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# “Spare your arithmetic, never count the turns”: A Statistical Analysis of Writing about Shakespeare, 1960–2010

LAURA ESTILL, DOMINIC KLYVE, AND KATE BRIDAL

FOR SHAKESPEAREANS, the plays that we write about reveal our critical preoccupations and concerns.<sup>1</sup> Indeed, Shakespeare studies can be indicative of larger trends in scholarship of both literature and theater. As Neema Parvini points out, Shakespeare studies “[act] as a kind of litmus test for critical approaches.” The study of particular plays has been influential in the development of schools of literary criticism: for example, *Hamlet* and psychoanalysis or *The Tempest* and postcolonial criticism.<sup>2</sup> Kiernan Ryan, while focusing on the critical history of *King Lear*, argues that considering the “key disputes dividing Shakespeare studies today” brings to light “the current predicament of criticism itself.”<sup>3</sup> Not only has the way we theorize and study Shakespeare changed over the past fifty years, but the way we edit his texts has also evolved with similar ramifications for textual studies writ large.<sup>4</sup>

While scholars have discussed the trends in scholarship qualitatively, this study is the first to present quantitative evidence about directions in late twentieth-century Shakespeare studies. Parvini, Michael Taylor, and R. S. White, to name a few, consider critical movements in Shakespeare studies from the influ-

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<sup>1</sup> For the title quotation, see *Cymbeline*, in *The Riverside Shakespeare*, gen. ed. G. Blakemore Evans, 2nd ed. (Boston: Houghton Mifflin, 1997), 2.4.142. All Shakespeare quotations follow this edition and will be cited parenthetically. We follow the WSB’s spelling conventions. The citations for quotations in the section headings of this essay are as follows: *Love’s Labor’s Lost*, 5.2.35; Sonnet 11.1; Jasper Fforde, *Something Rotten* (New York: Penguin, 2005), 22; *Titus Andronicus*, 2.3.265; *King Lear*, 4.7.91; and *The Tempest*, 1.2.36.

<sup>2</sup> Neema Parvini, *Shakespeare and Contemporary Theory: New Historicism and Cultural Materialism* (New York: Bloomsbury, 2012), 8.

<sup>3</sup> Kiernan Ryan, “*King Lear*: A Retrospect, 1980–2000,” *Shakespeare Survey* 55 (2002): 1–11, esp. 1.

<sup>4</sup> For a history of textual scholarship, notably trends in editing, over the past fifty years, see Gabriel Egan, *The Struggle for Shakespeare’s Text: Twentieth-Century Editorial Theory and Practice* (Cambridge: Cambridge UP, 2010).

ence of A. C. Bradley through the “theory wars” of the 1980s to the ever-multiplying approaches used today.<sup>5</sup> Perhaps more ambitiously, some scholars even suggest or argue for future directions of Shakespeare scholarship.<sup>6</sup> And while several essays or editions make claims about a particular play’s rising or falling popularity, our study is the first to use quantifiable evidence to account for the critical reception of Shakespeare’s plays by considering how much is written about an individual play in relation to the others. This essay focuses on critical interest in Shakespeare rather than popularity in theaters—though we do include essays about particular performances of Shakespeare’s plays in our results.<sup>7</sup> Ultimately, the relative popularity of Shakespeare plays reveals our critical preoccupations and concerns. Our title is taken from *Cymbeline* when Posthumus, trying to deny Jachimo’s falsehoods, pleads, “Spare your arithmetic, never count the turns.” To apply Posthumus’s words to a situation he could never have imagined (a statistical analysis of Shakespeare studies), if we spare the arithmetic, we will not see the turns that the field has taken.

“THE NUMBERS TRUE, AND, WERE THE NUMB’RING TOO”: WHAT COUNTS?

Data were collected using the *World Shakespeare Bibliography Online* (WSB) during the fall of 2014. At the time (WSB release 20143), the bibliography’s self-reported statistics gave that it contained over 140,000 records of scholarship and theatrical productions concerning Shakespeare from all over the world in all languages (even Klingon) between 1960 and 2014.<sup>8</sup>

<sup>5</sup> Parvini, *Shakespeare and Contemporary Theory*; Michael Taylor, *Shakespeare Criticism in the Twentieth Century* (Oxford: Oxford UP, 2001); and R. S. White, “Shakespeare Criticism in the Twentieth Century,” in *The Cambridge Companion to Shakespeare*, ed. Margreta de Grazia and Stanley Wells (Cambridge: Cambridge UP, 2001), 279–96.

<sup>6</sup> On the potential future(s) of Shakespeare studies, see Parvini, “The Scholars and the Critics: Shakespeare Studies and Theory in the 2010s,” *Shakespeare* 10 (2014): 212–23; Bryan Reynolds, *Performing Transversally: Reimagining Shakespeare and the Critical Future* (New York: Palgrave Macmillan, 2003); and Edward Pechter, *Shakespeare Studies Today: Romanticism Lost* (New York: Palgrave Macmillan, 2011).

<sup>7</sup> The WSB data can also be mined to gauge the relative popularity of a particular play by performance history. Valerie Traub, for instance, demonstrates that *A Midsummer Night’s Dream* is a consistently-staged play based on the number of performances catalogued in the WSB. See Traub, *The Renaissance of Lesbianism in Early Modern England* (Cambridge: Cambridge UP, 2002), 385n96. Similarly, Christine Dymkowski uses WSB performance stats to make a case for the upsurge in *Measure for Measure*’s popularity and relevance in “*Measure for Measure*: Shakespeare’s Twentieth-Century Play,” in *Shakespeare in Stages: New Theatre Histories*, ed. Christine Dymkowski and Christie Carson (Cambridge: Cambridge UP, 2010), 164–84.

<sup>8</sup> The Klingon entries are a 1996 production of one scene from *Hamlet* by Warp 5 (Lund: Akademiska föreningen, 1996), co456 and the published version, *Khamlet: Hamlet, Prince of Denmark. The Restored Klingon Version*, ed. Mark Shoulson (Flourtown, PA: Klingon Language Institute, 1996), ao1289. *Khamlet* was republished in facing-page translation: *The*

Thoroughly accounting for scholarly output on Shakespeare’s plays would have been all but impossible were it not for the *WSB*. Although there are many other ways to search for publications on Shakespeare, no other resources offer so comprehensive a focus. Inclusion in the *WSB* does not guarantee that a given work is scholarly: for instance, the bibliography includes new adaptations of Shakespeare’s work (stage, musical, video, and dance) and selectively covers, for example, popular newspaper articles of particular interest to Shakespeareans. Because the *WSB* does not assess a work’s scholarly rigor, we limited our search to entries classified as being a “Book monograph,” “Article” (both in journals and edited collections), “Dissertation,” or “Computer software.” No other filters were used. Naturally, the remarkable utility of the *WSB* also presents a limitation to the study: rather than discussing trends in Shakespeare scholarship, we are looking at trends in *publications* about Shakespeare’s plays, or, even more precisely, those publications placed into one of the above categories by the editors of the *WSB*.

The *WSB* categories can also, at times, be slippery. “Dissertation” is perhaps the clearest type included in this study.<sup>9</sup> “Book monograph” encompasses not only traditional academic books and popular works on Shakespeare but also editions; translations; printed adaptations; and outliers such as the graphic novel *Kill Shakespeare* (*WSB* Document ID number aaz408), the novel *Othello* (ai506), and *The Two Millionth Volume: In Celebration* (ad326)—an entry that indexes both an exhibition catalogue and an accompanying pamphlet.<sup>10</sup> The “Article” category comprises some newspaper coverage but not all, note-length essays (in, for instance, *Notes and Queries*), traditional academic journal essays in familiar venues (such as *Shakespeare Quarterly* and *Shakespeare Bulletin*), and chapters in edited collections.<sup>11</sup> The “Computer software” category contains material dating from as early as 1983 (such as Paul Davies’s *Shakespeare: The Tempest* [an74]) to some of the most up-to-date online tools, including *Folger*

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*Klinton Hamlet: The Restored Klinton Version*, ed. Mark Shoulson (New York: Pocket Books, 2000), aab837. When citing entries in the *WSB*, we offer the “Document ID” number, which is searchable through the advanced search option.

<sup>9</sup> If a dissertation is subsequently revised and published as a book, the *WSB* includes only an entry for the book and notes the dissertation in the entry.

<sup>10</sup> Although adaptations are included in our study as publications about Shakespeare’s plays, reviews or discussions of those adaptations are excluded from the bibliography unless they substantially treat Shakespeare’s original text. Conor McCreery and Anthony Del Col, *Kill Shakespeare* (San Diego: IDW, 2010); Julius Lester, *Othello: A Novel* (New York: Scholastic, 1995); and *The Two Millionth Volume: In Celebration* ([Newark]: U of Delaware Library, 1991).

<sup>11</sup> The “Article” category generally does not include brief reviews of productions or monographs, as those are included in the entry for the book, production, or article being reviewed under the subheading “Review(s).”

*Digital Texts* (aaac4).<sup>12</sup> When the bibliography began cataloguing “Computer software,” the editors could hardly have anticipated the boom in websites devoted to Shakespeare and the sometimes fleeting nature of online works.<sup>13</sup> The bibliography itself has gone through the growing pains that come from adopting changing technological standards. The *WSB* began as an appendix to the print version of *Shakespeare Quarterly* in 1949, grew into its own annual issue of the journal, and had its first digital release as a CD-ROM in 1996. This latter development won editor James L. Harner the Besterman Medal for outstanding electronic reference work. Now the *WSB* is entirely online, which makes possible large-scale data mining projects like this one. The “Computer software” the bibliography includes, by and large, is scholarly in nature and not simply fan sites, blogs, or production company sites. Some early materials in the “Computer software” category, such as “Shakespeare Quizzes: Romeo and Juliet” (1986, aj748), would not make the *WSB* today because Shakespeare quizzes are published online in any number of venues.

The “Document type[s]” included in the *WSB* that we have chosen to omit include “Production,” “Film,” and “Audio Recording”—elements that are performance-based rather than textual. Perhaps future statistical analyses could draw on these categories in the bibliography. Furthermore, we excluded the “Book collection” category, as it has its own section in the taxonomy (“Festschriften”) not linked to particular plays; as mentioned above, chapters from collections are, however, indexed as “Article[s].”<sup>14</sup> Though the *WSB*’s mandate and typology can complicate the data, it does not nullify our ability to draw conclusions based on this large data set. Rather, it allows us to approach the entries in this annotated bibliography knowing how the taxonomy functions.

Once we outlined the project boundaries by limiting ourselves to entries listed as “Book monograph,” “Article,” “Dissertation,” or “Computer software,” it

<sup>12</sup> Paul Davies, *Shakespeare: The Tempest*, 1983, an74 (described in the *WSB* as a “study guide to *Tempest*. For BBC microcomputer”); and *Shakespeare’s Plays from Folger Digital Texts*, ed. Barbara Mowat, Paul Werstine, Michael Poston, and Rebecca Niles (Folger Shakespeare Library, 2014), <http://folgerdigitaltexts.org/>.

<sup>13</sup> One site that could, for instance, be indexed in the bibliography but is not is Harry Rusch’s *Shakespeare’s World* ([www.shakespeare.emory.edu](http://www.shakespeare.emory.edu)). A previously active site, Terry A. Gray’s *Mr. William Shakespeare and the Internet* is indexed in the bibliography (ai979) but is now defunct. Digital projects linked to print works, such as G. Blakemore Evans’s *Shakespearean Prompt-Books of the Seventeenth Century* (<http://bsuva.org/bsuva/promptbook/>) do not have their own entry but are referenced in the print work’s entry (in this case, aap224).

<sup>14</sup> For instance, though “*And that’s true too*: *New Essays on “King Lear”*” (aay656) is a collection of essays about a single play, the head entry for the collection, as with all book collections, is in the “General Shakespeareana / Festschriften” category. Each individual chapter, however, is linked to the play, and as such, counted in our results. François Laroque, Pierre Iselin, and Sophie Alatorre, eds., “*And that’s true too*: *New Essays on “King Lear”*” (Newcastle upon Tyne, UK: Cambridge Scholars, 2009).

was straightforward, if time-consuming (as the WSB does not currently allow users to download large data sets), to collect the data we used in this paper. We searched for publications for each play separately, sorted the results by year, and then simply counted the number of works in these categories concerning that play each year. Others who wish to use this data without redoing the entire search are welcome to contact the authors, who are happy to share their data set.

We limited our search to the period 1960–2010. Because there is sometimes a few years’ lag before a published scholarly work is indexed, we expect that numbers from 2011 to present are likely to be incomplete in the sense that their values will increase over the next few years.<sup>15</sup> We confined our study to extant plays attributed to Shakespeare, ignoring the poems, the apocryphal works such as *Lochrine*, and speculation about the lost plays *Cardenio* and *Love’s Labor’s Won*. As a study about the relative popularity of work on each play, our purview excludes general Shakespeareana such as biographies and wide-ranging studies not linked to specific plays by the WSB.

Searching and organizing the results by play might sound clear-cut, but the reality of scholarship is that not all books and articles focus entirely on a single play. The WSB taxonomy reflects this. For example, it includes a category for “*King Henry IV, Part I*” and “*King Henry IV, Part 2*” individually, as well as a category for “*King Henry IV, Parts I and 2*” because those plays (like the *Henry VI* plays) are often considered as a unit. In practice, we added the total number of entries in the WSB for each of these categories together in order to reflect the scholarship about these groups of plays; we have similarly treated the *Henry VI* plays together. The WSB indexes comparative works—a standby of literary criticism—twice. So an essay about two plays, such as Pascale Aebischer’s “‘Yet I’ll speak’: Silencing the Female Voice in *Titus Andronicus* and *Othello*,” has two placeholders in the WSB (bbb691 and bbb692) because it is found in two places in the taxonomy: “Individual Works—Plays / *Titus Andronicus* / Scholarship and Criticism / Criticism” and “Individual Works—Plays / *Othello* / Scholarship and Criticism / Criticism.”<sup>16</sup> In terms of our statistics, this work would be counted once in the *Titus* category and once in the *Othello* category.

<sup>15</sup> The WSB is published in quarterly updates (each update is separately searchable in the “advanced search” function. Not all works from 2013 appear in the final 2013 update, however: works are entered based on when they are received by the WSB. This causes a particular delay with non-English works, where the WSB relies on the intellectual generosity of international correspondents. As such, limiting the dates to 2010 ensures that the global nature of the work annotated in the WSB is represented in the statistics.

<sup>16</sup> This duplication (rather, than, say having a single entry tagged with multiple labels) is the result of the WSB’s legacy technologies. Pascale Aebischer, “‘Yet I’ll speak’: Silencing the Female Voice in *Titus Andronicus* and *Othello*,” in *Shakespeare et la voix*, ed. Patricia Dorval (Paris: Société Française Shakespeare, 1999), 27–46.

Having multiple entries for comparative works means that they count for more than single-work articles in some of the summary statistics; however, the weighting of works is by no means an exact science. Moreover, our research does not weight the relative significance or length of each work: a book on *Othello* is one publication, as is a journal article or a note, and an article on a single play counts differently than an article on two plays.

“SO FAST THOU GROW’ST”: A BURGEONING FIELD

Unsurprisingly, the number of pieces written about Shakespeare’s work has substantially increased over time. As an illustration of how quickly scholarship has grown, consider Table 1. In this table, we show the average number of published scholarly articles concerning each play during the five-year period from 1960 to 1964, and compare it to the same average over the five-year period from 2000 to 2004. For most plays, the average annual number of publications has at least doubled in the last fifty years: on average, the number of publications for each play has tripled. The rise in Shakespeare-centric publications is symptomatic of the increase in humanities publishing over the same period. As Mark Bauerlein points out, “In some twenty years [between 1956–1980], then, scholarly output increased nearly sixfold in one area of the humanities” as recorded by the Modern Language Association’s *International Bibliography*.<sup>17</sup> While it might not be surprising that Shakespeare studies have grown along with increasing pressure to publish, the attention given to each play is variable, as Tables 1 and 2 demonstrate.

“TO EACH OUR OWN HAMLET”: *HAMLET* TOPS THE CHARTS

Though *Hamlet*’s enduring popularity might not be surprising (as demonstrated in Tables 1 and 2), the sheer scale at which writing about *Hamlet* dwarfs writing about the other plays is perhaps unexpected. *Hamlet* alone accounts for more than 15% of all writing about Shakespeare from 1960 to 2010, and the triad of *Hamlet*, *Macbeth*, and *Othello* make up almost a third of writing about Shakespeare during this period. In the graph below (see Figure 1), we plot the total number of publications by play in descending order—in this case, by the total number of items about each play published in the period from 1960 to 2010. Interestingly, the number of publications seems to decay exponentially as we move down the list of popular plays. That is, each time we move from one play to the next, the total number of scholarly works about the play drops by

<sup>17</sup> Mark Bauerlein, “The Future of Humanities Labor,” *Academe* 94.5 (2008): 34–36, esp. 34. For more on the growth of the *MLA International Bibliography*, see Humphrey Tonkin, “Navigating and Expanding the *MLA International Bibliography*,” *Journal of Scholarly Publishing* 41.3 (2010): 340–53.

about 7.8%. Indeed, the exponential decay equation shown in the upper right-hand corner of Figure 1 describes the data quite well with one glaring exception: *Hamlet* is considerably more popular than would be expected by this model.<sup>18</sup> The general trend that is seen throughout the plays completely breaks down for *Hamlet*. A statistician would normally expect about half the amount of writing about *Hamlet* than the actual value given the rest of the data. The black line in Figure 1 represents the best-fitting exponential curve for play popularity: the number of publications predicted for *Hamlet* by the model can be seen to be dramatically lower than the actual value.

The unparalleled popularity of *Hamlet* (see Figures 1 and 2) is perhaps both inexplicable and yet, paradoxically, easily explained. *Hamlet* is popular because *Hamlet* is popular: its popularity breeds further renown, and each adaptation, each performance, each article, or monograph is fodder for further engagement with Shakespeare’s play. Recent issues of *Shakespeare Quarterly* reveal not just one *Hamlet*, but “Two *Hamlets*,” “Three *Hamlets*,” or more.<sup>19</sup> This multiplicity of *Hamlets* comes from performance, adaptation, and homage. As Sarah Werner puts it, “The textual history of the play reveals three different *Hamlets* from Shakespeare’s time; the production history reveals an impossibly large number of *Hamlets* in the time after Shakespeare.” These *Hamlets*, she concludes, “speak powerfully about the hold Shakespeare’s play has on us.”<sup>20</sup> Margreta de Grazia suggests, “No work in the English literary canon has been so closely identified with the beginning of the modern age as *Hamlet*,”<sup>21</sup> though exactly how and why *Hamlet* speaks to twentieth- and twenty-first-century scholars cannot be pinned down because the interactions with the text are multifaceted. Alexander Welsh argues that “*Hamlet* became a modern hero . . . as soon as Shakespeare put his hands on him four hundred years ago,” whereas Marjorie Garber encapsulates the argument of *Shakespeare and Modern Culture* by proposing that “Shakespeare makes modern culture and modern culture makes Shakespeare.”<sup>22</sup>

<sup>18</sup> This is clear by looking at the curve described by the equation, but is even more compellingly measured by the  $R^2$  value shown on the figure. The  $R^2$  value shows how closely the data match the curve: a value of 1.0 would indicate a perfect relationship and would suggest that you can predict other values in the sequence. A value of 0.95, in turn, suggests that this curve comes quite close to a perfect description of the data.

<sup>19</sup> Kate D. Levin, “Two *Hamlets*,” *Shakespeare Quarterly* 53 (2002): 106–15; Sarah Werner, “Two *Hamlets*: Wooster Group and Syntetic Theater,” *Shakespeare Quarterly* 59 (2008): 323–29; and Marjorie Garber, “A Tale of Three *Hamlets* or Repetition and Revenge,” *Shakespeare Quarterly* 61 (2010): 28–55.

<sup>20</sup> Werner, “Two *Hamlets*,” 329.

<sup>21</sup> Margreta de Grazia, “*Hamlet* before Its Time,” *Modern Language Quarterly* 62 (2001): 355–57, esp. 355.

<sup>22</sup> Alexander Welsh, *Hamlet in His Modern Guises* (Princeton, NJ: Princeton UP, 2001), ix; and Marjorie Garber, *Shakespeare and Modern Culture* (New York: Pantheon Books, 2008), xiii.

Table 1: Average number of publications about each of Shakespeare's plays over two five-year periods.

Play	1960–1964		2000–2004	
	Avg	Rank	Avg	Rank
<i>All's Well That Ends Well</i>	7.4	23	17.2	29
<i>Antony and Cleopatra</i>	25.6	10	55.4	11
<i>As You Like It</i>	15	14	38.6	17
<i>Comedy of Errors</i>	6	29	20.6	28
<i>Coriolanus</i>	15.6	13	26.6	23
<i>Cymbeline</i>	7.4	23	30.2	21
<i>Hamlet</i>	113.4	1	319.6	1
<i>1 and 2 Henry IV</i>	6.8	27	31	20
<i>Henry V</i>	9	22	60.6	9
<i>1–3 Henry VI</i>	3	34	11.4	33
<i>Henry VIII</i>	4.4	32	13.6	31
<i>Julius Caesar</i>	27.6	8	39.8	15
<i>King John</i>	7.2	26	12.4	32
<i>King Lear</i>	53	3	114	5
<i>Love's Labor's Lost</i>	9.8	20	20.8	26
<i>Macbeth</i>	57.8	2	125.6	3
<i>Measure for Measure</i>	16.2	12	45.4	13
<i>Merchant of Venice</i>	29.8	7	81.8	8
<i>Merry Wives of Windsor</i>	4.6	31	20.8	26
<i>A Midsummer Night's Dream</i>	26.8	9	88.4	7
<i>Much Ado about Nothing</i>	11.8	18	32.6	19
<i>Othello</i>	38.2	4	122.4	4
<i>Pericles</i>	3.6	33	21.4	25
<i>Richard II</i>	13	16	30.2	21
<i>Richard III</i>	10.8	19	45.4	13
<i>Romeo and Juliet</i>	32	5	106.4	6
<i>Taming of the Shrew</i>	9.8	20	39.4	16
<i>Tempest</i>	30.2	6	125.8	2
<i>Timon of Athens</i>	7.4	23	14.2	30
<i>Titus Andronicus</i>	6.6	28	38.4	18
<i>Troilus and Cressida</i>	14.4	15	23	24
<i>Twelfth Night</i>	21.4	11	58.2	10
<i>Two Gentlemen of Verona</i>	5.4	30	11.4	33
<i>Two Noble Kinsmen</i>	1.6	35	5.8	35
<i>Winter's Tale</i>	12.6	17	48.8	12

Table 2: Publications about each of Shakespeare’s plays over two five-year periods, ordered by rank.<sup>a</sup>

Rank	1960–1964	2000–2004
1	<i>Hamlet</i>	<i>Hamlet</i>
2	<i>Macbeth</i>	<i>Tempest</i>
3	<i>King Lear</i>	<i>Macbeth</i>
4	<i>Othello</i>	<i>Othello</i>
5	<i>Romeo and Juliet</i>	<i>King Lear</i>
6	<i>Tempest</i>	<i>Romeo and Juliet</i>
7	<i>Merchant of Venice</i>	<i>Midsummer Night’s Dream</i>
8	<i>Julius Caesar</i>	<i>Merchant of Venice</i>
9	<i>Midsummer Night’s Dream</i>	<i>Henry V</i>
10	<i>Antony and Cleopatra</i>	<i>Twelfth Night</i>
11	<i>1 and 2 Henry IV</i>	<i>Antony and Cleopatra</i>
12	<i>Twelfth Night</i>	<i>1 and 2 Henry IV</i>
13	<i>Measure for Measure</i>	<i>Winter’s Tale</i>
14	<i>Coriolanus</i>	<i>Richard III</i>
15	<i>As You Like It</i>	<i>Measure for Measure*</i> (14)
16	<i>Troilus and Cressida</i>	<i>Julius Caesar</i>
17	<i>Richard II</i>	<i>Taming of the Shrew</i>
18	<i>Winter’s Tale</i>	<i>As You Like It</i>
19	<i>Much Ado about Nothing</i>	<i>Titus Andronicus</i>
20	<i>Richard III</i>	<i>1–3 Henry VI</i>
21	<i>Taming of the Shrew*</i>	<i>Much Ado about Nothing</i>
22	<i>Love’s Labor’s Lost*</i> (20)	<i>Richard II</i>
23	<i>Henry V</i>	<i>Cymbeline*</i> (22)
24	<i>Cymbeline*</i>	<i>Coriolanus</i>
25	<i>All’s Well That Ends Well*</i> (23)	<i>Troilus and Cressida</i>
26	<i>Timon of Athens*</i> (23)	<i>Pericles</i>
27	<i>King John</i>	<i>Love’s Labor’s Lost*</i>
28	<i>Titus Andronicus</i>	<i>Merry Wives of Windsor*</i> (27)
29	<i>1–3 Henry VI</i>	<i>Comedy of Errors</i>
30	<i>Comedy of Errors</i>	<i>All’s Well That Ends Well</i>
31	<i>Two Gentlemen of Verona</i>	<i>Timon of Athens</i>
32	<i>Merry Wives of Windsor</i>	<i>Henry VIII</i>
33	<i>Henry VIII</i>	<i>King John</i>
34	<i>Pericles</i>	<i>Two Gentlemen of Verona</i>
35	<i>Two Noble Kinsmen</i>	<i>Two Noble Kinsmen</i>

<sup>a</sup> Data in Table 1 are here sorted by rank, rather than by play.

\* Plays that share the same average number of publications and rank; values in parentheses indicate tied ranks.

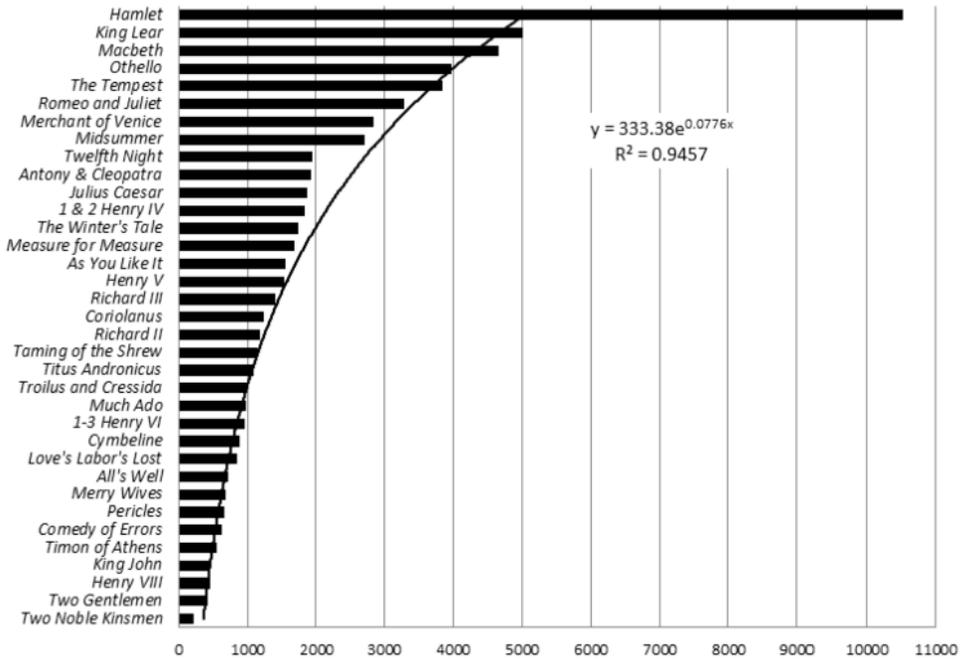


Figure 1: Total number of publications about each of Shakespeare's plays (1960–2010), sorted by the number of times they have been written about.

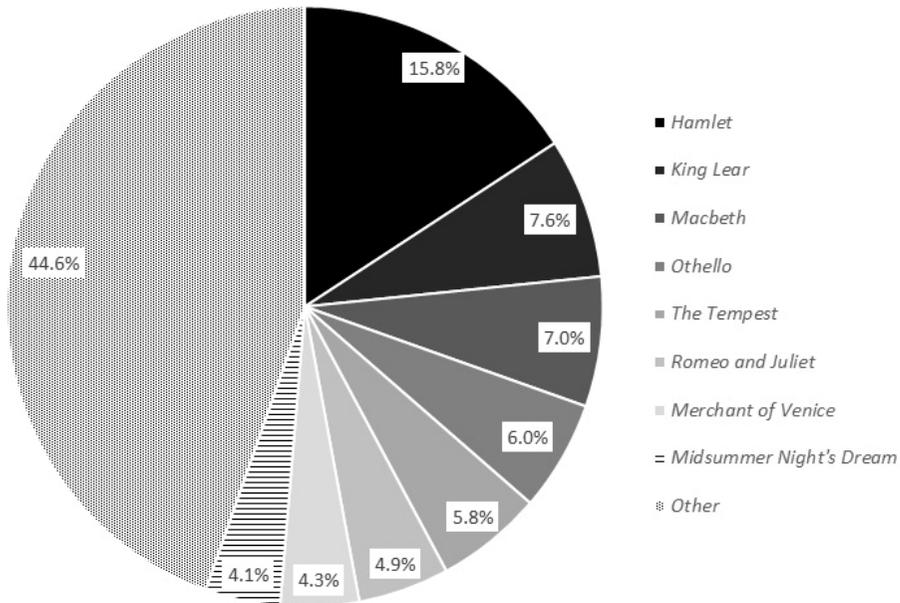


Figure 2: Pie chart showing total popularity of the eight most written-about plays as a percentage of the total.

Many of the titles in the 2011 special issue of *Shakespeare Quarterly* on “Surviving *Hamlet*”—for example, “*Hamlet* without Us” and “Forget *Hamlet*”—point to how difficult it is to shake our scholarly infatuation with this play, while also suggesting that *Hamlet* might not drop in popularity.<sup>23</sup>

“THIS TIMELESS TRAGEDY”: GENRE AND PLAY POPULARITY

Quantifying the number of publications about Shakespeare’s plays demonstrates that scholarly interest can and should be considered in relation to genre. The number of scholarly publications written about tragedies in general is higher than the number of publications about comedies and histories combined, though *Hamlet* is largely responsible for this difference. If we remove *Hamlet* from consideration, tragedies are still written about the most, but the margin drops. In fact, there has been more criticism written about *Hamlet* alone than about all of the histories combined. The genre of particular Shakespeare plays can be a contentious topic, especially for those considered “problem plays,” such as *Measure for Measure*, as well as for those labeled “romances” or “tragicomedies,” such as *The Tempest*. Recent work by Michael Witmore, Jonathan Hope, and others, however, suggests that genre may in fact be more tangible than usually supposed—as Witmore puts it, “something real.”<sup>24</sup> By considering writing about particular plays in the WSB, we can quickly find accurate measures of the relative popularity of the primary Shakespeare genres, and we can compare the plays within each genre. Figures 3 and 4 show the total number of publications in the WSB from 1960 to 2010 by genre, considering both the original First Folio and contemporary classifications.<sup>25</sup> The discussion of genre that follows uses the classifications of *The Riverside Shakespeare*, which are expressed in Figure 4.

With Figure 4, a natural question is whether the higher counts for the tragedies are due to their actual popularity or simply to the number of plays in

<sup>23</sup> Jonathan Gil Harris, ed., “Surviving *Hamlet*,” special issue, *Shakespeare Quarterly* 62 (2011). In this issue, see especially Kathryn Schwarz, “*Hamlet* without Us,” 174–79; and Carla Freccero “Forget *Hamlet*,” 170–73.

<sup>24</sup> Michael Witmore, “Fuzzy Structuralism,” *Wine Dark Sea*, 20 July 2013 ([www.winedark-sea.org](http://www.winedark-sea.org)). Ongoing work on genre is being undertaken by Robin Valenza, Michael Gleicher, Jonathan Hope, and Michael Witmore in the “Visualizing English Print 1470–1800” Mellon-funded project hosted at the University of Wisconsin-Madison. For Hope and Witmore’s work analyzing genre with DocuScope, see, for instance, “The Hundredth Psalm to the Tune of ‘Green Sleeves’: Digital Approaches to Shakespeare’s Language of Genre,” *Shakespeare Quarterly* 61 (2010): 357–90; and “The Very Large Textual Object: A Prosthetic Reading of Shakespeare,” *Early Modern Literary Studies* 9.3 (2004): 6.1–36.

<sup>25</sup> For Figure 3, because *Pericles* and *Two Noble Kinsmen* are not included in the Folio, scholarship concerning them is not represented in this count.

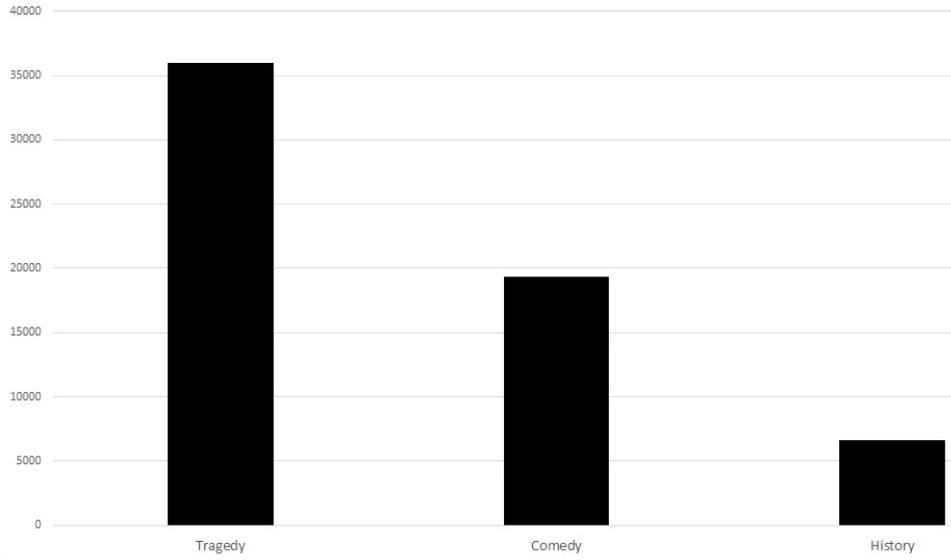


Figure 3: Popularity of genres using categories from the First Folio.

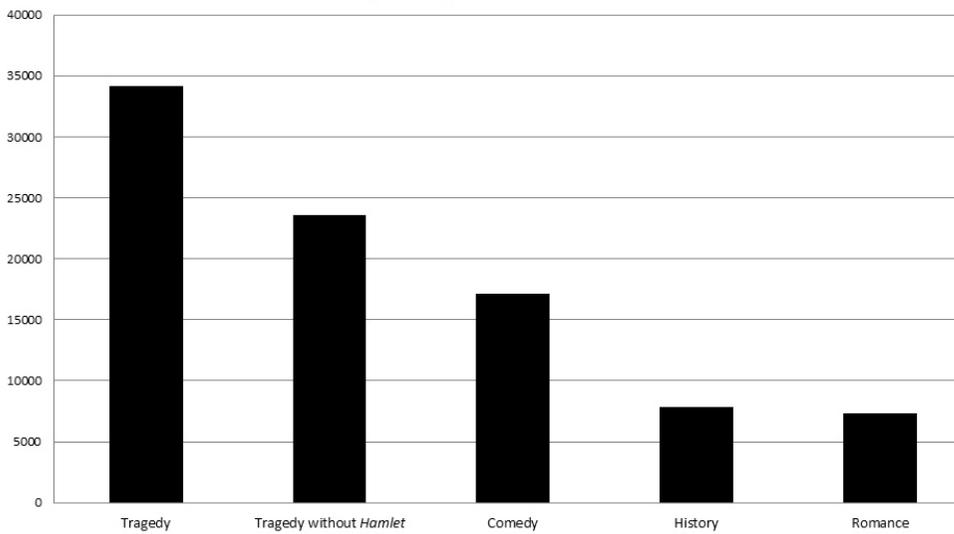


Figure 4: Total publications sorted by genre, including romance (following *The Riverside Shakespeare*).

that genre. In Figure 5, we report this data again, but we divide the total number of publications in the genre by the number of plays included. Tragedies are still the plays most written about even when we remove *Hamlet*, which, as we have shown (see Figure 1), is an outlier.

Figures 3 and 4 show that from 1960 to 2010, Shakespeare’s tragedies have garnered more attention than other genres, though this is in large part due to *Hamlet*’s popularity. Figure 4 reveals that when we account for romances, the gap widens even further between interest in tragedy and other genres.<sup>26</sup> The WSB enables additional consideration of genre and classification by including play groups in the taxonomy: “Comedies,” “Histories,” “Tragedies,” and “Romances,” as expected, but also “Apocrypha” and “Poems.”<sup>27</sup> This study does not account for works indexed in the WSB’s broad generic categories, but rather only for those works about specific plays.<sup>28</sup>

Analyzing the WSB data not only reveals which genres attracted more attention, but also the relative popularity of plays in a given genre. Although *Hamlet* is studied much more than other plays in Shakespeare’s canon, the disparate amount of attention is less dramatic when we consider tragedies alone (see Figure 5; consider with Figure 1). The five most popular plays (*Hamlet*, *King Lear*, *Macbeth*, *Othello*, and *Romeo and Juliet*) comprise about 80% of all writing about tragedies (see Figure 6).<sup>29</sup>

Comparing the results from the writing about plays in the WSB to the Royal Shakespeare Company (RSC) Performance Database and the performances listed in the WSB shows a disparity between how frequently a play is performed and how often works about that play are published (see Table 3).<sup>30</sup> The RSC

<sup>26</sup> In Figure 4, note that the total number of publications about comedy is smaller than it is in Figure 3, as *The Tempest* and *The Winter’s Tale* have been moved to the “Romances” category. Similarly, the number of tragedies is (slightly) reduced by moving *Cymbeline* to “Romances.” Note that *Two Noble Kinsmen* and *Pericles* are included in Figure 4 but not in Figure 3.

<sup>27</sup> Although the WSB uses generic categories, including “Romances,” it does not classify each individual play by genre; rather, the genre categories are used for works that specifically discuss an entire genre, such as Ann Blake, “Shakespeare’s Comic Locations,” in *Shakespeare: World Views*, ed. Heather Kerr, Robin Eaden, and Madge Mitton (Newark: U of Delaware P, 1996), 102–10.

<sup>28</sup> We include essays on each comedy, but broader essays, such as Blake, “Shakespeare’s Comic Locations,” are excluded from the data as they are not linked to individual plays but to the entire genre.

<sup>29</sup> For Figure 6, a complete breakdown of the popularity of the plays within the tragedies is as follows: *Hamlet*, 30.5%; *King Lear*, 15%; *Macbeth*, 13.5%; *Othello*, 11.6%; *Romeo and Juliet*, 9.7%; *Antony and Cleopatra*, 5.7%; *Julius Caesar*, 5.6%; *Coriolanus*, 3.6%; *Titus Andronicus*, 3.2%; *Timon of Athens*, 1.6%.

<sup>30</sup> The RSC database (which records tours separately from original performances) provides the following numbers of productions from 1960 to 2010: *Hamlet*, 42; *Lear*, 41; *Macbeth*, 36; *Othello*, 20; *Romeo and Juliet*, 38; *Antony and Cleopatra*, 20; *Julius Caesar*, 31; *Coriolanus*, 18;

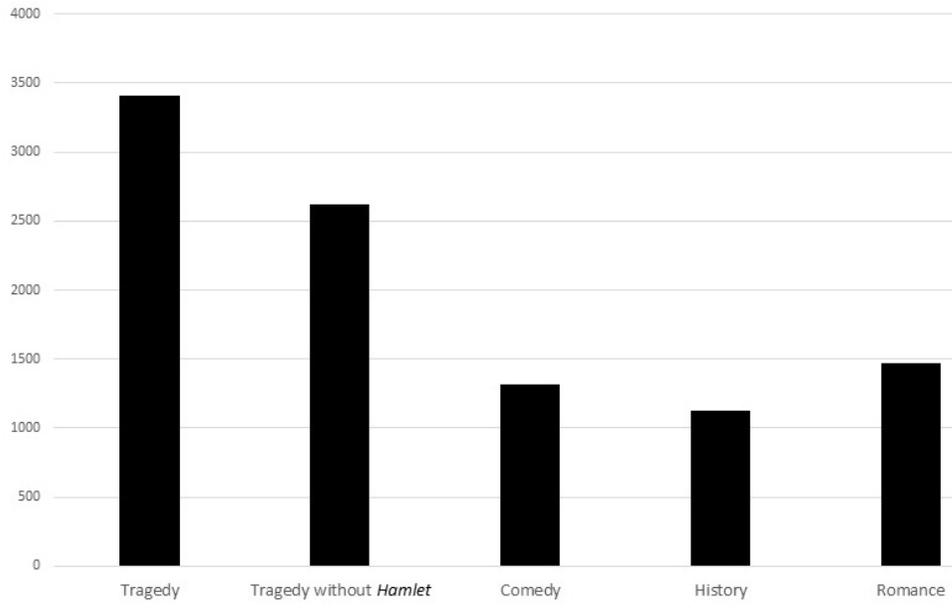


Figure 5: Average number of publications per play sorted by genre.

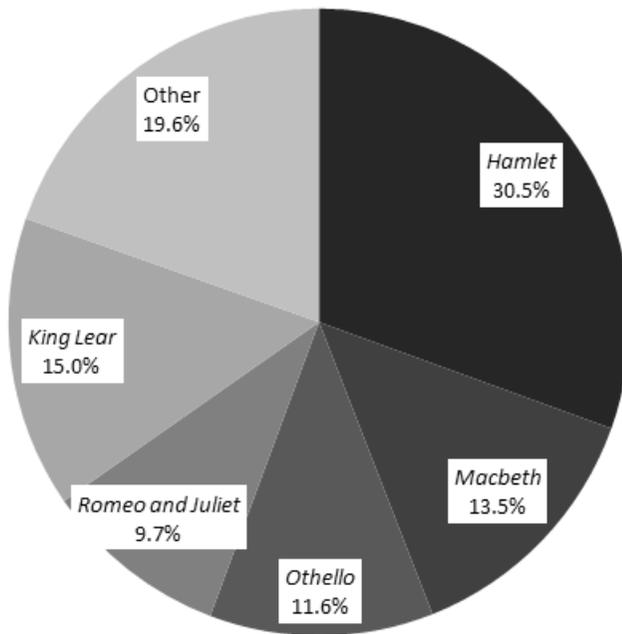


Figure 6: Popularity of tragedies (as a percentage of all tragedies), 1960–2010.

Table 3: Popularity of tragedies in the *World Shakespeare Bibliography* and the Royal Shakespeare Company Performance Database.<sup>a</sup>

Play	Popularity (%)		
	WSB publication entries, 1960–2010	RSC productions, 1960–2010	WSB production entries, 1960–2010
<i>Hamlet</i>	30.5	15.6	24.3
<i>King Lear</i>	15.0	15.2	11.6
<i>Macbeth</i>	13.5	13.4	21.3
<i>Othello</i>	11.6	7.4	11.1
<i>Romeo and Juliet</i>	9.7	14.1	17.3
<i>Antony and Cleopatra</i>	5.7	8.6	3.1
<i>Julius Caesar</i>	5.6	11.5	5.3
<i>Coriolanus</i>	3.6	6.7	2.5
<i>Titus Andronicus</i>	3.2	4.1	1.3
<i>Timon of Athens</i>	1.6	3.4	2.0

<sup>a</sup> Values indicate the popularity of a given play as a percentage of WSB-indexed publications about tragedies (see pp. 2–6 for search parameters), all tragedies in the RSC Performance Database, and all tragedies in the “production” category of the WSB.

data, of course, do not include all performances, but offer a valuable litmus test for comparison because of their commitment to staging Shakespeare’s plays. The WSB data are limited to professional or semi-professional performances and include translations and adaptations. While *Hamlet* tops all three columns of Table 3 as the most written about and most performed text, the WSB and RSC columns reveal that although *Hamlet* is written about more than the other tragedies, the RSC does not perform it much more frequently than *Lear*, *Macbeth*, or *Romeo and Juliet*. Both performance columns, furthermore, suggest that audiences enjoy *Romeo and Juliet* more than scholars enjoy writing about it—although, of course, a record of performance is no indicator of critical acclaim. As a company that primarily performs Shakespeare plays, the RSC has a relatively even coverage of the tragedies, unlike the productions indexed in the WSB (global, multilingual), which include troupes and venues that perhaps feature Shakespeare only every couple of years and would be more likely to choose

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*Titus Andronicus*, 11; *Timon of Athens*, 9. See the Royal Shakespeare Company Performance Database, Shakespeare Birthplace Trust, <http://www.calmview.eu/shakespearebirthplacetrust/CalmView/Advanced.aspx?src=CalmView.Performance>. The WSB (which includes translations and adaptations of the same title in multiple languages) lists the following number of productions from 1960 to 2010: *Hamlet*, 1,630; *Lear*, 779; *Macbeth*, 1,430; *Othello*, 746; *Romeo and Juliet*, 1,161; *Antony and Cleopatra*, 209; *Julius Caesar*, 354; *Coriolanus*, 136; *Titus Andronicus*, 170; and *Timon of Athens*, 88.

one of the heavy hitters. The coverage of both publications and productions in the *WSB* shows the relative neglect of the less-popular tragedies—that is, *Antony and Cleopatra*, *Coriolanus*, *Titus Andronicus*, and *Timon of Athens*.

When compared to the treatment of his tragedies, writing about Shakespeare's comedies has a much more equal distribution of popularity (see Figure 7).<sup>31</sup> While *A Midsummer Night's Dream*, *As You Like It*, and *Twelfth Night* are the regular fare of summer Shakespeare festivals, *The Merchant of Venice*—the comedy most written about—is not considered light, with its anti-Semitism, conflict between Old and New Testament mores, and potential mutilation and death. Though *The Merchant of Venice* meets the traditional criterion for being a comedy (ending in marriage), many scholars and editors either justify or disparage its place amid the other plays. While World War II has inalterably changed how we consider *The Merchant of Venice*, until the *WSB* extends coverage into the past, claims that “uneasiness after World War II altered the great popularity enjoyed by *The Merchant of Venice*” cannot be quantified.<sup>32</sup> Indeed, as Figure 7 shows, from 1960 to 2010, *The Merchant of Venice* enjoyed the highest relative popularity of all the comedies. Though our post-Holocaust understanding of *The Merchant of Venice* is necessarily different from the reception of the play in Shakespeare's time, we suggest that the difficulty of grappling with the play's anti-Semitic valences is precisely what has spurred people to write about *The Merchant of Venice* in the last half of the twentieth century. Consider, for instance, essays such as Arthur Horowitz's “Shylock after Auschwitz: *The Merchant of Venice* on the Post-Holocaust Stage—Subversion, Confrontation, and Provocation” (bbu1321), Avraham Oz's “Transformations of Authenticity: *The Merchant of Venice* in Israel, 1936–1980” (bn490), and Sigrid Weigel's “Shylocks Wiederkehr: Die Verwandlung von Schuld in Schulden, oder: Zum symbolischen Tausch der Wiedergutmachung” (bi165)—all of which explore what it means to read, perform, and think about *The Merchant of Venice* in the latter half of the twentieth century.<sup>33</sup> As the data from the *WSB* suggest, World

<sup>31</sup> In Figure 7, the seven most popular plays are plotted individually; the ten least popular plays, which comprise one-third of scholarship on the comedies, are grouped together in the category “other.” A complete breakdown of the popularity of the plays within the comedies is as follows: *The Merchant of Venice*, 16.4%; *A Midsummer Night's Dream*, 15.7%; *Twelfth Night*, 11.3%; *Measure for Measure*, 9.7%; *As You Like It*, 9.1%; *The Taming of the Shrew*, 6.7%; *Troilus and Cressida*, 6.4%; *Much Ado about Nothing*, 5.7%; *Love's Labor's Lost*, 4.9%; *All's Well That Ends Well*, 4.2%; *The Merry Wives of Windsor*, 3.9%; *The Comedy of Errors*, 3.6%; *The Two Gentlemen of Verona*, 2.4%.

<sup>32</sup> Velma Bourgeois Richmond, *Shakespeare as Children's Literature: Edwardian Retellings in Words and Pictures* (Jefferson, NC: McFarland, 2008), 180.

<sup>33</sup> Arthur Horowitz, “Shylock after Auschwitz: *The Merchant of Venice* on the Post-Holocaust Stage—Subversion, Confrontation, and Provocation,” *Journal of Cultural and Religious Theory* 8.3 (2007): 7–20; Avraham Oz, “Transformations of Authenticity: *The*

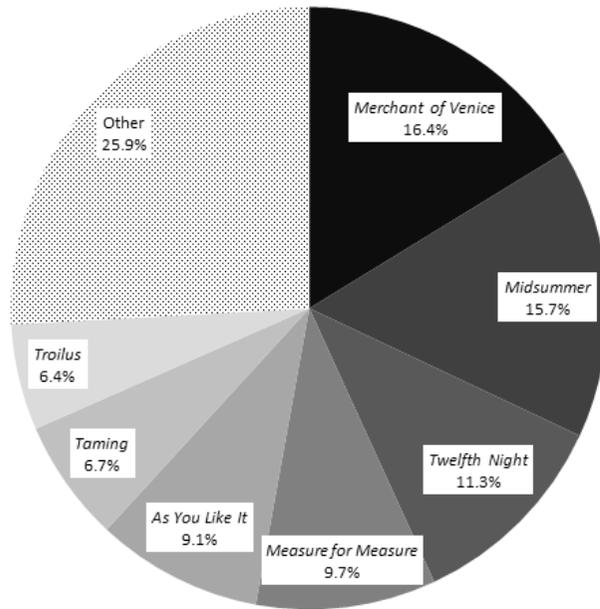


Figure 7: Popularity of comedies (as a percentage of all comedies), 1960–2010.

War II did not decrease our interest in Shakespeare’s most famous Jew; rather, it framed a new set of discussions.

*The Merchant of Venice* is not the only problem play to feature prominently in Figure 7: *Measure for Measure* and *Troilus and Cressida* are also often considered problem plays and, as Figure 7 shows, receive a fair amount of critical attention.<sup>34</sup> As Table 4 demonstrates, writing about *Measure for Measure* and *Troilus and Cressida* is not congruent with the number of times they are performed: both are written about more than they are performed. Being problem plays makes *Measure for Measure* and *Troilus and Cressida* challenging to stage but also compelling to discuss. *Measure for Measure* concludes with Duke Vincentio sentencing Lucio to marriage and hanging. The early modern proverb “[h]anging and wiving go by destiny” (*Merchant of Venice*, 2.9.83) may

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*Merchant of Venice* in Israel, 1936–1980,” *Shakespeare Jahrbuch* (1983): 165–77; and Sigrid Weigel, “Shylocks Wiederkehr: Die Verwandlung von Schuld in Schulden, oder: Zum symbolischen Tausch der Wiedergutmachung [Shylock’s Return: The Transformation of Guilt into Compensation or: The Symbolic Exchange of Reparation],” *Zeitschrift für deutsche Philologie* 114 (Supplement 1995): 3–22.

<sup>34</sup> Though “problem play” is a constantly shifting term, E. M. W. Tillyard suggested that *Measure for Measure* is “radically schizophrenic” and *Troilus and Cressida* is “full of interest and complexity,” much like *Hamlet*. See *Shakespeare’s Problem Plays* (London: Chatto and Windus, 1951), 2.

Table 4: Popularity of comedies in the *World Shakespeare Bibliography* and the Royal Shakespeare Company Performance Database.<sup>a</sup>

Play	Popularity (%)		
	WSB publication entries, 1960–2010	RSC productions, 1960–2010	WSB production entries, 1960–2010
<i>Merchant of Venice</i>	16.3	7.5	6.6
<i>A Midsummer Night's Dream</i>	15.6	12.4	21.2
<i>Twelfth Night</i>	11.2	11.4	16.6
<i>Measure for Measure</i>	9.7	6.5	5.9
<i>As You Like It</i>	9.0	9.3	9.8
<i>Taming of the Shrew</i>	6.6	9.3	10.6
<i>Troilus and Cressida</i>	5.7	5.4	2.0
<i>Much Ado about Nothing</i>	5.7	9.0	7.9
<i>Love's Labor's Lost</i>	4.9	5.2	3.4
<i>All's Well that Ends Well</i>	4.1	4.4	2.3
<i>Merry Wives of Windsor</i>	3.9	5.7	4.4
<i>Comedy of Errors</i>	3.6	9.0	6.1
<i>Two Gentlemen of Verona</i>	2.4	4.9	3.2

<sup>a</sup> Values indicate the popularity of a given play as a percentage of WSB-indexed publications about comedies (see pp. 2–6 for search parameters), all comedies in the RSC Performance Database, and all comedies in the “production” category of the WSB.

be lighthearted, but the conclusion to *Measure for Measure* is not.<sup>35</sup> *Troilus and Cressida* ends with infidelity and death. Although when compared to comedies of similar popularity *Troilus and Cressida* is performed much less than it is written about, the play is performed about the same number of times as tragedies of similar popularity, such as *Titus Andronicus* and *Coriolanus* (see Figure 1).<sup>36</sup> To *Measure for Measure* and *Troilus and Cressida*, we can add *All's Well that Ends Well*, all of which are often discussed as early Shakespeare tragi-

<sup>35</sup> The saying was proverbial (Shakespeare used a variation on this idea in *Twelfth Night*, 1.5.19). See R. W. Dent, *Proverbial Language in English Drama Exclusive of Shakespeare, 1495–1616: An Index* (Berkeley: U of California P, 1984), W232; and Dent, *Shakespeare's Proverbial Language: An Index* (Berkeley: U of California P, 1981), W232.

<sup>36</sup> *The Riverside Shakespeare*, like most collected works of Shakespeare, categorizes *Troilus and Cressida* as a comedy; see Table of Contents. See, for instance, Stephen Greenblatt, gen. ed., *The Norton Shakespeare, Based on the Oxford Edition* (New York: W. W. Norton, 1997); and David Bevington, ed., *The Complete Works of Shakespeare*, 7th ed. (New York: Pearson and Longman, 2013), Table of Contents. Critics, however, sometimes consider *Troilus and Cressida* as a tragedy, such as Jonathan Dollimore, *Radical Tragedy: Religion, Ideology and Power in the Drama of Shakespeare and His Contemporaries* (New York: Palgrave Macmillan, 2010). Figure 1 demonstrates that *Troilus and Cressida* is written about at roughly the same rate as *Coriolanus* and *Titus Andronicus*. Their performance histories are also similar. The WSB indexes productions as follows: *Troilus*, 172; *Titus*, 170; *Coriolanus*, 132. The RSC database counts productions as follows: *Troilus*, 21; *Titus*, 11; *Coriolanus*, 18.

comedies.<sup>37</sup> While in the late twentieth century, the RSC performed *All's Well* about as often as it is written about in the WSB, *All's Well* was their least-performed comedy. As demonstrated in this comparison of how often the comedies are written about and performed, the frequency of productions does not equate to scholarly interest (see Table 4).<sup>38</sup>

Unlike the comedies and tragedies, which are stand-alone texts, eight of the ten history plays are part of larger groups, which means their relative popularity can hardly be considered alone. The plays can be examined within their tetralogies or within smaller groups such as both *Henry IV* plays. Their performance and publication history reinforces the need to address these plays in groups, as they have been both performed and printed together since the early modern period: consider Edward Dering's performance version of *1 and 2 Henry IV* (circa 1622–23), as well as *The Whole Contention betweene the two Famous Houses, Lancaster and Yorke* (London, 1619), which printed *2 Henry VI* (*The First Part of the Contention between the two Famous Houses, Lancaster and York*) and *3 Henry VI* (*The True Tragedy of Richard Duke of York and Good King Henry the Sixth*) together.<sup>39</sup> Despite the popularity of the three *Henry VI* plays when they were first performed and published, today *Richard III* is the main reason people turn to Shakespeare's first tetralogy (see Figure 8).<sup>40</sup> The

<sup>37</sup> See, for instance, Barbara A. Mowat, “Shakespearean Tragicomedy,” in *Renaissance Tragicomedy: Explorations in Genre and Politics*, ed. Nancy Klein Maguire (New York: AMS Press, 1987), 80–96, bh737; and S. C. Chakravorti, *Shakespearean Tragicomedy: A Trilogy* (Calcutta: Mukhopadhyah, 1981), aq794, not to mention the books and articles that consider each of these plays as tragicomedies individually.

<sup>38</sup> The RSC Performance Database (which records tours separately from original performances) provides the following numbers of productions from 1960 to 2010: *Merchant of Venice*, 29; *Midsummer*, 48; *Twelfth Night*, 44; *Measure for Measure*, 25; *As You Like It*, 36; *Taming of the Shrew*, 36; *Troilus and Cressida*, 21; *Much Ado about Nothing*, 35; *Love's Labor's Lost*, 20; *All's Well*, 17; *Merry Wives*, 22; *Comedy of Errors*, 35; *Two Gentlemen of Verona*, 19. The WSB (which includes translations and adaptations of the same title in multiple languages) lists the following number of productions from 1960 to 2010: *Merchant of Venice*, 565; *Midsummer*, 1,818; *Twelfth Night*, 1,423; *Measure for Measure*, 502; *As You Like It*, 842; *Taming of the Shrew*, 912; *Troilus and Cressida*, 172; *Much Ado about Nothing*, 680; *Love's Labor's Lost*, 294; *All's Well*, 197; *Merry Wives*, 377; *Comedy of Errors*, 521; *Two Gentlemen of Verona*, 276.

<sup>39</sup> For more on the Dering manuscript, see George Walton Williams and G. Blakemore Evans, eds., *The History of King Henry the Fourth, as revised by Sir Edward Dering, Bart.* (Charlottesville: U of Virginia P, 1974). Although we offer a comparison of performance to writing about tragedies and comedies, the history plays merit their own study precisely because they are often performed in adaptations that challenge classification; see, for example, the Stratford Festival of Canada's 2002 production of the three *Henry VI* plays in two parts: *Henry VI: Revenge in France* (cch96) and *Henry VI: Revolt in England* (cch98).

<sup>40</sup> For Figure 8, a complete breakdown of the popularity of the plays within the English histories is as follows: *1 and 2 Henry IV*, 26.9%; *Henry V*, 21.5%; *Richard III*, 19.8%; *1–3 Henry VI*, 13.5%; *King John*, 6.5%; *Henry VIII*, 6.4%; *Richard II*, 5.5%.

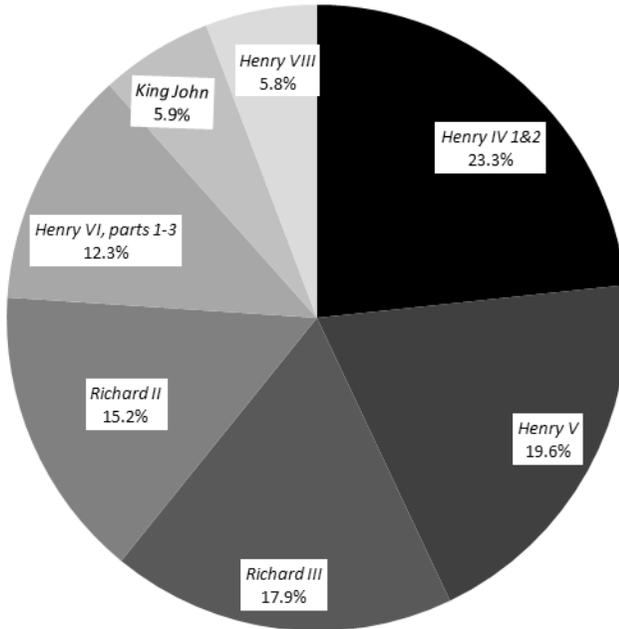


Figure 8: Popularity of history plays (as a percentage of all history plays), 1960–2010.

second tetralogy garners 56% of the writing on Shakespeare’s histories, despite the relative lack of attention to *Richard II*. Even *Henry VIII* and *King John*, the two stand-alone histories, are more discussed than *Richard II*—although if we take each *Henry VI* play individually, they fall to the least popular position. It seems that Jack Cade and Joan of Arc cannot compete with the eponymous star of the Henriad, Henry V.

If the *Henry VI* plays are the neglected younger brother of the histories, the same is true of *Two Noble Kinsmen* among the romances. Far from being the younger brothers, however, the three *Henry VI* plays were perhaps the first that Shakespeare ever wrote—and *Two Noble Kinsmen* one of the last.<sup>41</sup> *Two Noble Kinsmen*, like *Henry VIII*, *Pericles*, and *1 Henry VI*, is widely accepted as one of the plays that Shakespeare cowrote, and, as Figure 1 and Table 2 reveal, all three number in the least popular plays.<sup>42</sup> Perhaps the WSB data require that we

<sup>41</sup> See G. Blakemore Evans and J. M. Tobin, “Chronology and Sources,” in *The Riverside Shakespeare*, 77–87.

<sup>42</sup> For a more detailed discussion of Shakespeare coauthorship, see Jonathan Hope, *The Authorship of Shakespeare’s Plays: A Socio-linguistic Study* (Cambridge: Cambridge UP, 1994); and Brian Vickers, *Shakespeare, Co-Author: A Historical Study of the Collaborative Plays* (Oxford: Oxford UP, 2004). All major editions of *Two Noble Kinsmen*, *Henry VIII*, and *Pericles* note their likely coauthored roots, including the *Riverside*.

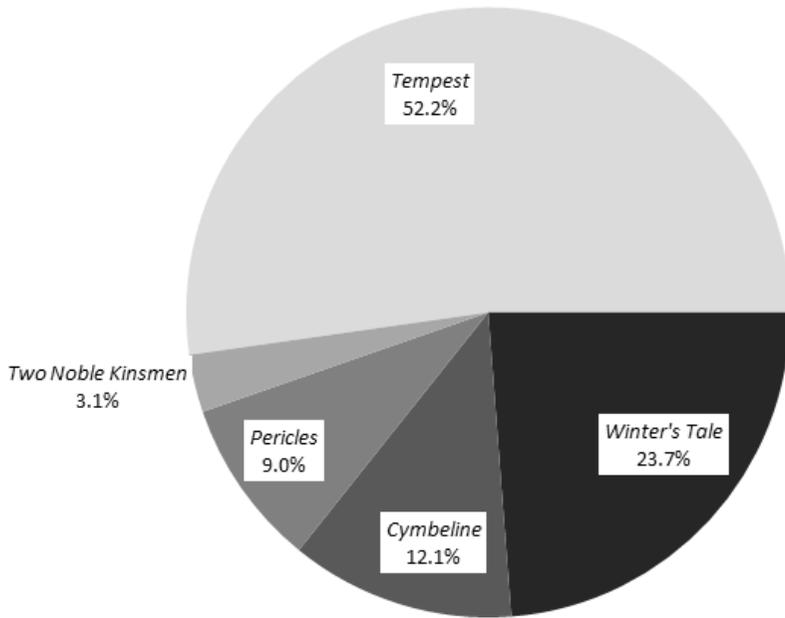


Figure 9: Popularity of romances (as a percentage of all romances), 1960–2010.

acknowledge our desire to find “real” Shakespeare: not those works written at the dawn or twilight of his career, but those he composed at its height. The data might also suggest that we write more about plays that we believe are solely by Shakespeare and not coauthored.

Of the romances and of the late plays, *The Tempest* is by far the most popular; indeed, even if we considered *The Tempest* a comedy (as it is categorized in the First Folio) it would still be the most popular of its genre, with more writing about it than *A Midsummer Night's Dream* (see Figure 9). Since the seventeenth century, *The Tempest* has been one of Shakespeare's most popular plays, with early adaptations including John Dryden and William Davenant's semi-operatic reworking (1670), Thomas Shadwell's opera (1674), and parodies such as Thomas Duffett's *The Mock Tempest* (1675), not to mention numerous settings of the songs.<sup>43</sup> And while the WSB does not index works solely about adaptations, it does include articles and books that treat Shakespeare's original substantively in relation to the adaptation.<sup>44</sup> As the next section of our study

<sup>43</sup> John Dryden and William Davenant, *The Tempest, or, The Enchanted Island* (London, 1670); Thomas Shadwell, *The Tempest, or, The Enchanted Island* (London, 1674); and T[homas] Duffett, *The Mock Tempest: or the Enchanted Castle* (London, 1675).

<sup>44</sup> Thus, an adaptation such as Djanet Sears's *Harlem Duet* (Winnipeg, CA: J. Gordon Shillingford, 1997) is indexed (production entry: cv496), but its French translation (*Harlem*

reveals, *The Tempest* was not only the romance most written about by far (see Figure 1), but it also rose in popularity over the period from 1960 to 2010.

“REPORT IS CHANGEABLE”: TRENDS AND REGRESSION ANALYSIS

Descriptive statistics—the comparisons given in the previous section—can be valuable in part because they provide us with precise values (of course many people write about *Hamlet*, but just how many?). In this section, we employ linear regression and time-series analysis to discover more about long-term trends in Shakespeare scholarship.<sup>45</sup> We now turn from examining only the number of publications concerning a given play, and begin comparing the plays to each other, irrespective of the overall increase in scholarship over the last half century. To this end, we built a new data set in which we tracked the proportion of publications for a given year about each play. In 1970, for example, there are 663 academic publications listed in the WSB, and 32 of these concern *Julius Caesar*. The proportion of published works that concern *Julius Caesar*, therefore, is  $32/663 \approx 0.048$ , or about 4.8%. In this section, we discuss the popularity of each play or subset of plays as relative to the rest. And while we can show how often publications focus on particular plays, this is, of course, no indication of the reception or enjoyment of a particular work. Consider, for instance, the articles in “*Bad*” *Shakespeare: Revaluations of the Shakespeare Canon* (ag154), which are included in our count and label plays as different as *The Taming of the Shrew*, *Henry VIII*, *Romeo and Juliet*, and *King Lear* as “bad.”<sup>46</sup>

As a project that indexes decades of Shakespeare scholarship, the WSB can indicate which plays become significantly more (or less) popular over

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*Duet*, trans. Janice Valls-Russell [Toulouse, FR: PU du Mirail, 2012]) is not. Joyce MacDonald Green’s “Finding *Othello*’s African Roots through Djanet Sears’s *Harlem Duet*” is included (bbq1197) because it analyzes the relation of Sears to her source text, whereas Elizabeth Brown-Guillory’s “Place and Displacement in Djanet Sears’s *Harlem Duet* and *The Adventures of a Black Girl in Search of God*” is not included as it only treats *Harlem Duet*’s relation to *Othello* in a cursory way. See Green, “Finding *Othello*,” in *Approaches to Teaching Shakespeare’s “Othello*,” ed. Peter Erickson and Maurice Hunt (New York: MLA, 2005), 2028; and Brown-Guillory, “Place and Displacement,” in *Middle Passages and the Healing Place of History: Migration and Identity in Black Women’s Literature* (Columbus: Ohio State UP), 155–70.

<sup>45</sup> Linear regression is a technique for finding a straight line that best approximates a set of data. Time series analysis is a general term that simply refers to the fact that one of the measured variables is changing over time.

<sup>46</sup> Maurice Charney, ed., “*Bad*” *Shakespeare: Revaluations of the Shakespeare Canon* (Rutherford, NJ: Fairleigh Dickinson UP, 1988). In this collection, see especially Shirley Nelson Garner, “*The Taming of the Shrew*: Inside or Outside the Joke?” 105–19, bg463; Iska Alter, “‘To reform and make fitt’: *Henry VIII* and the Making of ‘Bad’ Shakespeare,” 176–86, bg474; Avraham Oz, “What’s in a Good Name? The Case of *Romeo and Juliet* as a Bad Tragedy,” 133–42, bg467; and John Russell Brown, “The Worst of Shakespeare in the Theatre: Cuts in the Last Scene of *King Lear*,” 157–65, bg471.

time.<sup>47</sup> The definition of *significant* as it relates to statistics is crucial here. If the popularity of a play has increased *significantly*, this means that it is very unlikely that such an increase is due to chance alone. Because it is always possible that an event is simply due to chance (it is, for example, possible that twenty randomly chosen numbers could make an increasing sequence), statistics has developed tools to determine the probability of such a chance occurrence. This is the *p-value* and is given in Table 5 under the column of the same name.<sup>48</sup>

By using the ideas of significance and the p-value, we can identify plays that have significantly increased or decreased in popularity, relative to all the writings about Shakespeare's other plays (see Table 5 for a complete list). *Julius Caesar* exhibited the most significant decline; that its popularity has declined an average of only 0.046 percentage points per year hides the significance of this decline. Over the first five years of the 1960s (1960–64), an average of 4.3% of work written about Shakespeare's plays concerned *Julius Caesar*; over the first five years of the 2000s (2000–2004), the average was 2.27%. That is to say, the play is written about only half as often as it was half a century ago. If *Julius Caesar* were a Fortune 500 company, we would say it is losing market share. The decline in *Caesar* scholarship could be linked to evolving secondary-school curricula that now include more diversity in plays. As Russ McDonald noted about American high schools in 1995, "*Macbeth*, *Julius Caesar*, and *Romeo and Juliet* will probably never disappear from the curriculum, but lately they have been supplemented by such unlikely titles as *Antony and Cleopatra* and even *All's Well That Ends Well*."<sup>49</sup> In 1963, G. B. Harrison's "The Teaching of Shakespeare" in *The English Journal* focused entirely on how to teach *Julius Caesar* and explained why *Caesar* is a better choice for the classroom than other plays.<sup>50</sup> Half a century later, *The English Journal's* two themed issues on

<sup>47</sup> More precisely, we applied standard least-squares regression analysis and looked for plays for which the slope coefficient was significantly different than 0.

<sup>48</sup> The "p" in p-value stands for probability. It is one of the most important ideas in statistics, first introduced by Karl Pearson. See "On the criterion that a given system of deviations from the probable in the case of a correlated system of variables is such that it can be reasonably supposed to have arisen from random sampling," *Philosophical Magazine*, series 6, 50.302 (1900): 157–75. For a readable modern treatment, see David Moore, George P. McCabe, and Bruce A. Craig, *Introduction to the Practice of Statistics*, 7th ed. (New York: W. H. Freeman, 2012).

<sup>49</sup> Russ McDonald, "Shakespeare Goes to High School: Some Current Practices in the American Classroom," *Shakespeare Quarterly* 46 (1995): 145–56, esp. 146.

<sup>50</sup> G. B. Harrison, "The Teaching of Shakespeare," *The English Journal* 52.6 (1963): 411–19. Harrison "regard[s] *As You Like It* as a most *unsuitable* play for high schools," declares that *Macbeth* "contains far too much sheer bad writing," and suggests that most students will find Falstaff "very heavy going" (412).

Table 5: Plays showing the greatest changes in popularity, 1960–2010.<sup>a</sup>

Play	Slope (%)	R <sup>2</sup>	p value
<i>Julius Caesar</i>	-0.046	-0.77152	<0.0001
<i>Antony and Cleopatra</i>	-0.036	-0.63464	<0.0001
<i>Macbeth</i>	-0.031	-0.44479	0.001
<i>Troilus and Cressida</i>	-0.019	-0.61912	<0.0001
<i>Love's Labor's Lost</i>	-0.015	-0.49182	<0.0001
<i>Coriolanus</i> <sup>b</sup>	-0.013	-0.30869	0.027
<i>Timon of Athens</i> <sup>b</sup>	-0.012	-0.49144	<0.001
<i>As You Like It</i> <sup>b</sup>	-0.010	-0.24743	0.080
<i>Richard II</i>	0.008	0.447032	0.001
<i>Cymbeline</i>	0.009	0.321561	0.021
<i>Twelfth Night</i>	0.011	0.255309	0.070
<i>Othello</i> <sup>c</sup>	0.011	0.167355	0.240
<i>Romeo and Juliet</i> <sup>c</sup>	0.014	0.276828	0.049
<i>Merchant of Venice</i> <sup>c</sup>	0.016	0.304653	0.030
<i>Taming of the Shrew</i>	0.020	0.611444	<0.0001
<i>A Midsummer Night's Dream</i>	0.024	0.485979	<0.0001
<i>Henry V</i>	0.033	0.675352	<0.0001
<i>Titus Andronicus</i>	0.033	0.701897	<0.0001
<i>Tempest</i>	0.038	0.527216	<0.0001

<sup>a</sup> Slope, average increase or decrease in popularity each year. R<sup>2</sup>, the coefficient of determination, indicates what percentage of all the variation in popularity is explained just by the year. The p-value (see n. 48) is the probability of seeing such a strong relationship for no reason other than pure chance. Generally, any p-value of <0.05 is considered to be significant.

<sup>b</sup> Plays that have decreased most in popularity.

<sup>c</sup> Plays that have increased most in popularity.

teaching Shakespeare did not privilege *Caesar* over other plays.<sup>51</sup> Similarly, issues of *Shakespeare Quarterly* devoted to Shakespeare in the classroom and other works such as Rex Gibson's *Teaching Shakespeare* show no particular favoritism toward *Caesar*.<sup>52</sup> It is not that we have erased *Caesar* from the secondary-school curriculum; rather, in many Anglophone school systems, *Caesar* is now surrounded by other plays.

<sup>51</sup> Virginia R. Monseau, ed., "Shakespeare for a New Age," special issue, *The English Journal* 92.1 (2002); and Michael LoMonico, ed., "Teachers Set Free: Folger Education and Other Revolutionary Approaches to Teaching Shakespeare," special issue, *The English Journal* 99.1 (2009).

<sup>52</sup> John F. Andrews, ed., "Teaching Shakespeare," special issue, *Shakespeare Quarterly* 35.5 (1984); Ralph Alan Cohen, ed., *Shakespeare Quarterly* 46.2 (1995), with a focus on pedagogy; and Rex Gibson, *Teaching Shakespeare: A Handbook for Teachers* (Cambridge: Cambridge UP, 1998). For more on the history of Shakespeare in the classroom, see Joseph Haughey, "'What's Past is Prologue': Roots of a Performance-Based Approach to Teaching Shakespeare," *The English Journal* 101.3 (2012): 60–65; and Peggy O'Brien, "And Gladly Teach': Books, Articles, and a Bibliography on the Teaching of Shakespeare," *Shakespeare Quarterly* 46 (1995): 165–72.

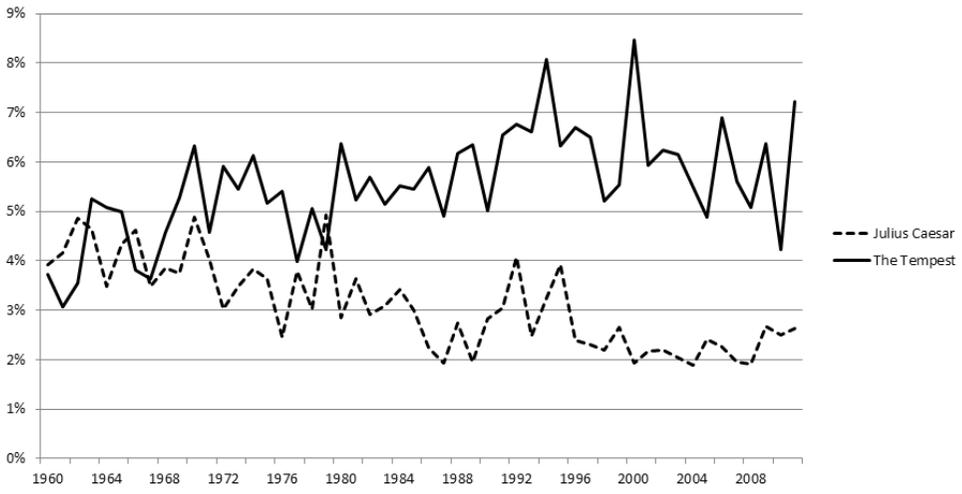


Figure 10: A comparison of the popularity of *Julius Caesar* and *The Tempest*.

While *Julius Caesar* lost popularity, *The Tempest* grew steadily more popular over the second half of the twentieth century (see Figure 10, which shows them starting at roughly the same popularity; compare to Table 5). Why are Shakespeareans writing more about *The Tempest* now than *Julius Caesar*? *The Tempest*'s popularity can perhaps be linked to new (postcolonial) critical approaches: as Virginia Mason Vaughan and Alden T. Vaughan explain, “Invigorated partly by *Prospero and Caliban* [a 1950s book by Octave Mannoni on “The Psychology of Colonization”] and partly by the social turbulence of the 1960s and 1970s, American scholars took renewed interest in *The Tempest*'s sociohistorical implications.” The colonial themes of *The Tempest* have been appropriated globally and applied to multiple cultures.<sup>53</sup> According to the WSB, since 1960 there have been twice as many adaptations and translations of *The Tempest* than of *Julius Caesar* (503 compared to 267), which points to *The Tempest*'s position as a primary text for “global Shakespeares.”<sup>54</sup> Furthermore, more translations and adaptations offer critics more fodder. Peter Greenaway's *Prospero's Books* (1991, cc295), for instance, had scholars reconsidering *The Tempest*; perhaps Julie Taymor's *The Tempest* with Helen Mirren as a female

<sup>53</sup> Virginia Mason Vaughan and Alden T. Vaughan, eds., *The Tempest*, Arden Shakespeare (London: Bloomsbury, 2011), 105–8, esp. 105.

<sup>54</sup> Further illustrating this point, as of December 2014, on the MIT *Global Shakespeares* site ([globalshakespeares.mit.edu](http://globalshakespeares.mit.edu)) there were only three videos associated with *Julius Caesar*, whereas there were ten videos associated with *The Tempest*. For comparison, thirty-two videos were tagged with *Hamlet*.

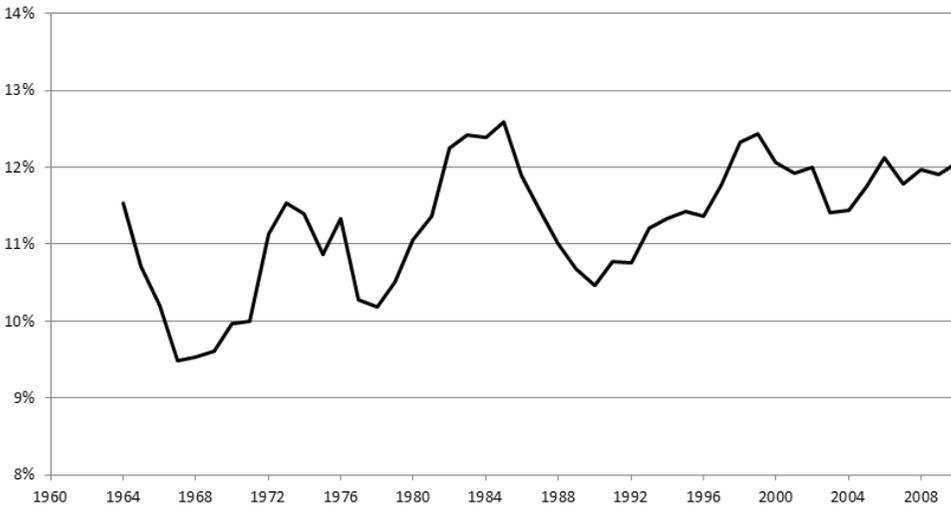


Figure 11: A five-year moving average plot of the popularity of the cross-dressing plays taken as a group.

Prospera (2010, ccz304) will similarly elicit comparative scholarship. If *Hamlet* is Shakespeare's play of modernity, *The Tempest* is Shakespeare's play about colonialism. Thus, with the rise of postcolonial scholarship, *The Tempest* has garnered more critical attention later in the twentieth century.

The plays we choose to write about reveal our scholarly preoccupations as much as the theoretical approaches we take to those plays. Figure 11 shows a five-year moving average of the popularity of plays that involve cross-dressing over time.<sup>55</sup> (A five-year moving average plot is a plot of popularity versus time, where we find the average popularity of the play during the five-year period centered at that year. The plot smoothes out single-year spikes, and gives a better overall representation of the data.) We can see, for example, that in the mid-1980s, more than 12% of Shakespeare scholarship concerned one of the cross-dressing plays, although these data do not represent what critical approach each publication takes. Given that the cross-dressing plays constitute about half of the comedies, one might reasonably wonder whether the trends seen here simply reflect larger, genre-level trends. Although the comedies do show a similar movement (increas-

<sup>55</sup> Future work in this area could consider the relative popularity of other play groups, such as the history tetralogies, plays set in Italy, or green world comedies. The way we compare the plays affects our understanding of their relative popularity, as the discussion of romances, tragi-comedies, and problem plays vividly illustrates. For Figure 11, the cross-dressing plays included are *The Merchant of Venice*, *As You Like It*, *Twelfth Night*, *The Two Gentlemen of Verona*, *Cymbeline*, *The Taming of the Shrew*, and *The Merry Wives of Windsor*.

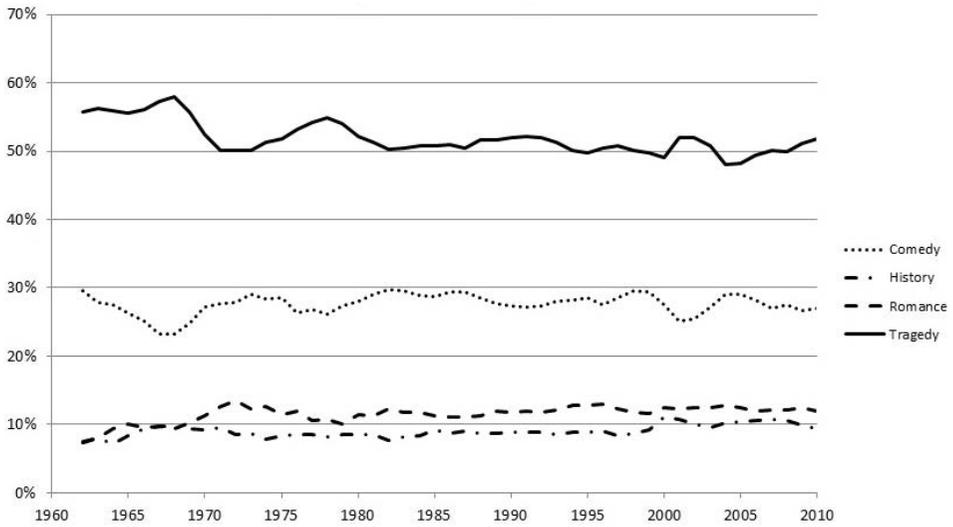


Figure 12: A five-year moving average plot of popularity of genres, measured by number of publications.

ing in popularity in the 1980s and after 2000), the difference shown in Figure 11 is more dramatic. While recent scholarship has indeed pointed to the importance of considering gender, sexuality, and genre by exploring the impact of cross-dressing in Shakespeare drama, many of the pivotal monographs in the field consider multiple plays and, as such, fall into the “General” category of the *WSB*. These include Garber’s *Vested Interests*, Jean E. Howard’s *The Stage and Social Struggle in Early Modern England*, and Stephen Greenblatt’s *Shakespearean Negotiations*.<sup>56</sup> The increasing popularity of the cross-dressing plays reveals, chiasmatically, that the topics we write about mirror the plays we write about and the plays we write about mirror the topics we write about.

Having demonstrated the relative popularity of particular plays in relation to the canon and to individual genres, we now turn to the combined popularity of all plays in a genre over time (see Figure 12). Note the slow decline in popularity of the tragedies to its current level of about 50%, and the correspondingly slow increase in popularity of the histories and the romances. As Table 1 shows, this does not reflect a drop in writing about *Hamlet*; it suggests that other tragedies, notably *King Lear*, *Macbeth*, and *Julius Caesar*, are not fixed in the center of the canon as they once were (see Table 5). Figure 12 reflects the ten-

<sup>56</sup> Marjorie Garber, *Vested Interests: Cross-Dressing and Cultural Anxiety* (New York: Routledge, 1992); Jean E. Howard, *The Stage and Social Struggle in Early Modern England* (Oxford: Routledge, 1993); and Stephen Greenblatt, *Shakespearean Negotiations: The Circulation of Energy in Renaissance England* (Berkeley: U of California P, 1989).

dency of scholars to reassess and consider previously neglected plays. We can also consider the notion of a canon within Shakespeare's plays: some plays, such as *Two Noble Kinsmen*, *King John*, and *Two Gentlemen of Verona*, are paid less attention than others. As Shakespeare remains a favorite subject in both high schools and universities, editions such as *The Norton Shakespeare* (with "Essential Plays / Sonnets" as part of its subtitle) and *Necessary Shakespeare* will continue, as will the articles and books that push back against the reification of a Shakespeare canon by attending to the importance of overlooked works.<sup>57</sup>

"CONCLUDING, 'STAY: NOT YET'": FUTURE DIRECTIONS FOR RESEARCH

This article is the first to analyze the WSB quantitatively and survey the field of Shakespeare scholarship by considering how and what we write. Though scholars usually search the WSB by keyword or browse by category in order to find materials on particular topics, we suggest that large-scale data analysis of the WSB has the potential to reveal even more about how we talk about Shakespeare. Future studies could, for instance, compare works by how they are categorized in the taxonomy; could include studies of apocryphal works and poetry; could find when certain keywords began appearing in article titles, key terms, and annotations; and could further examine aspects of the relationship between performance and publications. Global Shakespeare could also fruitfully be explored with attention to publication geography, performance venue, particular languages, and translations. Projects such as "Visualizing English Print 1470–1800" show the benefits of considering large corpora in the study of Shakespeare and early modern drama; existing data mining projects, however, tend to focus on the primary texts we study.<sup>58</sup> As this essay suggests, we can also better understand the field by analyzing the secondary sources we create.

The WSB is often called an "invaluable" resource for Shakespeareans.<sup>59</sup> Now, in the age of big data, distant reading, and visualization, the WSB can provide new ways of approaching Shakespeare scholarship.<sup>60</sup> But in order to do so, it will need to update its database structure and interface to make its wealth of information more readily available, accessible, and understandable to scholars.

<sup>57</sup> Stephen Greenblatt, gen. ed., *The Norton Shakespeare: Essential Plays, The Sonnets*, 2nd ed. (New York: W. W. Norton, 2008); David Bevington, *Necessary Shakespeare*, 4th ed. (New York: Longman, 2013).

<sup>58</sup> For examples, see n. 24.

<sup>59</sup> David Bevington, *William Shakespeare: Oxford Bibliographies Online Research Guide* (Oxford: Oxford UP, 2010), 6; and Jennifer Bowers and Peggy Keeran, *Literary Research and the British Renaissance and Early Modern Period: Strategies and Sources* (Lanham, MD: Scarecrow Press, 2010), 91.

<sup>60</sup> Distant reading is computer-assisted analysis of texts. See Franco Moretti, *Distant Reading* (London: Verso, 2013).