

# CAN THE OXFORD CANDIDACY BE SAVED?

## *A Response to W. Ron Hess, "Shakespeare's Dates: Their Effect on Stylistic Analysis"*

Ward E.Y. Elliott and Robert J. Valenza



There is a differency between a grub and a butterfly,  
yet your butterfly was a grub.

*Coriolanus*: 5:4.12



LD-SCHOOL Oxfordians still fondly remember the trick that Oxfordian scholar Louis Benezet, Sr. liked to play on Stratfordian English Lit professors in the 1940's. He would give them a seventy-line mixture of passages from Shakespeare and Oxford, defy them to tell one author from the other, find they had great trouble in doing so, and conclude that his experiment showed their styles to be barely distinguishable.<sup>1</sup> Much has changed since those days. In 1980, Steven May (79-84) showed from external evidence (and over Charlton Ogburn, Jr.'s objections that "he is unconcerned with stylistic criteria" [396]) that some of the passages Benezet thought were Oxford's were in fact written by Robert Greene, and that five other poems confidently assigned to Oxford by J.T. Looney and other Oxfordian scholars (following A.B. Grosart), were not Oxford's work.

In 1987, our students in the Claremont Shakespeare Clinic, sponsored by the Sloan Foundation and the Shakespeare Authorship Roundtable, began what became a seven-year computer study of all testable Shakespeare claimants, to see which, if any, matched Shakespeare. For the first two years the tests were favorable to Oxford, attracting much interest among Oxfordians and warm invitations to present our results to Oxfordian audiences. But in 1989 we discovered what looked like serious flaws in our then-best test (Valenza 1990) and turned to six other tests that showed mismatch after mismatch between Shakespeare and twenty-seven testable poet claimants, including the front-runners Oxford, Bacon, and Marlowe. Oxford's poems flunked five of the six new tests and seemed particularly different from those of Shakespeare.

When the students reported these results to the Shakespeare Authorship Roundtable in 1990, they got worldwide media attention. A round of "refutations" ensued in Oxfordian publications and in private correspondence with Oxfordians. Some of these made worthwhile points; some did not. But the invitations to respond to them in Oxfordian publications and meetings stopped completely. We made a few revisions in our tests and published our general findings in mainstream journals, *Computers and the Humanities* (1991), and *Notes and Queries* (1991a).<sup>2</sup>

**H**OWEVER, it was not the end of our work. After a two-year break to build up and edit our text archive, the Clinic met again to test playwright claimants. This time the students validated fifty-one tests for plays and an additional eight tests for poems, besides the six we used on poems in 1990. As before, Shakespeare's core works seemed to have high internal consistency, and no claimant work, no poem or play from the "Shakespeare Apocrypha" (non-canonical works ascribed at one time or another to Shakespeare), came close to matching Shakespeare. The most discrepant core Shakespeare play had three Shakespeare rejections in fifty-one tests; the least discrepant claimant play had eleven. These results appeared in the April 1996 issue of *Computers and the Humanities* and were vigorously, but we think ineffectually, attacked by our former collaborator, Don Foster (his 1996a, our 1998). They were reprinted with slight revisions in our 1998.<sup>3</sup>

Shakespeare Range	Most discrepant Shakespeare poem block	Oxford poems	Shakespeare Baseline	Remarks
Grade level, 10–14	10	7	A	g, e, p
HCW/20k, 31–153	153	32	A, B	e
Rel. clauses, 7–17	7	20	A, B	
BoB7, 136–944	625	1000	A, B	t, s/m
Modal distance, –2 to +2	–1.8	18.4	A	g
Open lines %, 7–24	10	7	C	t, e, p
Fem. endings %, 5–23	8	0	C	t, p
Enclitics/1,000 ln., 22–143	22	19	C	t, p
Proclitics/1,000 ln., 199–480	199	136	C	t, p
Total Shakespeare rejections	0	7		
Failure probability, 80%	.25	.0000003		

*Oxford's poems compared to Shakespeare's most discrepant poem block. The Shakespeare Clinic's fourteen verse tests show strong similarities among seventy 3,000-word Shakespeare core verse blocks tested, and strong dissimilarities between Shakespeare's verse and Oxford's. The first block of Venus and Adonis, though it least resembles Shakespeare's other poem blocks, has zero Shakespeare rejections in fourteen tests. Oxford's poems have seven rejections in the same fourteen tests (shaded), far more than any Shakespeare block tested. Oxford's poems have many more relative clauses than Shakespeare, far fewer feminine endings, enclitics, and proclitics. His grade-level scores are far below Shakespeare's, his BoB7 scores above Shakespeare's, and his modal distance from Shakespeare's mean is far greater than that of any like-sized Shakespeare block. If Shakespeare's test results are Poisson-distributed (as it appears that three are: relative clauses, feminine endings, and proclitics), and depending on how tightly the comparison envelope is defined, the odds that Shakespeare could have produced Oxford's test-patterns by chance are 36 to 750,000 times worse than those for Shakespeare's own most discrepant block.*

**Key to Table 1:**

HCW: Hyphenated Compound Words per 20,000 words

Rel. clauses: Relative clauses per 3,000-word block

BoB7, *Modal distance*, *Open lines*, *Feminine endings*, *Enclitics*, and *Proclitics per 1,000 lines*: see text.

Shakespeare ranges are set in bold type.

*Shakespeare Baseline*:

A: fourteen 3,000-word blocks of Shakespeare's poems; all but "A Lover's Complaint" (Shakespeare authorship doubtful) and "Phoenix & Turtle" (too short);

B: fifty-six 3,000-word blocks of verse from selected Shakespeare plays;

C: twenty-eight 1,500-word blocks of Shakespeare's poems, minus "LC" and "Pht"; same as A, but with 1,500-word blocks.

*Remarks*:

g: results can be sensitive to differences of *genre* (poem verse v. play verse);

e: results can be sensitive to differences in *editing*, such as spelling and punctuation;

p: results can be sensitive to differences in *prosody*, that is, verse structure, meter, stanzaic structure, and rhyme schemes;

s/m: results can be sensitive to differences in *subject matter*;

t: results can be sensitive to differences in *time of composition*.

All ranges and results except those in the boxed area are based on comparisons between the entire Oxford poem corpus, per Steven May, 1980, and 3,000-word Shakespeare poem and/or play verse blocks. Ranges and results in the boxed area are based on comparisons with 1,500-word Shakespeare poem blocks, and compare only the 1,388 words of Oxford's poems that are in iambic pentameter (I-5) with like-sized I-5 Shakespeare poem blocks. See *Shakespeare Baseline*, above, for details. Shakespeare's most discrepant poem block, both 3,000-word and 1,500-word, is the first block of *Venus and Adonis*.

Our 1996/1998 play results have little bearing on the Oxford candidacy because none of Oxford's plays have survived, but the new 1996/1998 poem tests do permit a significant updating of the Oxford findings we published in 1991. Highlights appear in Table 1 to the left:

**Our testing methodology**

Our methodology can be summed up in three short phrases: "clean baseline," "block and profile," and "silver bullets." "Clean baseline" means that we tried to test from a pure Shakespeare baseline, from which anything thought authored or co-authored by someone else was excluded. In Oxford's case we also tried to use a clean comparison sample: the poems Steven May assigned to Oxford in 1980, not his "possibly Oxford" poems, nor the *A Hundreth Sundrie Flowres* poems claimed for Oxford by some Oxfordians.<sup>4</sup> "Block and profile" means that, when we calculated a Shakespeare profile for a given trait—say, hyphenated compound words—we aimed to compare like-sized blocks with each other. Large blocks and large numbers normally tell you more than small blocks with small numbers because they

average out more variance. With giant, play-sized blocks, 20,000 words or so in size, we could easily validate fifty-one tests. But for poems the blocks have to be smaller. Oxford and Bacon wrote only 3,000 words or so of testable poetry; Marlowe, two 3,000-word blocks, not counting his translations. These, and corresponding 3,000-word blocks of Shakespeare, should have more “noise” and wider test profiles than 20,000-word play blocks, and most of them did. We could only validate fourteen tests for 3,000-word and 1,500-word Shakespeare blocks, not fifty-one. 500-word blocks are so short and noisy that few of our tests are usable.

Besides size, one should also try to match for other variables: *genre* (whether a work is play verse, prose, or poem), *time of composition*, *subject matter*, *editorial conventions* (spelling and punctuation), and *prosody* (meter, stanzaic structure, etc.). Many of these appear in the “Remarks” column of Table 1 and should figure prominently in any discussion of whether Louis Benezet was right in treating Oxford like a mature butterfly, properly comparable to Shakespeare, and not like a juvenile caterpillar or “grub,” unsuitable for comparison to Shakespeare’s mature work. It is seldom possible to match perfectly for all of these at once, but there are often ways to try one combination against the other and see how much difference it makes. In Oxford’s case, we have matched our 3,000-word blocks for genre (poem v. poem, or poem v. play verse) and spelling (*Riverside Shakespeare* spelling, including hyphenation), but not for prosody or time of composition—unless, as Ron Hess and other Oxfordians argue, we are wrong about our Shakespeare dates. Ninety-nine percent of Shakespeare’s verse, but less than half of Oxford’s, is iambic pentameter, and most of Oxford’s poems far pre-date Shakespeare’s plays, as conventionally dated. For verse-tests, which are considered sensitive to prosodic variations (boxed in Table 1), we used 1,500-word blocks matched for genre (poem v. poem), spelling, and meter (iambic pentameter v. iambic pentameter), but, again, not for time of composition by conventional reckoning.

Finally, there is our preference for “silver-bullet” tests, which attempt to disprove common authorship by showing lack of resemblance, rather than “smoking-gun” or “thumbprint” tests that attempt to prove common authorship by showing supposedly unique resemblances.<sup>5</sup> Part of this preference may have come from our assignment by the Shakespeare Authorship

---

Ward E.Y. Elliott and Robert J. Valenza were faculty advisors to the Claremont Shakespeare Clinic from 1987 through 1994. Valenza is the W.M. Keck Professor of Mathematics and Computer Science at Claremont McKenna College, author of books on *Linear Algebra*, *Abstract Algebra*, *Number Theory*, *Fourier Analysis*, and *Number Fields*. Elliott is the Burnet C. Wohlford Professor of American Political Institutions at Claremont McKenna College. He has written on voting rights, smog, transportation, and population policy. His *Rise of Guardian Democracy* was nominated by the Harvard University Press for a Pulitzer Prize in history. He and Valenza have written more than a dozen papers and articles on Shakespeare authorship controversies. A description of the Shakespeare Clinic may be found at <http://academic.mckenna.edu/welliott/shakes.htm>.

Roundtable, which was to use computers to shorten the list of credible claimants. But most of it stems from the fact that, with imperfect tests, a “couldn’t-be” finding is much more telling than a “could-be” finding. In thirteen years of looking, we have heard many claims of “unique quirks” shared by one claimant or another with Shakespeare, but none has ever been shown, like thumbprints or smoking guns, to be free of false negatives or positives. Absent such a showing of perfection, fitting a size-five slipper does not prove that you are Cinderella, only that you are a could-be. You could also be Little Miss Muffet or Tiny Tim. But *not* fitting the tiny slipper is strong proof that you are *not* Cinderella.

### Our test outcomes updated

That means that the seven strong, validated Shakespeare tests that the Oxford poem sample passed (listed in our 1996 and 1998, Appendix Five) are much less interesting than the seven that it flunked. The former are nothing more than could-be’s. Only the latter (plus hyphenated compound words, a close-call Oxford pass, and open lines, a time-sensitive verse-test passed by Oxford’s iambic-pentameter poems and not available in our earlier work for I-5 only) are listed in Table 1. Table 1 compares Oxford’s poems with Shakespeare’s least typical core poem block, the first 1,500 words—or the first 3,000 words—of *Venus and Adonis*. In every case, the most discrepant Shakespeare block fits (albeit sometimes barely) within the Shakespeare profile we used, while, in every case but two (HCW’s and open lines), the matched Oxford block does not. Let us look at the Oxford outcomes.

*Grade Level:* Shakespeare’s poems have much longer sentences and/or longer words than Oxford’s, testing no lower than the tenth-grade level. Oxford’s poems test at the seventh-grade level (our 1996, 1998 Appendix Five). This test, which compares Oxford’s lightly-modernized punctuation with that of the *Riverside Shakespeare*, is sensitive to editorial preference, but comparing original-punctuation Oxford with original-punctuation Shakespeare would make the gap even wider. It seems to us a clear rejection.

*HCW’s:* Oxford’s poems have fewer *hyphenated compound words* per block than any like-sized Shakespeare poem block, and fewer HCW’s than ninety-seven percent of Shakespeare’s like-sized play-verse blocks. But, to be cautious, we re-edited Oxford’s poems to mark every arguable Riverside hyphenation; we expanded our Shakespeare verse baseline to include plays, as well as poems; and we broadened our Shakespeare profile to include the highest highs and lowest lows found in either genre.<sup>6</sup> This was just enough to squeeze Oxford’s poems into the expanded Shakespeare range and turn a narrow rejection into a narrow pass, though it still hardly makes a close match with Shakespeare.

*Relative Clauses:* Oxford’s poems have twenty relative clauses, many more than Shake-

spere's maximum of sixteen per 3,000-word block. In the phrase, "the evil that men do," "that men do" is a relative clause (our 1991, 1991a).

*BoB7*: This is a ratio of occurrences of the word "is" to occurrences of the contractions "'tis," "there's," "I'm," "here's," "she's," "that's," and "what's" (our 1996, 1998). It is validated for the entire range of Shakespeare plays but, since Shakespeare used fewer contractions in his earliest plays, it could reasonably be questioned as applied to works, such as Oxford's poems, composed before the earliest of Shakespeare's plays, as conventionally dated. However, the Oxfordian redatings, which backdate Shakespeare's earliest plays by a decade or more, would make it much harder to justify such questioning.

*Modal Distance*: Modal analysis tests the extent that authors use, or avoid using, certain words together (our 1991, 1991a). Our version was sensitive to genre, working well on poem-poem comparisons, like this one, but not so well on play-verse or song-verse comparisons (our 1996, 196-97). Shakespeare's lowest and "best" modal score was minus 25.4, his highest and "worst," 187.7, and his mean, 56.2. Oxford's best, worst, and mean scores, respectively, were 233.8, 490.5, and 356.9; all worse than Shakespeare's worst. Overall, Oxford tested 18.4 standard errors distant from Shakespeare's mean; very distant indeed. One might reasonably speculate that the first eight of Oxford's poems were song-verse, not poems proper, and, hence, not suitable for modal analysis. Dropping these from the sample would move Oxford closer to Shakespeare's mean, but not close enough: seven standard errors instead of eighteen.<sup>7</sup>

(f) *Open lines*: These are lines not bounded by punctuation marks. They are sensitive to time of composition, editorial practices (punctuation), and prosody, which means you should compare I-5 with I-5, not with any of the un-Shakespearean meters that characterize most of Oxford's verse (Ross n.d.). Hence, all the verse-tests in Table 1 (boxed) compare only Oxford's I-5 poems, amounting to 1388 words, written between 1576 and 1593, with Shakespeare's I-5 poems, written between 1593 and 1609 by conventional dating, and divided into like-sized, 1,500-word blocks for the reasons mentioned above under *block and profile*. Oxford's poems fit—barely—within Shakespeare's 1,500-word profile, with no effort to allow for strong upward trends in Shakespeare's play verse, where, by conventional dating, the percentage of open lines quadrupled between the beginning, in 1590 and the end, in 1613 (see Appendix and Figure 4 below).

Compensating for trends in open lines in the plays would be superfluous under conventional dating since most of Oxford's poems far predated most of Shakespeare's plays (Figure 4). But it would not be superfluous under Oxfordian redating of the plays, which makes many of Shakespeare's plays appear contemporary with Oxford's poems and makes the discrepancy between Shakespeare's open line play-verse range from 1579 to 1591 (that is, 11-32 percent) and Oxford's I-5 1576-1593 poem score, 7 percent, start to look suspicious (see Appendix and Figure 5). Both Oxfordian redating efforts, old Clark (not pictured) and new Hess (Figure 5),

threaten to turn Oxford's narrow pass for open lines into a rejection. They weaken, not strengthen, the argument that he fits within the Shakespeare profile.

g) *Feminine endings*: These are lines ending on an unstressed syllable, with words such as "gotten" or "running." They are not sensitive to editing, but they are considered sensitive to prosody and require I-5 to I-5 comparison, in like-sized, 1,500-word blocks. Oxford flunks this test decisively, compared to Shakespeare's poem range, having no feminine endings at all, while Shakespeare's lowest percentage was seven, highest twenty-five. But this test, too, is sensitive to time of composition. Feminine ending percentages increased by a half or more in Shakespeare's plays, conventionally dated (Figure 1), as they do by the new Hess dating (Figure 3), but not by the old Clark dating (Figure 2).

Just as with open lines, if conventional dating of the plays is right, and you allow for the clear upward trend in play verse, you could plausibly argue that Oxford's lack of feminine endings fits comfortably below the bottom of a long upward trendline which is documented from 1590 on and might well have started earlier. Conventional dating could put a question mark next to the rejection by this test.

But Oxfordian redating would erase the question mark. The Clark dating (Figure 2) crams almost every Shakespeare play back into the 1570's and 1580's, obscures the trend line, and makes Oxford's lack of feminine endings a glaring mismatch with Shakespeare. This is essentially what we reported in our 1991a, using Ogburn, Sr. dates similar to Clark's. The Hess redating (Figure 3) is less radical about the time rollback and better at preserving trendlines in the plays. But the trendline is still less distinct than with conventional dating, and Oxford's poems, with no feminine endings at all, are still glaringly out of line with Shakespeare plays that Oxfordian redating sees as contemporary with Oxford's poems. Again, the Oxfordian redating weakens, not strengthens, the case for a match with Shakespeare.

h) *Enclitic and proclitic microphrases*: These tests count instances in which certain "clinging monosyllables," stressed in natural speech, lose the stress for metrical reasons. (See our 1996, p. 201; Tarlinskaja, 1987, Ch. 6.) Oxford's I-5 poems fall below the bottom of our Shakespeare 1,500-word-block profiles for both of these tests, and, hence, suffer two more clear Shakespeare rejections. Shakespeare's rates by both tests appear to have risen somewhat from early plays to late, but we only have figures for four plays, *Richard II*, *Titus Andronicus*, *The Tempest*, and *A Winter's Tale*, to support this impression. If Oxfordian backdating of the plays has any bearing at all on these tests, it would again be to strengthen the rejections.

After all the refining and updating, the Oxford candidacy fares no better today than it did in 1990. His poems now have seven Shakespeare rejections in fourteen tests, far too many to look like Shakespeare to us. Five of the rejections could be time-sensitive, but trying to run Oxford's poems against Oxfordian-backdated plays only makes the mismatches more glaring, not less.

### The new Hess Shakespeare chronology

The Good News: as we see it, the good news about the Hess chronology is this: It pulls all three Oxfordian dating schemes together conveniently into a single document. It more than fully acknowledges the conjectural aspects of assigning dates to the plays. And it does try to respond to our challenge to get Oxfordian dating reshuffled to reflect what looks like clear stylistic trends in Shakespeare's plays, by conventional dating, while making sure the trends stop after Oxford's death in 1604. As we have seen, the stylistic trends help the early Oxford "fit" by showing some of his rejections to be just what you might expect from extrapolating Shakespeare's trendlines backwards. But they don't fit Oxford at all if they continued after his death; unless his death was faked, as some Oxfordians tried to argue after *Elegy* by W.S. (clearly dated in 1612) was attributed to Shakespeare.<sup>8</sup>

We don't know how the new Hess chronology will be received by Oxfordians, but it seems to us an improvement over the older ones of Eva Turner Clark and the senior Ogburns. Like the Clark/Ogburn dating, it backdates the plays enough to fit them into Oxford's lifetime, but this time (unlike Clark/Ogburn) not enough to obliterate the trends. Hence, it looks to us like a forthright, first-cut response to the challenge we issued in our 1991a *Notes and Queries* article. For us the best news is that this time THE OXFORDIAN has allowed us to answer it, offering every one of its readers a chance to critique us, and suggesting a markedly greater self-confidence and open-mindedness among Oxfordians than we have experienced in other Oxfordian *fora* in the past. Finally, it gives us a chance to take a second look at the question of play chronology to see how firm it is, and how much changing it would influence a major ascription controversy.

### The Bad News: lack of Oxfordian consensus

The Bad News is this: the second look tells us that both Oxfordian and mainline Stratfordian dating have always been speculative, but Oxfordian dating seems to us an order of magnitude more speculative and less settled than Stratfordian. If you look at successive editions of the *Riverside Shakespeare*, or compare the *Riverside* chronology with other leading contemporary Shakespeare chronologies, or with E.K. Chambers, or with nineteenth-century chronologies, the resemblances between different estimates seem highly persistent. The order and dates of individual plays may differ somewhat from one estimate to another, but the same plays appear repeatedly in the same broad classifications, early, middle, and late. As Peter Moore put it, "Chambers dead is stronger than his successors alive" (25).

Thanks to Hess's yeoman service of combing through different versions of Oxfordian dat-



ing over the years, it is much easier to compare Oxfordian estimates with one another (see Hess, 1999, Appendix, and our Appendix, below). Today they are spread all over the map, with gaps of ten to twenty years between some alternative versions, and they are much more scattered now than they were in the early days. The senior Ogburns's dating (1952) turns out to be almost a carbon copy of Eva Turner Clark's dating (1930), with no two dates for the same play more than two years apart.<sup>9</sup> But the senior Ogburns's tight consensus was little heeded either by Charlton Ogburn, Jr., or by Hess, or by Peter Moore (1997), on whom Hess relied for about half of his seventeen "anchor" dates.

MOORE challenges conventional Stratfordian dating (specifically that of Chambers) as speculative and inconclusive and offers new backdates for ten plays, which he also acknowledges to be speculative and inconclusive. He criticizes Francis Meres's 1598 list as incomplete and Henslowe's "ne" entries, which affect two Shakespeare plays, as probably meaning something other than "new." Both points seem reasonable, though we doubt that Meres's known early-play omissions, *The Taming of the Shrew* and the *Henry the Sixth* series, from a list of twelve or thirteen plays, are enough to justify abandoning him entirely as a point of reference. Considering the even-more-speculative alternatives, we think it makes more sense to take account of the imperfect play list than to ignore it just because it missed a play or two. Moore proposes the following tentative backdates: *Titus Andronicus*: 1585-89 (from *Riverside Late*: 1594); *Comedy of Errors*: 1587-88 (from 1594); *King John*: 1590 (1596); *Romeo and Juliet*: 1591 (1596); *1 Henry IV*: by 1592 (1597); *Henry V*: 1592-99 (1599); *As You Like It*: 1593-94 (1599); *Hamlet*: ?1594 (1601); *Macbeth*: perhaps 1600-01 (1606); *Pericles*: by 1604 (1608) (55). He immediately—and appropriately—adds that "some of the pieces of evidence underpinning this list are strong, others are weak" (43, 44, 46, 55). He also properly observes, as Chambers did, that evidence of earliest possible dates tends to be "weak stuff" compared to evidence of latest possible dates (28).

Our inclination here, for the moment, is not to examine his evidence in detail. Instead, we shall take him at his word, note that he attempts only ten backdates for thirty-eight plays, all tentative, and note also that the spread between his tentative dates and those of the *Riverside Shakespeare* averages five or six years, not the twelve or more years found in other Oxfordian dating. In general, we find Moore's external evidence more cautious and more persuasive than Hess's or Clark's, though no more persuasive than the conventional, Chambers-derived evidence that Moore criticizes. We would also guess from looking at Figures 1, 4, and 6 below, that some of his proposed backdates, such as *Titus*, *Shrew*, and *Errors*, might fit the conventional trendlines every bit as well as the conventional dates for these plays, maybe better. Major differences remain between Hess's bold, comprehensive estimates and Moore's cautious, limited ones, and between Hess's and Moore's estimates and the older Oxfordian

estimates. Current consensus among Oxfordians, after eighty years of trying to get the dates right, still seems to be anything but tight.

### Problems with external evidence

We have no idea whether Oxfordians will ever be as agreed on chronology as they once were, or as mainline Stratfordians seem to be now. Surely the answer will and should depend in large part on external evidence, a subject on which we have never pretended to be authorities. But we don't have the impression that the Hess chronology will be the last word on the subject. Even an amateur, looking, say, at Eva Turner Clark's actual evidence that Oxford wrote *Richard III* in 1581, might have misgivings about making it an "Anchor Play" in any chronology, as Hess has done. Her sole grounds for "imagining" that date turns out to be that Oxford was in the Tower of London in 1581 and that *Richard III* makes more reference to the Tower than Shakespeare's other history plays (257). Such "evidence" seems to us skimpy and far-fetched, compared to, say, the mainline dating of *As You Like It* at 1599. *As You Like It* is not mentioned in Meres's compendious (though not quite exhaustive) 1598 list of Shakespeare plays known to him, but it was "stayed" in the Stationer's Register, August, 1600, and its song, "It was a lover and his lass," was published in Thomas Morley's *First Book of Airs*, 1600. These say: "probably not before 1598, certainly not after 1600." Or the evidence for *Henry VIII*, playing when the Globe Theater burned down on 29 June 1613, and reportedly performed no more than two or three times previously (Wells 133).

Hess's "Anchor Dates" appear in boldface in our Appendix; we have also set in bold dates we consider better substantiated than most in our *Riverside* Date Late column. The most interesting cases are *As You Like It* and *Henry V*. We would anchor both plays in 1599, for essentially the reasons mentioned for *AYL*: no mention in Meres, but Stationer's Register and other convincing references (such as a "bad quarto" of *H5*) in 1600. Hess would anchor them, respectively, in 1593 and 1592, respectively, following Moore. Moore's evidence for both plays turns out to be speculative in the extreme (46-48). He argues that, because *AYL* seems to refer to the death of Marlowe (in 1593), it must therefore have been written shortly afterward. We don't think this necessarily follows. And he argues that "Shakespeare's reference to Essex in Ireland in 1599 [in *H5*] bears the marks of revision of an earlier text" and shows the play to have been a revival. He concedes, however, that "I have offered no positive evidence for an earlier date for the play" (47).

Hess and the other Oxfordians pay little attention to Shakespeare's three reported collaborations with John Fletcher, the lost *Cardenio*, *Henry VIII*; and *The Two Noble Kinsmen*, all around 1613. The dates of the first two seem to us better substantiated than most: recorded

payments to the King's Men for two 1613 performances of "Cardenno," and Sir Henry Wotton's letter to Edmund Bacon, describing the burning of the Globe Theater during the performance of a "new play called All is True, representing some principal pieces of the Reign of Henry VIII" (Wells 30, 132-33)." If these relatively well-documented collaborations with Fletcher were live ones, as we believe collaborations generally were then and are now, it poses a grave problem for the claim for Oxford, who died in 1604. If the collaboration were posthumous, it raises the same question as Oxfordian ascriptions do generally (below): if Oxford wrote his half of these plays in 1601, 1603, or "not later than 1592," why did they wait ten or twenty years to get the other half written?

Besides listing three of the Oxfordian chronologies to compare with the *Riverside*, we have also included a column called "First Clear Mention." This column records the date when we consider a play to have first been clearly identified, whether by Meres, by an entry in the Stationer's Register, by publication of a Quarto version, or by a report from someone who attended the play or heard about it. Comparing "first clear mention" dates with *Riverside* and Hess chronologies makes a striking contrast. Of the thirty-eight plays listed, thirty-four had a "first clear mention" other than the pertinent, sometimes decades-later Folio edition. For these thirty-four plays, the average lag between the *Riverside* estimated date and the first clear mention is a year and a half. For the thirty-three of these thirty-four plays dated by Hess, the average lag is eleven and a half years! For the Clark/Ogburn dating, the lag would be even longer.

This does not ring true to us. It is almost like asking us to suppose that Oxford, because he wished to hide his authorship of Shakespeare's plays, must have hidden the plays for twelve years as well. Show-biz people don't often do that. Most people who write or produce shows want them performed for an audience, measure their success by how they do at the box-office, and do what they can to get their plays noticed on opening night. Here in Claremont, just up the road from Hollywood and Disneyland, we hear tons about this season's releases (with "Antz," "Pokemon," or other up-to-the-minute marketing tie-ins), ounces, at most, about last season's, and nothing at all about "Ninja Turtles" and whatever else was the rage twelve years ago. Who would suppose that Elizabethans in show-biz, even if they were trying hard to hide the authorship of new plays, would routinely keep the plays themselves under wraps for twelve years before the word leaked out and someone managed to get them registered, printed, reviewed, or recorded? It would be as if none of the dozens of films like *Bridge on the River Kwai* (1957), with screenplays covertly written by blacklisted Hollywood screen writers in the Eisenhower years, got any lasting mention until Richard Nixon was President. No one would expect such a thing to happen, and it didn't.

Where did Hess get all those eleven-and-a-half-year lags? In most cases, out of a hat, as he freely admits on page 34: "So, to preserve the monotonic stylistic continuum for [the half

of the plays he didn't "anchor"], wherever there are no better reasons to date a play we simply subtract twelve years from the Elliott/*Riverside* date for that play." His most remarkable feats of backdating, that is, the backdating of most of the plays conventionally dated after Oxford's death, are typically accomplished by this simple expedient, without even a nod to external evidence. He simply marks the play "Stylistically, transferred from 1608 to 1596," and the job is done. As Lady Macbeth put it, "A little water clears us of this deed."<sup>10</sup>

**Problems with internal evidence**

But has it? Let us acknowledge, again, that external evidence is often skimpy, tricky, and inconclusive; that we don't pretend to follow it closely; and that we have rarely been picky about claimant-advocates' external-evidence suppositions, no matter how far-fetched. What does the internal evidence say? The Appendix, besides giving a summary of the various chronologies, also gives a summary of various stylistic chronological indicators: feminine endings (FE's), open lines (OL's), midline speech endings (MLE's), light endings, weak endings, most's per 10,000 words, colloquialisms, and archaisms.<sup>11</sup> All but archaisms increased during Shakespeare's writing lifetime, conventionally reckoned; archaisms decreased.

**Feminine endings, open lines and midline endings**

Figure 1 (below) illustrates the upward trend of feminine endings by conventional dating, from as low as five percent in the 1590's to as high as thirty-five percent in the early 1600's.

Figure 1: *Feminine endings, Shakespeare plays* *Riverside late dating*

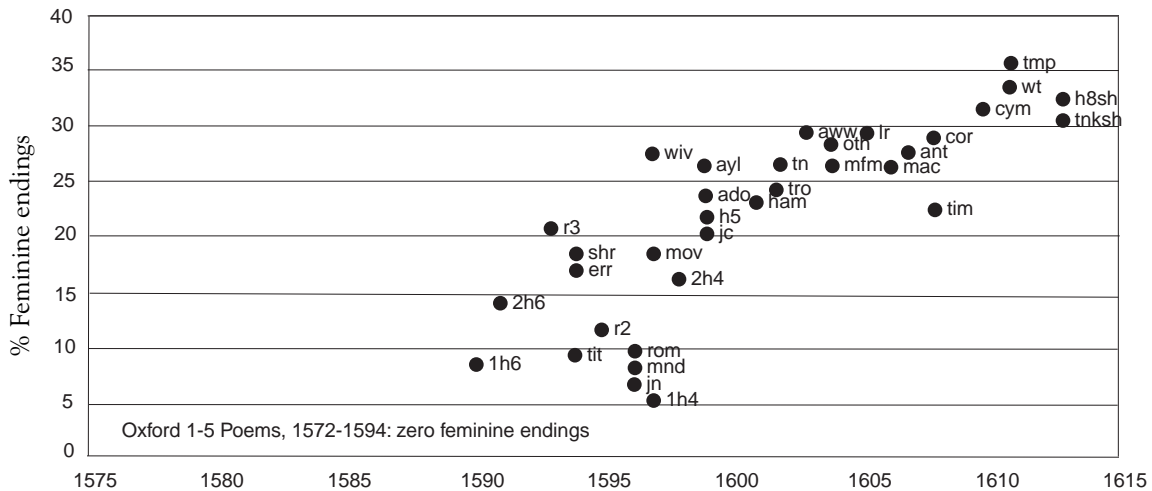
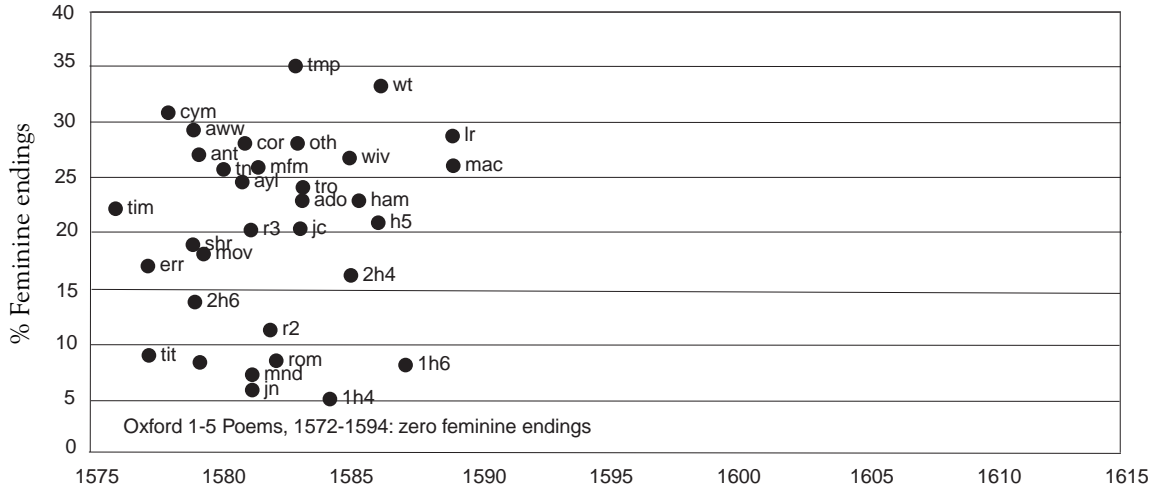


Figure 2: *Feminine endings, Shakespeare plays*

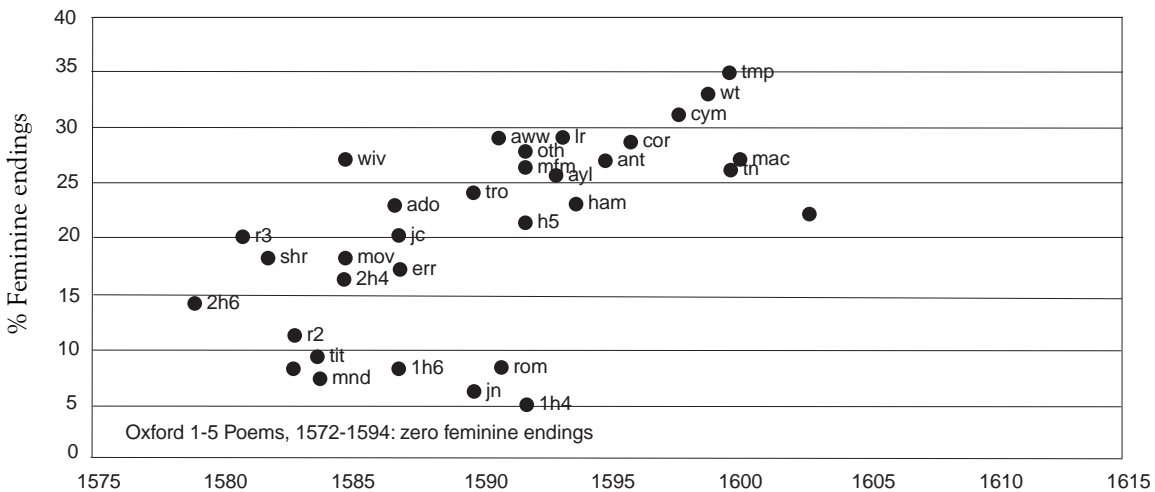
Clark late dating



It is neither ruler-straight nor ruler-thin, but it is smooth enough, tight enough, and consistent enough that, when we asked our Excel spreadsheet to draw a trendline, it obliged with a nice, straight, slanting line (not pictured) which could be extrapolated downward to cross zero at 1580. Such a line, as we have seen, might arguably spare Oxford's I-5 poems a rejection (though they don't have a single feminine ending) since they were mostly written before the earliest of Shakespeare's poems and plays. But conventional dating says the uptrend in FE's continued for almost a decade after Oxford's death. If true, as we noted in 1991, it would be the worst of news for the Oxford claim.

Figure 3: *Feminine endings, Shakespeare plays*

Hess dating



The old Clark/Ogburn Oxfordian backdating solved the posthumous trend problem by trying to pack every Shakespeare play but one into the 1570s and 1580s.<sup>12</sup> As long as one suspends skepticism of their external evidence, this would more than solve the problem of posthumous trends because it obliterates every sign of a trend. Excel draws a horizontal trendline (not pictured) halfway up the cloud of FE percentages, and the mismatch with Oxford's rock-bottom FE percentage becomes undodgeable (Figure 2).

The new Hess backdating likewise solves the posthumous trend problem and creates something that looks like two trend lines, one slanting up, from *2h6* to *tmp*, one slanting down, from *2h6* to *1h4*. Again, the only trendline that Excel could manage from these contradictory impulses (not pictured) is perfectly flat. Once again, Oxford's mismatch with Shakespeare becomes impossible to discount with trendline arguments. No less than the Clark redating, the Hess redating strengthens, not weakens, our Oxford rejections by this test.

b) *Open lines*. Similar conclusions might be made from open-line trends. Oxford's I-5 poems barely pass our Shakespeare threshold for open lines, and his low percentages seem about what you might expect from backward-extrapolating Shakespeare's open-line trendline by conventional dating (Figure 4). If Hess's redating affects this conclusion at all, the backward-extrapolation overshoots Oxford's poems and makes them seem anomalously low compared to Shakespeare's plays supposedly of the same time (Figure 5). Again, if anything, it weakens the internal evidence of possible common authorship. In this case, the Hess trend looks clear to the eye, but the Excel-drawn trendline (not pictured) is still flat.

We shall spare the reader plots of comparable tests using "light endings," "weak endings," "most's," "colloquialisms," and "archaisms." They generally repeat the lessons taught by FE's

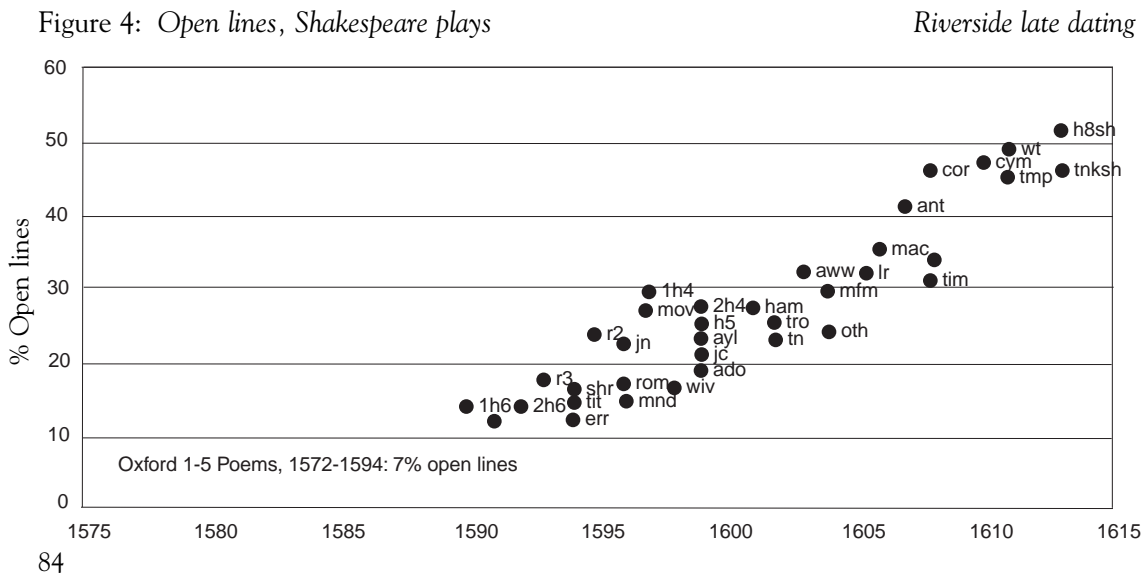
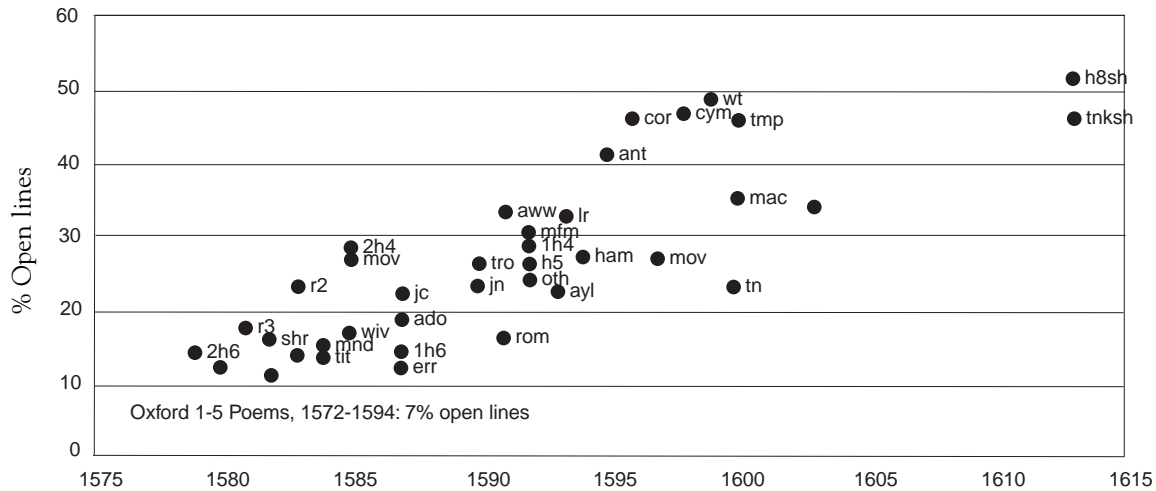


Figure 5: *Open lines, Shakespeare plays*

Hess dating



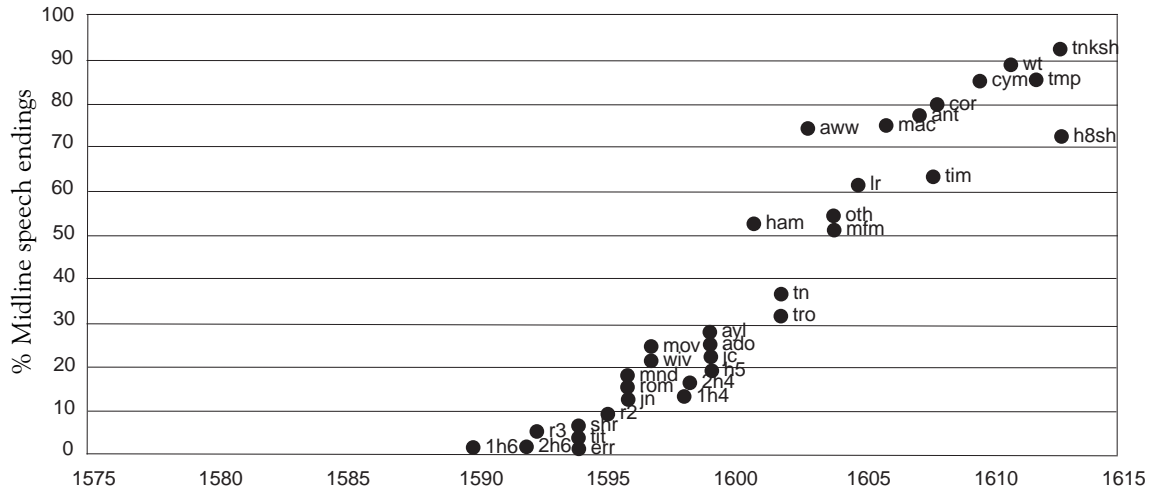
and OL's: clear upslanting trends (downslanting for archaisms) by *Riverside* dating, most of them continuing after Oxford's death, not-so-clear trends by Oxford dating, none continuing after Oxford's death. We shall also pass over some very interesting studies by Kent and Charles Hieatt, and Anne Lake Prescott (1991), and Donald Foster (1994, 1995, 1996b; but see Price 1995, Hieatt 1997), concluding from vocabulary overlap that some of Shakespeare's poems must have been written well into the seventeenth century. Instead of these, we shall close with some charts of midline speech endings, which by conventional dating increased from as low as one percent in the 1590's to over ninety percent in the 1600s. The *Riverside* MLE uptrend looks tight, smooth, and steep (Figure 6); Excel drew us a nice, steep, slanted line (not pictured). The Hess trend looks clearly upward to the eye, but much less tight and smooth (Figure 7). Excel again drew a flat, equivocal trendline (not pictured).

c) *Midline speech endings*. What if we had no external evidence at all but wanted to guess the sequence of the plays purely from one strong stylistic trend? Simply counting and ranking each play's percentage of MLE's would produce a sequence that in only three cases differs from the *Riverside* sequence by more than three places. In other words, only eight percent of the thirty-eight MLE-percentage-ranked plays differed from the *Riverside* sequence by more than three rank-places. (Compare the Appendix, columns 2 and 3).<sup>13</sup> The same exercise relative to the Hess sequence (comparing the Appendix, columns 3 and 4) would produce eighteen such anomalies, about half of the thirty-four plays Hess dated.

Such comparisons, of course, rest on the conjecture that one apparent trend, under one set of assumptions, can actually serve as independent evidence of a sequence. It's a conjec-

Figure 6: Midline speech endings, Shakespeare plays

Riverside late dating

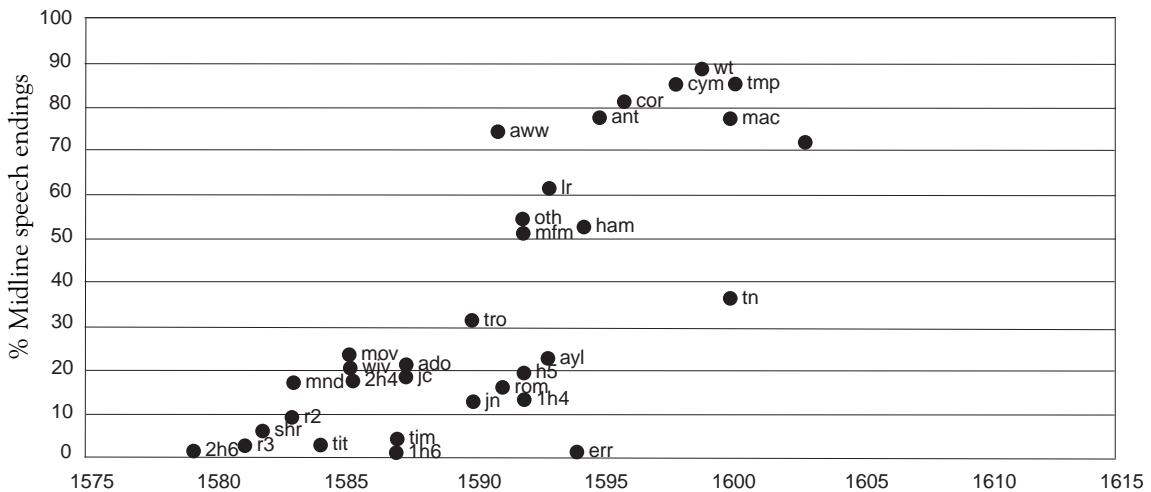


ture, but one we consider much more plausible and less far-fetched than Hess’s conjecture that arbitrarily lopping off twelve years from half the *Riverside* dates and calling it a “stylistic transfer” will improve their accuracy. Neither we, nor any Oxfordian scholar we know, has found as tight, steep, or smooth a trendline for any other indicator, under any set of Oxfordian assumptions, as we have found for the eight indicators treated here under Stratfordian assumptions.

If the Hess dates were any stronger on external evidence than the *Riverside* dates, sequencing comparisons might say that MLE percentages, though tighter, smoother, and steeper with

Figure 7: Midline speech endings, Shakespeare plays

Hess dating





*Riverside* dates, nonetheless make for a bad ranking. Where the *Riverside* dates seem stronger and more consistent with other Stratfordian chronologies, as they do to us, and freer from such gross counterindicators as the Fletcher collaborations and the supposed eleven-year gap between the average play's debut and the first clear mention of it, MLE percentages are yet another indicator that Oxfordians still have work to do in getting the plays dated.

### Conclusions

The new Hess dating seems less formless and less relentlessly confined to antiquity than the old Clark/Ogburn dates, and somewhat more systematic and attentive to comparative perspectives and external evidence. But Oxfordian dates still seem to us more scattered than Stratfordian, less well-founded in external evidence, and much more loosely and haphazardly sequenced, as measured by tightness, smoothness, and steepness of internal indicators. The blank spot for the Fletcher collaborations, the wholesale lopping off of twelve years from the *Riverside* dates, and the long implied gap between opening night and first mention, all seem to us severe drawbacks and make us think that there is much room for further improvement in Oxfordian dating. Taken at face value, Oxfordian backdating does avoid the problem of play trends continuing well past Oxford's death, but only by compounding the dissimilarities between Oxford's poems and Shakespeare's backdated "contemporary" plays.

After a decade of augmentation and refinement, our stylometric tests still show that Louis Benezet's inference that Oxford's style was all but indistinguishable from Shakespeare's was dead wrong. When you computer-test sizeable blocks, it is anything but indistinguishable. Oxford flunked four of six available tests in 1990. Now he flunks seven of fourteen tests, many more than the most errant like-sized block in our core Shakespeare poem baseline. Three of the seven Oxford rejections are not time sensitive, and are not affected at all by the proposed redating. The other four are time-sensitive, but the new Oxfordian backdating, though generally better than the old ones, still makes for stronger rejections than Stratfordian dating because they make Shakespeare's plays look more contemporary with Oxford's poems, and Shakespeare's poem-mismatches with Oxford look more glaring. We think the Shakespeare Clinic has removed one serious objection to the Oxford candidacy, by showing *Elegy* by W.S. (1612) not to be by Shakespeare, but the Clinic's overall effect has been much more to show differences between Shakespeare and Oxford than to show resemblances.

### Possible Discounts

Are there any tenable counter-arguments left for Oxfordians or others to deflect or discount our findings? No doubt there are. For one thing, they can always plead novelty. Our methods were new and experimental; they still are; they have evolved over years as we have continued to discard some tests and modify others. We would be the last to suppose that this process has stopped or that what we have arrived at today will be the last word tomorrow. On the other hand, after five or ten years of availability for refutation, the first rounds of criticism knocked out only one of our tests (among many), and subsequent rounds have barely changed our results at all. Under the circumstances, we can hardly help feeling a bit less tentative than we did in 1990 or 1994.

They could demand a dirtier baseline than ours, one that includes more material that we consider doubtful or co-authored but others do not. That could certainly expand some of our needle's-eye Shakespeare profiles enough to get a camel or two through them. Maybe they could try to shrink the camel by demanding the inclusion of more "Oxford Apocrypha," such as the play *Horestes*, or the poems of "Meritum Petere Grave" or other "posies" from George Gascoigne's *A Hundreth Sundrie Flowres*, claimed as Oxford's by one Oxfordian scholar or another, in hopes that one of them might pass our tests; but our tests say such hopes are pretty dim. They lengthen the already-long chain of speculative evidence and, more often than not, make the camel bigger, not smaller.<sup>14</sup>

Or they could ask us to meet a heavier burden of proof, citing the same limitations of our tests that we acknowledge in the "Baseline" and "Remarks" columns of Table 1, and rejecting our proof unless and until we do more tests on more texts. Or, more appropriately, they could perform the extra tests themselves and possibly justify different conclusions. Are Shakespeare's 45,000 words of poems enough of a baseline for a convincing test ("A" and "C" under baseline), or do you also need the 165,000 words of play verse ("B")? Or an even larger play-verse baseline, since "B" does not include all of Shakespeare's play verse? "Time" has not turned out to be a big discount relative to Oxford, so far at least, but what about "editing," "prosody," or even "subject-matter"? These are only a few of the possible limitations. We can think of more, and of other tests we might have tried (see, for example, the "Not Yet Tried" and "Cautions and Caveats" sections, pp. 207-210 of our 1996). It would take more time and work than we consider appropriate, considering the onesidedness of the evidence we already have, but any of these could be a good starting point for a critique of our work. We note, however, that these, too, have been available for five or ten years, and that none of our critics has pursued them far enough to make a successful challenge to our results.

### Grub or Butterfly?

The last resort, and in our view, the strongest defense left for the Oxford candidacy against evidence like ours, would be to concede the evidence, that Oxford's style is indeed grossly different from Shakespeare's, but to reject the conclusion we draw from it, that he therefore probably is not a Shakespeare "could-be." Why not instead suppose that the observed differences are more developmental than essential, more like those between a grub and a butterfly than like those between a sow's ear and a silk purse? Wouldn't Oxford's wobbling baby-steps be just what we would expect of someone as young and old-fashioned as Oxford was before blazing forth from his cocoon as the immortal Shakespeare? Wouldn't it, in fact, help solve the mystery of how Shakespeare managed to start out a full-grown butterfly with no sign of ever having taken baby steps or having been a grub? In sum, shouldn't the very baby-step stylistic discrepancies with Shakespeare that we see in Oxford's work, enhance his claims, rather than diminish them (Ogburn 390-93)?

In the words of one thoughtful Oxfordian, "We're not dealing with just any writer here, but a genius on the scale of Leonardo da Vinci or Mozart. Early Mozart can be confused with Haydn, late Mozart with Beethoven . . . . If we didn't know for a fact that Picasso had a Blue Period, if all we knew of him was his work from Cubism on, we'd never believe that those early works were his. When we read anything from the seventies and compare it with Shakespeare, and note the immense growth and changes in only twenty years, we can hardly expect that tests that compare early works with late works will give a meaningful result" (Hughes).

Such arguments—that differences, no less than similarities, can prove common authorship—are hard to refute directly. Such differences could be much elaborated in Oxford's case. By some estimates, Oxford could have been as young as fifteen when he wrote the eight poems eventually published in *The Paradyse of Daynty Deuises* (1576). Any or all of them could be song lyrics, not poems proper, and, hence, not suitable for comparison with poems. Terry Ross has noted that more than half of Oxford's known poems are in meters not found in the Shakespeare canon. Only one of his poems, "Who taught thee first to sigh, alas, my heart?" (May number 15), is a sonnet, and even that has an "echo" nowhere found in Shakespeare. None of his poems are in blank verse, Shakespeare's favorite verse form, or "rhyme royal," (ababbcc 7-line I-5), the form used in *The Rape of Lucrece*. Strictly speaking, only four of Oxford's sixteen poems (May numbers 6, 9, 10, and 12) match anything in Shakespeare's known work (*Venus and Adonis*). Stated differently, two-thirds of Oxford's known verse has no structural parallel in Shakespeare; the other third matches no more than two to four percent of Shakespeare's verse. In structural terms, the two poets might seem to have about about as much in common as Vic Damone and the Beatles; or, alternatively, as Picasso's "The Old Guitarist" (1903) and his "Guernica" (1937). What could more firmly

demonstrate Oxford's primitiveness and lack of suitability for comparison with the mature Shakespeare? If one wanted a clincher, one could do what we almost never admit to doing, that is, not just crunch Oxford's poems, but actually read them. Consider, for example, this passage from Oxford:

Help gods, help, saints, help sprites and powers, that in the heaven do dwell,  
 Help ye that are to wail aye wont, ye howling hounds of hell;  
 Help man, help beasts, help birds and worms, that on the earth doth [sic] toil,  
 Help fish, help fowl, that flocks [sic] and feeds [sic] upon the salt-sea soil;  
 Help echo that in air doth flee, shrill voices to resound,  
 To wail this loss of my good name, as of these griefs the ground.

E.O. (May no. 4)

Contrast this with Shakespeare's treatment of the same subject, loss of good name:

Know my name is lost,  
 By treason's tooth bare-gnawn and canker-bit. . . .

*King Lear*: V.3.121-22

How could anyone suppose that the two passages were written by the same person? Yet we seldom rely on such comparisons because the texts (just like Louis Benezet's) are seldom selected at random, but more often are chosen to illustrate whatever point the writer is trying to make. Benezet chose for similarity with Shakespeare; we chose for contrast. In this case, the evidence is exactly opposite to Benezet's. The styles seem to be worlds apart, with Shakespeare's manifestly more polished and mature. Shakespeare managed to capture in eleven tight, vivid, lapidary words of I-5 much the same thought that took the struggling young Oxford seventy-nine sprawling, repetitious, overwrought, ungrammatical words of I-7 to convey.<sup>15</sup> But Oxfordians today draw the same conclusion from the apparent stylistic mismatch that they once thought to draw from a perceived stylistic match: that the very immaturity of Oxford's writing is evidence that Shakespeare therefore might have been Oxford after all, only grown-up. If you accept unconditionally the premise that the young Shakespeare must have been a grub, Oxford's many and great differences from Shakespeare don't damage his claim to be the True Shakespeare at all. On the contrary, they all but clinch the claim by showing that the young Oxford looks every bit the grub that the True Young Shakespeare must have been.

But there are serious problems with this argument. One is the apparent absence of stylistic development in Oxford's own poems between his ages of twenty-two and forty-four. Unlike the young Mozart or the young Picasso, he tests like a grub (and, to us, sounds like a grub) from beginning to end. If he abruptly morphed into a butterfly when he adopted the name "Shakespeare" in 1593, it would be an extreme case of what Stephen Jay Gould calls

“punctuated development.” Another problem is the mixed record of stylistic development in Shakespeare’s poems and plays, especially the plays, which are twenty times more voluminous than the poems and look easier to sequence stylometrically. Many of Shakespeare’s measurable patterns did not change at all during his known productive lifetime. Why should we suppose that these constants of his maturity must have changed drastically in his youth? Other patterns, as we have seen, changed in ways that would permit us to discount mismatches with Oxford, but only if we accept the conventional Stratfordian chronology, which embarrassingly continues the trends after Oxford’s death. If we swallow our doubts about gross sequencing and recording-lag anomalies and accept any of the Oxfordian backdatings that we have seen, the embarrassing posthumous trends fade away, but the embarrassing mismatches with Oxford become much more glaring and harder to discount. Either way, even after his own developmental trends are considered, Shakespeare seems to have been a butterfly all his life, as different from Oxford as the Beatles are from Vic Damone.

Oxfordians have had to argue, in effect, that Shakespeare had a Blue Period, exemplified, say, by Oxford’s “Who taught thee first to sigh, alas, my heart?” (May number 15) and a “Guernica” period, exemplified by *Venus and Adonis* (1593), *The Rape of Lucrece* (1594), and *The Sonnets* (1590-1596). But the parallel runs into trouble when you look at the actual timing. Picasso’s Blue Period ran from 1901 to 1904, when he was in his early twenties, and his Blue work, while far distant in style from what came later, was still manifestly the work of a master. Unlike Oxford’s “help fish, help fowl” lines quoted above, “The Old Guitarist” could never be described as a stumbling, apprentice work. By the time he did “Guernica,” in 1937 at fifty-six, Picasso had not done anything blue, good or bad, for thirty-three years. By contrast, Oxford’s great leap to stylistic maturity and master-level work, if there was one, had to take place in his mid-forties and virtually overnight; another case of drastically punctuated evolution, from stumbling baby steps in 1593 to practiced giant’s strides afterward.<sup>16</sup>

Finally, even if an ounce or two of discrepancy could enhance a claim to common authorship, it does not follow that a ton of it would make the claim even stronger. The grub defense does two things awkward for the Oxford claim: it applies equally to other older-generation Shakespeare claimants, such as Sir Edward Dyer, and it marks a huge tacit shift from Louis Benezet’s arguments that Oxford and Shakespeare were stylistic look-alikes. The new Oxfordian argument is that maybe they were not stylistic look-alikes at all, but it doesn’t matter, since Oxford might easily have grown into a look-alike. What counts is no longer what Oxford wrote, but how his life experiences compared to those depicted in Shakespeare.

We have generally stayed out of such controversies, which fall under the heading of conventional literary and historical “smoking-gun” evidence. This was not just to be true to our assignment from the Shakespeare Authorship Roundtable. It also came from a growing skepticism that such “sum of ‘unique’ quirks” evidence, which have been advanced with seeming

plausibility for dozens of claimants, will ever actually amount to a smoking gun for any one claimant (see our 1997, pp. 185-86). The claims can all look plausible, but they can't all be right. The net effect of the grub defense is to move the defendant, Oxford, out of the category of "testable" claimants like Marlowe, who have actually written something legitimately comparable to Shakespeare. It moves him, instead, into the category of "untestable" claimants like the Rosicrucians and the Earls of Derby and Rutland, from whom no poems or plays have survived. No amount of stylometric testing can confirm or deny claims based on what the untestable claimant might have written. But such claims, absent any comparable supporting writing, seem to us far more speculative than those, say, of the despised William Shaksper of Stratford. We have done nothing, of course, to prove directly that William Shaksper wrote the plays signed with William Shakespeare's name. Maybe he was fronting for someone, as anti-Stratfordians argue. But for whom? If style is a legitimate measure, and we have tested it right, it can hardly be Oxford or anyone else we could test.

### **Finally**

We are pleased to see Oxfordians trying to improve their dating, and the current Hess and Moore estimates seem to us improvements over what went before. But we still see major problems with the new chronology and don't think it would strengthen the stylometric case for Oxford, even if its dates were right. The "grub" defense does offer a possible out, but it has serious fit problems, considering what we do know about stylistic developments in both Shakespeare's and Oxford's known works.

In short, we doubt that the Hess chronology will be considered the last word on the subject, even by Oxfordians, and that the "grub" defense, in its present admittedly larval stage, can be counted on to rescue the Oxford claim. On the other hand, though our evidence seems to us persuasive, and despite Hess's talk of "refuting our certitudes" (39), we have never claimed a monopoly on the truth and don't do so now. Even after thirteen years of very rapid, wide-ranging development, with plenty of mistakes made along the way, and no lack of robust criticism to point them out, our methods are still novel, "larval," if you wish. Though the robust criticism has not diminished over the years, the needed corrections have gotten smaller and smaller; still, we have no doubt that our results could be further refined, qualified or perhaps in some cases refuted by someone willing to discuss them directly. Hence, we are grateful to Hess for taking us on, and to THE OXFORDIAN for giving us a chance, for the first time "eVer" to present our own arguments and evidence in an Oxfordian journal. Maybe some future writers can show that Oxford's style was not a bit like Vic Damone's, or that Shakespeare's was, just as Louis Benezet liked to think. We won't know till they try. — 🍷

Appendix  
Chronological indicators in Shakespeare's plays:

Title	Riv Seq	MLE Seq	Hess Seq	Rdate late	Clark late	Ogbn Sr	Hess	1st clear	Ri-/1st clear	He/1st clear	F.end Hall.%TC	OL sp.end	Md. ends	Lt. ends	Weak ends	*Most/ 10K	**q/ 20K	***Arch/ 20K
<b>1h6</b>	1	1		1590	1587	1587		1592	2		8	14	1	3	1	7	31	143
<b>3h6</b>	2	2	2	1591	1580	1581	<b>1580</b>	1592	1	12	14	12	1	3	0	2	40	75
<b>2h6</b>	3	3	1	1591	1579	1581	1579	1594	3	15	14	14	1	2	1	6	55	83
<b>r3</b>	4	6	3	1593	1581	1581	<b>1581</b>	1597	4	16	20	17	3	4	0	11	15	90
<b>tit</b>	5	5	8	1594	1577	1577	<b>1584</b>	1594	0	10	9	15	3	5	0	5	17	108
<b>err</b>	6	4	14	1594	1577	1577	<b>1587</b>	1594	0	7	17	12	1	0	0	9	38	82
<b>tgV</b>	7	8	4	1594	1579	1579	1582	1598	4	16	18	16	6	0	0	5	50	8
<b>shr</b>	8	7	5	1594	1579	1579	1582	1607	13	25	18	11	4	1	1	3	75	81
<b>r2</b>	9	9	6	1595	1582	1582	1583	1597	2	14	11	23	7	4	0	8	19	65
<b>111</b>	10	10	7	1595	1579	1579	1583	1598	3	15	8	14	10	3	0	25	43	56
<b>jn</b>	11	11	17	1596	1581	1582	<b>1590</b>	1598	2	8	6	23	13	7	0	7	27	130
<b>rom</b>	12	13	19	1596	1582	1583	<b>1591</b>	1597	1	6	8	16	15	6	1	7	47	99
<b>mnd</b>	13	14	9	1596	1581	1583	1584	1598	2	14	7	15	17	0	1	12	31	98
<b>1h4</b>	14	12	21	1597	1584	1584	<b>1592</b>	1598	1	6	5	29	14	5	2	5	26	115
<b>wiv</b>	15	18	10	1597	1585	1585	1585	1602	5	17	27	16	21	1	0	4	128	60
<b>mov</b>	16	20	11	<b>1597</b>	1579	1579	1585	1598	1	13	18	27	22	6	1	9	24	99
<b>2h4</b>	17	15	12	1598	1585	1585	<b>1585</b>	1600	2	15	16	27	17	1	0	16	13	100
<b>h5</b>	18	16	22	<b>1599</b>	1586	1586	<b>1592</b>	1600	1	8	21	26	18	2	0	16	69	117
<b>ayl</b>	19	21	25	<b>1599</b>	1582	1582	<b>1593</b>	1600	1	7	26	23	22	2	0	17	59	57
<b>jc</b>	20	17	15	<b>1599</b>	1583	1583	1587	1599	0	12	20	22	20	10	0	15	50	82
<b>ado</b>	21	19	16	1599	1583	1583	1587	1600	1	13	23	19	21	1	1	12	35	84
<b>ham</b>	22	25	27	1601	1585	1585	<b>1594</b>	1602	1	8	23	27	52	8	0	27	156	52
<b>tn</b>	23	23	32	<b>1602</b>	1580	1580	<b>1600</b>	1602	0	2	26	23	36	3	1	17	92	46
<b>tro</b>	24	22	18	<b>1602</b>	1583	1584	1590	1603	1	13	24	26	31	6	0	13	84	47
<b>aww</b>	25	31	20	1603	1579	1579	1591	1623	20	32	29	32	74	11	2	18	205	43
<b>mfm</b>	26	24	23	1604	1581	1581	1592	1604	0	12	26	30	51	7	0	25	159	55
<b>oth</b>	27	26	24	1604	1583	1583	1592	160	0	12	28	24	54	2	0	22	183	42
<b>lr</b>	28	27	26	<b>1605</b>	1589	1589	1593	1606	1	13	29	31	61	5	1	20	164	52
<b>mac</b>	29	32	33	1606	1589	1590	<b>1600</b>	1611	5	11	26	35	77	21	2	15	232	29
<b>ant</b>	30	33	28	1607	1579	1580	1595	1608	1	13	27	41	78	71	28	25	251	21
<b>tim</b>	31	28		1608	1576	1576		1623	15	22	31	63	16	5	20	222	51	
<b>cor</b>	32	34	29	1608	1581	1580	1596	1623	15	27	28	46	79	60	44	19	345	29
<b>persh</b>	33	29	35	1608	1577	1577	<b>1603</b>	1623	0	5	22	34	71	15	5	19	164	65
<b>cym</b>	34	35	30	1610	1578	1578	<b>1598</b>	1611	1	13	31	47	85	78	52	17	250	18
<b>wt</b>	35	37	31	1611	1586	1586	<b>1599</b>	1611	0	12	33	48	88	57	43	20	307	17
<b>tmp</b>	36	36	34	1611	1583	1583	1600	1611	0	11	35	46	85	42	25	26	231	25
<b>h8sh</b>	37	30		<b>1613</b>	1601	1603		1613	0		32	51	72	45	37	22	254	30
<b>tnksh</b>	38	38		1613				1634	21		30	46	92	50	34	17	335	19

Dates in bold considered more firm. \*Most's per 10,000 words \*\*Colloquialisms per 20K \*\*\*Archaisms per 20K

## Notes:

- 1 Benezet's text is reproduced and discussed in Ogburn, 1984, 393-97
- 2 The latter article, specifically addressed to the Oxford claim, can be accessed on the Ross-Kathman website: <http://www.clark.net/pub/tross/ws/elval.html>. It was the main point of departure for Ron Hess's 1999 article in THE OXFORDIAN, to which this article responds.
- 3 By following the 1974 *Riverside Shakespeare*, and not the *Folio Shakespeare*, we had missed three of Shakespeare's "whenas's" a "whereas," and an "I'm"; and a glitch in *Textcruncher*, one of our analytical programs, threw off some of our results by a percent or so. All of these minor problems were fixed in our 1998 revision.
- 4 We did test some of the *An Hundreth Sundrie Flowres* "Oxford" poems in 1990 and did not find a Shakespeare match (see "Meritum Petere Grave" poems, our 1991a, 1996). In June 1993 May downgraded his Oxford poem no. 14, "What cunning can express?" to "possibly by Oxford," but, to avoid confusion between our 1990 and 1996 test results, we have kept it in our Oxford corpus. For most of our tests, dropping it would not have affected the outcome.
- 5 We owe the terms "smoking guns" and "silver bullets" to S.O.S. Newsletter editor William Boyle (1997).
- 6 After re-editing Oxford's poems to follow spelling conventions found in the *Riverside Shakespeare*, we found five arguable hyphenated compound words, "oft-times," "late-done," "good-liking," "salt-sea," and "tennis-knit," well below Shakespeare's minimum in fourteen 3,000-word poem blocks, which is eight (see our 1996, p. 198, 237). Two of our fifty-five blocks of Shakespeare's play verse (2.9% of our total Shakespeare verse baseline), had as few as four HCWs. Figures given are HCWs per 20,000 words to facilitate comparison with plays. As far as we can tell from the *Riverside*, Shakespeare's hyphenation ranges did not vary much between poems and plays, nor between early and late works.
- 7 In a normal distribution, 99.7% of a population fall within three standard errors of the mean. We make no claim that our distributions of tested score are normal (most of them are not), but the standard-error numbers are still useful for comparative purposes. We tried various possible exclusions from the Oxford corpus with Oxfordian scholar Nina Green in the 1990s, but, since every Oxford block is "worse" than the worst of Shakespeare's blocks, no amount of tinkering could materially change an original outcome damaging to the Oxford claim.
- 8 More recent studies, however, make it highly doubtful that the *Elegy* was written by Shakespeare, and, hence no real obstacle to the Oxford claim (Elliott and Valenza, 1997; Vickers, forthcoming).
- 9 This means that the "roaring gaffes" which Hess claims we felt "obliged to correct without comment or apology on [our] website" [i.e., by substituting Clark's supposedly superior dates for the Ogburns's supposedly inferior ones] would be less than roaring even if they were true and they are not true. "Clark" is the name of Terry Ross's server and has nothing to do with Eva Turner Clark. Terry Ross, not we, did the posting to his own website, not ours, using our original Oghurn, not our amended Clark dates, or anyone else's. Clark's and the Ogburns' dates, in any case, are so close to each other that substituting either for the other could have made no visible difference on our chart.



<sup>10</sup> *Macbeth*: II.2.64.

<sup>11</sup> See Wells and Taylor, 1987, pp. 104-05 for tabulations of “colloquialisms” and “negative-trending” word like “-eth,” which we call “archaisms” in the Appendix.

<sup>12</sup> The exception was *Henry VIII*, not marked in Figure 2, apparently, but Oxford-dated at 1601 or 1603.

<sup>13</sup> Two of the three exceptions are from jointly-written plays. The three exceptions are *All's Well That Ends Well* (MLE% says it's six places later than *Riverside*); Shakespeare's part of *Pericles* (MLE% says it's four places earlier); and Shakespeare's part of *Henry VIII* (MLE% says seven places earlier).

<sup>14</sup> None of these “Oxford Apocrypha” comes anywhere near to fitting Shakespeare's profiles. (Elliott 1991a 203; 1996 214, 240).

<sup>15</sup> The Oxford passage has three further stylistic quirks which we suspect distinguishes him from Shakespeare: his wailfulness, his occasional odd combination of plural subject and singular verb, and his heavy doses of alliteration. We have spot-checked these against the first 3,000 words of *Venus and Adonis* and found perhaps ten times as many wailful passages in our Oxford baseline as in Shakespeare, twice as much alliteration, and three instances of plural subject, singular verb. We found no such plural-subject/singular-verb in the *Venus and Adonis* block, but can think of at least one example elsewhere in Shakespeare, Henry V's dismissal of Falstaff in 2H6 5.05.48: “How ill white hairs becomes a fool and jester!” We would be interested if Oxfordians could establish frequency rates for such usages elsewhere in Shakespeare. This evidence is no more than suggestive, since alliteration and wailfulness are not always easy to count, and since we have compared Oxford's work to only one of our fourteen Shakespeare poem blocks. But if differences from Shakespeare prove common authorship, under the grub/butterfly argument, we suspect that there may be yet more rich pickings here for Oxfordians wishing to pursue the matter.

<sup>16</sup> In response to 1990 Oxfordian assertions of the grub-butterfly argument, we did try out our then-new modal test (which Oxford had failed badly) on two other writers with large, firmly dated bodies of poetry, Milton and Spenser. Milton's earliest poems (before 1633) and his later poem, *Samson Agonistes* (1670-71) both fit within a profile set by *Paradise Lost* (1658-65). Spenser's *Epigrams and Sonnets* (1569), and his *Amoretti* (1595), closely matched his *Shepherd's Calendar* (1579) although his *Faerie Queene* (1590, 1598) tested very distant from the other four works mentioned. As far as we can tell from these improvised tests (which used Shakespeare-optimized keywords, not keywords optimized for Milton or Spenser), Milton was a butterfly all his life. So was Spenser, except when he wrote the *Faerie Queene* (Elliott, 1991, 18-19).

1



## Works Cited

- Boyle, William. "Smoking Guns and Silver Bullets." *Shakespeare Oxford Newsletter* 33.1 (1997): 20.
- Clark, Eva Turner. *Hidden Allusions in Shakespeare's Plays: A Study of the Early Court Revels and Personalities of the Times*. New York: Farquhar Payson, 1930.
- Elliott, Ward and Valenza, Robert. "A Touchstone for the Bard." *Computers and the Humanities* 25 (1991): 199-208.
- \_\_\_\_\_. "Was the Earl of Oxford the True Shakespeare? A Computer-Aided Analysis." *Notes and Queries* 236 (1991a): 501-506.
- \_\_\_\_\_. "And Then There Were None: Winnowing the Shakespeare Claimants." *Computers and the Humanities* 30 (1996): 191-245.
- \_\_\_\_\_. "Glass Slippers and Seven-League Boots: C-Prompted Doubts About Ascribing 'A Funeral Elegy' and 'A Lover's Complaint' to Shakespeare." *Shakespeare Quarterly* 48 (1997): 177-207.
- \_\_\_\_\_. "The Professor Doth Protest Too Much, Methinks: Problems with the Foster Response." *Computers and the Humanities* 32 (1998): 425-90.
- \_\_\_\_\_. "So Much Hardball, So Little of it Over the Plate: Conclusions from our 'Debate' with Donald Foster." *Computers and the Humanities* (forthcoming).  
Also: <http://academic.mckenna.edu/welliott/hardball.htm>
- \_\_\_\_\_. "Silver Bullets, Smoking Guns, and Goose Eggs: Could John Ford Have Written 'The Funeral Elegy'?" Shakespeare Clinic working draft, 2000.
- Evans, G. Blakemore, ed. *The Riverside Shakespeare*. 2d. Edition. Boston: Houghton Mifflin, 1997.
- Foster, Donald. *"Elegy" by W.S.: A Study in Attribution*. Cranbury, NJ: Associated UP, 1989.
- \_\_\_\_\_. "Abstract of Shakespeare's Career as reconstructed by SHAXICON 2.0." Unpublished manuscript, 1994.
- \_\_\_\_\_. "SHAXICON 1995." *The Shakespeare Newsletter* 45 (1995): 28, 30, 32.
- \_\_\_\_\_. "'A Funeral Elegy': W[illiam] S[hakespeare]'s 'Best-Speaking Witnesses.'" *PMLA* 111 (1996): 1082-1105.
- \_\_\_\_\_. "Response to Elliot [sic] and Valenza, 'And Then There Were None.'" *Computers and the Humanities* 30 (1996a): 247-255.
- \_\_\_\_\_. "Shaxicon and Shakespeare's Acting Career: Reply to Diana Price." *The Shakespeare Newsletter*, 46 (1996b): 57-58.
- \_\_\_\_\_. "The Claremont Shakespeare Authorship Clinic: How Severe Are the Problems?" *Computers and the Humanities* 32 (1998): 491-510.

- Halliday, F.E. *A Shakespeare Companion, 1550-1950*. London: Duckworth, 1952.
- Hess, W. Ron. "Shakespeare's Dates: Their Effect on Stylistic Analysis." *The Oxfordian* 2 (1999), 25-59.
- Hieatt, A. Kent and Charles W. and Anne Lake Prescott. "When did Shakespeare Write Sonnets 1609?" *Studies in Philology* 88, (1991): 69-109.
- Hieatt, A. Kent, and Charles W. "Attributing 'A Funeral Elegy.'" *Letters*. *PMLA* 112 (1997): 429-34.
- Hughes, Stephanie H. E-mail letter to Ward Elliott, 8 Jan., 2000.
- May, Steven W. "The Poems of Edward De Vere, Seventeenth Earl of Oxford and of Robert Devereux, Second Earl of Essex." *Studies in Philology* 77 (1980): 5-132.
- Moore, Peter. "The Abyss of Time: The Chronology of Shakespeare's Plays." *The Elizabethan Review*. 5.2 (1997): 24-60.
- Ogburn, Charlton and Dorothy. *This Star of England: "William Shakespeare" Man of the Renaissance*. New York: Coward-McCann, 1952.
- Ogburn, Charlton, Jr. *The Mysterious William Shakespeare: The Myth and the Reality*. New York: Dodd, Mead, 1984.
- Price, Diana. "SHAXICON and Shakespeare's Acting Career." *The Shakespeare Newsletter* 46 (1996): 27-28, 46.
- Ross, Terry. "The Verse Forms of Shakespeare and Oxford." <http://www.clark.net/pub/tross/ws/verform.html>.
- Tarlinskaja, Marina. *Shakespeare's Verse: Iambic Pentameter and the Poet's Idiosyncrasies*. New York: Peter Lang, 1987.
- Valenza, Robert. "Are Thisted-Efron Authorship Tests Valid?" *Computers and the Humanities* 25 (1990): 27-46.
- Vickers, Brian. *Counterfeiting Shakespeare*. Cambridge: CUP, forthcoming.
- Wells, Stanley. and Gary Taylor. *William Shakespeare: A Textual Companion*. Oxford: Clarendon, 1987.