Case Study: Blaine T. Bettinger's The Genetic Genealogist

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By 2000, a new discipline of genetic genealogy had been forged from the influence of three landmark studies and the creation of two businesses. In 1997, Skorecki et al. identified specific Y-DNA patterns that were found among male descendants of Jewish priests (the Kohanim) that were not generally found in large numbers among the general Jewish population.

Within a year, Foster et al. (1998) concluded that Sally Hemmings' youngest son, whose descendents possessed Jeffersonian DNA, was likely fathered by President Thomas Jefferson.

By 2000, Bryan Sykes and Catherine Irven were able to provide a link between Y-DNA markers and surnames. Their discovery provided a vehicle for genealogists to determine whether a given surname had a single ancestor or multiple founders.

Influenced by these studies, Family Tree DNA and Oxford Ancestors were both formed in 2000 to provide genetic testing for genealogical purposes ("Family Tree DNA," n.d.; "Oxford Ancestors," n.d.). Genetic genealogy grew rapidly in popularity with each new company, feature, and test iteration. It was estimated that the number of people who have tested their DNA for genealogical purposes passed the three million mark in 2015 (Kennett, 2015).

Part of this market growth can be attributed to the contributions of a large number of "thought leaders" who are often termed as "citizen scientists." One of these is Dr. Blaine T. Bettinger whose blog, *The Genetic Genealogist*, has provided a wealth of information about the field. This case study will analyze Bettinger's blog along three areas deemed important by marketing researchers. These criteria include appeal, credibility, and reach.

#### Appeal

In their analysis of the top 50 blogs, Singh and Singh (2008) recommended that authors develop a style and content that is unique and different. Successful blogs appear to appeal to a

distinct market need. Although much was written about genetic genealogy on a variety of listservs, discussion boards, and web sites through 2006, the first two weblogs on the subject were created within days of each other in February 2007. Emily Aulicino penned the first three genetic genealogy posts, and these appeared on her *DNA - Genealem's Genetic Genealogy Blog* between February 4 and 10 (Aulicino, 2007a; 2007b; 2007c).

When Bettinger began *The Genetic Genealogist* on February 12, 2007, he honestly believed that he was the first to address the subject in a weblog format, as he wasn't aware of Aulicino's previous contributions until much later (B. Bettinger, personal communication, January 3, 2016). Although Aulicino's (2007d) total contributions for 2007 consisted of four posts, Bettinger authored a total of 216 entries during his inaugural year and thus became one of the lead bloggers in the field (Bettinger, 2016b).

The Genetic Genealogist's success can be partially attributed to the ability of readers to become part of the conversation. According to Singh and Singh (2008), blogs "also serve as knowledge repositories that can be tapped to assess customer experiences, opinions, and needs . . . [and] allow blog visitors to view archived dialogues that may be of interest to them" (p. 472). In 2007, Bettinger blogged the question: "Is Genetic Genealogy a Scam?" Although only one comment and three pingbacks were generated that year, this particular post generated a total of 48 responses. Visitors continued to provide feedback through 2013 about their questions and their experiences – both positive and negative (Bettinger, 2007b). This one post has had an active life of six years.

According to Dr. Bettinger, the blog's most popular read was 2012's "A Review of AncestryDNA – Ancestry.com's New Autosomal DNA Test" (B. Bettinger, personal communication, January 6, 2016; Bettinger, 2012a). Generating 250 responses (the most for any

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of Bettinger's posts), feedback has continued to the present (Bettinger, 2012a). As demonstrated, even older posts continue to engage this very specialized, but intensely curious market.

In essence, *The Genetic Genealogist* has become a forum for knowledge attainment and sharing. This concept is referred to as *ba*. Inspired by Japanese philosophy, Nonaka and Konno (1998) have extended the definition of *ba* as "a shared space that serves as a foundation for knowledge creation" (p. 40). Martin-Niemi and Greatbanks (2009) considered four learning enabling conditions in a blogging environment that harbor the creation of *ba*. These include "active questioning," "metaphor use," "storytelling," and "access to use" (Martin-Niemi & Greatbanks, 2009, pp. 18-19). In addition, "blogs have the potential to develop communities with all of the attributes necessary to provide an environment for tacit-to-tacit as well as individual-to-collective knowledge conversion (Martin-Niemi & Greatbanks, 2009, pp. 20-21). *The Genetic Genealogist* has accomplished this.

### Credibility

In addition to being a knowledge source, the overall popularity of a particular blog is driven in part by its credibility and trustworthiness. Huang (2015) posited that trust in a blog is largely defined by the author's personal evaluation of products, as these reviews are often more in-depth and honest. As noted above, the most popular page on the site was 2012's review of AncestryDNA. Bettinger's third most popular post, also from 2012, directly addressed readers concerns with the ethnicity predictions provided by the AncestryDNA product (2012b).

Although product reviews and explanations remain popular, they are not the only criteria of the blog's credibility. In this analysis, three additional aspects have emerged: the author's actual credibility, the medium's credibility, and the author's perceived credibility.

## The Author's Actual Credibility

While the promotion of genetic genealogy has primarily occurred via the experiences and research of "citizen scientists," there are number of scientists that bring another level of credibility to the field. Blaine Bettinger is one of these. Although holding a Juris Doctorate and is currently employed in the area of intellectual property law, Bettinger's research degree (Ph.D.) is in biochemistry with a concentration in genetics (Bettinger, 2016a; "Blaine T. Bettinger," n.d.). He is also an experienced genealogist of 20 years (Bettinger, 2016a).

#### The Medium's Credibility

In nearly nine years, Bettinger's *The Genetic Genealogist* has produced an output 569 posts that included research topics, product appraisals, personal reflections, website and book reviews, news items, and interviews (Bettinger, 2016b). The shear breadth and depth of this blog provides the reader the necessary insight into the topic without sacrificing readability. This is consistent with Johnson and Kaye's (2004) findings that the vast majority of blog users view the medium as being moderately to very credible because the authors "provide more depth and more thoughtful analysis than is available in other media" (p. 633).

## The Author's Perceived Credibility

While Bettinger brought an expert's knowledge of genetics and genealogy to the blog, his credibility as genetic genealogist has increased exponentially. Since starting *The Genetic Genealogist* in 2007, Bettinger transformed from just being another genealogist to being an authority in the field. The credibility that the blog has personally brought to Bettinger can be summed up in the following list of his accomplishments since 2007:

- Editor of the *Journal of Genetic Genealogy* from 2010-2012;
- Trustee of the New York Genealogical and Biographical Society;

- Instructor at the following genealogical institutes: Genealogy Institute of Pittsburgh, the Salt Lake Institute of Genealogy, the Institute of Genealogy and Historical Research, and the Virtual Institute;
- Speaker at national conferences including the 2014 Family Tree DNA Conference;
- Author of two E-books and several articles; and
- Featured in numerous articles as an information source (B. Bettinger, personal communication, January 4, 2016; Bettinger, 2016a).

In addition, Bettinger chaired the Genetic Genealogy Standards Committee. Eighteen genetic genealogists worked diligently beginning in 2013 to develop standards to be used by those conducting genetic genealogical research. These guidelines not only address ethical issues but also the standards for interpreting DNA results (Parker, 2015).

Borah (2015) discovered that an author's perceived credibility enhances a blog's overall credibility in the eyes of its readers. Regarding his own experiences, Bettinger mused,

I credit the blog with all of my genealogical successes, in large part because it was so early to the fray. I received invitations to speak at local societies due to local readers of the blog, which has ultimately led to speaking at national conferences . . . In my opinion, all of these accomplishments can be traced back to my decision to start that blog in February of 2007! (B. Bettinger, personal communication, January 4, 2016)

The credibility of *The Genetic Genealogist* and Dr. Blaine Bettinger has been cyclic—with each enhancing the standing of the other.

#### Reach

In addition to content, a blog's reach is also important. Borah (2015) concluded that the reach of a blog correspondingly increases its credibility. Therefore, a wider (and larger)

audience aids its overall importance as an information source. A number of metrics can be used to judge the reach of a blog. These include readership, search engine optimization, and standing.

## Readership

According to Bettinger (personal communication, January 4, 2016), *The Genetic Genealogist* has had "approximately 1.5 million [unique] visitors and 2.5 million page views." To aid in generating this number, Bettinger has used other social media to drive traffic to the site. Not only is he a frequent contributor to the International Society of Genetic Genealogy's (ISOGG) Facebook page, he developed a dedicated Facebook presence for the blog in 2008. The Facebook page currently has 2,195 "likes." Bettinger also promotes his blog via Twitter. Currently, he has a following of 3,178 individuals and has composed nearly 2,000 tweets. His Twitter account started one month following the establishment of his blog (Bettinger, B. [@blaine\_5], n.d.).

# **Search Engine Optimization (SEO)**

To determine *The Genetic Genealogist*'s ranking on various search engines, several keywords and phrases were used on search engines to determine the blog's standing. In Alexa's list of the top websites in the United States, three search engines were in the top 25 list: Google (#1), Yahoo (#5), and Bing (#17) ("Top Sites in the United States," n.d.). A search of "genetic genealogy" (with and without quotation marks) and "DNA genealogy" (without quotation marks) were used.

Table 1.

The Genetic Genealogist's search engine placement.

Search Term	Google	Yahoo	Bing
genetic genealogy	1	7	2
"genetic genealogy"	4	6	3
DNA genealogy	36	24	18

Placement in the search returns determined *The Genetic Genealogist's* SEO rank. In the two initial categories in Table 1, *The Genetic Genealogist* was the first listed genetic genealogy blog. In the third search category (DNA genealogy), *The Genetic Genealogist*, however, did not make the number one slot. While it placed second behind *Your Genetic Genealogist* with Yahoo and Bing, Google ranked it fifth among blogs; *The Legal Genealogist* placed first.

## **Standing**

In addition to the overall readership and its search engine rankings, a comparison of *The Genetic Genealogist's* popularity alongside other blogs on the subject was warranted. In December 2015, the Board of Certification for Genealogists® recommended 13 genetic genealogy blogs as essential reading on the subject (Fox, 2015). The web analytics tool Alexa was used to determine the rankings (see Table 2).

Since two blogs were operated by corporations, these were eliminated from the comparison as they primarily dealt with their specific products. Another four blogs did not generate sufficient data to be compared. Finally, a list of seven genetic genealogy blogs was compiled and their URLs were analyzed by Alexa. The tool generated the sites' positions within global and U.S. web traffic. The rankings represent each blog's placement among all websites. Table 2.

Genetic genealogy blogs' popularity rankings.

BLOG NAME	GLOBAL RANK	<b>US RANK</b>
The Legal Genealogist	193,164	31,291
DNAeXplained	206,553	50,506
The Genetic Genealogist	609,676	124,773
Kitty Cooper's Blog	644,826	148,415
Your Genetic Genealogist	925,180	354,714
Through the Trees	1,593,442	534,290
Segment-ology	3,182,903	722,888

Although *The Genetic Genealogist* placed third among genetic genealogy blogs behind *The Legal Genealogist* and *DNAeXplained*, its position remained respectful. Although Fox (2015) listed the top ranked *The Legal Genealogist* as a genetic genealogy blog, its content is much broader. Only about 20% of its content relates specifically to genetic genealogy. With a larger potential audience, Judy G. Russell's *The Legal Genealogist* would naturally have a higher position in Alexa. Although found in Fox's (2015) list, it is not a genetic genealogy blog per se.

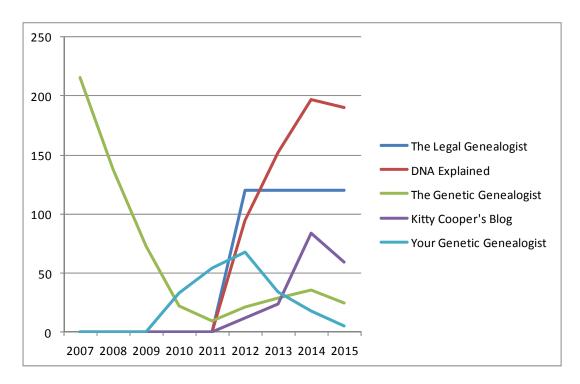


Figure 2. Comparisons of the top five genetic genealogy blogs' yearly post counts.

Authored by Roberta J. Estes, *DNAeXplained* is specifically dedicated to genetic genealogy and is ranked significantly higher than *The Genetic Genealogist*. Although founded in 2012, *DNAeXplained* may have achieved a higher Alexa rank due its amount of activity. Figure 1 analyzes the yearly posts of the five top rated genetic blogs. Estes had the most posts per year for 2013, 2014, and 2015. Russell's numbers for *The Legal Genealogist* have remained consistent at 120 posts per year. She has 10 posts per month – no more and no less.

As for Bettinger's *The Genetic Genealogist*, it was the leading source of posts on the subject from 2007 to 2009; however, this would change. Established in 2010, CeCe Moore's *Your Genetic Genealogist* outpaced Bettinger in both 2010 and 2011. Since 2012, *The Genetic Genealogist* has placed fourth in the number of posts.

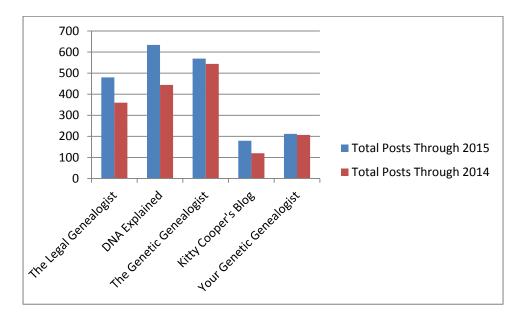


Figure 2. Total posts of the top five blogs through 2014 and 2015.

So why has *The Genetic Genealogist* remained viable? Figure 2 tracks the total number of posts of Alexa's top five rated genetic genealogy blogs. Although Bettinger's blog is second in the total number of posts, he continued to hold the largest number of posts through 2014. With a total of 569 postings, Bettinger still has a catalog of information that continues to drive traffic to his blog. An example is the site's fourth and fifth most popular posts. These two sister posts on the X chromosome from 2008 and 2009 remain popular and are often referenced by other bloggers, as they are the quintessential reference on how X-chromosomal DNA is inherited (B. Bettinger, personal communication, January 6, 2016).

While Bettinger's posts have averaged to about 30 per year since 2013, he tends to post targeted and unique content that is not covered by other bloggers. One such exclusive series is

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his "Shared cM Project" that highlights the data he has collected from approximately 8,500 relationships. Bettinger has analyzed the amount of DNA shared in specific relationships (i.e., first cousins, second cousins, and etc.) and has developed statistical models. This information better aids genetic genealogists in estimating the relatedness between individuals who have a heretofore unknown relationship with each other, but share DNA (B. Bettinger, personal communication, January 6, 2016).

#### **Conclusion**

While other genetic genealogy bloggers' output has been greater in recent years, Dr. Blaine Bettinger remains a "thought leader" in the field. This is evidenced through a number of factors that include the amount of traffic that *The Genetic Genealogist* has generated, the credibility assigned to the blog and its author, its search engine placement, and its standing within the genetic genealogy blogging community. With unique content, a loyal following, and longevity, *The Genetic Genealogist* continues to fulfill the purpose, stated in its byline, of "adding DNA to the genealogist's tool box" (Bettinger, n.d., masthead).

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