

A BIBLIOGRAPHIC STUDY OF CHARLES DARWIN'S BIOGRAPHIES

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HSCI 4993 - Capstone in History of Science, Technology, and Medicine
November 23, 2015

Biographies are curious objects. On one hand, biographies summarize entire lives into easily digestible packages, a task that is certainly commendable. Biographers are, in a sense, educators, producing educational books designed for popular consumption. Unfortunately, this summarization curates an individual's life into narratives that are unsuited for historical study because context is difficult to understand without a comprehensive narrative. However, a collective study of biographies, typically termed as a metabiographical study, can greatly benefit historical understanding. A study of a biographical corpus can outline broad trends in the specifics of biographical production by collectively highlighting individual narrative curations and physical variations, and through their interpretation enhance historical understanding of culturally specific values, such as race, class, gender, or profession.¹ Regrettably, previous metabiographical studies have primarily focused on discerning authorial intent through literary analysis and have largely ignored biographies' descriptive bibliographic materiality.² In doing so, historians have neglected the influence and intent of these works' publishers, traits that would readily complement pre-existing literary analysis. In fact, no studies have even attempted to discern the validity of bibliographically-focused metabiographical studies; although, admittedly, most individuals are ill-suited to such explorations. A bibliographically-focused metabiographical study must focus on an individual whom a large number of biographies exist and whom has been previously metabiographically studied. Fortunately, an individual exists

¹ For further discussion regarding the merits of biographical study, see Browne, "Making Darwin: Biography and the Changing Representations of Charles Darwin" and Söderqvist, "A New Look at the Genre of Scientific Biography."

² For further studies not directly referenced in this essay and relevant to Charles Darwin, see Browne, "Charles Darwin as Celebrity," Browne, "Darwin in Caricature," Browne, "Looking at Darwin," Browne, "Presidential Address," Lightman, "Evolution for Young Victorians." Nicolaas Rupke coined metabiography in *Alexander von Humboldt: A Metabiography*. However, this essay adheres to the simplified definitions by Söderqvist in "A New Look at the Genre of Scientific Biography," pp.3 and Browne in "Making Darwin: Biography and the Changing Representations of Charles Darwin," pp.351.

whose biographical representations are innumerable and has already inspired literary-focused metabiographical analysis: Charles Darwin.³

The confluence of biographical proliferation of Charles Darwin and pre-existing, literary, and metabiographical discourse forms ideal conditions in which to test the validity and effectiveness of a supplementary and bibliographically-focused metabiographical study. However, this study does not aim to perform a comparative cross examination between existing literary and bibliographical discourse, but it does aims to produce a piece of scholarship which argues the efficacy and need of bibliographic analysis in metabiographical studies.

BACKGROUND

Like most metabiographical studies, studies of Charles Darwin have primarily focused on the literary and generally ignored the bibliographic, a focus precisely the opposite of this study. Even so, there is value in briefly summarizing previous metabiographical studies because these studies are proven examples of metabiographical scholarship, not simply literary scholarship. Consideration of their strengths and deficiencies can significantly enhance the design of this study. Also, a review of previous efforts highlight the necessity of bibliographic approaches.

An early example of a metabiographical study of Charles Darwin is Ralph Colp Jr.'s "Charles Darwin's Past and Future Biographies." However, Colp merely outlines Darwin's biographies in order to support his thesis that past biographies are "problematic or inadequate" because of their reliance on increasingly outdated sources.⁴ He then posits that newly published correspondence will transform future biographical analysis and production.⁵ Colp's efforts are clearly metabiographical in nature, but his metabiographical analysis stands secondary to the

³ Browne, "Making Darwin," 357.

⁴ Colp, "Charles Darwin's Past and Future Biographies," 167.

⁵ Ibid., 175-177.

argumentation of his thesis, and his efforts make no attempt to discern broad trends in Darwin's biographical corpus. Because of his lack of critical interpretation, Colp's essay fails as an effective metabiographical study.

In his "The Many Lives of Charles Darwin: Early Biographies and the Definitive Evolutionist," Bernard Lightman more directly focuses on a collective analysis of Darwin's biographical corpus, but his scope is far from comprehensive.⁶ Lightman only examined book-length biographies from Darwin's death in 1882 to 1900, a range so chosen because Lightman hoped to study Darwin's representation before "the iconic figure was not yet set in stone, and before the rediscovery of Mendel's work in the early twentieth century and the anniversary celebrations of 1909 changed the way in which Darwin was regarded."⁷ However, Lightman was constrained because his literary approach necessitated a close reading of each biography, an overwhelming strategy if attempted comprehensively. Lightman acutely concluded that the Darwin biographies published during this period were essential to his eventual attribution as a paragon of science and moral character, yet it is not readily apparent how these conclusions fit into a broader narrative due to its lack of comprehensiveness.⁸

Janet Browne's "Making Darwin: Biography and the Changing Representations of Charles Darwin" certainly epitomizes a more comprehensive metabiographical examination of Charles Darwin's biographical corpus when compared to Lightman's, but because she relies on literary analysis, her conclusions suffer similarly.⁹ Literary analysis holds intellectual merit, but

⁶ Moore, "Metabiographical reflections on Charles Darwin." Chapter self-labels itself as metabiographical, but the article is more personal reflection of the biographical writing process of Desmond and Moore's *Darwin: The Life of a Tormented Evolutionist*. Moore does reflect on Darwin's biographies, but does so casually and unsystematically.

⁷ Lightman, "The Many Lives," 341.

⁸ Ibid., 340-41, 348-49, 355.

⁹ Browne, "Making Darwin," 372-73.

the conclusions drawn from literary analysis alone are typically limited to suppositions about biography's authorial intention and motivation. And the final sentence of Browne's work certainly supports this assumption. "The discussion of Darwin's intellectual development in a notable procession of biographies provides considerable insight into the different worlds of their authors."¹⁰ Unfortunately, this authorial focus largely ignores the intentions of a monographs' publishers. Even if, as Browne states, "... biographers hold all the strings," the publishers drive the physical production of monographs.¹¹ This influence should be investigated.

The essays of Colp, Lightman, and Browne succinctly illustrate the gradual evolution of metabiographical scholarship of Charles Darwin over the last several decades. Initially, Colp utilized metabiographical methodologies primarily to support his assumptions. He did not focus directly on elucidating broad trends in Charles Darwin's biographical corpus, but his scholarship clarified it regardless because it was necessarily resultant from his studies. Thirty years later, Lightman and Brown focused more directly on Darwin's biographical corpus, but their adherence to literary analysis either hampered comprehensive examination or neglected the influence of biographies' publishers. Yet, the efforts of Colp, Lightman, and Browne clarified much.

First, an effective metabiographical study requires a focused, critical interpretation of the biographical corpus. Colp progressed the broader metabiographical narrative of Charles Darwin, but his lack of focus inhibited his effort's metabiographical potential. Second, if a broad metabiographical narrative can be drawn, it must be drawn from a relatively comprehensive sample of biographical texts. Lightman's essay drew perceptive conclusions, but these conclusions stood apart from broader contextual considerations. Finally, literary analysis alone is

¹⁰ Browne, "Making Darwin," 373.

¹¹ *Ibid.*, 350.

not sufficient, even if accomplished comprehensively. Browne surveyed Darwin's biographical corpus far more completely than Lightman, but her comprehensiveness proved insufficient. Literary analysis primarily interprets authorial intention, and this authorial focus largely ignores the influence of biographies' publishers, influence more easily interpretable through bibliographic rather than literary characteristics.

The efforts of Colp, Lightman, and Browne greatly contributed to the metabiographical discourse of Charles Darwin, but their efforts have also clarified the necessity of methodological approaches other than literary analysis because literary analysis cannot sufficiently account a major contributor to the production of biographical texts: their publishers. Fortunately, a comprehensive, bibliographic-focused, and metabiographical study of Darwin's biographical corpus neatly supplements the scholarship of Colp, Lightman, and Browne as well as remedies many of their deficiencies.

METHODOLOGIES, DESIGN, AND CONSIDERATIONS

There are a lot of biographies of Charles Darwin. In fact, there are so many biographies that traditional methodologies and strategies of analysis--which have hitherto been literary in nature--are increasingly constrained, especially if such studies need be completed in a sensible amount of time. However, traditionally-undertaken literary metabiographical surveys of Charles Darwin can hardly be expedited. For literary studies to be effective as possible, a researcher must carefully consider the literary content of every biography in the range of their study.

Bibliographic studies are not similarly constrained because bibliographic traits are generally more quantifiable than literary traits, and there are emerging, digital methodologies and technologies that can greatly expedite bibliographic traits' study.

Unfortunately, many historians are less familiar with this variety of methodological approach, so a moment is required to fully explain how the information in this study was sourced, compiled, and analyzed. Additionally, all of this study's findings depends on the accuracy of its compiled bibliographic data, so it is appropriate to document how it was collected. For library professionals or digital humanists, the following several paragraphs might prove unnecessary; however, for many others, the definitions and descriptions in the next several paragraphs might prove invaluable. Historians are not generally well-versed in some of the concepts introduced and defined within this study, even if these historians are familiar with digital humanities methodologies.

DESIGN

A primary requirement that must be met before conducting a comprehensive bibliographic study of Charles Darwin's biographies is simply knowing what biographies exist. One cannot simply Google "Complete List of Biographies of Charles Darwin in English" and locate anything even reasonably comprehensive. There are too many biographies to be easily referenced. However, a major, albeit incomplete, enumerative bibliographic study of Charles Darwin's biographies has already been completed. In "Making Darwin: Biography and the Changing Representations of Charles Darwin", Janet Browne published an interim list, aided by Ellen Bales at the University of California, Berkeley, but her list excludes several titles which both Colp and Lightman found relevant to metabiographical discourse.¹² She notes, "This interim list covers titles that were published on both sides of the Atlantic, as well as new editions, reprints, and reissues. The list excludes juvenile literature, and commemorative edited volumes that appeared in 1909 and 1982."¹³ This study aims to comprehensively complement existing

¹² Browne, "Making Darwin," 352-357.

¹³ Ibid., 357.

metabiographical discourse, so the excluded titles must be reintroduced because not doing so would unfairly preference Browne over Colp and Lightman. Thankfully, the task was relatively effortless. Excluded yet referenced titles referred to in Colp's "Charles Darwin's Past and Future Biographies" and Lightman's "The Many Lives of Charles Darwin: Early Biographies and the Definitive Evolutionist" were simply added to Browne and Bale's interim list, forming a tentative list of Darwin's biographies that were relevant to previous metabiographical discourse.¹⁴

Each biography on this tentative list was then entered into spreadsheet and subdivided into three periods, demarcated to align with shifts described by Browne, Colp, and Lightman.¹⁵ The product was a simple enumerative bibliography; however, a simple enumerative bibliography was an inadequate resources because it cannot support the depth of analysis this study hopes to aim. This study hopes to prove the efficacy of bibliographic metabiographical studies, so additional characteristics, such as page length and physical size, must be considered. Additionally, Browne and Bale's bibliography was only mostly comprehensive, even after the consideration and re-inclusion of titles covered by Colp and Lightman. This study also aims to conduct as comprehensive as a survey as possible, so it is duefully important to ensure that this study's data set at least highly representative of his biographical corpus. Thankfully, there is large population of professional librarians who collectively cataloguing of every single instance of every monograph and their bibliographic traits, and their efforts were invaluable to supplement the work of Colp, Browne, and Lightman. Due in great thanks to cataloging efforts of librarians, the tentative list of Darwin's biographies was enriched into a reasonably comprehensive one after referencing pre-existing library catalogue MARC records.

¹⁴ Colp, "Charles Darwin's Past and Future Biographies," and Lightman, "The Many Lives."

¹⁵ These demarcations shall be later defined in this study's findings.

Before continuing, a few terms should be defined. A MARC record is a “Machine-Readable Cataloging record,” a standardized format which is often uploaded to an online, collective database such as OCLC’s WorldCat.¹⁶ And what is WorldCat? WorldCat “represents a “collective collection” of the world’s libraries, built through the contributions of librarians, expanded and enhanced through individual, regional and national programs. WorldCat represents the electronic and digital materials most in demand by information seekers, as well as the important, unique items found only in local libraries.”¹⁷ In short, WorldCat is a repository of MARC records, continually updated by qualified repositories worldwide. Thus, WorldCat serves as a highly comprehensive and searchable database of every book in existence, a resource invaluable when conducting a bibliographic metabiographical survey. Researching WorldCat facilitated the enrichment of known printing’s bibliographic traits as well as elucidated additional printings previously unrepresented in the studies by Browne, Colp, and Lightman.

METRICS AND DEFINITIONS

The resultant list of titles and their bibliographic traits then sourced dozens of charts and graphs which compared and contrasted various bibliographic elements. A book concerning the bibliographic trends of Darwin’s biographical corpus could easily be written from their study, but such an undertaking would far exceed the scope of this exploratory survey. Instead, this study primarily focuses on three traits which I have defined as a monograph’s *Origin*, and an author’s *Yield* and *Reach*. However, these terms are not standardized and are uniquely wielded in this study. The next few paragraphs will define these terms, as they will be referred to frequently in this essay’s conclusions and findings, if not by precise definition then by general concept.

¹⁶ "WHAT IS A MARC RECORD, AND WHY IS IT IMPORTANT?" Understanding MARC Bibliographic: Parts 1 to 6, Accessed November 23, 2015, <https://www.loc.gov/marc/umb/um01to06.html>.

¹⁷ "WorldCat," WorldCat. Accessed November 23, 2015. <https://www.oclc.org/worldcat.en.html>.

A monograph's origin refers to the region or country in which a title was originally published. Biographies are often printed by several publishers in several regions over several printings. In the case of Darwin's biographies, most titles are eventually printed in multiple regions. This fact is not terribly surprising as Darwin is widely regarded as a celebrity, and interest in his life is probably universal. However, acknowledgment of such a fact does not sufficiently account a title's geographic origins, nor does the acknowledgement that a specific author wrote a specific biography. This study will focus primarily on the interrelationship between titles published between North America and the British Isles. However, the charts included in this study will represent all regions, even if not directly mentioned. A global analysis certainly holds merit, but to do so rigorously would demands the inclusion of biographies published in all languages, not simply English, a task which far exceeds the scope of this study.

An author's yield refers to the total amount of printings an author's biography received over time. A study which clarifies a biographies origin must also elucidate all subsequent incarnations of that biography, at least if done rigorously. If the entire biographical corpus is thus elucidated, a comparative study of each author's yield might be sensibly conducted. By measuring an author's yield, this study hopes to clarify the proliferation and popularity of specific biographies over time. A study measuring the economic success of each title within the corpus might better clarify such facts, but the necessary study would be exhaustive, time consuming, and maybe even impossible because the minutiae of a book's economic success is rarely part of public discourse. Individuals publishers might be approached, but many titles were published by publishers no longer in existence. However, generalizations might be drawn by considering how often titles have been printed because additional printings are generally an

indicator of economic success. A comprehensive bibliographic survey of the corpus readily facilitates such an examination.

An author's reach measures how widely an author's biography is held within the global library community. One of the major benefits of WorldCat to libraries is that it provides an easy way to know which libraries hold which books. Libraries voluntarily post their holdings to WorldCat because collectively posting holdings enhances library services, such as interlibrary loans. If a library knows who owns a book, they know who to request it from during an interlibrary loan request. Because of this fact, every MARC record in WorldCat numbers how many libraries worldwide hold said printing, numbers which can be readily recorded if one is cognizant of their existence.¹⁸ If every printing of a title is thus accounted, their summed holdings can determine the how widely an author's biography is held. A comparative examination of all author's sums might thus clarify popular success of a title, as opposed to economic or critical success, numbers more readily discernable through an examination of title's yield. This study hopes to clarify any patterns of popular success through its study of reach, be they contradictory or complementary to existing metabiographical discourse on Darwin.

CONSIDERATIONS AND CONCESSIONS

No study is completely ideal, and this study certainly does not break that expectation. All of the bibliographic information sourced for this study originated from Browne's, Colp's, and Lightman's metabiographical work and was then further enhanced by each MARC records in WorldCat. This strategy was appropriate given the non-existent state of bibliographic

¹⁸ For the purposes of this study, GLIMIR clusters were used to determine holdings. For more information on GLIMIR clusters, see Gatenby, "GLIMIR: Manifestation and Content Clustering within WorldCat." Also, these holdings fluctuate dynamically as libraries alter their holding. Holding information considered in this study was collected in October 2015 and will likely change over time.

metabiographical research on Charles Darwin, but it suffers from several flaws which will be honestly and openly admitted before describing this study's findings.

First, WorldCat is not an infallible source of information. MARC records are posted by libraries or officiating agencies, and typically there are several records for each specific printing of a title. Often, the 'correct' record is blatant, but it is not always the case. In circumstances in which there have been a litany of records for a specific printing, due care and diligence has been taken to ensure that the information represented in this study aligns with the most widely represented holdings, i.e., the records which libraries have most widely and numerous posted their holdings on. Additionally, information in a title's MARC records might unfortunately be the product of inadequate cataloging practices. This is exceedingly uncommon, but it is difficult to determine without a physical copy of a biography in hand, as was the case in this study.

Second, multiple MARC records on WorldCat might not necessarily indicate multiple printings of any given title, though they are highly indicative. As mentioned earlier, it is common to find multiple records for any given specific printing of title. Generally, these printings are discernible from each other by examining each record's bibliographic traits, such as publisher or published date. However, sometimes outliers exist, and it is often difficult to determine exactly why. Sometimes, a publisher's subsidiary brand might be confused with a different subsidiary brand. Sometimes, the publishing date is a year less or greater than the copyright date of a book. Sometimes, the outlier records are completely illogical. Whatever the cause, incredible care and diligence has been taken to minimize the possibility of duplicate entries because of the existence of these outliers.

Third, this study's enhanced bibliography of Darwin's biographical corpus, originally compiled by Browne and Bales, inserted with omissions to better collectively represent the

works of Colp and Lightman, and further bolstered by numerous printings discovered only after considering MARC records in WorldCat, should not be considered completely comprehensive. No comprehensive bibliography of scientific biography exists, let alone the biographies of Charles Darwin. Regardless of this study's rigor, there must be concessions that titles might exist which are not covered in this study.

Fourth, the data compiled for this study may not be temporally consistent. Libraries optionally post their holdings to WorldCat. Contemporarily, this is a nigh-universal practice; however, it cannot be confidently assumed that a library's entire holdings are necessarily represented in WorldCat. Online Computer Library Center, Inc. (OCLC), WorldCat's operator and manager, did not exist until 1967, long after many of the titles referred to in this study had been published. Titles acquired by libraries after OCLC began accumulating libraries' holdings are probably highly representational of physical holdings because posting holdings is simple and routine. Titles acquire before this time must be retroactively posted, and this additional investment must be acknowledged because it cannot be readily assumed that all libraries have or desire to expel the resources required to undertake such a task. Accordingly, this study has attempted to minimize the potential influence of this phenomenon by separating biographies into three temporal periods, so chosen for biographical shifts broadly demarcated by Browne, Colp, and Lightman.

Lastly, data gathered from this study primarily reflects trends in librarianship. All the data compiled for this study sources holdings in WorldCat, collectively posted and maintained by libraries worldwide. Some publishers hold the ability to maintain and post MARC records, but only qualified repositories of books, such as archives, rare book collections, or libraries, may post new or update holdings. Thus, data sourced in this study only reflects the dissemination of

titles in repositories of books. Absent from such analysis are metrics of a monograph's economic success. A rigorous study which contrasts a monograph's economic success with its dissemination in libraries might certainly contribute to the metabiographical discourse of Darwin, but such an effort far exceeds the scope of this study. Instead, this study hopes to provide tentative evidence that bibliographic considerations can supplement and contribute to current literary analysis. In such cursory aims, an examination of MARC records in WorldCat certainly holds merit.

FINDINGS

As mentioned previously, this study separated Darwin's biographical corpus into three periods, and the findings from each shall be presented individually. The first set of biographies contains titles originally published from 1883-1900, so demarcated by Lightman. "By making 1900 the cutoff point I can examine the early biographies produced in the first 18 years after Darwin's demise, when the iconic figure was not yet set in stone, and before the rediscovery of Mendel's work in the early twentieth and the anniversary celebrations of 1909 changed the way in which Darwin was regarded."¹⁹ This study hopes to compliment current metabiographical discourse, so it is apt to follow Lightman's lead.²⁰ The second set of biographies contains titles originally published from 1901-1958, a period so chosen because it neatly falls after the shift described by Lightman in 1900 and before the 1959 centenary celebrations that Browne stated "... was fertile for writers to promote another kind of Darwin," and Colp argued provided many of "the essential biographical prerequisites" to promote a more complete portrayal of Darwin's

¹⁹ Lightman, "The Many Lives," 341.

²⁰ It should be noted, however, that the only biographical text published between 1894 and 1909 was Francis Darwin's *More letters of Charles Darwin: A record of his work in a series of hitherto unpublished letters* in 1903. So stated, the exact range chosen for analysis need only exclude this title in order to align with Lightman in "The Many Lives of Charles Darwin."

life.²¹ The third set of biographies contains titles originally published from 1959 to 2009. This range was so chosen because it covers works after the 1959 biographical shifts described by Browne and Colp up to sesquicentennial celebrations of 2009, the latest published titles accounted by Browne and Bales in “Making Darwin.”²² As stated before, this study hopes to compliment current metabiographical discourse, so was germane to follow Browne’s lead.

BIOGRAPHIES 1883-1900

Twenty one monographic editions were published from titles originating in this period, written by nine authors, and notable contributions include Francis Darwin’s *Life and Letters* and his later *More Life and Letters*, Grant Allen’s *Charles Darwin*, and G. T. Bettany’s *Life of Charles Darwin*. Unsurprisingly, this first set of biographies was dominated by works initially published in England (see figure 1.1).²³ Many of these titles were later published in other regions, but not all. George W. Bacon’s *The Life of Charles Darwin with British Opinion on Evolution*, Louis C. Miall’s *Life and Work of Charles Darwin*, Walter Mawer’s *Truth for Its Own Sake: The Story of Charles Darwin Written for Young People*, James Stirling’s *Darwinianism: Workmen and Work*, and Bettany’s *Life of Charles Darwin* never received editions outside of the British Isles. Additionally, the United States received Charles Holder’s *Charles Darwin: His Life and Work*, a title never published abroad. However, the majority of titles published in this period originated in England, and the majority of titles published in this period were never published more than one region, with only 22.2 percent of titles doing so (see figure 1.2).²⁴ In fact, the only author’s works who managed to garner multiple editions was Grant Allen and Francis Darwin.

²¹ Browne, “Making Darwin,” 365 and Colp, “Charles Darwin’s Past and Future Biographies,” 174. Like the first set of biographies, the year of 1959 was chosen for its centenary significance, but no biographies were originally published between 1955 and 1959. Reprints certainly appeared, but no original work.

²² Ibid. 352-57.

²³ See Appendix.

²⁴ Ibid.

The analysis of reach and yield of these authors and their works confirm the general consensus that Francis Darwin's *Life and Letters* and his later *More Life and Letters* were highly influential. As noted above, only Grant Allen and Francis Darwin gained multiple printings of their biographical texts, and the number of editions they received was not insignificant (see figure 1.3).²⁵ Francis Darwin's *Life and Letters* was printed seven times in the ensuing decades, and *More Life and Letters* was printed twice. In comparison, Grant Allen's *Charles Darwin* was but printed five times, and a comparison of each author's reach further widens this gap (see figure 1.4).²⁶ Francis Darwin's yield, as measure on WorldCat, is 1563 holdings worldwide, far more than any work in this period. The second and third most held authors, G. T. Bettany and Grant Allen, but measure at 286 holdings and 175 holdings, respectively. Francis Darwin's works are the most widely printed in this period, and, it would seem, the most widely contemporarily held.

BIOGRAPHIES 1901-1958

Forty monographic editions were published from titles originating in this period, written by 15 authors, and notable contributions include William Irvine's *Apes, Angel, and Victorians*, Ruth Moore's *Charles Darwin*, Robert Clark's *Darwin, Before and After: An Examination and Assesment*, and Paul B. Sears' *Charles Darwin: The Naturalist as a Cultural Force*. Initial printings in the previous period originated mostly in England, and proportional to the period's total printed monographs, this remains mostly true, with a slight increase, from 77.8 percent to 80 percent (see figure 2.1).²⁷ However, half of this 80 percent was simultaneously published in the United States and Canada, unlike the previous period. Over the course of additional printings,

²⁵ See Appendix.

²⁶ Ibid.

²⁷ Ibid.

the number of titles published in England increases, from 80 percent to 86.7 percent, and the number of titles eventually published in multiple regions also increases sharply, from 22.2 percent to 60 percent (see figure 2.2).²⁸ The only titles from this period which were not eventually published in England was Gamaliel Bradford's *Darwin* and Paul B. Sears' *Charles Darwin: The Naturalist as a Cultural Force*. The latter of which is especially curious after examining this period's reach and yield.

Not unlike biographical texts printed up to 1900, few titles dominated this period's reach and yield. William Irvine's *Apes, Angel, and Victorians* is blatantly dominate, with 11 eventual printings, the most yield of any author in any period covered in this study (see figure 2.3).²⁹ Robert Clark's *Darwin, Before and After: An Examination and Assesment* received a respectable eight printings, but each subsequent author's yield decreases rapidly after. Charles Ward's *Charles Darwin: The Man and his Warfare* received but three printings, with all remainder authors receiving one or two. When contrasted to each author's reach, these numbers become increasingly complicated. Unsurprisingly, William Irvine tops WorldCat holdings for this period at 2644 holdings worldwide (see figure 2.4).³⁰ However, subsequent places are far more even. Ruth Moore (792 holdings), Paul B. Sears (769 holdings), Gamaliel Bradford (670 holdings), Charles Ward (609 holdings), and Geoffrey West (598) hold places two through six, and all of these authors yielded one or two printings, with the exception of Charles Ward, who only received three. Robert Clark, whose yield of eight far exceeded all but Irvine, only has 359 holdings. Additionally, Gamaliel Bradford and Paul B. Sears were never printed outside of the United States. The numbers imply that William Irvine's *Apes, Angel, and Victorians* is the most

²⁸ See Appendix.

²⁹ Ibid.

³⁰ Ibid.

highly representative title originating from this period, but it the numbers alone cannot easily account to the complex interrelationships of secondarily important titles. Further, more rigorous investigation is necessary.

BIOGRAPHIES 1959-2009

Ninety four monographic editions were published from titles originating in this period, written by 35 authors, and notable contributions include Janet Browne's two volume *Charles Darwin*, Adrian Desmond and James Moore's *Darwin*, Gertrude Himmelfarb's *Darwin and the Darwinian Revolution*, Alan Moorehead's *Darwin and the Beagle*, and Peter Bowler's *Charles Darwin: The Man and His Influence*. The two previous periods held a general increase in titles whose original printing included England, but this period started to see a slight decrease, from 80 percent to 71.4 percent (see figure 3.1).³¹ Through the course of additional printings, the number of titles eventually published in England rises, but only slightly, to 74.2 percent (see figure 3.2).³² The number of titles published in multiple regions also drops, from 60 percent in 1901-1958 to 53.1 percent, a curious trend. The numbers imply that titles became increasingly global towards the middle of the twentieth century, but this trend has since diminished, with each region's printings becoming increasingly insular globally.

Unlike the previous two periods, there are a litany of authors who have been widely printed (yield) and widely held (reach). Janet Browne's yield tops the period, at eight printings, but many authors achieve yields nearing this total (see figure 3.3).³³ Gertrude Himmelfarb received seven printings, Sir Gavin de Beer received six printings, and six additional authors received between four and fix printings. This distribution yield is far more steady than previous

³¹ See Appendix.

³² Ibid.

³³ Ibid.

periods, a trait also apparent the period's yield. Alan Moorehead tops Worldcat holdings for this period at 2639 holdings worldwide, but subsequent authors follow close behind (see figure 3.4).³⁴ Janet Browne (2395 holdings), Gertrude Himmelfarb (2072), David Quammen (1968), and Ronald W. Clark (1684) exemplify this period's steady curve, continuing throughout. Interestingly, much like the Gamaliel Bradford and Paul B. Sears, Ronald W. Clark's *The Survival of Charles Darwin: A Biography of man and an Idea* is a curious outlier. It only yielded two printings and never left the United States, yet it is the fifth most widely held title originating from this period and the sixth most widely title in all periods.

CONCLUSIONS

Studies which utilize quantitative and digital methodologies more often solidify assumptions or elucidate aberrations instead of forming concrete conclusions, and this study is no exception. Analysis of biographies originating from 1883 to 1900 seemingly verify the persistent value attached to Francis Darwin's *Life and Letters* and his later *More Life and Letters*. No other title originating from this period was as widely printed, then or now, and no other title from this period is as widely held by repositories worldwide. Such findings seems to align with previous metabiographical discourse. Additionally, titles from this period tended to remain in a single region, with only Grant Allen's and Francis Darwin's only receiving more than one printing.

Biographies originating from 1901 to 1958 follow a similar pattern, with William Irvine's *Apes, Angel, and Victorians* holding dominance in both yield and reach; however, this was not the only curious aberration elucidated from this period's study. Gamaliel Bradford's *Darwin* and Paul B. Sears' *Charles Darwin: The Naturalist as a Cultural Force* were the third and fourth

³⁴ See Appendix.

most held titles in this period, despite only being printed in North America and despite having only received a single printing of their titles. Future investigations should investigate these titles to determine how they align with current metabiographical discourse.

Biographies originating from 1959 to 2009 exhibited more insular printings, more often tending to be printed in a singular region in comparison to the previous period. Also, unlike the previous two periods, title dominance was less pronounced and more evenly curved. Much like Gamaliel Bradford and Paul B. Sears, Ronald W. Clark's *The Survival of Charles Darwin: A Biography of man and an Idea* offers is a potential subject of future research. Like Bradford and Sears, future investigations should investigate this title's metabiographical significance.

All three periods' research either highlighted worthwhile subjects of future scholarship or reinforced current scholarship. In both cases, this study's findings could not have fully been discerned from literary analysis alone, despite this study's multiple concessions. And most of these concessions can be significantly minimized.

As previously noted, the bibliographic information sourced from WorldCat is not infallible. However, the information could be independently verified with sufficient effort. If all of the printings considered in this study could be physically examined, the MARC records on WorldCat could be independently verified. Additionally, such an effort would verify or disprove printing duplications that might have arisen. If titles attached to separate WorldCat holdings could be simultaneously examined, like-titles would be blatantly obvious and then subsequently removed from consideration. Alternatively, if printings not considered in this study could be examined physically, it would be blatantly obvious if these titles were judged accurately. Simple physical examination of every printing considered or excluded in this study would most certainly eliminate both of these concessions, albeit with significant effort.

As also noted, the enhanced bibliography created to conduct this study cannot be assumed to be completely comprehensive. However, this concession too can be remedied, albeit with significant effort. Even if every printing of every title in this study could be physically examined, such research could not account titles or printings which Colp, Browne, or Lightman were unaware. Even so, attempts could be made to locate such titles, if any were in fact discluded. Several bibliographies could be referenced to consider additional biographical texts, such as Leslie Howsam's *Scientists Since 1660: A Bibliography of Biographies*, Roger Smith's *Biographies of Scientists: An Annotated Bibliography*, or the Isis bibliography.³⁵ Just like this study's effort's, these sources cannot be considered completely comprehensive, but the collective examination them should be highly representative, or at least more representative than the modest efforts of this study.

Concessions of temporal consistency can also be remedied, again, with significant effort. This study focused exclusively on data compiled from librarian's efforts and their active participation. Certainly libraries participate as much as their resources allow, but resources might be limited and their ability to participate be subsequently constrained. Simply stated, this study depended on data presented by librarians, not gained by approaching librarians. If enough resources could be mustered, future bibliographic studies might contact individual repositories to determine their exact holdings, eliminating the need to concede that some repositories might not retroactively post their holdings.

This study was an experimental exploration, not rigorous examination, yet the benefits of bibliographic study in metabiographical discourse is easily apparent. Further bibliographic

³⁵ IsisCB, Accessed November 23, 2015, <http://isisbibliography.org/>.

research is worthwhile, and this study's cursory finding, as meager as they are, provide solid evidence than it is true.

Appendix

Figure 1.1 - Count of Region First Published (Origin) (+-1 year) (Authors) - 1883-1900

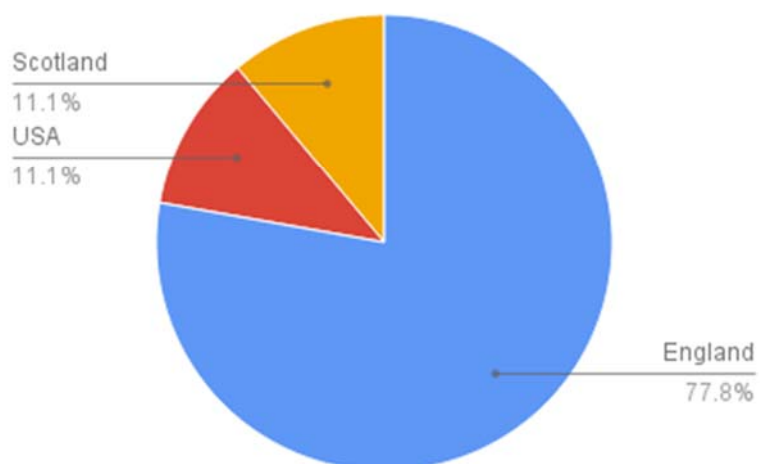


Figure 1.2 - Count of Regions Published (Authors) - 1883-1900

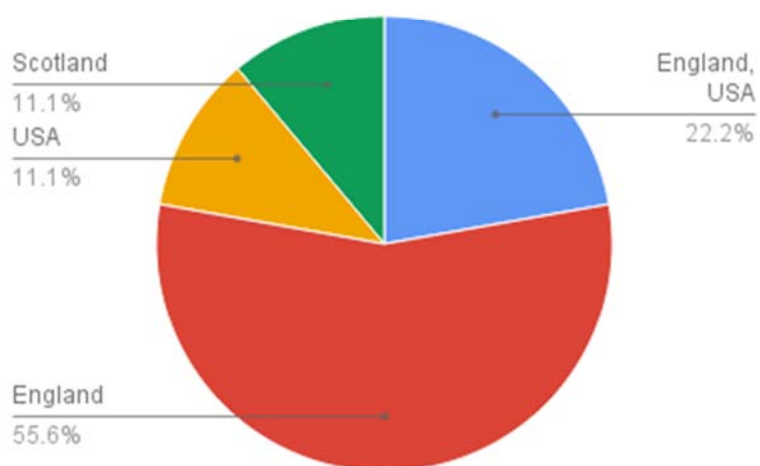


Figure 1.3 - Number of Printings by Author (Productive Yield) vs. Author - 1883-1900

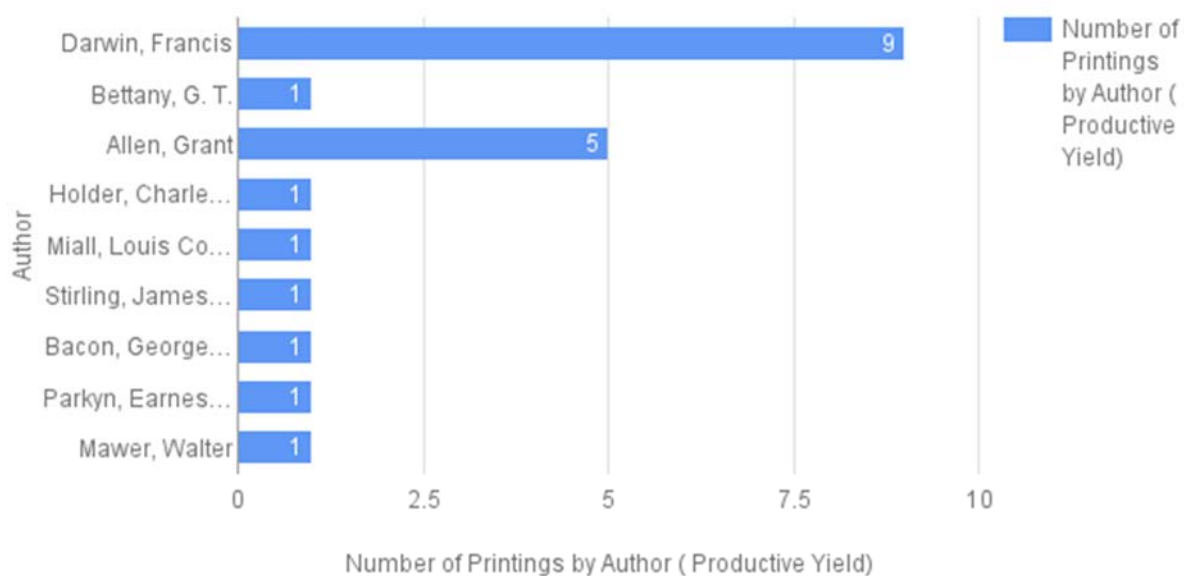


Figure 1.4 - Author's Total Holdings (Reach) vs. Author - 1883-1900

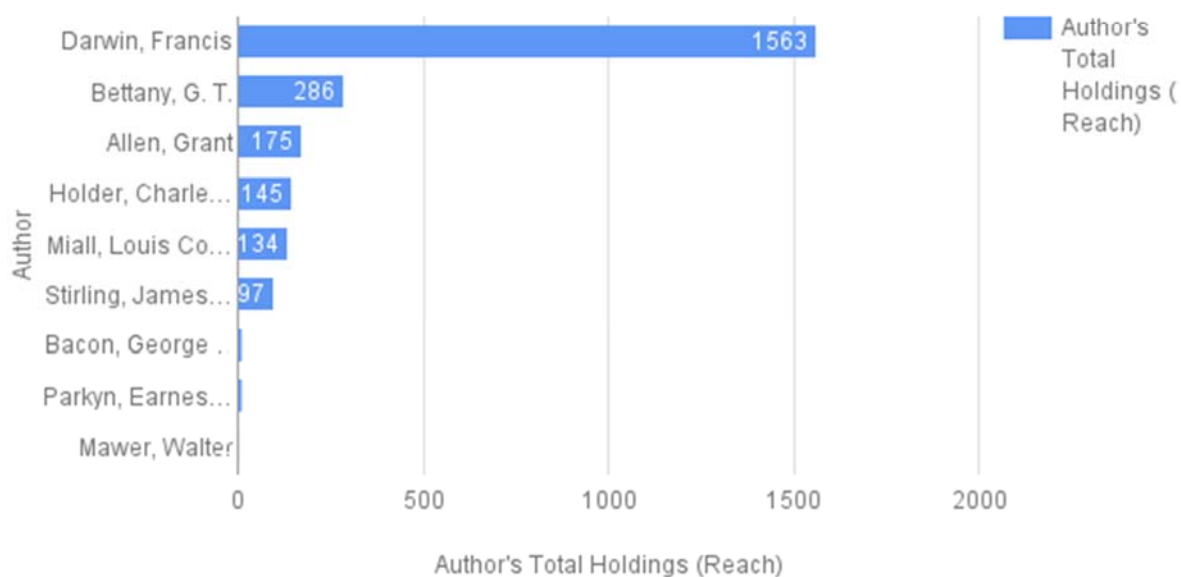


Figure 2.1 - Count of Region First Published (Origin) (+/-1 year) (Author) - 1901-1958

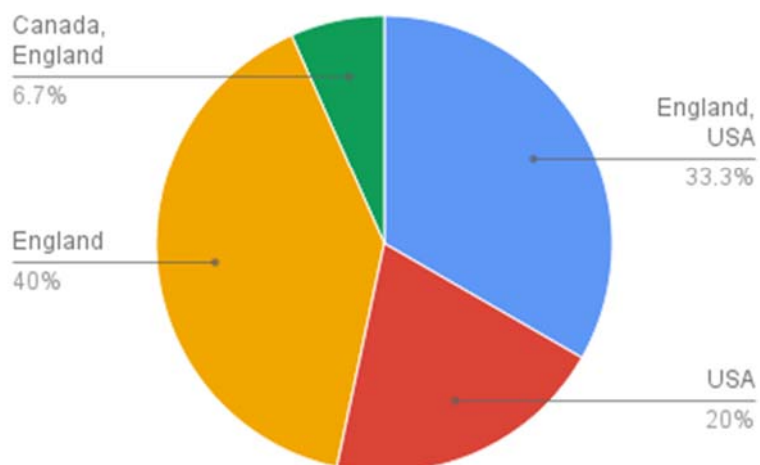


Figure 2.2 - Count of Regions Published (Author) - 1901-1958

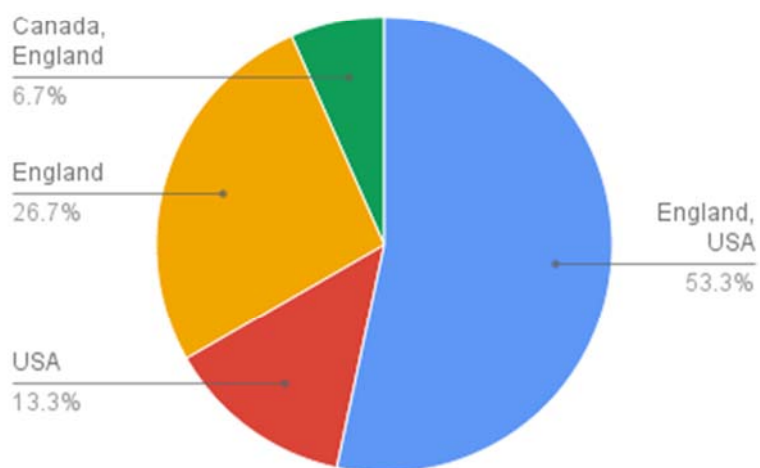


Figure 2.3 - Number of Printings by Author (Productive Yield) vs. Author - 1901-1958

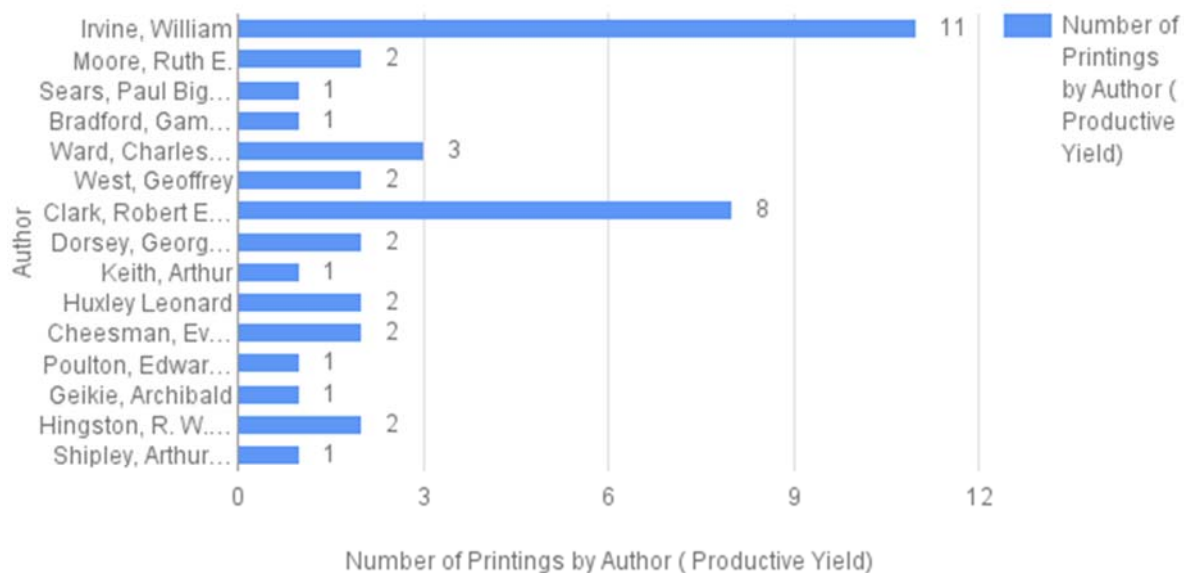


Figure 2.4 - Author's Total Holdings (Reach) vs. Author - 1901-1958

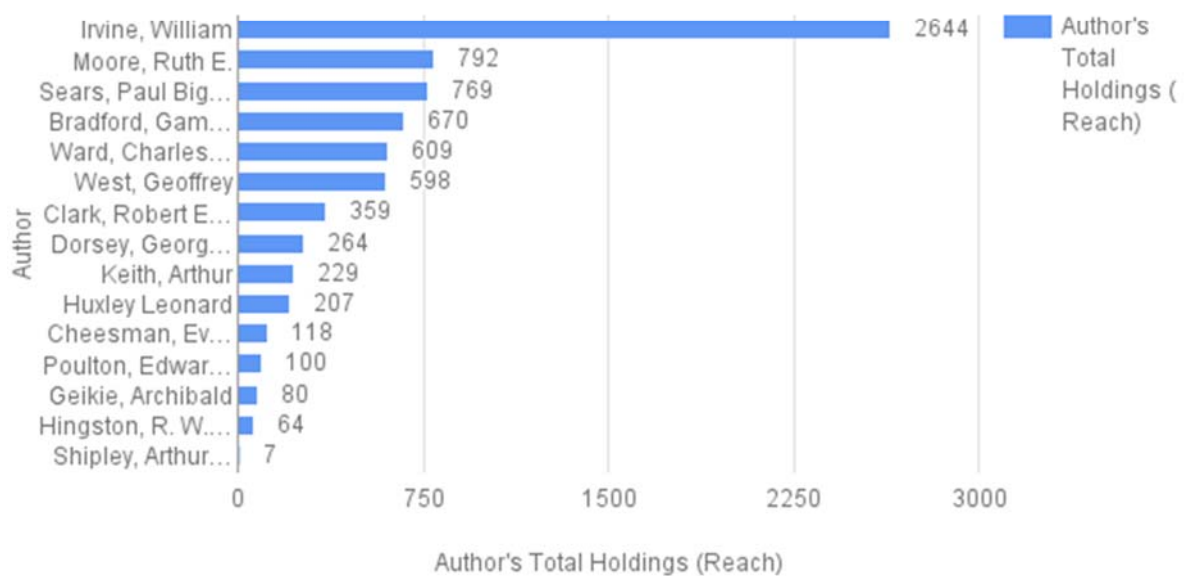
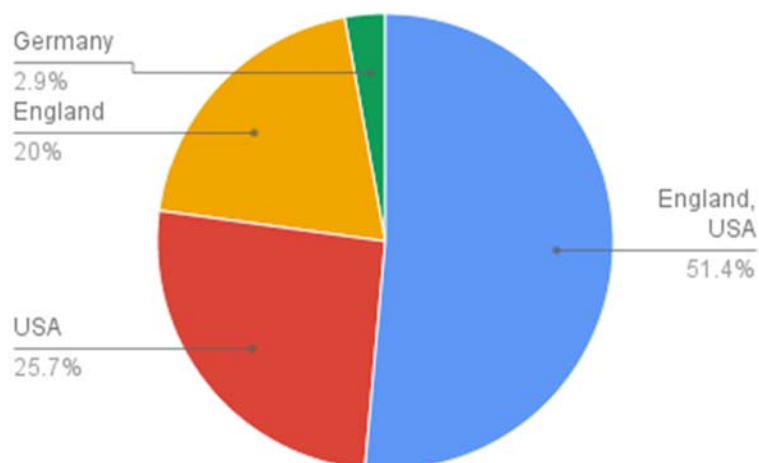


Figure 3.1 - Count of Region First Published (Origin) (±1 year) (Author) - 1959-2009



3.2 Figure Count of Regions Published (Author) - 1959-2009

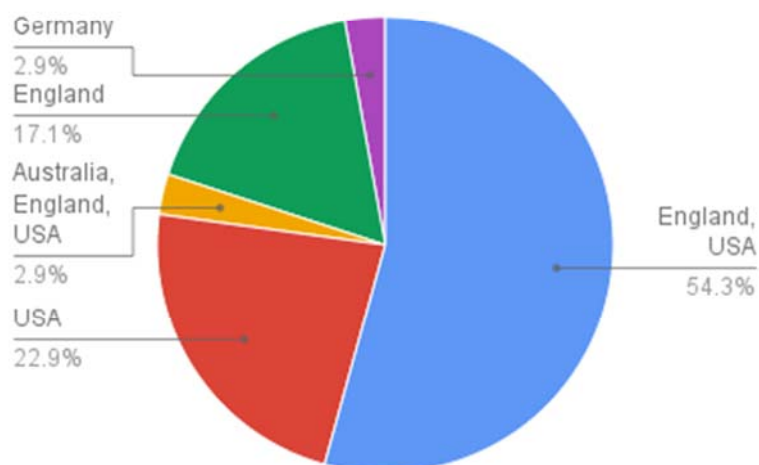
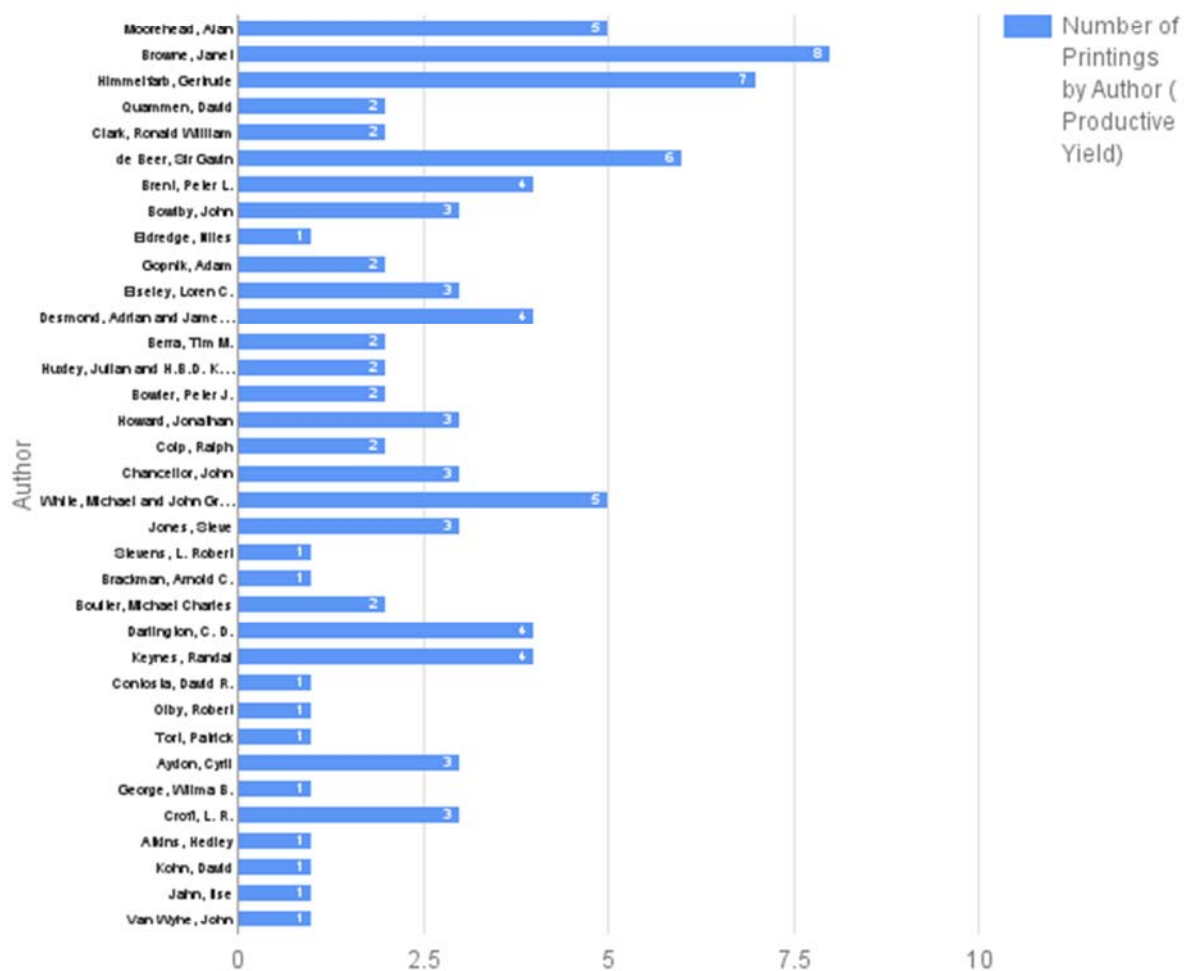
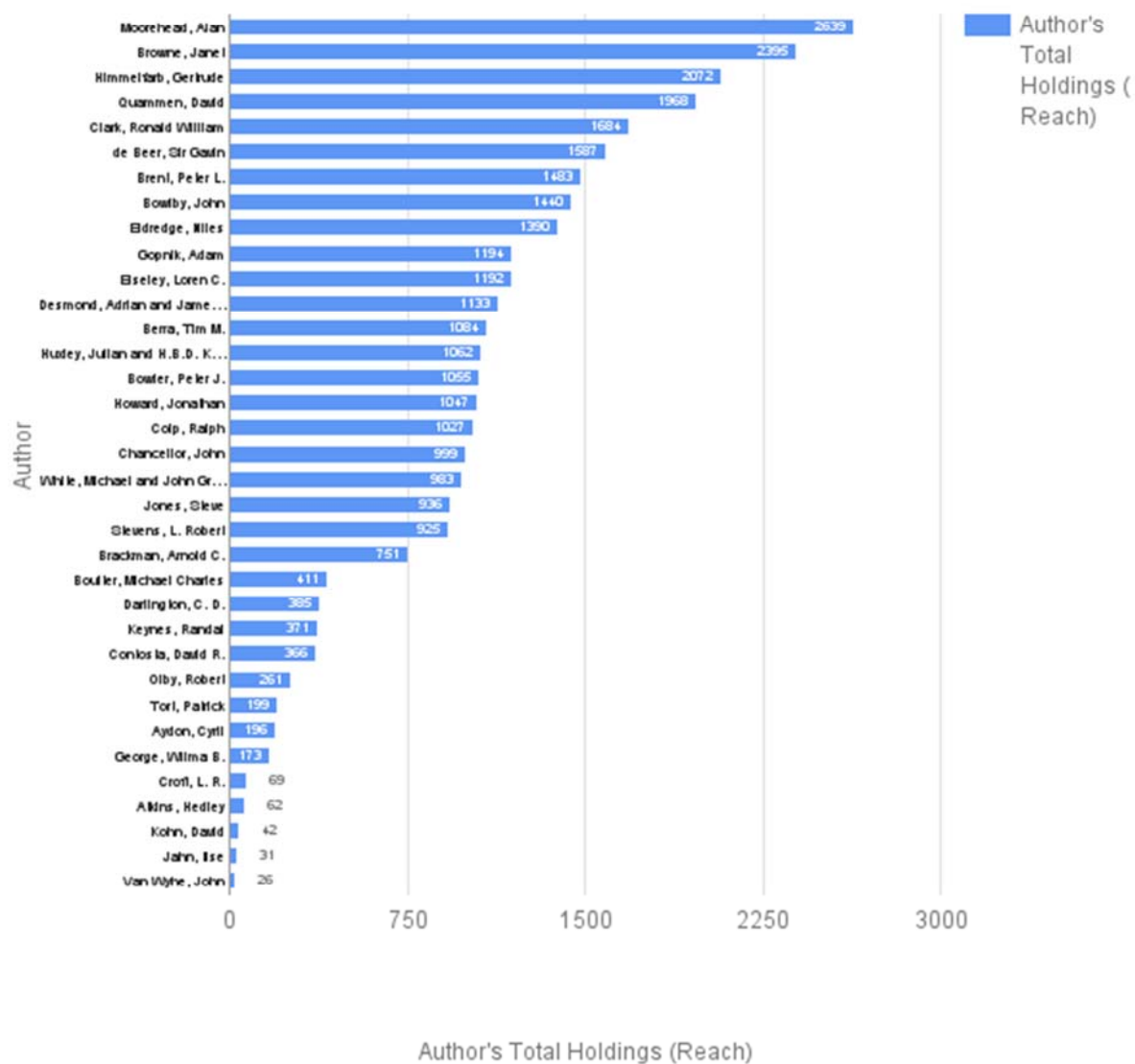


Figure 3.3 - Number of Printings by Author (Productive Yield) vs. Author - 1959-2009



Number of Printings by Author (Productive Yield)

Figure 3.4 - Author's Total Holdings (Reach) vs.
Author - 1959-2009



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