Sources

Online supplement for
http://seedmagazine.com
http://psych.nyu.edu/pelli/docs/authorship%2Dsources.pdf

Denis G. Pelli
Professor of Psychology and Neural Science
New York University
http://psych.nyu.edu/pelli/

Charles Bigelow
Carey Distinguished Professor of Graphic Arts
Rochester Institute of Technology
http://en.wikipedia.org/wiki/Charles_Bigelow_%28type_designer%29

2 PM October 19, 2009

Acknowledgements

We thank Diana Balmori, Chris Bregler, Jeremy Freeman, Peter Gollwitzer, Judy Graham (put what’s most important first), Kris Holmes, Elizabeth James, Gideon Lichfield (be more specific about what’s coming), Margaret Ling, Mariana Ling, Meredith Leich (increase weight of lines in by-century section of graph), Bradford Paley (gray background in by-century section of graph), Cesar Pelli, Rafael Pelli (add “By century” and “By year” labels), David Pankow (history), Jamie Radner (explaining the graph; Athenians), Jay Rosen, Sarah Rosen, Barbara Selvin (specify impact on the individual; don’t show new media by century), Helen Shenton, and Kate Walbert (Jane Austen?) for helpful comments on earlier drafts. Paul Shaw recommended sources on book publishing. Azra Raza and Abbas Raza explained to us the importance of speed. Peter Gollwitzer and John Jost pointed us to social psychology papers on belonging. Nathaniel Blanco helped find the modern book-production statistics. Yvette Granata found a blog about author spotting (now cut). Elizabeth Segal edited for grammar and style. Patricia Theiler edited to help us achieve an op-ed style. Supported by NIH Grant EY04432 to Denis Pelli.

Many have noted the new ease of publishing, but only a few people have tried to imagine the effect of universal publishing, especially:
http://www.rebeccablood.net/essays/weblog_history.html
http://journalism.nyu.edu/pubzone/weblogs/presthink/2006/06/27/ppl_frmr.html
SOURCES FOR THE GRAPH

The large (pop-up) graph plots authors per year over time. The small (in-line) graph replaces the data curves by linear regression lines. Linear regression of log(authors) vs. year indicates that a tenfold increase in authorship takes 1.31 years for books, 1.4 years for blogs, 2.0 years for Facebook, and 1.1 year for Twitter. The regression equations and coefficients are:

<table>
<thead>
<tr>
<th>Authors per year</th>
<th>Interval</th>
<th>Regression equation</th>
<th>Coeff.</th>
</tr>
</thead>
<tbody>
<tr>
<td>book authors</td>
<td>1425-2009</td>
<td>log(authors) = 0.0077 (year - 1263.0)</td>
<td>R=0.961</td>
</tr>
<tr>
<td>blog authors</td>
<td>April 1997 to August 2008</td>
<td>log(authors) = 0.6989 (year - 1998.2)</td>
<td>R=0.980</td>
</tr>
<tr>
<td>Facebook authors</td>
<td>December 2004 to July 2009</td>
<td>log(authors) = 0.5110 (year - 1995.3)</td>
<td>R=0.995</td>
</tr>
<tr>
<td>Twitter authors</td>
<td>January 2007 to June 2009</td>
<td>log(authors) = 0.9422 (year - 2002.6)</td>
<td>R=0.981</td>
</tr>
</tbody>
</table>

Each regression includes all the plotted points for a medium. The average slope for the new-media authors is 0.72 decade/year which is nearly 100 times bigger than the 0.0077 slope for book authors. A linear regression finds the best fitting straight line, minimizing the mean squared error. A straight line in the logarithmic-vs-linear coordinates, log(authors)=a(year-b), is an exponential function, authors=10^{a(y-b)}. The plotted extrapolation of the Twitter-author curve, in the small and big versions of the graph, is the regression line specified above.

Newspaper authors—editors and reporters—are not plotted in our graph, but they are few in number. In the US, there are only 46,700 reporters, compared to the 275,000 book authors published in 2008. Source:
American Society of Newspaper Editors
http://204.8.120.192/index.cfm?id=7323
http://asne.org/
275,000 book titles were published in the US in 2008, which is the most recent full year.
http://www.bowker.com/index.php/media%2Dmentions

The world’s largest medium, QQ, in China, with 340 million users, is not plotted, for lack of data. Source:
Slide 17 in
http://www.slideshare.net/web2asia/web2asia%2Donline%2Dsocial%2Dnetworks%2Din%2Dchina%2Dpresentation

The remaining sections, medium by medium, explain our estimates of authors per year. We specify the assumptions and sources for the estimates of authors per year plotted in our graph (by century and by year). The two sections of the graph show the same data with different horizontal scales. The graph plots the number of authors published in each year in a medium, worldwide. We have estimated authors per year based on a variety of published data supplemented by linking assumptions. Here we specify the sources, assumptions, and reasoning used to estimate the number of authors per year, which we plot.

Book authors per year

Each interval is plotted as a point. The plotted graph consists of points (estimates) connected by lines. Before 1999, the estimates are for time intervals of various lengths, up to a century, and we plot each estimate at the middle of its time interval. Thus, the first estimate, 13 authors per year, plotted at 1425, is for the interval, 1400-1450. That’s our first point, representing book authors per year for handwritten books.

Before 1800, for long intervals (50 to 100 years) we estimate roughly one author per 4,000 books (book copies, not titles or editions). Source:


Since we say publishing requires at least 100 instances, the number of (published) authors of manuscript books may be small.

Source:

After 1800, for a one-year interval, we estimate roughly one unique author for each unique book title. For the purpose of estimating number of authors, we assume that every book (unique title) has exactly one unique author that year, so the number of authors equals the number of books (new titles) that year. This assumption tends to overestimate authors who publish more than one book in a year and tends to underestimate the multiple authors of a single book. Altogether, it seems to us that the resulting estimate for authors in that year is unlikely to be wrong by more than a factor of 2, which is a very small part (5%) of the million-range plotted in the graph.

How we figure the number of authors from the number of copies of books printed from 1454-1800.

10 titles (editions) per author during 1454 to 1501
“Incunabula” means books printed between 1454 and 1501. The Incunabula Short Title Catalogue (ISTC) lists some 30,000 titles (editions) by approximately 3,000 authors. Hence, a ratio of one author per every ten titles. Many of these authors were classical or medieval writers whose works were avidly read in the 15th century.

12 (or 18) million printed copies during 1454 to 1501
This depends on the estimate of the average print run/edition size. For the incunabular period (1454 to 1501), Buringh & Zanden (2009) estimate 12,500,000 copies of books, but, assuming a higher average print run per edition and a greater number of editions, Febvre & Martin (p. 262) estimate 15,000,000 to 20,000,000, which we summarize as roughly 18 million.

4,000 (or 6,000) copies per author
We divide the estimated total number of copies for the period by the estimated number of authors from ISTC.

(12,000,000 or 18,000,000)/3000 = 4000 or 6000. Febvre & Martin seem generous in their estimates of editions (35K instead of the 30K in the /STC) and size of editions (600 copies/edition), so we follow the lower estimates of Buringh & Zanden, and say that, for 1454-1501, there were roughly 4,000 copies per author.

In the 16th century, the average size of an edition increased threefold compared to the incunabular period, to more than 1,000 copies, but remained somewhere between 1,500 and 2,000 copies into the 18th century, according to Febvre & Martin (p. 216-220). Also, the editions per author ratio appears to have dropped in the 16th century, probably because more living authors were publishing. “A Guide to Italian Books before 1601” lists around 3,000 titles by around 1,000 authors, for a title per author ratio of 3, which is less than one third the ratio in the ISTC.

http://library.nyu.edu/literature/italian/Italian_Books_Before_1601.pdf

Assuming that the average size of an edition grew threefold (from 400-500 to 1,200-1,500), while the editions per author shrank threefold, these changes cancel each other out, and we still have 4,000 copies per author.

Different samples and different assumptions could easily alter this ratio. We assume one author per edition, but in the case of some popular authors, many different editions of the same work were published by different printers. For example, ISTC lists 26 editions of Aristotle’s Nichomachean Ethics and more than 150 editions of Aesop’s Fables.
85 authors per year during 1454 to 1501
12 million copies divided by 4 thousand copies per author yields 3 thousand authors. Dividing by the 47-year length of the interval yields 85 authors per year.

Scribal books 1400-1500

<table>
<thead>
<tr>
<th>Year</th>
<th>Begin</th>
<th>End</th>
<th>Book copies in interval</th>
<th>Book copies per year</th>
<th>Book authors per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1425</td>
<td>1400</td>
<td>1450</td>
<td>2,500,000</td>
<td>50,000</td>
<td>13</td>
</tr>
</tbody>
</table>

Manuscript book production totaled 5 million book copies between 1400 and 1500. We estimate manuscript book production from 1400 to 1450 at half that, since manuscript production increased in the first half of the 15th century but may have been flat or declined in the second half because of competition from printing.

Source:

Printed books 1454-1800

<table>
<thead>
<tr>
<th>Year</th>
<th>Begin</th>
<th>End</th>
<th>Book copies in interval</th>
<th>Book copies per year</th>
<th>Book authors per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1478</td>
<td>1454</td>
<td>1501</td>
<td>12,589,000</td>
<td>267,851</td>
<td>67</td>
</tr>
<tr>
<td>1526</td>
<td>1501</td>
<td>1551</td>
<td>79,017,000</td>
<td>1,580,340</td>
<td>395</td>
</tr>
<tr>
<td>1576</td>
<td>1551</td>
<td>1601</td>
<td>138,427,000</td>
<td>2,768,540</td>
<td>692</td>
</tr>
<tr>
<td>1626</td>
<td>1601</td>
<td>1651</td>
<td>200,906,000</td>
<td>4,018,120</td>
<td>1,005</td>
</tr>
<tr>
<td>1676</td>
<td>1651</td>
<td>1701</td>
<td>331,035,000</td>
<td>6,620,700</td>
<td>1,655</td>
</tr>
<tr>
<td>1726</td>
<td>1701</td>
<td>1751</td>
<td>355,073,000</td>
<td>7,101,460</td>
<td>1,775</td>
</tr>
<tr>
<td>1776</td>
<td>1751</td>
<td>1800</td>
<td>628,801,000</td>
<td>12,832,673</td>
<td>3,208</td>
</tr>
</tbody>
</table>

Source:

Also see:

For the century 1501-1601, Buringh & Zanden estimate 217 million book copies, whereas Febvre & Martin estimate slightly fewer, 150 to 200 million.


## Printed books 1800-1910

<table>
<thead>
<tr>
<th>Year</th>
<th>English-speaking country books</th>
<th>Estimate of world books</th>
</tr>
</thead>
<tbody>
<tr>
<td>1800</td>
<td>5,236</td>
<td>15,708</td>
</tr>
<tr>
<td>1810</td>
<td>6,735</td>
<td>20,205</td>
</tr>
<tr>
<td>1830</td>
<td>12,795</td>
<td>38,385</td>
</tr>
<tr>
<td>1850</td>
<td>20,551</td>
<td>61,653</td>
</tr>
<tr>
<td>1870</td>
<td>21,543</td>
<td>64,629</td>
</tr>
<tr>
<td>1890</td>
<td>14,361</td>
<td>43,083</td>
</tr>
<tr>
<td>1910</td>
<td>18,347</td>
<td>55,041</td>
</tr>
</tbody>
</table>

*Source:* The English-speaking-countries book title counts are from NSTC. “It covers virtually all printed materials published in the U.S. and the British Empire from 1801 to 1919.” We searched the NSTC database for all books (titles) published in each year, and used the returned count as English-language books per year. We did not succeed in finding any global estimates (i.e. including the non-English-speaking countries) for the nineteenth century. (We paid the New York Public Library $140 to help us, but they too failed to find any global book title production figures in the nineteenth century.) The world estimate is triple the English-speaking-countries value, assuming (see below) that English-language book titles are 33% of world book titles.


http://www.encyclopedia.com/doc/1G1-88685129.html
http://nstc.chadwyck.com/marketing/about.jsp
http://ezproxy.library.nyu.edu:9643/gotoSearchCollections.do?initialise=nstc

### English-speaking-country books as a fraction of world books
- **33%** in 2005. For latest available dates (1991-2008) mostly near to 2005, there were about 400,000 English-speaking-country books (UK, US, Canada, Australia, India) and about 1.2 million world books. English-speaking / world = 400,000 / 1,200,000 = 33%.

- **40%** in 2004.

*Source:* “The good news is that [in 2004] English language publishers, powered by the prolific U.S. publishing industry, produced 40% of all new book content in the world.”

- **24%** in 1999. Roughly 1,000,000 books produced worldwide in 1999. English-language (UK + US + Canada + Australia + New Zealand + part of India) is 111 + 88 + 23 + 7 + 5 + 5 = 239,000. English / world = 24%


Note that, for 1999, worldmapper reports 65,000 US book titles, whereas Bowker reports 119,000. We suppose that undercounting (by worldmapper) is much more likely than overcounting (by Bowker).

- **15%** in 1959. (Titles published: world 334,000, US 14,876, UK 20,690, Australia 580, Canada 2,542, India 11,979, Ireland 281.) The UNESCO figures for Anglo-American publishing are consistently about half the R.R. Bowker figures for the same or similar years. We don't know why. Perhaps they use different definitions of what a “book” is. We ignore this 15% estimate as an outlier.

- **30%** in 1750 - 1800. English-speaking-country books (UK+US) are 30% of world books for the interval 1750 to 1800. In this interval, the rest of the English-speaking countries (India, Canada, Australia, etc.) each published a negligible number of book titles, less than 1% of what UK +US published. We
use the total of this table as our estimate of world books. This slightly underestimate the true value since many countries are omitted.

<table>
<thead>
<tr>
<th>Titles per year per million</th>
<th>Population (million)</th>
<th>Titles per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>100.0</td>
<td>22.0</td>
</tr>
<tr>
<td>UK</td>
<td>198.0</td>
<td>10.5</td>
</tr>
<tr>
<td>Italy</td>
<td>90.0</td>
<td>13.0</td>
</tr>
<tr>
<td>Netherlands</td>
<td>538.0</td>
<td>2.0</td>
</tr>
<tr>
<td>China</td>
<td>3.0</td>
<td>300.0</td>
</tr>
<tr>
<td>US</td>
<td>141.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>219.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Spain</td>
<td>30.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Japan</td>
<td>7.0</td>
<td>25.0</td>
</tr>
<tr>
<td>Russia</td>
<td>3.0</td>
<td>37.0</td>
</tr>
<tr>
<td>Belgium</td>
<td>35.0</td>
<td>1.0</td>
</tr>
<tr>
<td>India</td>
<td>0.1</td>
<td>260.0</td>
</tr>
<tr>
<td>Total</td>
<td>688.1</td>
<td></td>
</tr>
</tbody>
</table>


Population estimates (mostly for 1795-1801) are drawn from various sources. We tried to find at least two estimates from different sources. In most cases there was agreement within 20%.

**Printed books 1955, 1959, 1995**
The number of book titles produced in the world was 270,000 in 1955, 334,000 in 1959, and 770,000 in 1995.

Source:
“According to UNESCO, the total number of book titles published worldwide in 1955 was around 270,000; by 1995, the total had risen to around 770,000, an increase of nearly threefold over this forty-year period.”
[http://books.google.com/books?id=zPt7g_cTwoeC6pg=PA47&lpg=PA47&dq=%22book+titles+published%22](http://books.google.com/books?id=zPt7g_cTwoeC6pg=PA47&lpg=PA47&dq=%22book+titles+published%22)


**Printed books 1999**
In 1999 a million (1,039,649) new book titles were published, worldwide.

Source:

**Printed books 2007-2008**

<table>
<thead>
<tr>
<th>Year</th>
<th>US books per year</th>
<th>World books per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>284,370</td>
<td>1,953,091</td>
</tr>
<tr>
<td>2008</td>
<td>275,232</td>
<td>1,890,330</td>
</tr>
</tbody>
</table>

In 2004, US books per year was 52% of English-language books, which was 40% of worldwide books.

Blog authors per year

In his latest report on “The state of the blogosphere”, August 2008, David Sifry, founder and Chairman of Technorati, reports that Technorati is tracking 133 million blogs, world wide. (Spam blogs are filtered out, and not counted.) Of the tracked blogs, 7.4 million (6%) are classified as “active” by virtue of having posted in the last 120 days. As a sample of the active blogs, they examined those that posted in June 2008. Based on this sample, half (51%) of active blogs have 1000 or more unique visitors per month. (They don’t provide statistics for fewer visitors, e.g. 100.) Also, about half (45%) of active blogs were linked to in the last six months. On this basis, we estimate that half the active blogs, 0.5x6%=3% of all blogs, are publishing, in the sense of providing new content that year to 100 or more people. The Technorati blog count is an underestimate because it omits blogs that haven’t registered with them, but independent estimates of the whole population are not much higher; Technorati is tracking 133 million blogs (in August 2008) and Universal McCann estimates (for March 2008) that 184 million people, world wide, have started a blog.

Source:
http://technorati.com/blogging/state%2Dof%2Dblogosphere/
http://www.sifry.com/stateoftheliveweb/
The 2004-2007 data are summarized here:
http://techliberation.com/2008/05/06/need%2Dhelp%2Dhow%2Dmany%2Dblogs%2 Dare%2Dthere%2Dout%2Dthere/

We assume that, in each year, each published blog publishes one unique author. In fact, it is common for a single author to contribute to several blogs, and for a single blog to publish several authors. However, while we lack data on this point, it is our impression that these two effects might roughly cancel each other out. Imagine a group of friends, each of whom owns a blog. Suppose the group is homogeneous in that they are all published or not, by virtue of the number of unique visitors to their own blog. In that case, posting on each other’s blogs will not affect the number of unique authors. Because we assumed homogeneity within the group, after cross-posting, unpublished bloggers will remain unpublished and published authors will remain published.

The first weblog appeared in April 1997.
Source:
Dave Winer, 2007, tenth anniversary of his weblog.
http://www.scripting.com/2007/04/01.html

We estimate that there were 23 blogs in January 1999, 300 blogs in July 1999, and 3,000 blogs in September 2000.
Source:
“Jesse’s ‘page of only weblogs’ lists the 23 known to be in existence at the beginning of 1999.”
“This rapid growth continued steadily until July 1999 ..., and suddenly there were hundreds.”
“In September of 2000 there are thousands of weblogs ...”
Rebecca Blood, September 2000
http://www.rebeccablood.net/essays/weblog_history.html

There were 20,000 blogs in February 2001.
Source:
“Starting in December 1999, Winer offered a free blog hosting service at EditThisPage.com, and claimed to be hosting ‘approximately 20,000 sites’ in February 2001. “
http://en.wikipedia.org/wiki/Dave_Winer
Twitter authors per year

We say 6% of users have 100+ followers, and 0.7% have 1,000+ followers.

Source:
“93.6% of Twitter users have less than 100 followers,”
Thus, 6.4% of accounts have 100 or more followers, based on this June 2009 sysomos report.
“0.68% have more than 1,000 followers.”

Number of Twitter users

Source:
February 2007 to April 2009, relative to total in May 2009
http://sysomos.com/insidetwitter/appendix/#growthtable
37 million world twitter users (unique visitors) in May 2009
http://www.techcrunch.com/2009/08/03/twitter%2Dreaches%2D445%2Dmillion%2Dpeople%2Dworldwide%2Din%2Djune%2Dcomscore/

MySpace and Facebook authors per year

We assume that 6.4% of users (unique visitors) have 100 or more friends (i.e. have “published”). This comes from taking the value for Twitter, under the assumption that the distribution of number of friends (or followers) is similar on MySpace, Facebook, and Twitter. This assumption, in turn, rests on the observation that users of all three media have a similar average number of followers or friends.

Source:
“on average, each [Twitter] user has 126 followers”
Evan Weaver, Lead Engineer in the Services Team at Twitter
“Average [Facebook] user has 120 friends on the site.”
“What is the average number of friends on MySpace? ... between 50 & 250.”
http://answers.yahoo.com/question/index?qid=20080804121350AAAL0SO

Number of MySpace users

Source:
Jan, 2004, launched
http://www.web strategist.com/blog/2008/01/09/social%2Dnetwork%2Dstats%2DFacebook%2DMySpace%2DReunion%2DJan%2D2008/
May, 2004, 2 million
http://www.highbeam.com/doc/1G1%2D1171109582.html
Sept, 2004, 4 million
http://www.highbeam.com/doc/1G1%2D1171109582.html
Nov, 2004, 4.9 million
March, 2005, 11 million
http://www.highbeam.com/doc/1G1%2D130360134.html
April, 2005, 12 million
http://www.businessweek.com/technology/content/apr2005/tc2005045_8067_tc206.htm
June, 2005, 19 million
http://www.highbeam.com/doc/1G1%2D133563045.html
July, 2005, 22 million
http://www.businessweek.com/technology/content/jul2005/tc20050719_5427_tc119.htm
August, 2005, 23 million
http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2005/08/18/DDGMD8QAT1.DTL
Sept, 2005, 28 million
http://www.theinquirer.net/default.aspx?article=26027
Oct, 2005, 33 million
http://www.sfgate.com/cgi%2Dbin/article.cgi?f=/c/a/2005/10/23/MNGAQFCQJ01.DTL&amp;feed=rss-news
Number of Facebook users

Source:
Facebook active users, December 2004 to July 2009
Facebook: 41.0 million, MySpace 75.1 million in August 2008
http://technorati.com/blogging/state%2Dof%2Dthe%2Dblogosphere/
307.1 million Facebook and 126.9 million MySpace users worldwide in April 2009
http://www.latimes.com/business/la%2Dfj%2Dfacebook16%2D2009jun16%2D0,2582307.story
http://en.wikipedia.org/wiki/Facebook
http://www.time.com/time/business/article/0,8599,1644040,00.html
Facebook and MySpace, world wide, December 2007 to December 2008
http://www.techcrunch.com/2009/01/22/facebook%2Ddoubles%2Dsize%2Dof%2Dmyspace%2Dworldwide/
US figures, not used, December 2007 to December 2008
http://www.techcrunch.com/2009/01/17/social%2Dnetworking%2Dwii%2Dfacebook%2Ddoubles%2Dsize%2Dof%2Dmyspace%2Dworldwide/
Right now, in 2009, the publishing industry is devastated by the immediate effects of the new digital technology, losing classified ads to Craigslist and display ads to Google. However, this painful and disruptive transition will pass. The hugely increased authorship is here to stay, and still growing exponentially, nearly tenfold per year.

We say, “Before 1455, books were handwritten, and it took a scribe a year to produce a Bible.”
Source:
took a scribe a year to produce a Bible.
A Bible contains about 780,000 words, more than most single-volume works.

M. B. Parkes cites several instances of a scribe copying books at a rate of roughly one volume a year.

Scribes may have been able to achieve greater rates of production. On the claim of Vespasiano da Bisticci, a Renaissance publisher and dealer in manuscripts, that 45 scribes produced 200 volumes in 22 months, B. L. Ullman remarks that the scribes “might well have copied a thousand manuscripts” in the same period.

As far as we know, “This is the first published graph of the history of authorship.”
Source:
It’s hard to be sure that something doesn’t exist. Our claim is based on our extensive search for data on book production, which is the best way we can think of to estimate authorship.

We say, “In July, a popular coach complained on Twitter of rude service at her favorite pizza spot and the employee responsible was fired the next day.”
Source:
http://www.thestate.com/usc/story/871489.html

We say, “And businesses are using a new service, Spokeo, that screens customers on the basis of their new-media usage, to avoid dealing with ‘nutcases,’ like you, who don’t use any.”
Source:
http://www.openforum.com/idea%2Dhub/topics/the%2Dworld/article/how%2Dto%2Dfigure%2Dout%2Dif%2Dyoure%2Ddealing%2Dwith%2Dany%2Dnutcase%2Dguy%2Dkawasaki

We mention the “United breaks guitars” video.
Source:
http://www.boingboing.net/2009/07/08/united%2Dbreaks%2Dguitar.html
http://technmarketing.com/marketing/the%2Dpower%2Dof%2Dsocial%2Dmedia%2Dunited%2Dbreaks%2Dguitars/

We mention “social conscience”.
Source:

We say, “The judgment of the vice-chancellor of Buckingham University was widely questioned after he claimed that ‘curvy’ female students are a ‘perk’ of his job.”
Source:
http://www.themshighereducation.co.uk/story.asp/storycode=408135
http://www.guardian.co.uk/education/mortarboard/2009/sep/23/kealey%2Dfemale%2Dstudents%2Dperk
http://news.bbc.co.uk/2/hi/uk_news/education/8270475.stm
http://www.themshighereducation.co.uk/story.asp/storycode=408135
We say, “Reaching 100 people may seem inconsequential, but new-media messages are often re-broadcast by recipients, and their recipients, and so on.”
Source: If more than 1% of your 100 followers re-broadcast your message then the number of people receiving it will grow exponentially without limit as long as your followers and their followers, etc., have a similar number of followers and tendency to re-broadcast.

We say, “Increasing the stringency of the criterion for ‘publishing’ from 100 to 1000 readers would reduce new media ‘authorship’ tenfold, which merely delays everything by a year.”
Source: We call a text ‘published’ when it is read by 100 or more people, but increasing that to 1,000 only mildly affects what follows. Some 2 million Twitter users, 6% of all Twitter users, have 100 or more followers; 0.7% have 1000+ followers. If authorship continues to grow tenfold per year, the tenfold reduction from 6% to 0.7 % merely delays the predicted outcomes by a year. See “Twitter authors” below.

We say, “International concern for the minority who can’t read may soon extend to those who can’t publish.”
Source: The 1948 UN Universal declaration of human rights implies a universal right to publish, like the right to education. During the second phase of the industrial revolution, Britain’s 1870 Education Act mandated universal education.
http://en.wikipedia.org/wiki/Elementary_Education_Act_1870
Article 19. Everyone has the right to … impart information and ideas through any media and regardless of frontiers. Article 26. Everyone has the right to education. Article 27. Everyone has the right to freely participate in the cultural life of the community...
Here’s an example of appealing to these principles in Namibia: “Significantly, as the Editors’ Forum of Namibia (EFN) noted, ‘it is not the first time politicians have called for an end to the publication of the cell-phone generated SMSes.’ EFN went on to defend ‘the rights of citizens to approach print or electronic news media to offer their opinions on current affairs, matters of state politics and other issues of public debate in the form of letters to the editor, SMS or by direct participation in interactive programmes.’”
http://
Less directly, one might interpret Finland’s guarantee of effective internet access to reflect a concern for access to new media.
http://www.techcrunch.com/2009/10/14/applause-for-finlands-first-country-to-make-broadband-access-a-legal-right/
http://www.guardian.co.uk/technology/2009/oct/14/finland%2Dbroadband
We say, “all Athenian citizens were expected to know how to read”.
Source: “By 500 B.C.E., however, citizens of Athens (that is, those inhabitants who were free and male) were expected to know how to read the public notices and write their own ballots, although anecdotes show that not all could. “The History of Ideas Vol. 3. “Linguistics language and literacy; Alphabetic literacy”
http://science.jrank.org/pages/9917/Language%2DLinguistics%2DLiteracy%2DAlphabetic%2DLiteracy.html#ixzz0Mq5u37Gx
However, citizens were a small minority.
http://en.wikipedia.org/wiki/Athenian_democracy#Citizenship_in_Athens