CS-234 WEEK 3

INFLUENCE

- <u>What</u> is? The ability to change/modify other people's behavior.

- How does influence happen?
  - We receive tons of information.
    - Newspapers.
    - Social media.
    - <u>logos</u>/brands
    - industry / <u>lobbists</u>.
    - friends.
    - families/upbringing.
    - neighborhood/region/country (CULTURE).
    - advertisement
    - education

Influence Metrics

- Measuring influence in Twitter (X)
  - Indegree: Popularity of the user
  - Retweets: The value of the content of a tweet
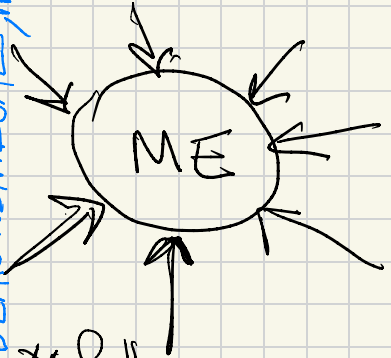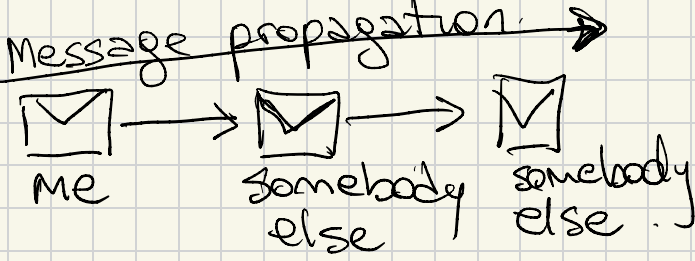 - Mentions: The value of the user's name

INFLUENCE IS DYNAMIC.

TOPIC   TIME

- The audience need to be active to impact on influence
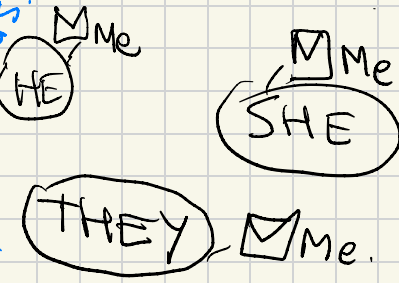
POPULAR INDIVIDUALS, NEWS:

ME

followers: size of the audience

CONTENT AGGREGATORS:

Message propagation →

☑ Me → ☑ Somebody else → ☑ Somebody else

retweets: Indicate the ability of the user to generate valuable content.

Celebrities, Brands, leaders:
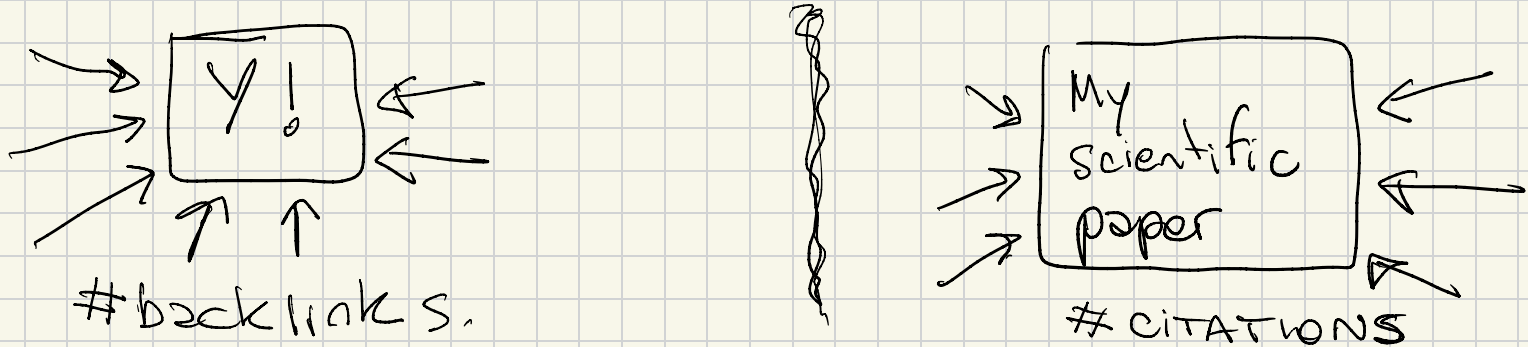
HE ☑ Me

SHE ☑ Me

THEY ☑ Me.
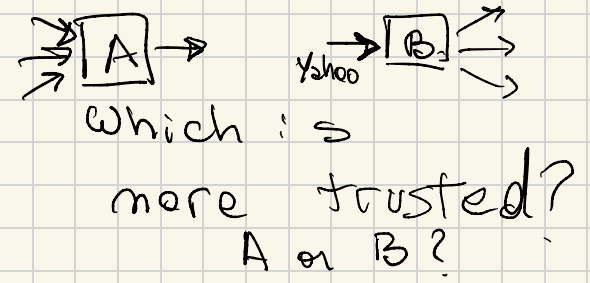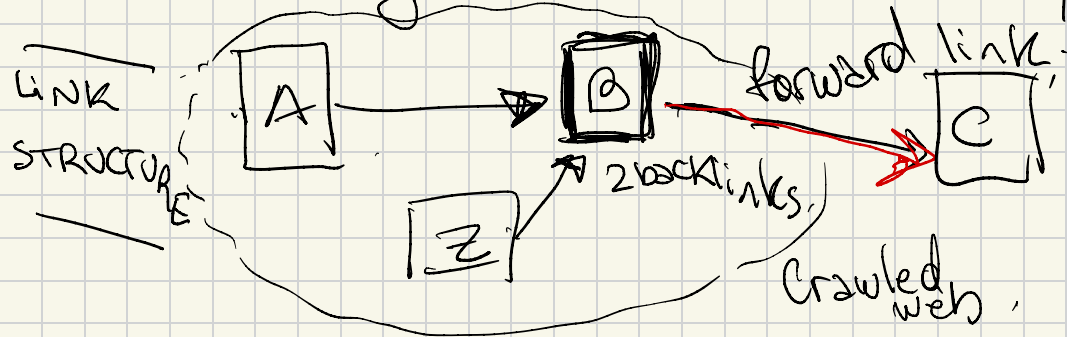
Mentions
The ability of a user to generate conversations.

PAGE RANK (ranking web page).

Larry Page - Sergey Brin (Stanford) → GOOGLE.

Historical context: Yahoo (web categorization) - Altavista -

\#backlinks.

\# CITATIONS

How do you measure the quality of a metric?

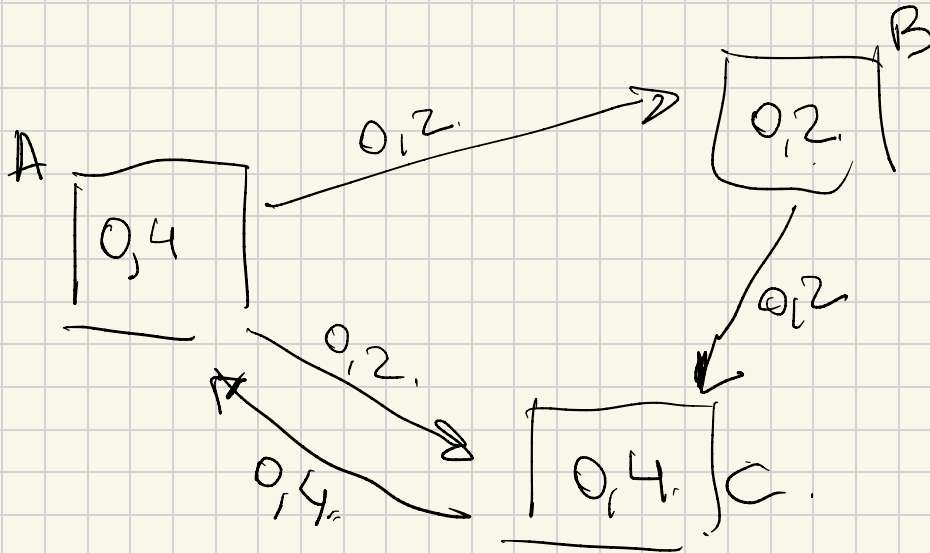LINK STRUCTURE

forward link.

2 backlinks.

Crawled web.

Which is more trusted? A or B?

Ranking formula

- More backlinks.
- More Trusted backlinks.

LINEAR OPTIMIZATION PROBLEM.

- Multiple iterations

A
$0,4$

$0,2$

B
$0,2$

$0,2$

$0,2$

$0,4$

$0,4$ C.

STEADY
STATE
(converge).
final state,

WEALTH INEQUALITY.

- Piketti - French economist -

Money buys influence → investments.
→ jobs.
→ education
city growth,
→ developments
(housing -

cumulative
share of.
income earned.

45 degrees

Perfect equality,
A
Lorenz curve
B

$$\text{Gini coefficient} = \frac{A}{A+B}$$

0 → equality

Gini Coeffien

1 → inequality

↑ cumulative share of people income.
↑ 100% population
high income

Low income

Share top percentile

income inequality.
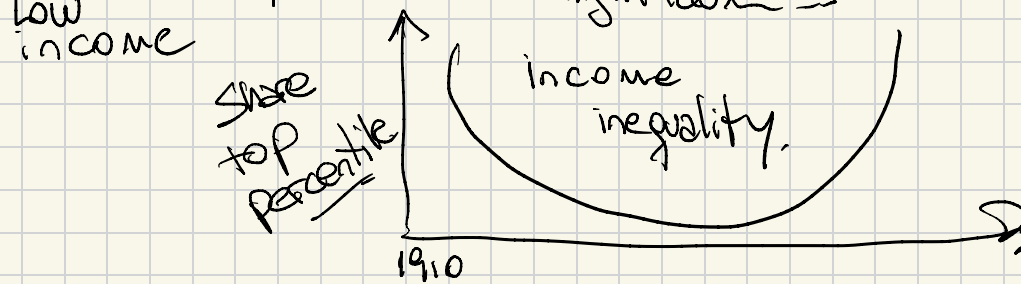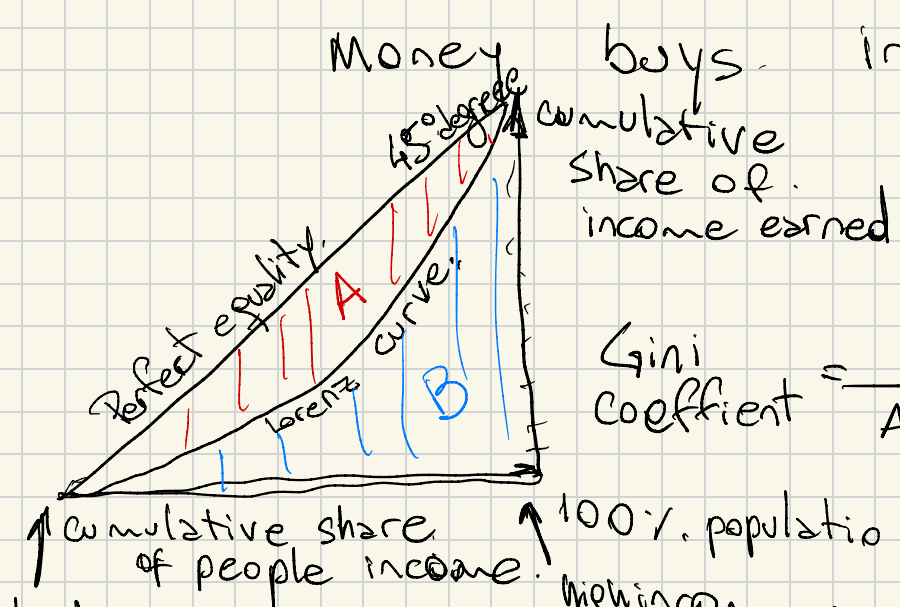
GROWTH RATE < RATE OF RETURN

1910   2010.