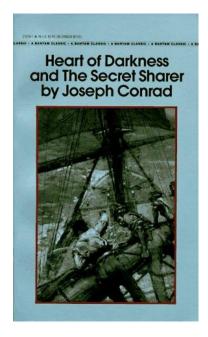


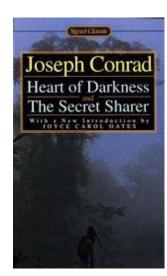


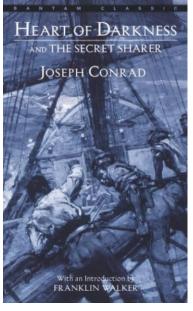


Serial Sharers

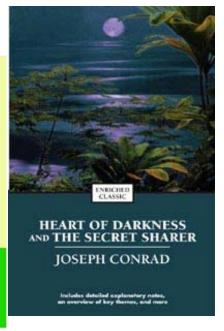
Einat Amitay, Sivan Yogev, Elad Yomtov



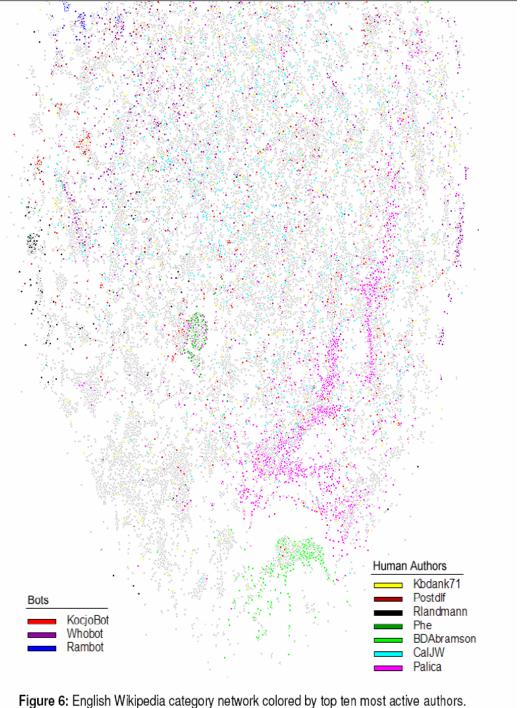




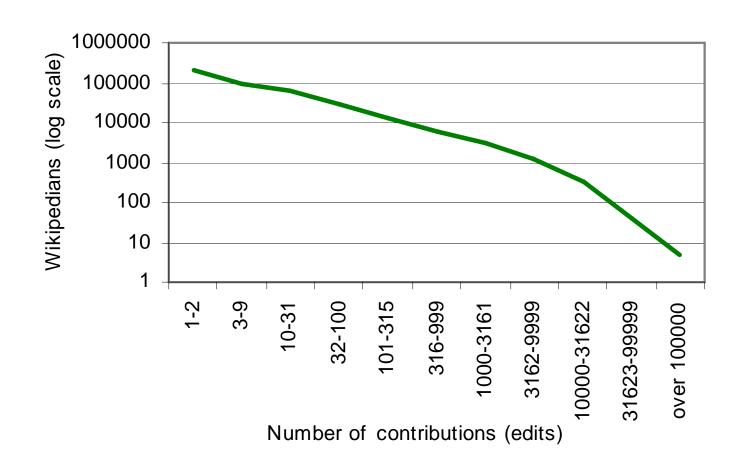




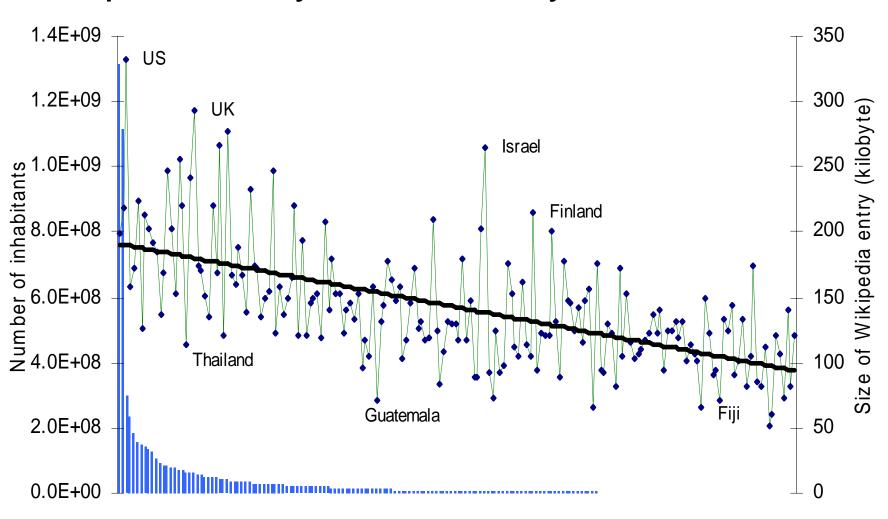
 Holloway T., Bozicevic M., Börner K. (2005). Analyzing and Visualizing the Semantic Coverage of Wikipedia and Its Authors.



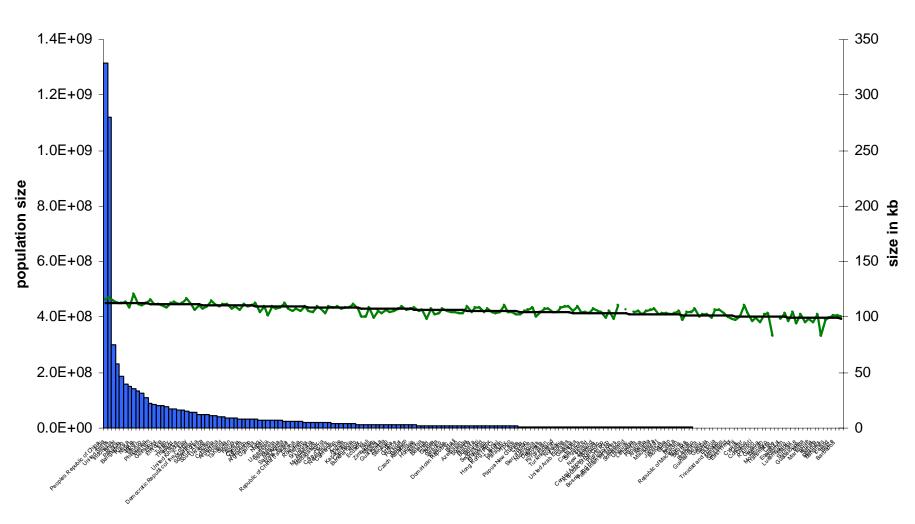
A histogram of the number of contributions per single author to the English portion of Wikipedia



A comparison of country population size and Wikipedia entry size in kilobytes



CIA Factbook by population



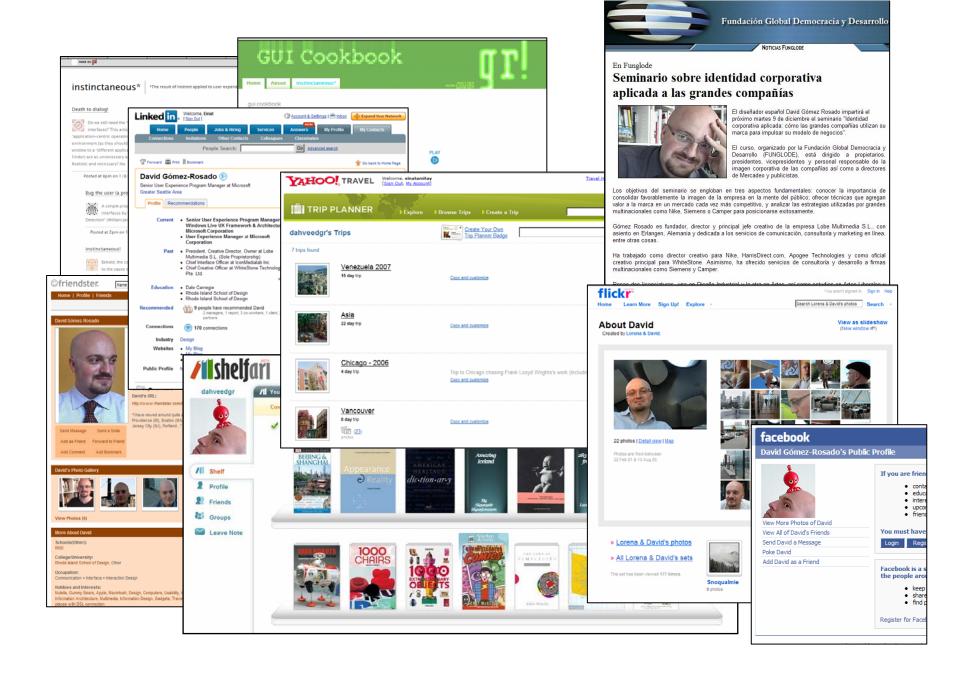
% of Web users who have done this	Activity	Survey Date
35%	Posted content to the internet	December 2005
30%	Rated a product, service or person using an online rating system	September 2005
26%	Shared something online that they created themselves, such as own artwork, photos, stories or videos	December 2005
14%	Created or worked on own webpage	December 2005
13%	Created or worked on webpages or blogs for others, including friends, social groups, or for work	December 2005
11%	Used online social or professional networking sites like <u>Friendster</u> or <u>LinkedIn</u>	September 2005
8%	Created or worked on own online journal or blog	February-April 2006

 61% of 13 to 17 year-olds in the US have a personal profile on sites such as MySpace, Friendster, or Xanga.

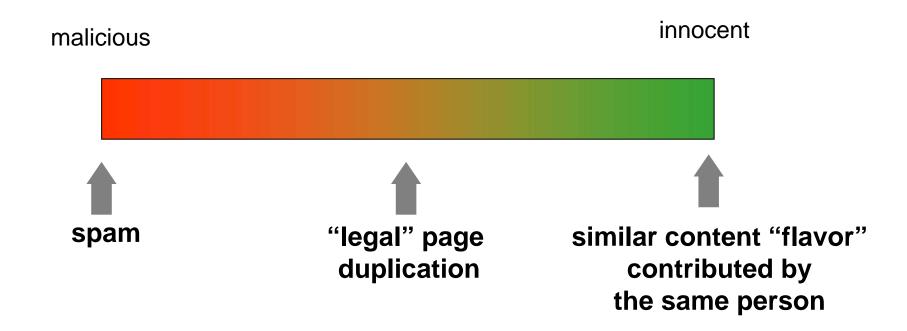
37% of them maintain a blog

 37% of American bloggers had a personal website before they started blogging

 43% of all bloggers maintain at least two blogs.



Types of information duplication



Applications of Serial Shares detection

Profiling

- Personalization for creating site or personal defaults
 (e.g. layout, color choice, dictionaries, links, etc.)
- Personalized advertising based on cross-page content and/or readership
- Expertise location based on link analysis, shared content, readership, etc.
- Generating use patterns of the "typical" author in a given site (e.g. a typical author of blogger maintains another blog on typad and has 10 tagged links on del.icio.us)

Applications of Serial Shares detection

Noise reduction

- Site collapse by author for search results
- "more from this author" button
- Contributing to "Net Neutrality"
- Treating same-author pages as single entity to reflect clickthrough, inlinks, indexing, summary, etc.

Applications of Serial Shares detection

Sizing Web sites

- Determining the true size of a site's user community (how large is MySpace?)
- Comparing the uniqueness of each site in terms of authorship (blogger vs. typad - which has more <u>truly</u> unique users?)

claim D: Mindy McAdams

Viewing 6 links

My Online Self -

As far as the online world is concerned, this is who I am.

* mindymcadams.com - verified

▶ About Me | By Me | Tagged with: personal bio biography contact links pages work

Officially, my home page.

* macloo.com - Verified

▶ About my work | By Me | Tagged with: work journalism business online teaching education resources examples

My handle online, and my primary domain for professional topics, such as online journalism.

* Teaching Online Journalism - verified

▶ About my field | By Me | Tagged with: online journalism journalism blog resources reference tips professional practice

My blog about practices in the world of online media. Updated often!

* University of Florida faculty bio page

About Me | From my employer | Tagged with: bio biography personal work

Evidence of my employment and position. (I try to teach students how to verify that people are who they say they are.)

* My Flickr

Visual evidence | By Me | Tagged with: photos photographs photography travel

I get to travel a lot, and you can see some documentation of where I've been.

* My del.icio.us

▶ What interests me | By Me | Tagged with: reference resources tutorials examples

The links I have not blogged about, but I expect I might



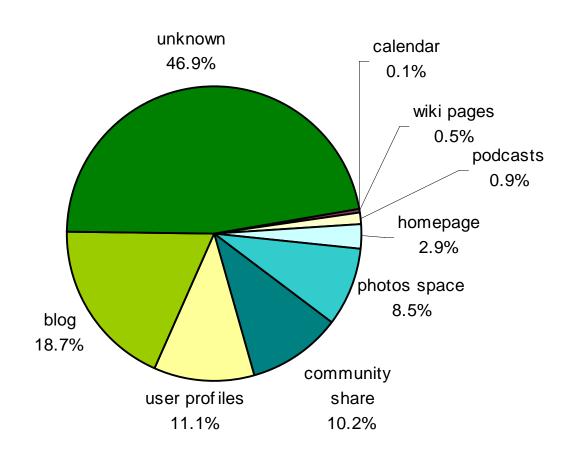
Mindy McAdams Florida, USA

In 1994 the Web took off, and soon all the world knew about the Internet. Journalism has been adapting, slowly but continuously, to the possibilities and demands of online, digital media. This is my field. This is where I work.



Mindy McAdams

9834 pages coming from 2201 different authors

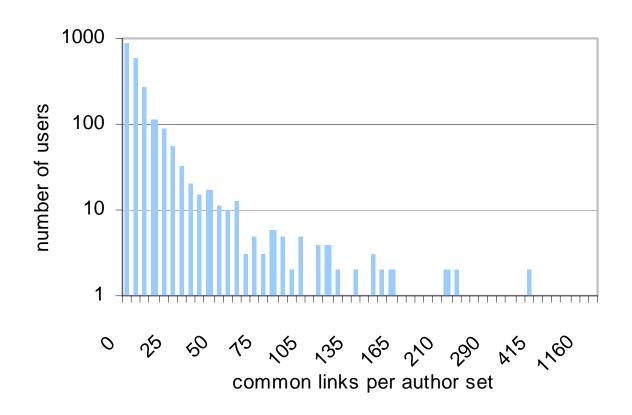


Common Authorship Characteristics

- same username
- share themes
- shared content terms
- relative URL path
- linking patterns
- page layout
- color scheme
- image filenames
- coding style

60% of authors reproduced links more than once in two different pages

The most prolific author had 1283 links appearing repeatedly



- links are not awfully useful
- maintaining a comparison list for each term – not practical
- combining any of the features is a hard task.
- authorship is an illusive thing!

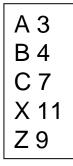
Cilibrasi R., Vitanyi P.M.B. (2005). Clustering by compression. IEEE Transactions on Information Theory, 51(4):1523-1545.

Detection by Compression

$$2NCD(x,y) = \frac{[C(xy) - C(x)] \cdot [C(xy) - C(y)]}{C(x) \cdot C(y)}$$

2NCD measures separately how much the compression of **each** of the documents is improved by using the information included in the other document.

Detection by Compression

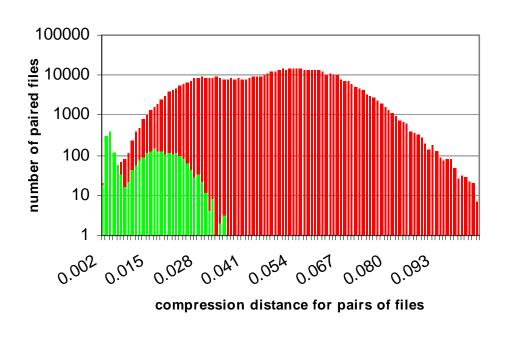


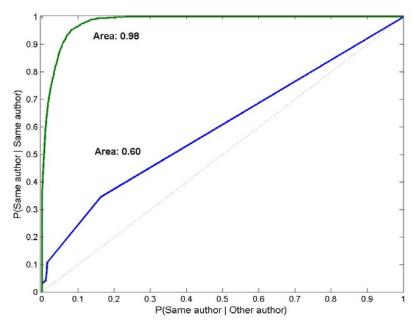


A 5 B 5 C 7 X 13 Z 9

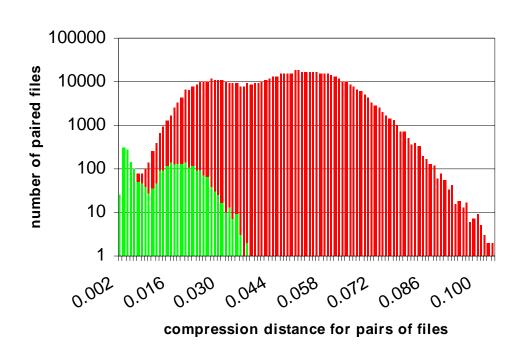
2NCD measures separately how much the compression of **each** of the documents is improved by using the information included in the other document.

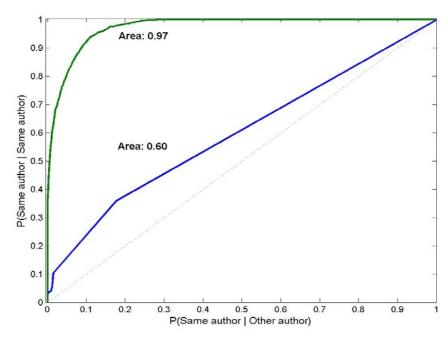
Experiment 1



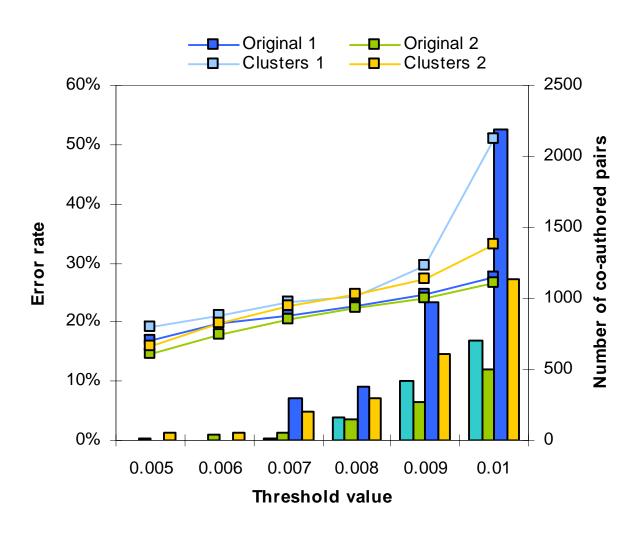


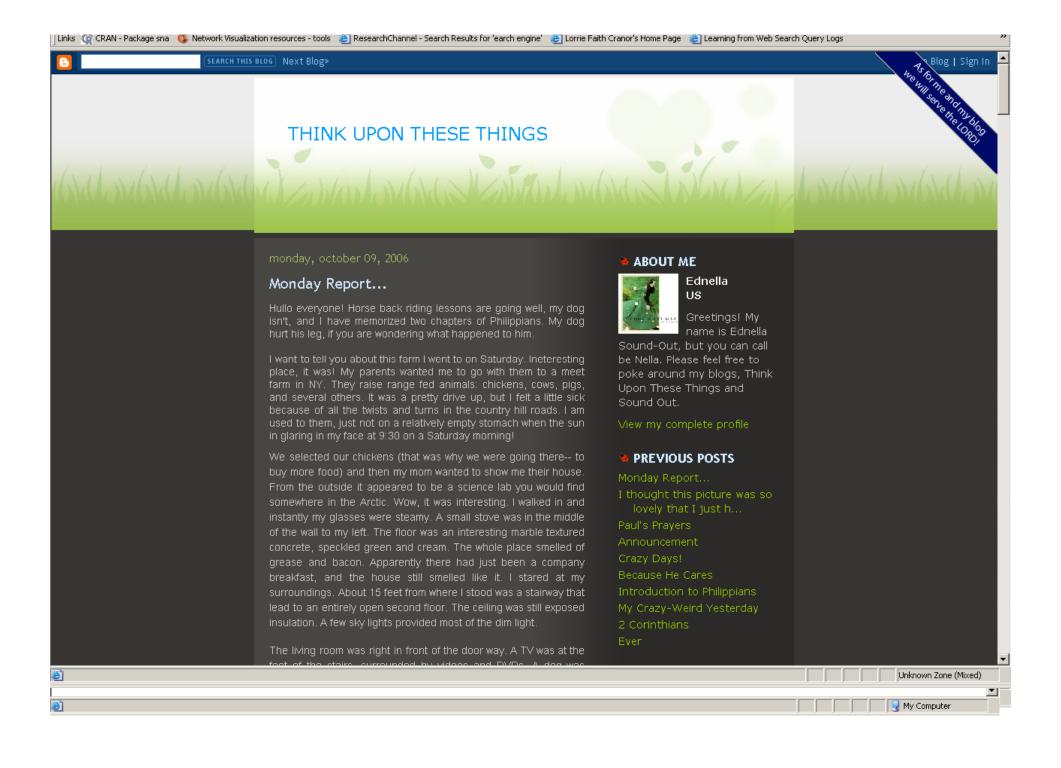
Experiment 2





Clustering





a, c, d, f blogs; b, e, h profiles; g unknown













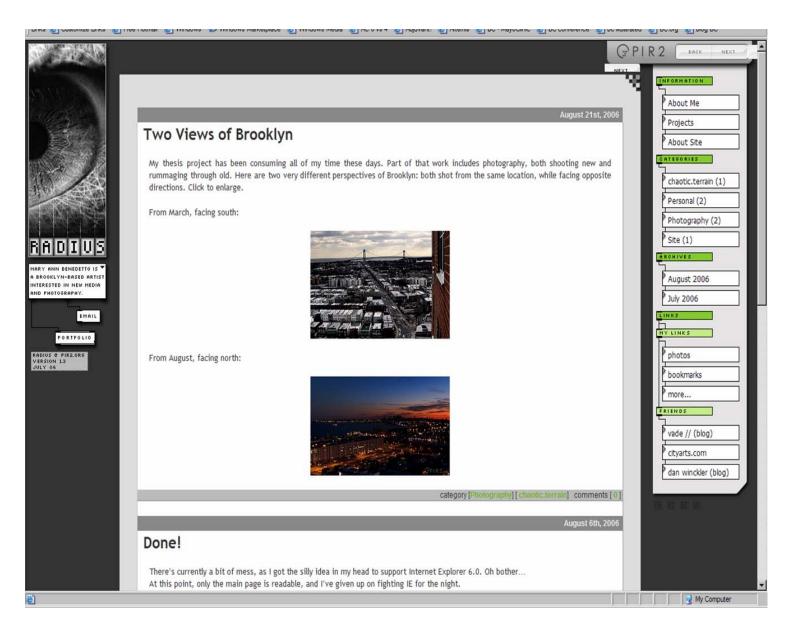




0.005 0.0033 0.0036 С 0.0048 0.0051 0.0038 0.0065 0.0041 0.0044 0.0041 0.0051 0.0036 0.0036 0.0038 g 0.0036 0.0033 0.0036

а 0.005 0.0048 0.0051 0.0065 0.0051 0.0028 0.0028 0.0041 0.0036 0.0036 0.0036 0.003 0.0033 0.0044 0.0036 0.0041 0.0036 0.0041 0.0041 0.0041 0.0041 0.0036 0.0036 0.0041 0.0036 0.0036

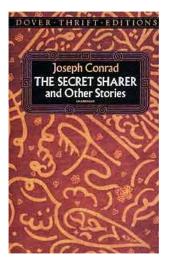




falsely paired document with g (0.016), d (0.018), f (0.018), and h (0.018). **(pay attention to color choice and layout!)**









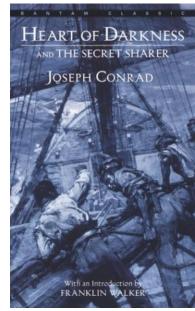


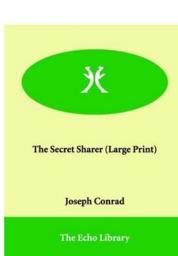
Heart of Darkness and The Secret Sharer by Joseph Conrad

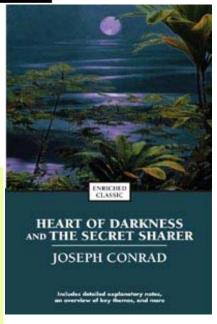


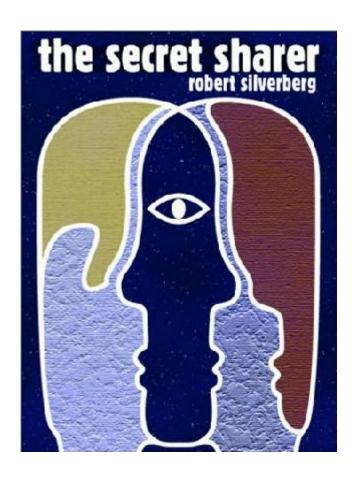




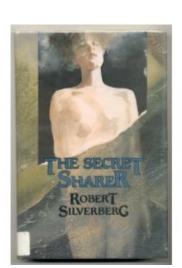


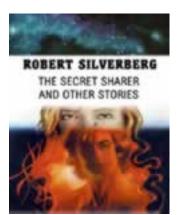












The last slide

