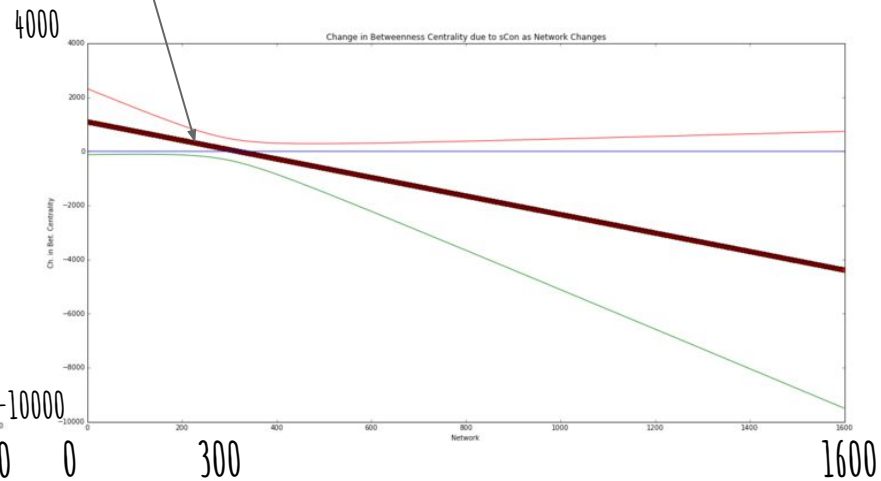
PIVOT POINT AROUND 300

CHANGE IN
NETWORK
“BRIDGENESS”



INCREASING NETWORK SIZE

CONSCIENTIOUSNESS



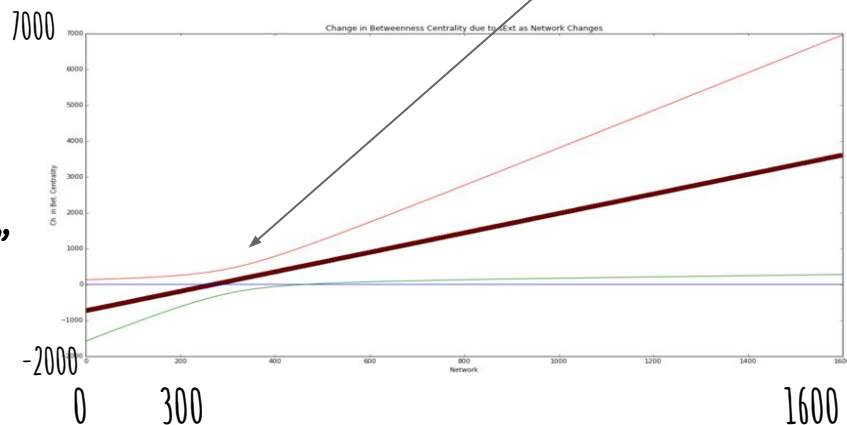
INCREASING NETWORK SIZE

EXTRAVERSION

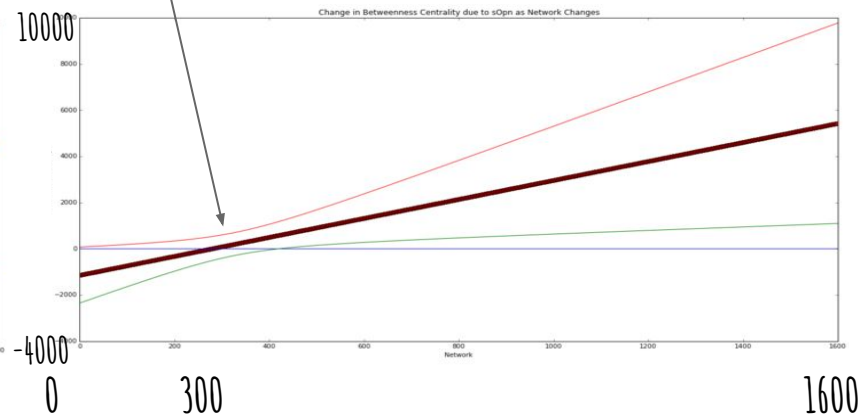
PIVOT POINT AROUND 300

OPENNESS

CHANGE IN
NETWORK
"BRIDGENE"



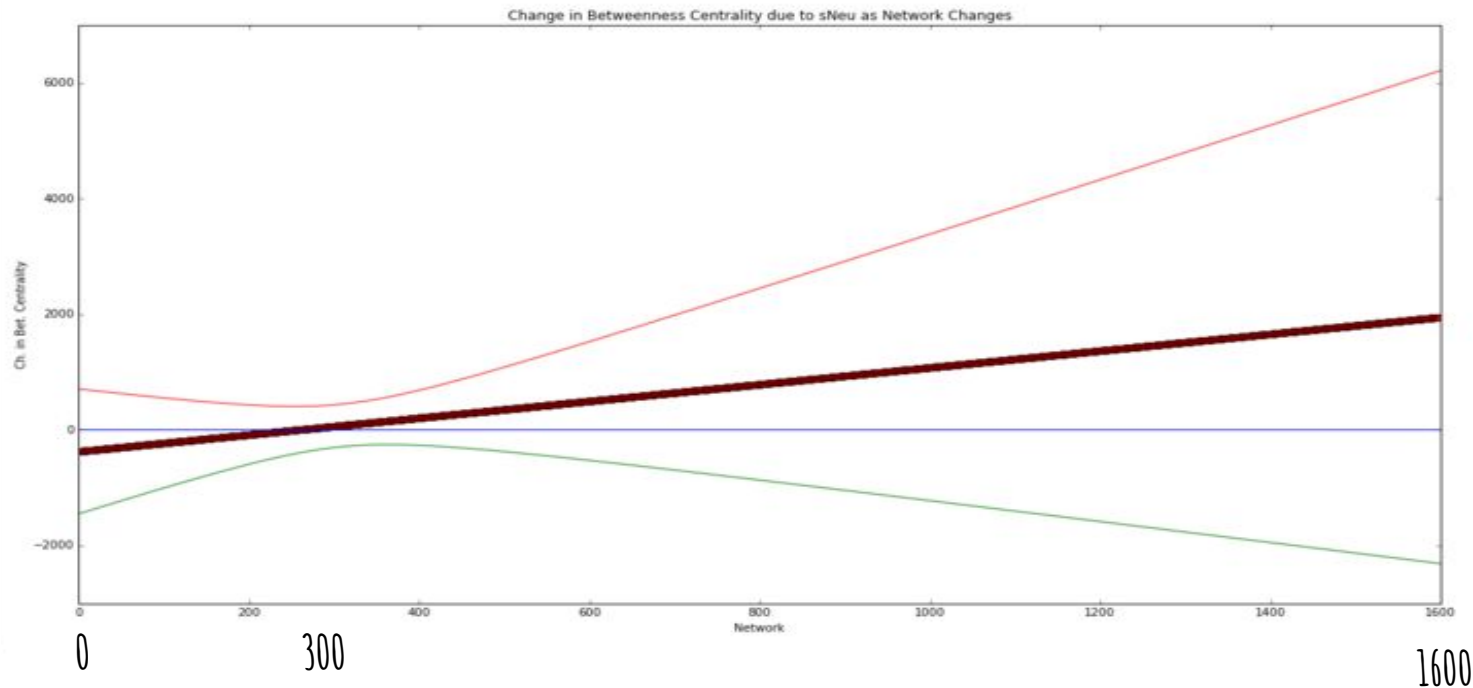
INCREASING NETWORK SIZE



INCREASING NETWORK SIZE

SECURENESS (NON-NEUROTICISM)

CHANGE IN
NETWORK
"BRIDGENE"



INCREASING NETWORK SIZE

NEXT STEPS:

With this dataset:

- Exploration of the “Why’s” and think deeper on Network Size as a Moderating Variable
- Real World Applicability of “Betweenness” in Human Terms
- K-means to find personality “cluster groups”
- Sentiment Analysis
- Compare with result from outside literature

Other Personality/Network Explorations:

- Work with more data (only 250!)
- Personality analysis within groups (political group, artistic group, religious group)
- Compare with different network types (e.g. Twitter or Google+).



QUESTIONS?