

Analysis of Declaration of Independence Word Frequency in *The Beale Papers* and 100 “Classic” Short Stories

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*This research is dedicated to Miss Cecilia (Lily) Powell,
a beautiful young writer who left us way too soon.*

A comparison of the frequency of the 348 longest words (six letters or longer) from the Declaration of Independence (DOI) to matching DOI words that appear in *The Beale Papers*, a cryptographic, treasure mystery published anonymously in 1885 and 100 “Classic” short stories, determined that *The Beale Papers* contained the highest number of words, 264, which were spelled exactly as the corresponding 348 DOI survey words. The data also revealed that *The Beale Papers* had the highest frequency of words, 560, which were grammatically “related” to the 348 DOI survey words. The results in both cases (“exact” and “related”), suggest that *The Beale Papers* was significantly enriched with words from the DOI.

Introduction

This study attempted to answer the question:

Is the text of *The Beale Papers* significantly enriched with words from the Declaration of Independence?

This question arose because of suspicions first noted in 2011 and published in *The Last Haunting of Edgar Allan Poe, Hiding in Plain Sight: Observations Concerning the Text of the Beale Papers* (www.lasthaunting.com/essays) that the Beale text contained an excessive number of words from the Declaration of Independence. Some researchers were skeptical that *The Beale Papers* text contained any more DOI words than other works of fiction, noting that because of the large number of words contained in the DOI (approximately 1,325), all fictional tales were bound to have many words from that historic document in the text. With respect to shorter words this is certainly true, as all stories contain articles and prepositions that appear in the DOI. But in the case of larger words, at least those chosen for this survey, that is not the case. For words from the DOI six letters or longer that result in an “exact” or “related” match

with words in the text of *The Beale Papers* and 100 “classic” tales of fiction, the Beale text is significantly enriched with words from the DOI.

While the sample size of short stories is very small and the survey modest, the preliminary results may warrant further analysis of the relationship between the Beale text and words from the Declaration of Independence.

Relationship between *The Beale Papers* and the Declaration of Independence

Over the past century, *The Beale Papers* has developed into something of a minor “Holy Grail” within the cryptography community, while also maintaining its allure to treasure hunters who search for the thousands of pounds of gold and silver purported in the story to be buried near Bedford, Virginia. The exalted status of the Beale mystery may have arisen from a variety of factors including the mystery concerning the identity of the anonymous author, the legitimacy of the main characters, Thomas Beale and Robert Morriss, whether the story was written as a fictional short story or a true historical account, the apparent strength of two unsolved ciphers which lead to the treasure, and the suspicions that the entire story is an elaborate hoax.

The inclusion of the DOI as a key to one of the three ciphers, and the fact that a complete copy of the DOI was weaved into the Beale tale, also enhances the element of historical mystery that clings to *The Beale Papers*. One reason the DOI is enticing to Beale researchers is that the solution to one of the ciphers, which is arrived at by using the DOI as a key, provided the reader with the composition of the treasure but not its location. For some, the DOI offers a palpable closeness to the treasure - if the treasure hunter could but coax a solution by using the DOI to solve the remaining ciphers, he would be rich beyond all avarice. Alas, the two remaining ciphers have proven difficult to crack, and it is this lack of success, perhaps, that provides the allure to cryptographers, who long to discover a solution, not for gold and silver, perhaps, but for the “charm” of cracking the code and, very likely, the prestige of being the one above all others who arrived at a solution.

The cryptographic mystery has also gained traction over the years because of the renown of some of the cryptographers who have attempted to crack the ciphers. William Friedman, the “father” of American cryptography and leader of the team that cracked the Japanese purple code in World War II, was a devotee of the Beale mystery. Recently, James Gillogly, perhaps the best cryptographer in the United States, discovered, in 1980, that one of the ciphers contained strings of letters that revealed an alphabetical pattern such as ABCDEFGHIJKLMMNOHPP when the numbers in the ciphers were compared to words in the DOI. This discovery added to the mystery of the Beale story by heightening the possibility that the ciphers, or at least one of them, were a hoax.

Because of its appeal to historians and average citizens alike, the DOI as part of the Beale tale has helped to elevate the mystery to almost legendary status over the years. The observations in this study may add to the significance of the DOI within the tale, particularly if further

investigation determines that *The Beale Papers* contains more words from the Declaration of Independence than any comparable English language tale of fiction.

Short Stories Surveyed

The 100 short stories surveyed for this study were selected to approximate as closely as possible the length (7700 words) and date of publication (1885) of *The Beale Papers*. All short stories were written in English originally; no translations were a part of the survey. "Classic" is defined as a short story downloadable from the Internet that is described by the host website as a "classic" short story.

Embedded Version of DOI in *The Beale Papers*

As published in 1885, the text of *The Beale Papers* is longer than 7700 words because the anonymous author input into the tale a verbatim copy of the Dunlap broadside version of the Declaration of Independence. For the purposes of this survey, these DOI words were not counted as being part of the text.

Methodology

If a word was six letters or longer and appeared in the DOI it was a part of the survey; ultimately, there were 348 DOI "survey words" used in this study. These survey words were compared to the text of each of the 101 sample short stories for matches. There were two criteria searched for each DOI survey word, "exact" and "related" match. An "exact" match of a DOI survey word to a word in the text of a short story must have been spelled exactly as it appeared in the DOI, regardless of meaning. A "related" DOI word included all exact matched words plus words that were grammatically related to the DOI word from the 348 words selected for comparison.

For example, the word "necessary" appears twice in the DOI:

In the first sentence:

*"When in the course of human events it becomes **necessary** for one people to dissolve..."*

and later in the charges against King George:

*"He has refused his assent to laws the most wholesome and **necessary** for the public good."*

For the purposes of this survey, the word "necessary" was included as one of the 348 "DOI survey" words because it appears in the DOI and is six letters or longer.

A search of the Beale story reveals that the word "necessary" appears six times in the text: once in the Robert Morris statement, twice in the narrative and three times in the Beale letters. For the survey of exact matches, *The Beale Papers* received a count of six exact matches to a DOI word for the word "necessary." The search also revealed that the word "necessarily" appeared once in the Beale text. The "related" DOI word count, therefore, totaled seven for the DOI

word “necessary,” the six exact spelling matches and the one grammatically related word, “necessarily.”

The “related” search was undertaken because of the apparent inclusion by the anonymous Beale author of so many “related” DOI words into the Beale text. A short list of such words raises suspicions that the Beale author included them in the tale for some purpose. This survey is an attempt to confirm that these DOI related words do not appear in the Beale tale *by accident*, but, instead, were deliberately placed there for some purpose, perhaps to create a secret writing or coded message.

A sample of “Related” DOI words in the Beale text includes (DOI word in parenthesis):

Corresponding (correspondence), sanguine (consanguinity), comfortable (uncomfortable), constituting (constitution), execution (executioners), transportation (transporting), according (accordingly), independence (independent), comply (compliance), condition (conditions), connexions (connection), deposited (depository), endeavoring (endeavored), experienced (experience), founded (foundation), important (importance), intention (intentions), organization (organizing), unparalleled (paralleled), punished (punishment), quarters (quartermen), civilization (civilized).

Results

Because the short stories in the survey ranged in length between 6100 and 9300 words, a percentage of “exact” and “related” DOI words per text was calculated and used to rank each story. Despite being a short story of middle length in the study, however, *The Beale Papers* nevertheless contained the highest number of “exact” (264) and “related” (560) matches by a significant margin. It is *The Beale Papers’* highest percentage of both “exact” and “related” DOI words, however, that presents the most interesting results. Acknowledging that the sample is small, it is still a survey of 100 classic short stories over an approximately 150-year period of American and English short story literature. For the Beale text, a story in which the Declaration of Independence plays a prominent role, to not only contain the most DOI words, “exact” and “related,” but to contain significantly more such words than all the other short stories, may justify further study of the relationship between DOI words and the Beale text.

“Exact” Distribution

The distribution of the “exact” percentage for the 101 short stories reviewed in this survey:

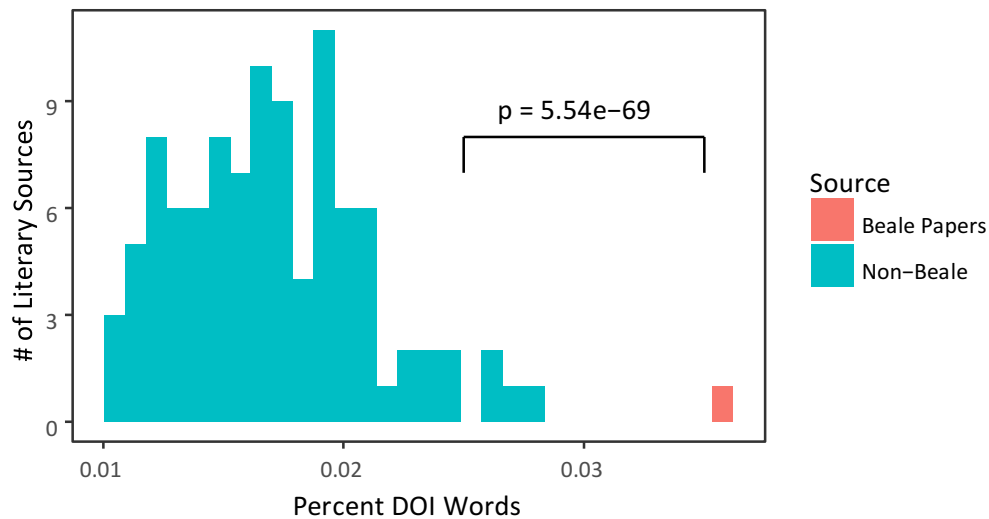
<i>Title</i>	<i>Author</i>	<i>Published</i>	<i>Word Length</i>	<i>“Exact” DOI Words</i>	<i>Exact” Percentage</i>
<i>The Beale Papers</i>	<i>Anonymous</i>	<i>1885</i>	<i>7700</i>	<i>264</i>	<i>0.03428</i>
<i>The Great Stone Face</i>	<i>Nathaniel Hawthorne</i>	<i>1850</i>	<i>7600</i>	<i>211</i>	<i>0.02776</i>
<i>The Two Husbands</i>	<i>T.S. Arthur</i>	<i>1845</i>	<i>6800</i>	<i>182</i>	<i>0.02676</i>
<i>The Purloined Letter</i>	<i>Edgar A. Poe</i>	<i>1844</i>	<i>7100</i>	<i>188</i>	<i>0.02647</i>
<i>William Wilson</i>	<i>Edgar A. Poe</i>	<i>1839</i>	<i>8000</i>	<i>211</i>	<i>0.02637</i>
<i>The Literary Life of Thingum Bob</i>	<i>Edgar A. Poe</i>	<i>1844</i>	<i>7600</i>	<i>183</i>	<i>0.02407</i>

<i>The Pelican</i>	Edith Wharton	1899	7500	180	0.024
<i>The Fall of the House of Usher</i>	Edgar A. Poe	1839	7200	169	0.02347
<i>The Stolen White Elephant</i>	Mark Twain	1882	6800	158	0.02323
<i>The Birth Mark</i>	Nathaniel Hawthorne	1843	6500	150	0.02307
<i>My Kinsman, Major Molineux</i>	Nathaniel Hawthorne	1852	7600	170	0.02236
<i>The Descent of Man</i>	Edith Wharton	1903	7300	160	0.02191
<i>The Passing of Grandison</i>	Charles W. Chesnutt	1899	6700	142	0.02119
<i>Roger Malvin's Burial</i>	Nathaniel Hawthorne	1832	7900	167	0.02113
<i>The Consul</i>	Richard Harding Davis	1900	7300	154	0.02109
<i>The Reckoning</i>	Edith Wharton	1902	8200	173	0.02109
<i>Rip Van Winkle</i>	Washington Irving	1819	7300	153	0.02095
<i>The Thousand-and-Second Tale of Scheherazade</i>	Edgar A. Poe	1845	7200	150	0.02083
<i>The Knight of Malta</i>	Washington Irving	1840	6200	126	0.02032
<i>The Private History of a Campaign That Failed</i>	Mark Twain	1885	8100	163	0.02012
<i>Fisherman's Luck</i>	Henry Van Dyke	1915	6700	134	0.02
<i>A Case of Identity</i>	Arthur Conan Doyle	1891	7000	140	0.02
<i>Peter Goldthwaite's Treasure</i>	Nathaniel Hawthorne	1853	7800	155	0.01987
<i>Markheim</i>	Robert Louis Stevenson	1885	6700	132	0.0197
<i>Feathertop</i>	Nathaniel Hawthorne	1852	7800	153	0.01961
<i>Ethan Brand</i>	Nathaniel Hawthorne	1850	6800	133	0.01955
<i>The Stolen Body</i>	H. G. Wells	1898	6400	125	0.01953
<i>The Body Snatcher</i>	Robert Louis Stevenson	1884	7500	146	0.01946
<i>An Account of Some Strange Disturbances</i>	Joseph Sheridan Le Fanu	1853	8600	166	0.0193
<i>A Descent into the Maelstrom</i>	Edgar A. Poe	1841	7200	139	0.0193
<i>The Adventure of the Musgrave Ritual</i>	Arthur Conan Doyle	1893	7700	148	0.01922
<i>Grace</i>	James Joyce	1914	7500	144	0.0192
<i>The Griffin and the Minor Cannon</i>	Frank Stockton	1885	6100	116	0.01901
<i>The Empty House</i>	Algernon Blackwood	1906	6300	119	0.01888
<i>The Paradise of Bachelors and the Tartus of Maids</i>	Herman Melville	1855	8100	152	0.01876
<i>Government Goat</i>	Susan Glaspell	1916	7800	146	0.01871
<i>Marjorie Daw</i>	Thomas Bailey Aldrich	1869	7400	144	0.0187
<i>Babylon Revisited</i>	F. Scott Fitzgerald	1931	7400	135	0.01837
<i>The Facts Concerning the Recent Carnival of Crime</i>	Mark Twain	1876	6500	119	0.0183
<i>Blind Man's Holiday</i>	O. Henry	1905	7500	134	0.01786
<i>Leiningen Versus The Ants</i>	Carl Stephenson	1938	8800	157	0.01784
<i>The Red Headed League</i>	Arthur Conan Doyle	1891	9200	163	0.01771
<i>The Adventure of the Blue Carbuncle</i>	Arthur Conan Doyle	1892	7900	139	0.01759
<i>The Sire de Maletroit's Door</i>	Robert Louis Stevenson	1877	8200	142	0.0173
<i>The Phantom Rickshaw</i>	Rudyard Kipling	1888	8900	154	0.0173
<i>Cock A Doodle Do</i>	Herman Melville	1853	8800	152	0.01727
<i>Unlighted Lamps</i>	Sherwood Anderson	1921	7600	130	0.0171
<i>To Build A Fire</i>	Jack London	1908	7100	121	0.01704
<i>The Door in the Wall</i>	H. G. Wells	1911	7000	131	0.01701
<i>A Lodging for the Night</i>	Robert Louis Stevenson	1902	7900	134	0.01696
<i>Lost World</i>	Henry Van Dyke	1898	9100	154	0.01692
<i>The Pit and the Pendulum</i>	Edgar A. Poe	1842	6100	101	0.01655
<i>The Unexpected</i>	Jack London	1906	8100	134	0.01654
<i>An Anarchist</i>	Joseph Conrad	1905	8500	140	0.01647
<i>The Idiots</i>	Joseph Conrad	1896	9300	153	0.01645
<i>Scarlet Stockings</i>	Louisa May Alcott	1868	8600	140	0.01627
<i>A Convert of the Mission</i>	Bret Harte	1895	7800	126	0.01615
<i>Under the Eaves</i>	Bret Harte	1901	7000	113	0.01614
<i>The Riding Whip</i>	George Gissing	1906	6300	101	0.016
<i>"They"</i>	Rudyard Kipling	1904	8200	131	0.01597
<i>Extricating Young Gussie</i>	P.G. Wodehouse	1915	7300	115	0.01575

<i>The First Christmas Tree</i>	Henry Van Dyke	1897	7000	109	0.01557
<i>Birthday of the Infanta</i>	Oscar Wilde	1891	7400	114	0.0154
<i>The Gay Old Dog</i>	Edna Ferber	1919	8000	123	0.01537
<i>Eve's Diary</i>	Mark Twain	1906	6800	104	0.01529
<i>Was It Heaven? Or Hell?</i>	Mark Twain	1902	7200	108	0.015
<i>The New Englander</i>	Sherwood Anderson	1921	6900	103	0.01492
<i>South of the Slot</i>	Jack London	1909	6600	97	0.01469
<i>The Daughters of the Late Colonel</i>	Katherine Mansfield	1922	7100	104	0.01464
<i>The Apple-Tree Table</i>	Herman Melville	1856	8100	118	0.01456
<i>When the World was Young</i>	Jack London	1910	6500	94	0.01446
<i>Jane</i>	Mary Roberts Rinehart	1912	8300	121	0.01457
<i>The Inconsiderate Waiter</i>	James M. Barrie	1920	7100	103	0.0145
<i>Adjustment Team</i>	Philip Dick	1954	8100	114	0.01407
<i>The Mexican</i>	Jack London	1911	9300	130	0.01397
<i>A Night in Acadie</i>	Kate Chopin	1897	6700	93	0.01388
<i>The Strangers That Came to Town</i>	Ambrose Flack	1952	6400	88	0.01375
<i>Aunt Kipp</i>	Louisa May Alcott	1868	7800	107	0.01371
<i>The Prussian Officer</i>	D. H. Lawrence	1914	9000	123	0.01366
<i>Paul's Case</i>	Willa Cather	1905	8100	107	0.0132
<i>Thy Heart's Desire</i>	Netta Syrett	1894	8100	105	0.01296
<i>The Open Boat</i>	Stephen Crane	1898	9300	120	0.0129
<i>Odour of Chrysanthemums</i>	D. H. Lawrence	1909	7500	96	0.0128
<i>Good Country People</i>	Flannery O'Connor	1955	8800	112	0.01272
<i>Revolt of Mother</i>	Mary E. Wilkins Freeman	1890	6300	80	0.01269
<i>The Buller-Podington Compact</i>	Frank Stockton	1897	6800	84	0.01235
<i>Red Stockade</i>	Bram Stoker	1894	7100	87	0.01225
<i>An Old-Fashioned Thanksgiving</i>	Louisa May Alcott	1881	7300	89	0.01219
<i>Mowgli's Brothers</i>	Rudyard Kipling	1893	7400	90	0.01216
<i>The Apostate</i>	Jack London	1906	7500	91	0.01213
<i>A Jury Of Her Peers</i>	Susan Glaspell	1927	8200	99	0.01207
<i>A Piece of Steak</i>	Jack London	1909	7800	93	0.01192
<i>The White Stocking</i>	D. H. Lawrence	1914	8200	97	0.01182
<i>The Most Dangerous Game</i>	Richard Connel	1924	8400	98	0.01166
<i>The Garden of Spices</i>	Lucy Maud Montgomery	1918	6900	80	0.01159
<i>The Gospel According to Joan</i>	Mary E. Wilkins Freeman	1919	7300	84	0.0115
<i>The Blue Hotel</i>	Stephen Crane	1898	9300	107	0.0115
<i>The Dead Sexton</i>	Joseph Sheridan Le Fanu	1871	7300	84	0.0115
<i>Jeff Peters</i>	O. Henry	1908	6600	69	0.01045
<i>The Higher Abdication</i>	O. Henry	1906	7400	80	0.01081
<i>The Reluctant Voyagers</i>	Stephen Crane	1900	6500	66	0.01015

“Exact” Distribution P value

The P value for the distribution of “exact” matches to DOI words is:



“Related” Distribution

For the purposes of this survey, “related” DOI word matches were comprised of the following:

All words must be six letters or longer.

All words which exactly matched a DOI survey word were included as related.

All plurals of singular words and vice versa, unless less than six letters in length, were included. For example, the word “houses” appears in the DOI in the charges against King George as “He has absolved representative houses repeatedly...” Many stories in the survey, including *The Beale Papers*, contain the word “house” in the text but “house” and all other words less than six letters were not counted. This arbitrary decision was based, in part, on the fact that there is an almost exponential increase in DOI words depending on the shortness of the word surveyed. This does not mean that shorter words may not be a part of a secret writing or coded message, but they were not included in this study.

Words related to the base of the DOI were included as related. So that, for example, words like “raised” or “raises” would be a related match to the DOI word “raising,” “immediately” would be a related match to the DOI word “immediate,” and “change” and “changing” would be a related match to the DOI word “changed.” As long as the related word was longer than five letters it was included in the survey as a match.

All DOI words which appeared *within another word* in the text were included. This was done because of the possibility that a secret message might involve some type of word-within-word code. For example, the word “nation” appears in the DOI as part of a charge against King George which ends “...totally unworthy the head of a civilized nation.” Five words can be found in the Beale text that include the entire word “nation” as a suffix. The word “explanation”

appears four times and the word “destination” appears once in the Beale text so the total related count for the word “nation” is five, since there is no exact match for the word “nation” in *The Beale Papers*.

The distribution of the “related” percentage for the 101 short stories reviewed in this survey:

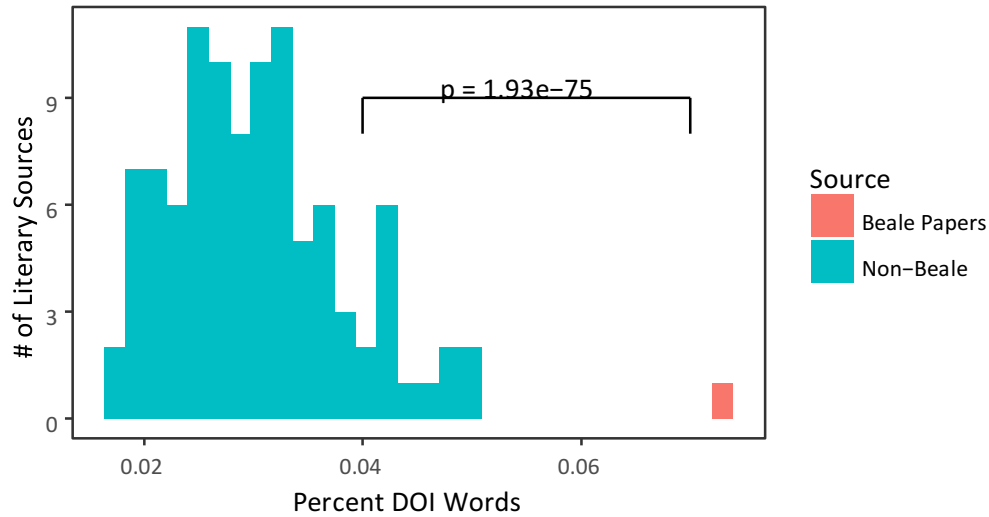
Title	Author	Year Published	Word Length	"Related" DOI Words	"Related" Percentage
<i>The Beale Papers</i>	Anonymous	1885	7700	560	0.07272
<i>William Wilson</i>	Edgar A. Poe	1839	8000	400	0.05
<i>The Purloined Letter</i>	Edgar A. Poe	1844	7100	353	0.04971
<i>The Two Husbands</i>	T.S. Arthur	1845	6800	329	0.04838
<i>The Fall of the House of Usher</i>	Edgar A. Poe	1839	7200	346	0.04805
<i>The Great Stone Face</i>	Nathaniel Hawthorne	1850	7600	354	0.04657
<i>The Consul</i>	Richard Harding Davis	1900	7300	319	0.04369
<i>The Literary Life of Thingum Bob</i>	Edgar A. Poe	1844	7600	324	0.042631
<i>My Kinsman, Major Molineux</i>	Nathaniel Hawthorne	1852	7600	323	0.0425
<i>The Descent of Man</i>	Edith Wharton	1903	7300	308	0.04219
<i>Roger Malvin's Burial</i>	Nathaniel Hawthorne	1832	7900	332	0.04202
<i>The Knight of Malta</i>	Washington Irving	1840	6200	259	0.04177
<i>The Stolen White Elephant</i>	Mark Twain	1882	6800	283	0.04161
<i>The Reckoning</i>	Edith Wharton	1902	8200	332	0.04048
<i>The Birth Mark</i>	Nathaniel Hawthorne	1843	6500	261	0.04015
<i>The Passing of Grandison</i>	Charles W. Chesnutt	1899	6700	262	0.0391
<i>Rip Van Winkle</i>	Washington Irving	1819	7300	281	0.03849
<i>The Pelican</i>	Edith Wharton	1899	7500	283	0.03773
<i>The Pit and the Pendulum</i>	Edgar A. Poe	1842	6100	228	0.03737
<i>The Thousand-and-Second Tale of Scheherazade</i>	Edgar A. Poe	1845	7200	266	0.03694
<i>Under the Eaves</i>	Bret Harte	1901	7000	257	0.03671
<i>An Account of Some Strange Disturbances</i>	Joseph Sheridan Le Fanu	1853	8600	315	0.03662
<i>Fisherman's Luck</i>	Henry Van Dyke	1915	6700	240	0.03582
<i>The Phantom Rickshaw</i>	Rudyard Kipling	1888	8900	318	0.03573
<i>A Descent into the Maelstrom</i>	Edgar A. Poe	1841	7200	254	0.03527
<i>The Stolen Body</i>	H. G. Wells	1898	6400	225	0.03515
<i>The Body Snatcher</i>	Robert Louis Stevenson	1884	7500	262	0.03493
<i>The Private History of a Campaign That Failed</i>	Mark Twain	1885	8100	282	0.03481
<i>Babylon Revisited</i>	F. Scott Fitzgerald	1931	7400	251	0.03391
<i>Grace</i>	James Joyce	1914	7500	250	0.03333
<i>Peter Goldthwaite's Treasure</i>	Nathaniel Hawthorne	1853	7800	259	0.0332
<i>The Red Headed League</i>	Arthur Conan Doyle	1891	9200	303	0.03293
<i>The Empty House</i>	Algernon Blackwood	1906	6300	206	0.03269
<i>Marjorie Daw</i>	Thomas Bailey Aldrich	1869	7400	240	0.03243
<i>A Convert of the Mission</i>	Bret Harte	1895	7800	253	0.03243
<i>Leiningen Versus The Ants</i>	Carl Stephenson	1938	8800	284	0.03227
<i>Blind Man's Holiday</i>	O. Henry	1905	7500	242	0.03226
<i>A Case of Identity</i>	Arthur Conan Doyle	1891	7000	225	0.03214
<i>Markheim</i>	Robert Louis Stevenson	1885	6700	214	0.03194
<i>The Open Boat</i>	Stephen Crane	1898	9300	297	0.03193
<i>Feathertop</i>	Nathaniel Hawthorne	1852	7800	246	0.03153
<i>Ethan Brand</i>	Nathaniel Hawthorne	1850	6800	214	0.03147
<i>The Unexpected</i>	Jack London	1906	8100	254	0.03135
<i>The Paradise of Bachelors and the Tartus of Maids</i>	Herman Melville	1855	8100	254	0.03135
<i>The Door in the Wall</i>	H. G. Wells	1911	7000	219	0.03128

<i>The Facts Concerning the Recent Carnival of Crime</i>	Mark Twain	1876	6500	200	0.03076
<i>South of the Slot</i>	Jack London	1909	6600	203	0.03075
<i>The Sire de Maletroit's Door</i>	Robert Louis Stevenson	1877	8200	250	0.03048
<i>The Riding Whip</i>	George Gissing	1906	6300	189	0.03
<i>Adjustment Team</i>	Philip Dick	1954	8100	242	0.02987
<i>The Adventure of the Musgrave Ritual</i>	Arthur Conan Doyle	1893	7700	227	0.02948
<i>An Anarchist</i>	Joseph Conrad	1905	8500	249	0.02929
<i>The Griffin and the Minor Cannon</i>	Frank Stockton	1885	6100	178	0.02918
<i>The Inconsiderate Waiter</i>	James M. Barrie	1920	7100	203	0.02859
<i>The Strangers That Came to Town</i>	Ambrose Flack	1952	6400	181	0.02828
<i>Cock A Doodle Do</i>	Herman Melville	1853	8800	248	0.02818
<i>The Prussian Officer</i>	D. H. Lawrence	1914	9000	252	0.028
<i>Was It Heaven? Or Hell?</i>	Mark Twain	1902	7200	201	0.02791
<i>The Adventure of the Blue Carbuncle</i>	Arthur Conan Doyle	1892	7900	220	0.02784
<i>Scarlet Stockings</i>	Louisa May Alcott	1868	8600	239	0.02779
<i>The Idiots</i>	Joseph Conrad	1896	9300	257	0.02763
<i>The Gay Old Dog</i>	Edna Ferber	1919	8000	218	0.02725
<i>When the World was Young</i>	Jack London	1910	6500	177	0.02723
<i>The Apple-Tree Table</i>	Herman Melville	1856	8100	220	0.02716
<i>A Lodging for the Night</i>	Robert Louis Stevenson	1902	7900	212	0.02683
<i>Unlighted Lamps</i>	Sherwood Anderson	1921	7600	203	0.02671
<i>Lost World</i>	Henry Van Dyke	1898	9100	240	0.02637
<i>Thy Heart's Desire</i>	Netta Syrett	1894	8100	212	0.02617
<i>The New Englander</i>	Sherwood Anderson	1921	6900	177	0.02565
<i>Eve's Diary</i>	Mark Twain	1906	6800	173	0.02544
<i>A Night in Acadie</i>	Kate Chopin	1897	6700	170	0.02537
<i>Government Goat</i>	Susan Glaspell	1916	7800	197	0.02525
<i>Aunt Kipp</i>	Louisa May Alcott	1868	7800	195	0.025
<i>Paul's Case</i>	Willa Cather	1905	8100	202	0.02493
<i>To Build A Fire</i>	Jack London	1908	7100	175	0.02464
<i>Birthday of the Infanta</i>	Oscar Wilde	1891	7400	180	0.02432
<i>The Mexican</i>	Jack London	1911	9300	226	0.0243
<i>A Piece of Steak</i>	Jack London	1909	7800	188	0.0241
<i>The Blue Hotel</i>	Stephen Crane	1898	9300	224	0.02408
<i>Extricating Young Gussie</i>	P.G. Wodehouse	1915	7300	175	0.02397
<i>Jane</i>	Mary Roberts Rinehart	1912	8300	191	0.02301
<i>The Most Dangerous Game</i>	Richard Connel	1924	8400	191	0.02273
<i>Jeff Peters</i>	O. Henry	1908	6600	149	0.02257
<i>"They"</i>	Rudyard Kipling	1904	8200	184	0.02243
<i>The Daughters of the Late Colonel</i>	Katherine Mansfield	1922	7100	158	0.02225
<i>The Buller-Podington Compact</i>	Frank Stockton	1897	6800	149	0.02191
<i>The Apostate</i>	Jack London	1906	7500	163	0.02173
<i>The Reluctant Voyagers</i>	Stephen Crane	1900	6500	139	0.02138
<i>The First Christmas Tree</i>	Henry Van Dyke	1897	7000	149	0.02128
<i>An Old-Fashioned Thanksgiving</i>	Louisa May Alcott	1881	7300	154	0.02081
<i>The Dead Sexton</i>	Joseph Sheridan Le Fanu	1871	7300	150	0.02054
<i>Odour of Chrysanthemums</i>	D. H. Lawrence	1909	7500	154	0.02053
<i>A Jury Of Her Peers</i>	Susan Glaspell	1927	8200	162	0.01975
<i>Revolt of Mother</i>	Mary E. Wilkins Freeman	1890	6300	124	0.01968
<i>The Higher Abdication</i>	O. Henry	1906	7400	145	0.01959
<i>The Gospel According to Joan</i>	Mary E. Wilkins Freeman	1919	7300	144	0.01927
<i>The White Stocking</i>	D. H. Lawrence	1914	8200	157	0.01914
<i>Good Country People</i>	Flannery O'Connor	1955	8800	167	0.01897
<i>Mowgli's Brothers</i>	Rudyard Kipling	1893	7400	136	0.01837

<i>The Garden of Spices</i>	<i>Lucy Maud Montgomery</i>	1918	6900	119	0.01724
<i>Red Stockade</i>	<i>Bram Stoker</i>	1894	7100	121	0.01704

“Related” Distribution P Value

The P value for the distribution of “related” matches to DOI words:



Observations

A cursory look at the authors who appear in the top quartile of both the “exact” and “related” searches shows that Hawthorne (3-3), Poe (5-6) and Irving (2-2) appear more than once on each distribution. There are many reasons why these three authors should appear in the “top twenty-five” of these searches, not the least of which is that they are “classic” writers who frequently wrote “longer” short stories. The variables which might lead to a conclusion of why these writers appear at the top of these lists are too many to contemplate, particularly for such a small sample of short stories. If, however, the contemporaries of Hawthorne, Poe and Irving are also considered, one might make a tentative generalization concerning the distribution of these short stories and DOI word frequency.

Excluding *The Beale Papers*, the frequency of DOI words in the one hundred short stories in this survey authored prior to 1850 and those authored in the latter half of the 19th century shows an interesting pattern. Of the 100 total short stories surveyed, fourteen were written prior to 1850. Of those fourteen, eleven appear among the twenty-four stories with the highest frequency of DOI words.

Era

The fact that eleven of the fourteen stories written prior to 1850 appear in the top quarter of stories with the highest DOI word frequency might be explained by the proximity of the authors in time to those men who wrote the Declaration of Independence. Irving (1783), Hawthorne (1804), Poe (1809) and their contemporaries were the sons and grandsons of the men who created the DOI. The latter authors were close enough in time to their elders to have used words fashionable in the earlier era, such as “manly,” “hither,” etc. Historical events that occurred in 1776 were also timely in the first half of the 1800s, such as Western migration and wars with Native Americans. The reason that some of the stories, at least, contain a high frequency of words from the DOI, then, may be because of the era in which the story was written.

Why *The Beale Papers* Might Be Significantly Enriched With DOI Words

The Beale Papers, copyrighted in 1885, over a century after the DOI, would appear to be of a different era. The number of “exact” and “related” DOI words in the Beale text is also significantly higher than any of the tales in the survey, including those pre-1850 stories. It is possible, though, that the Beale author, writing in the 1880s, may have realized the suggestive power of words from an earlier era when creating the Beale tale. Particularly with respect to the 1822 Beale letters to Morriss, the Beale author may have inserted words from the DOI into the letters to further the deception that the letters were written at an earlier date. Of course, it is also possible that *The Beale Papers* was written much earlier than 1885, but for some unknown reason was not published until much later, and then with some alterations to “modernize” the tale. The most logical explanation for why the Beale tale contains such a high number of DOI words may be that the words served a purpose for The Beale author. Particularly because the Beale story is so closely aligned with the Declaration of Independence, a finding that the text of the story contained, possibly, the highest frequency of DOI words for any comparable work of fiction ever written, may justify closer study of the DOI words that appear in the enigma.

Distribution of DOI Words in Beale Papers

If the Beale author were attempting to deceive his readers into believing that the Beale letters were written in 1822, and he selected many DOI words to accomplish this deception, then the distribution of DOI words within the Beale text should show an excessive amount of DOI words in the letters and not the remainder of the text. This is not the case.

By numbering every paragraph in *The Beale Papers* and then charting the distribution of DOI words in the text, one can see that the DOI words are evenly distributed throughout the tale.

TBP, Paragraph 1, Introduction: *public, immediate, should, beyond, circumstances, pressing, character, dependent, attention, therefore, relinquish, others, subject, attention, secure (15)*

TBP, Paragraph 2, Introduction: *course, absolute, having, others, others (5)*

TBP, Paragraph 3, Introduction: *pursuit, independent, marked, others, friends* (5)

TBP, Paragraph 4, Introduction: *certain, importance, attention, called* (4)

TBP, Paragraph 5, Introduction: *subject, history, others, indeed, character, should, happiness, others* (8)

TBP, Paragraph 6, Robert Morriss background: *without, without, erected, assembled* (4)

TBP, Paragraph 7, Robert Morriss background: *happiness* (1)

TBP, Paragraph 8, Robert Morriss background: *character, states, country, amongst, friends, justice, others, scarcely, connected, without* (10)

TBP, Paragraph 9, Robert Morriss personality: *friends, people* (2)

TBP, Paragraph 10, Robert Morriss personality: *character, certain* (2)

TBP, Paragraph 11, Narrator and Robert Morriss: *changed, interrupt, created, importance, between, subject, history* (7)

TBP, Paragraph 12, Narrator and Robert Morriss: *substance, circumstances, others, subject, conditions, should, certain, amount, subject, should* (10)

TBP, Paragraph 13, Narrator: XXXXX

TBP, Paragraph 14, Narrator: *conclude* (1)

TBP, Paragraph 15, Narrator: *having, purpose, connected, having, together, opinions, future* (7)

TBP, Paragraph 16, Robert Morriss Statement: *others, friends, themselves, remaining, should, independent, remaining, established* (8)

TBP, Paragraph 17, Robert Morriss Statement: *unusual, within, character, character* (4)

TBP, Paragraph 18, Robert Morriss Statement: *future* (1)

TBP, Paragraph 19, Robert Morriss Statement: *friends, returned* (2)

TBP, Paragraph 20, Robert Morriss Statement: XXXXX

TBP, Paragraph 21, Robert Morriss Statement: *importance, called, course, importance, render, depository, secure, should, authority, should, having, meantime, totally* (13)

TBP, Paragraph 22, Robert Morriss Statement: *necessary, should, others* (3)

TBP, Paragraph 23, Narrator: *substance, attention, others* (3)

TBP, Paragraph 24, Narrator: *course, purpose, Declaration, necessary, present, already, circumstances* (7)

TBP, Paragraph 25, Narrator: XXXXX

TBP, Paragraph 26, Beale May 9, 1822 Letter: XXXXX

TBP, Paragraph 27, Beale May 9, 1822 Letter: *fortunes, others, therefore, necessity, prevent, necessary, should, authority, without* (9)

TBP, Paragraph 28, Beale May 9, 1822 Letter: *already, meantime, should, friends, authority* (5)

TBP, Paragraph 29, Beale May 9, 1822 Letter: *friends* (1)

TBP, Paragraph 30, Narrator: *states, absolute, safety, future, should, having, liberty* (7)

TBP, Paragraph 31, Narrator: *Indian, certain* (2)

TBP, Paragraph 32, Narrator: *become, another* (2)

TBP, Paragraph 33, Narrator: XXXXX

TBP, Paragraph 34, Narrator: *giving, public, experience, should, another, necessary, without, subject, patient, already, subject* (11)

TBP, Paragraph 35, Narrator: *pursuing, suffer* (2)

TBP, Paragraph 36, Narrator: *connected, present* (2)

TBP, Paragraph 37, Beale January 4, 1822 Letter: *importance, should, others, design, character* (5)

TBP, Paragraph 38, Beale January 4, 1822 Letter: *connection, others* (2)

TBP, Paragraph 39, Beale January 4, 1822 Letter: *connection, friends, danger, country, object, character, standing, object, friends, conditions, refused* (11)

TBP, Paragraph 40, Beale January 4, 1822 Letter: *necessary, establish* (2)

TBP, Paragraph 41, Beale January 4, 1822 Letter: *military, elected, should, authority, necessity, united, tyranny* (7)

TBP, Paragraph 42, Beale January 4, 1822 Letter: *purpose* (1)

TBP, Paragraph 43, Beale January 4, 1822 Letter: XXXXX

TBP, Paragraph 44, Beale January 4, 1822 Letter: *purpose, country, become, course, secure, together* (6)

TBP, Paragraph 45, Beale January 4, 1822 Letter: *others, future, already, reduce, object, common, common, necessary, obtained, secure, amount, another, others, states, secure, present, should, depository* (18)

TBP, Paragraph 46, Beale January 4, 1822 Letter: *purpose, neighboring* (2)

TBP, Paragraph 47, Beale January 4, 1822 Letter: *without, against, therefore, should* (4)

TBP, Paragraph 48, Beale January 4, 1822 Letter: *nature, called, importance* (3)

TBP, Paragraph 49, Beale January 4, 1822 Letter: *without, depository, places, present* (4)

TBP, Paragraph 50, Beale January 4, 1822 Letter: *conclude, secure* (2)

TBP, Paragraph 51, Beale January 4, 1822 Letter: *prevent* (1)

TBP, Paragraph 52, Beale January 4, 1822 Letter: *future, respect* (2)

TBP, Paragraph 53, Beale January 5, 1822 Letter: *others* (1)

TBP, Paragraph 54, Narrator: *others, course* (2)

TBP, Paragraph 55, Narrator: *declaration* (1)

Embedded Declaration of Independence: Excluded from this survey

TBP, Paragraph 56, Narrator: *marked* (1)

TBP, Paragraph 57, Narrator: *declaration* (1)

TBP, Paragraph 58, Decryption: *XXXXX*

TBP, Paragraph 59, Decryption: *obtained* (1)

TBP, Paragraph 60, Decryption: *others* (1)

TBP, Paragraph 61, Narrator: *marked, without* (2)

TBP, Paragraph 62, Narrator: *marked, together, places* (3)

TBP, Paragraph 63, Narrator: *character, having, connection, subject* (4)

TBP, Paragraph 64, Narrator: *complete, themselves, submitted, public* (4)

TBP, Paragraph 65, Narrator: *absolute, connection, beyond, public* (4)

TBP, Paragraph 66, Narrator: *multitude, should, character* (3)

TBP, Paragraph 67, Narrator: *publish, subject* (2)

Total "Exact" DOI Survey Words - 264

The distribution of "exact" DOI words in the Beale tale does not appear to support a conjecture that the Beale author injected such words only into the 1822 Beale letters. In fact, the DOI words selected for inclusion into the tale do not seem to have any connection to the earlier era at all. Most of the DOI words seem commonplace in the extreme.

The Possibility of a Coded Message

If it turns out that *The Beale Papers* contains more DOI words than any similar sized English language work of fiction, researchers may wish to consider the possibility that a coded message or secret writing exists within the Beale text. The excessive amount of DOI words in the Beale text revealed by this survey suggest that the Beale author expended considerable effort to place these words into the tale. Particularly if select DOI words were part of code, the author would need great skill to not only use the correct coded word in the proper order, but to have the story flow smoothly so the reader would not become suspicious of a secret writing within the text. One might ask why the Beale author would go to so much trouble if he was not embedding a message into the tale. Although it is possible that the Beale author is merely perpetrating a hoax by placing an excessive number of DOI words into the tale, the fact is that these DOI words were not recognized, at least publicly, until 2011, more than a century and a quarter after the Beale tale was first copyrighted. If the DOI words in the text were part of a hoax, the author should have been more obvious in placing them in the tale. One other reason that the author may have surreptitiously placed DOI words into the Beale tale could involve an attempt to hide a secret writing in plain sight.

The Purloined Letter

As a work of fiction, the Beale story can be read as a concerted effort to direct the reader to focus on the ciphers. The ciphers, and what they can provide, are a constant theme of the Beale tale. Observe the flow of the Beale tale from the perspective of the ciphers:

A treasure is discovered c. 1818 by 30 honorable Virginia gentlemen of “good character and standing.” All the men eventually die leaving a treasure which can only be found by solving three ciphers.

The leader of the group, Thomas Beale, is a man respected by other men, trustworthy, fiercely independent, strong and tough. He is a man of high character who says what he means and can be relied upon to back it up. He can be trusted to have truthfully conveyed the story of his treasure discovery and secret ciphers before his death.

Robert Morriss, a trustworthy Lynchburg innkeeper, is also a man of “sternest integrity”, “unblemished honor,” and reliability. He can be trusted to have preserved the ciphers and truthfully told the history of the ciphers to the Beale author.

Both Beale and Morriss must be men who can be trusted or the existence of the treasure won't be believed nor will the reliability of ciphers. Much of the story involves developing the character of these two protagonists so that the reader can safely rely on the fact that Morriss is telling the truth when he reveals the existence of the treasure and the ciphers that he heard from Beale.

The story sets up the “buried treasure” theme when, in two trips from Santa Fe to Virginia, Beale deposits hundreds of pounds of gold, silver and jewels near Bedford, Virginia.

Beale then conveys the secret of the treasure to Morriss, but does not provide the location. Instead, Beale gives three ciphers to Morriss, one of which provides the location, another the composition and the third cipher the names of the relatives who are to receive the treasure in the event all the Virginians should die in the west.

Of course, all the treasure party dies and Morriss is left with the knowledge of the treasure and three ciphers.

Subsequently, Morriss, on his death bed, conveyed to a friend the tale of the treasure. This unknown friend tried to crack the ciphers for twenty years, during which time he discovered that the key to one of the ciphers is the Declaration of Independence. The friend then conveyed the story, and his progress in cracking one of the ciphers, to the Beale author. Although the trustworthiness of this unknown friend of Morriss is less developed in the tale, presumably the fact that he solved one cipher and gave that solution to the Beale author helped him pass muster as an honest and believable man.

The Beale author then explained how the one cipher was cracked in detail. He provided the reader with a point by point instruction of how the Declaration was used as the key to solve the cipher. The Beale author even went to the trouble of inserting a complete verbatim, numbered, copy of the Declaration of Independence into the Beale tale.

The Beale author's decryption of the one solved cipher is a classic treasure lure, with a description of thousands of pounds of gold and silver, hundreds of dollars in jewels, and a vivid description of the vault, secure enough to keep the treasure safe from harsh weather, and well-hidden to prevent accidental discovery, so that potential treasure hunters would be enticed into pursuing the treasure by solving the remaining ciphers.

All that needs be done to acquire this fabulous treasure is to solve the ciphers.

Compare *The Beale Papers* to Poe's *The Purloined Letter*. Poe, through his detective extraordinaire, Auguste Dupin, sets up the pursuit of an ingeniously hidden blackmail letter by devoting considerable effort to describing the methods of the Paris police in searching for such an object. The police leave "no stone unturned" by boring in crevices and otherwise looking into all the small hidden places where most criminals hide letters and other such objects. Dupin, however, realizes the villain, Minister D., is *directing* the police to look in all the small places in his apartment by various tricks such as allowing himself to waylaid to prove the document is not on his person. Dupin seizes on this misdirection and finds the blackmail letter, significantly altered to be sure, but sitting in plain sight in Minister D's apartment.

One possible motive of the Beale story is to create a "real-life" demonstration of the premise in *The Purloined Letter* that things hidden in plain sight are sometimes more effectively concealed than when placed out of sight. Poe could have attempted this "proof," it seems like something he would do, but Poe is a longshot as author of the Beale tale since he died in 1849 and *The Beale Papers* was not copyrighted until 1885. It is possible, though, that the Beale author was a

fan of Poe and wrote the story to honor or mimic Poe, as the story appears to have several connections to Poe. (See *The Last Haunting of Edgar Allan Poe: An Identification of "Poe Preferences" contained in The Beale Papers* here www.lasthaunting.com/essays). If the Beale author is directing the reader to the ciphers, it may be that he is doing so to lure the reader away from a secret writing hidden in "plain sight" in the text. If an attempt was made to conceal in plain sight a hidden message by placing DOI words in the Beale text it was very effective. No one seems to have noticed this excess of DOI words for over a century and a quarter.

Closing

The Beale enigma is a wonderful icon of U. S. history. For the past century and a quarter, it has touched on many historic events including reconstruction, the growth of cryptography during the World Wars, the advent of the computer age and the creation of the Internet. One can do worse than study Poe, cryptography, the history of the Santa Fe Trail and the Declaration of Independence. Investigating this mystery with the great cryptographers, such as William Friedman, the "father" of the NSA, and the nameless treasure hunters who took a shot at fantastic riches but failed, is part of the lure of *The Beale Papers*. The collective efforts of those Beale researchers who have contributed their discoveries and observations, no matter how small, to solving the enigma, has, perhaps, moved us closer to a solution. This survey adds to that collective knowledge and, it is hoped, will help to eventually arrive at a solution to the mystery.

Like the astronomers who predict the existence of "Planet Nine" based on perturbations of orbits in the outer solar system, this survey suggests that the presence of an excessive amount of DOI words in the Beale text may conceal a hidden message. If it turns out that *The Beale Papers* text contains more DOI words than all comparable length English language short stories ever written, this phenomenon may help to reveal the presence of a secret writing. The hope is that this small survey might lead to a solution of a "Holy Grail" of cryptography, *The Beale Papers*.

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