# The role of feedback and NPOV on meme evolution in the wikisphere

:en:boud = :fr:baoud = :pl:boud = :id:boud

 $\bullet$  epistemological problem: knowledge from everybody  $\Rightarrow$  compression  $\alpha \sim 10^{6-9}$ 

• epistemological problem: knowledge from  $everybody \Rightarrow$  compression  $\alpha \sim 10^{6-9}$ 

 hypothesis: NPOV and other +/- feedbacks in wikisphere may, in some sense, "avoid censorship" despite this huge compression factor

- epistemological problem: knowledge from  $everybody \Rightarrow$  compression  $\alpha \sim 10^{6-9}$
- hypothesis: NPOV and other +/- feedbacks in wikisphere may, in some sense, "avoid censorship" despite this huge compression factor
- empirical GFDL/GPL research proposal/invitation

- epistemological problem: knowledge from  $everybody \Rightarrow$  compression  $\alpha \sim 10^{6-9}$
- hypothesis: NPOV and other +/- feedbacks in wikisphere may, in some sense, "avoid censorship" despite this huge compression factor
- empirical GFDL/GPL research proposal/invitation
- results: sorry, not yet :(

# selection problem: $\forall = 6.5 \times 10^9$

Can everybody really contribute to the wikisphere?

# selection problem: $\forall = 6.5 \times 10^9$

Can *everybody* really contribute to the wikisphere?

• true wikisphere neutrality: integrate 6.5 billion POVs

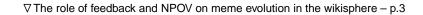
# selection problem: $\forall = 6.5 \times 10^9$

Can *everybody* really contribute to the wikisphere?

• true wikisphere neutrality: integrate 6.5 billion POVs

 $\Rightarrow$  Assertion: It is obvious that no human being can physically read six to ten billion news reports or articles each day, let alone even in his/her lifetime.

compression factor  $\alpha$ :



compression factor  $\alpha$ :

 $\bullet$  one word  $\times$  6.5 billion  $\rightarrow$  6-10,000 words  $\Rightarrow \alpha \sim 10^{6}$ 

compression factor  $\alpha$ :

- one word  $\times$  6.5 billion  $\rightarrow$  6-10,000 words  $\Rightarrow \alpha \sim 10^{6}$
- one page  $\times$  6.5 billion  $\rightarrow$  1 page  $\Rightarrow \alpha \sim 10^9$

compression factor  $\alpha$ :

- one word  $\times$  6.5 billion  $\rightarrow$  6-10,000 words  $\Rightarrow \alpha \sim 10^{6}$
- one page  $\times$  6.5 billion  $\rightarrow$  1 page  $\Rightarrow \alpha \sim 10^9$

 $\Rightarrow \alpha \sim 10^6 - 10^9$ 

compression factor  $\alpha$ :

- one word  $\times$  6.5 billion  $\rightarrow$  6-10,000 words  $\Rightarrow \alpha \sim 10^{6}$
- one page  $\times$  6.5 billion  $\rightarrow$  1 page  $\Rightarrow \alpha \sim 10^9$

 $\Rightarrow \alpha \sim 10^6 - 10^9$ 

This compression factor cannot be avoided, unless the information from most people is ignored, or if the end reader is assumed to gain superhuman powers.

Compression by a factor of 1,000,000 or 1,000,000,000  $\Rightarrow$ 

Compression by a factor of 1,000,000 or 1,000,000,000  $\Rightarrow$ 

• some form of *meme* selection is unavoidable

Compression by a factor of 1,000,000 or 1,000,000,000  $\Rightarrow$ 

- some form of *meme* selection is unavoidable
- risk of censorship is extremely high

Compression by a factor of 1,000,000 or 1,000,000,000  $\Rightarrow$ 

- some form of *meme* selection is unavoidable
- risk of censorship is extremely high
- government-controlled media model: memes too critical of the government are selected out

Compression by a factor of 1,000,000 or 1,000,000,000  $\Rightarrow$ 

- some form of *meme* selection is unavoidable
- risk of censorship is extremely high
- government-controlled media model: memes too critical of the government are selected out

• corporate media model (Herman & Chomsky): memes against the interests of the market are selected out

#### wikisphere selection model

wikisphere (wikis, especially wikimedia wikis) model — more *neutral* than government and corporate information compression methods?

#### wikisphere selection model

wikisphere (wikis, especially wikimedia wikis) model — more *neutral* than government and corporate information compression methods?

wikisphere has many, many positive and negative feedback mechanisms

#### wikisphere selection model

wikisphere (wikis, especially wikimedia wikis) model more *neutral* than government and corporate information compression methods?

wikisphere has many, many positive and negative feedback mechanisms

especially: NPOV

#### **NPOV as + or - feedback**

• NPOV as positive feedback — stops "politically incorrect" information from being suppressed; encourages contributors to include all "noteworthy" POVs

#### **NPOV as + or - feedback**

• NPOV as positive feedback — stops "politically incorrect" information from being suppressed; encourages contributors to include all "noteworthy" POVs

 NPOV as negative feedback — stops spread of memes which cannot be traced to external sources (Wikipedia:NOR)

# NPOV, +/- feedbacks in wikisphere

Aim of project: quantitatively study NPOV and other negative, positive feedback processes in wikisphere and find out to what extent dissident (but "correct"?) points of view survive and grow in the wikisphere, despite the  $\alpha \sim 10^{6-9}$  compression factor.

# NPOV, +/- feedbacks in wikisphere

Aim of project: quantitatively study NPOV and other negative, positive feedback processes in wikisphere and find out to what extent dissident (but "correct"?) points of view survive and grow in the wikisphere, despite the  $\alpha \sim 10^{6-9}$  compression factor.

data set: http://en.wikipedia.org/wikistats/EN/Sitemap.htm

#### measuring a + feedback loop

purely positive feedback loop  $\Rightarrow$  exponential growth of number N of words related to a meme or articles supporting it

#### measuring a + feedback loop

purely positive feedback loop  $\Rightarrow$  exponential growth of number N of words related to a meme or articles supporting it

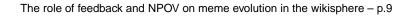
$$\frac{dN}{dt} \propto N \Rightarrow N \propto e^{t/\tau}$$

t is time,  $\tau$  is a time scale

# quantitative results: compare with quantitative results from Herman & Chomsky studies?

# quantitative results: compare with quantitative results from Herman & Chomsky studies?

qualitatively compare with other models such as government/authoritarian information selection systems



• text/figures of research results — GFDL

- text/figures of research results GFDL
- software aim is to have fully GPL package prepared with *autotools, GSL, plotutils, ...*

- text/figures of research results GFDL
- software aim is to have fully *GPL* package prepared with *autotools*, *GSL*, *plotutils*, ...
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

- text/figures of research results GFDL
- software aim is to have fully GPL package prepared with *autotools, GSL, plotutils, ...*
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $\mbox{LargeX \documentclass{prosper}}$ 



- text/figures of research results GFDL\_
- software aim is to have fully *GPL* package prepared with *autotools*, *GSL*, *plotutils*, ...
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $LAT_EX \ \$ 



- text/figures of research results --- GFDL\_
- software aim is to have fully GPL package prepared with *autotools*, GSL, *plotutils*, ...

http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $LAT_EX \$ 

- text/figures of research results --- GFDL\_
- software aim is to have fully *GPL* package prepared with *autotools*, *GSL*, *plotutils*, ...
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $\mbox{LAT}_{E}X \ \ \$ 

- text/figures of research results --- GFDL\_
- software aim is to have fully GPL package prepared with *autotools*, GSL, *plotutils*, ...
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $\mbox{LAT}_{E}X \ \ \$ 

- text/figures of research results GFDL\_
- software aim is to have fully GPL package prepared with *autotools*, GSL, *plotutils*, ...
- http://en.wikibooks.org/wiki/Wikimani05/Paper-BO1

at the moment, this is only a plan (as yet still quite vague) for a research project — please join in if you are interested!

document prepared entirely with free software: GNU/Linux +  $\mbox{LAT}_{E}X \ \ \$