

A Blind Taste Test of Literary Genius

Can You Tell the Difference Between Great and Bad Literature?

By Mikhail Simkin

Abstract: A test was administered offering unlabeled prose quotes from Charles Dickens and Edward Bulwer-Lytton, considered by many to be the worst writer in history of letters. The average score for over 9,000 subjects was about 50%, or random guessing. This suggests that the quality of Dickens's prose is indistinguishable from that of Bulwer-Lytton.

F. Scott Fitzgerald wrote, "Let me tell you about the very rich. They are different from you and me." On this Ernest Hemingway commented, "Yes, they have more money."

Are famous writers distinguishable in some measurable way from more obscure writers? Can you tell the difference between the prose of acknowledged great writers versus the prose of those who are considered bad writers?

I started thinking about these questions after a study that I conducted on the misprints of scientific citations, revealing that about 80% of citations are copied from the lists of references used in other papers.¹ In a majority of cases a citation is not a result of an independent evaluation of the qualities of the cited paper but merely an imitation of another citer's behavior. In this way a paper that was already cited is more likely to be cited again, and after it is cited again it is even more likely to be cited in the future. Thus some papers can become much more cited than others even when identical in merit. Mathematical modeling of the process of citation copying demonstrated that major features of the citation distribution could be explained even under assumption that all papers are created equal.²

This is similar to what the sociologist of science Robert K. Merton called the *Matthew Effect*, from Matthew 25:29: "For to everyone who has, more shall be given, and he will have an abundance; but from the one who does not have, even what he does have shall be taken away." Merton discovered that eminent scientists typically receive more credit than they deserve simply by dint of having a big name, while their junior colleagues and graduate students, who usually do most of the work, go largely unnoticed.³

This led me to wonder if highly popular writers can become such as a result of similar feedback loops. One way to check that is to see if people can appreciate the prose of a famous writer when his name is detached from it. Edward Bulwer-Lytton is considered by most literary critics to be the worst writer in history of letters. An annual wretched writing contest was even established in his honor.⁴ In contrast, Charles Dickens is one of the best writers ever. Can one tell the difference between their prose? To check this I constructed an online quiz called "Great prose or not?"⁵ It consists of a dozen representative literary passages written either by Bulwer-Lytton or Dickens. The quiz takers are instructed to choose the author of each quote. Here is a sample. Which passage was written by Dickens and which was written by Bulwer-Lytton? (The answer may be found in Table 1 below as numbers one and two.)

It was a dark night, though the full moon rose as I left the enclosed lands, and passed out upon the marshes. Beyond their dark line there was a ribbon of clear sky, hardly broad enough to hold the red large moon. In a few minutes she had ascended out of that clear

field, in among the piled mountains of cloud. There was a melancholy wind, and the marshes were very dismal. A stranger would have found them insupportable, and even to me they were so oppressive that I hesitated, half inclined to go back. But, I knew them well, and could have found my way on a far darker night, and had no excuse for returning, being there. So, having come there against my inclination, I went on against it.

It was one of those nights, half dim, half glorious, which mark the early decline of the year. Nature seemed restless and instinct with change; there were those signs in the atmosphere which leave the most experienced in doubt, whether the morning may rise in storm or sunshine. And in this particular period, the skiey influences seem to tincture the animal life with their own mysterious and wayward spirit of change. The birds desert their summer haunts; an unaccountable inquietude pervades the brute creation; even men in this unsettled season have considered themselves, more (than at others) stirred by the motion and whisperings of their genius. And every creature that flows upon the tide of the Universal Life of Things, feels upon the ruffled surface, the mighty and solemn change, which is at work within its depths.

This turns out to be a formidable task and quiz takers are often surprised to learn the correct answers. As one of my respondents wrote me: “What mindless boob would write such tripe? Dickens, one would know now.”

The distribution of the scores received by over 9,000 quiz-takers is shown in Figure 1.⁶ The average score is 5.78 or 48.2% correct.

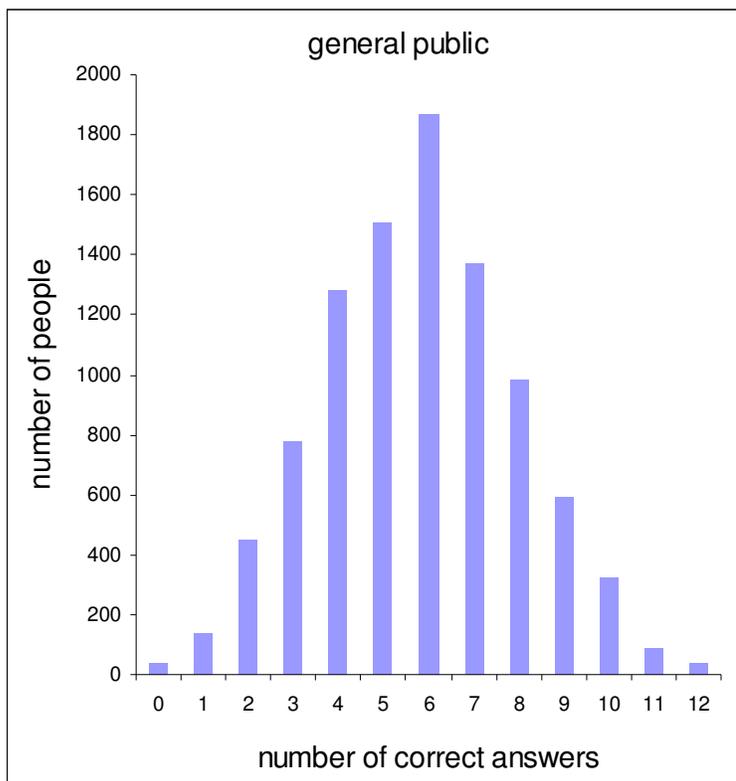


Figure 1. The histogram of the scores earned by 9,461 people on the “Great prose or not?” quiz. The average score is 5.78 or 48% correct. The standard error of this average is 0.022 or 0.19%.

Table 1. Fraction of people who attributed each quote to Dickens and to Bulwer-Lytton, along with the true author.

Question number	The real author, and the book the excerpt is taken from	Selected as Dickens	Selected as Bulwer-Lytton
1	Charles Dickens, <i>Great Expectations</i>	42.5%	57.5%
2	Edward Bulwer-Lytton, <i>Eugene Aram</i>	50.5%	49.5%
3	Charles Dickens, <i>Great Expectations</i>	54.6%	45.4%
4	Edward Bulwer-Lytton, <i>Eugene Aram</i>	49.9%	50.1%
5	Charles Dickens, <i>David Copperfield</i>	50.7%	49.3%
6	Edward Bulwer-Lytton, <i>Eugene Aram</i>	50.1%	49.9%
7	Charles Dickens, <i>Great Expectations</i>	59.9%	40.1%
8	Edward Bulwer-Lytton, <i>Paul Clifford</i>	49.6%	50.4%
9	Edward Bulwer-Lytton, <i>Eugene Aram</i>	36.5%	63.5%
10	Charles Dickens, <i>Great Expectations</i>	40.6%	59.4%
11	Charles Dickens, <i>David Copperfield</i>	40.8%	59.2%
12	Edward Bulwer-Lytton, <i>Paul Clifford</i>	74.3%	25.7%

There are two possible answers to each test question. If one is completely clueless and resorts to random guessing, he will on average get 50% of the questions right. With the average score of 48% our quiz-takers lost to randomness. On average, a quote from Bulwer-Lytton was selected as Dickens (or as great prose) by 52% of quiz-takers, while a quote from Dickens was selected as Dickens by only 48%. Does this mean that Bulwer-Lytton is a better writer than Dickens? No, but it does demonstrate the effect of fame on such evaluations. Table 1 shows for every quote the fraction of people who attributed it to Dickens. This fraction varies between the quotes with the lowest being 36% (No. 9) and the highest 74% (No. 12). Does this mean that a different selection of quotes could lead to a different average score? To test for this, I removed the most Dickensian Bulwer (No. 12) and the most Bulwerian Dickens (No. 10), and recalculate the scores based on 10 remaining questions, and still the average score came in at 51%.

An interesting thing is that out of 9,461 people, 38 got every question wrong and 37 got everything right. The approximate equality of these numbers is consistent with random guessing, but their magnitude is not. It is more than 15 times larger than what random guessing would produce. The explanation is that some people can sniff stylistic similarities between certain literary passages and attribute them to the same writer. This would help them to get a higher score, if they can determine which writer is good and which is bad, otherwise they are equally likely to get a very high or a very low score.

The performance of the quiz-takers was bad. But could this be because they don't know English literature? Fortunately, the program I used for the quiz records a taker's IP address. From it, one can infer where their computers were located. I selected a subset of scores, which were received by people coming from English-speaking universities in America, Great Britain, Australia, and New Zealand (identified by their Internet domains: edu, ac.uk, edu.au, and ac.nz). The histogram of the scores received by 602 such people is shown in Figure 2. The average score is 5.76 or 48.0% correct. The standard error of this average is 0.095 or 0.8%. Educated English-speaking folks lost to the general public, whose average score is 48.2%. The difference between the scores is, however, statistically insignificant, because it is less than the standard error.

Maybe the beauty of Dickens' prose is so far beyond the apprehensions of the vulgar that only the most cultured people can appreciate it? To check this I selected a subset of scores, earned by people coming from elite universities (Ivy League and Oxbridge). Table 2 contains the statistics of scores received by 76 of the chosen. The average score is 6 or 50% correct. The elite won over crowd by only 2%, statistically insignificant. Due to the small size of the elite sample the standard error of the average elite score is 2.6%.

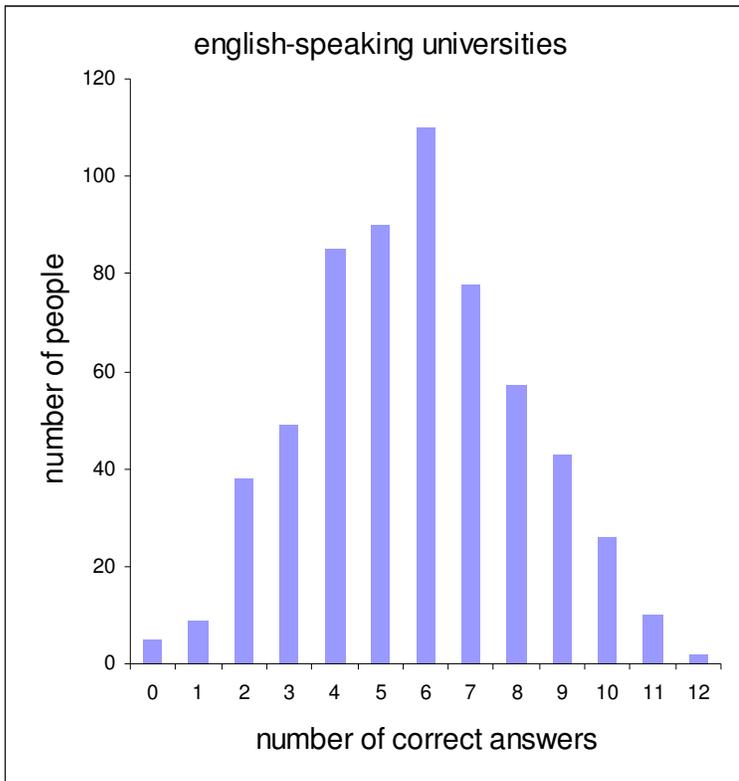


Figure 2. The histogram of the test scores earned by 602 people, coming from American, British, Australian, and New Zealandian universities. The average score is 5.76 or 48.0% correct. The standard error of this average is 0.095 or 0.8%.

Table 2. Statistics of the elite (Ivy League and Oxbridge) scores on “Dickens or Bulwer-Lytton?” quiz. The average elite score is 6 or 50% correct. The standard error of this average is 0.3 or 2.6%.

Elite School	number of respondents	minimum score	maximum score	average score
Brown University	2	3	6	4.50
Columbia University	13	2	9	5.08
Cornell University	3	4	7	6.00
Harvard University	14	1	10	5.71
Princeton University	2	3	9	6.00
University of Cambridge	16	2	9	6.13
University of Oxford	10	3	10	6.30
University of Pennsylvania	7	2	11	7.71
Yale University	9	3	11	6.56

Total	76	1	11	6.00
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These data are supported anecdotally by the feedback I received from the test takers, indicating that even educated people can't tell Dickens from Bulwer. One of the quiz-takers wrote me: "I got a 50%. My cat could do that well. The wine experts say a peek at the label is worth a thousand sips, and that seems to hold here. As a classicist I'm frequently called on to teach stuff I think is wretched, just because it's old." Some experts do not even dare to take the quiz. Professor Scott Rice, the founder of the Bulwer-Lytton bad fiction contest, wrote to me: "I haven't really taken it yet myself. Perhaps I am afraid to." Based on my data he probably should be, for the results of this test demonstrate that people cannot appreciate great prose when the name of a great writer is detached from it.

I began this paper with a question: Are famous writers distinguishable in some measurable way from more obscure writers? The answer is: *Yes, they have more readers.*

Recently I conducted a similar test for the case of Modern Art, the results of which I will present in a future article in *Skeptic*.⁷

References

1. Simkin, M.V. and V.P. Roychowdhury. 2003. "Read Before You Cite!" *Complex Systems*. 14:269-274. Also available at <http://arxiv.org/abs/cond-mat/0212043>
2. Simkin, M.V. and V.P. Roychowdhury. 2007. "A Mathematical Theory of Citing." *Journal of the American Society for Information Science and Technology*, 58:1661-1673. Also available at <http://arxiv.org/abs/physics/0504094>
3. Merton, Robert K. 1968. "The Matthew Effect in Science." *Science*, 159(38), 56-63.
4. Bulwer-Lytton fiction contest, <http://www.bulwer-lytton.com/>
5. Simkin, M. V. 2004. "Great Prose, or Not?" <http://reverent.org/bulwer-dickens.html> (Published on September 16, 2004.)
6. When I looked at the quiz results I noticed hundreds of cases when two or more scores came from the same IP address within few minutes. In many of such cases the later score was 100%. This suggests that many people took several shots at the quiz. To eliminate this cheating I cleaned the data by selecting only the first score from each IP address. Afterwards I cleaned the data from the results, where one or more questions were skipped.
7. Simkin, M.V. 2007. "My Statistician Could Have Painted That! A Statistical Inquiry into Modern Art." *Significance*. 14:93-96. Also available at <http://arxiv.org/abs/physics/0703091>

About the author: Mikhail Simkin received a Ph.D. in Physics from Brown University. He currently works as a research engineer at UCLA. His best known skeptical papers are "Copied Citations Create Renowned Papers?" (<http://arxiv.org/abs/condmat/0305150>) and "Theory of Aces" (<http://arxiv.org/abs/physics/0607109>).

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