The Use of Spellings for Compositor Attribution in the First Folio

Pervez Rizvi

Charlton Hinman's *The Printing and Proof-Reading of the First Folio of Shakespeare* is our authority for most compositor attributions.[1] Some of the attributions he made have been revised by subsequent investigators but most remain unchallenged. Hinman used the evidence of type recurrence and skeleton forme reuse to decide the order in which the formes in the Folio were printed and the typecases they were set from. This evidence also assisted him in some cases to make compositor attributions; nevertheless, as he acknowledged, the attributions he made rely largely on spellings.[2] As T. H. Howard-Hill affirmed, spellings are 'the great bulk of evidence generally used to distinguish compositors.'[3]

The most recent authoritative listing of compositor attributions was given by Peter W. M. Blayney in the second edition of the Norton facsimile of the Folio, based on his review of all work done up to that time.[4] As all but a handful of attributions listed by Blayney were made by Hinman and Howard-Hill, I shall confine my discussion almost entirely to their work, because it is the purpose of this paper to argue that some of the methods they used are unsound.

One difficulty with the existing books and papers on compositor attributions is that it requires a daunting effort to check the data they present. The Shakespeare's Text website has substantially lessened this difficulty as far as Folio spellings are concerned. It has been my aim that a reader of this paper should find it feasible to check the Folio data I give by performing the appropriate searches of the concordance there.

Lines in the Folio which are right-justified are known variously as 'justified', 'long' or 'full' lines. I shall use the terms 'justified' and 'unjustified' and take due account of the widely agreed and easily demonstrable fact that compositors adjusted spellings to make it possible to

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[1] Charlton Hinman, *The Printing and Proof-Reading of the First Folio of Shakespeare*, 2 vols (Oxford: Clarendon Press, 1963).

[2] Hinman, *Printing and Proof-Reading*, I, 181.

[3] T. H. Howard-Hill, *Compositors B and E in the Shakespeare First Folio and Some Recent Studies* (Columbia SC: privately published, 1976), 41.

[4] *The First Folio of Shakespeare: The Norton Facsimile*, 2nd edition, ed. Peter W. M. Blayney (New York: Norton, 1996), xxxv-xxxvii. Where the source of a compositor attribution mentioned in this paper is not stated, it should be assumed to be this book. I have taken Hinman's original compositor attributions from his own book but I have also taken into account his subsequent retraction of his attributions to Compositor C in the *Henry IV* plays (Norton facsimile, xviii). For simplicity I refer to 'pages' throughout this paper. Where different parts of a page have been attributed to different compositors I have of course treated each part as a separate 'page'.

justify some lines.[5] I shall cite all lines by Through Line Number (TLN). I shall use modern spelling and quotation marks to refer to all words used in spelling tests, for example, 'devil', but list their variant spellings in italics; for example *deuil* and *diuel.*

McKenzie's Work and Its Implications

D. F. McKenzie wrote two important papers, 'Printers of the Mind'[6] and 'Stretching a Point'[7], about some techniques used by Hinman and Howard-Hill, principally skeleton forme reuse and so-called psycho-mechanical evidence. My paper is concerned with the use of spellings. Nevertheless, what McKenzie's papers taught us is salutary for all compositor analysis, so I shall summarise them here. The evidential basis for both papers was the archive of operational records of Cambridge University Press from the late seventeenth and early eighteenth centuries. These records tell us not only the names of the books published but also when their individual quires were printed and the names of the compositors who typeset them.

'Printers of the Mind' used that body of evidence to test the theory of skeleton forme reuse. Hinman had arranged some of the formes in the Folio into groups, a group being defined by all its members having the same combination of box rules placed in the same skeleton. The theory he relied on was that formes in the same group were printed one after another, and then the combination of box rules in the skeleton was changed and another group's formes were printed one after another.[8] McKenzie demonstrated that predictions made by this theory were completely unrelated to what actually happened. For example, he considered a book called *Psyche*, printed in 1701-2, a folio-in-fours, so that each quire consists of four formes. The book exhibits evidence that four different skeleton formes were used, but all four of them appear in both of two successive quires, TT and UU.[9] Applying Hinman's theory we would have to create four groups, each one containing just one forme from each quire, and infer that the printers alternated between the two quires, printing one forme of one quire, reusing the skeleton to print a forme of the other quire, and then changing the skeleton and repeating the process. But, as McKenzie showed from the surviving documents, quire UU

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[5] For example, consider Compositor B's spellings of *do* and *doe*. If we look at all lines attributed to him, we find 1646 *do* and *ado* spellings and 83 *doe* and *adoe* spellings, so the short spellings are a little over 95% of the total. But if we consider only the unjustified lines, we find 1348 *do* and *ado* spellings and 20 *doe* and *adoe* spellings. The proportion of short spellings has risen to more than 98%. The reader may check at the website that we find similar increases in percentages for other words and other compositors. If justification had not affected spellings, we should have seen the percentages remain about the same or for some to move up and some down. What we find is that they almost always move in the direction of the compositor's preference, proving that justification did cause the compositor to set spellings he would not have set otherwise.

[6] D. F. McKenzie,'Printers of the Mind: Some Notes on Bibliographical Theories and Printing-House Practices', *Studies in Bibliography*, 22 (1969), 1-75.

[7] D. F. McKenzie,' Stretching a Point: Or, The Case of the Spaced-out Comps', *Studies in Bibliography*, 37 (1984), 106-21.

[8] Hinman, *Printing and Proof-Reading*, I, 157.

[9] McKenzie,'Printers of the Mind', 29-30.

was fully printed in the five-week period commencing 26 December 1701, a period in which no part of quire TT was printed.[10] The theory relied on by Hinman to deduce the order in which his groups were printed was contradicted by the Cambridge evidence.

After the appearance of 'Printers of the Mind', Howard-Hill published his discovery of a new compositor, Compositor F. This was the first compositor attribution which relied partly on psycho-mechanical evidence such as spaces after commas.[11] Howard-Hill's new technique was adopted by other investigators, most notably Gary Taylor, who used it to help him discover four further compositors, H1, H2, I and J.[12] In his second paper, 'Stretching a Point', McKenzie used the same Cambridge book, *Psyche*, to pull the rug from under this technique too. Having counted spaces before commas on 224 pages of the book and discovered a statistically significant division between them, he divided the pages accordingly between two compositors. But the press records show that composition was shared by six men, four of whom set pages with both high and low proportions of spaced commas.[13] Once again the predictions made by the theory were contradicted by the evidence.

McKenzie's work was made possible by the fortunate survival of the Cambridge operational records. By the end of the seventeenth century spellings had become sufficiently standardised for them to be of no help in compositor attribution, so we cannot use those Cambridge records to test any attributions made on the basis of spellings. We would have to use operational records from Shakespeare's time. No such records have been discovered for any printer in Shakespeare's London, so we have no hope of doing the kind of study with spellings that McKenzie did with skeleton forme reuse and psycho-mechanical evidence, to prove or disprove our compositor attributions. This ought to trouble us greatly since, as we have seen, the only time any of our theories have been tested against external evidence, they have been found to be wildly wrong.

'Stretching a Point' should have had the effect of immediately calling into question the existence of all post-Hinman compositors, since all were discovered by investigations that relied at least partly on psycho-mechanical evidence. But it did not. Taylor responded that 'McKenzie's key example has not been the subject of such extensive, independent, and interlocking investigation as the 1623 Folio'[14]. Craig Ferguson performed compositor attribution on the first quartos of *Romeo* and *Troilus* using psycho-mechanical evidence

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[10] McKenzie, 'Printers of the Mind', 63.

[11] T. H. Howard-Hill, 'The Compositors of Shakespeare's Folio Comedies', *Studies in Bibliography*, 26 (1973), 61-106.

[12] Gary Taylor, 'The Shrinking Compositor A of the Shakespeare First Folio', *Studies in Bibliography*, 34 (1981), 96-117.

[13] McKenzie, 'Stretching a Point', 111-14.

[14] Stanley Wells and Gary Taylor with John Jowett and William Montgomery, *William Shakespeare: A Textual Companion* (Oxford: Clarendon Press, 1987; New York: Norton, 1997), 66, n. 115.

without even mentioning McKenzie's demonstration of its unreliability.[15] He wrote instead that Howard-Hill 'has demonstrated that compositors in the Shakespeare First Folio can be distinguished by the ways they space commas.' Howard-Hill had demonstrated no such thing; he had assumed it, just as it has always been assumed that spelling patterns can be used to distinguish between compositors. For psycho-mechanical evidence, McKenzie had falsified the assumption for one book and therefore rendered its use suspect for other books. As he observed, the only way to salvage the Folio attributions made by using psycho-mechanical evidence is to assert that printing-house practices were different in London in 1623, something which 'must be rigorously argued as a matter of history and meet the appropriate standards of historical scholarship.'[16] No such argument has been made.

We have seen that the hypothesis that compositors can be distinguished by spellings is not on an equal footing with the hypothesis that they can be distinguished by psycho-mechanical evidence. The latter has been discredited by external evidence.[17] We shall probably never discover external evidence with which to test the former, so we are left only to perform such checks on its internal consistency as we can devise. The following sections try to do this.

The Compositor Disintegration Game

For compositor attribution the three most useful test words are 'do', 'go' and 'here' because all three occur on almost every page and each has two frequently-occurring variant spellings. But Howard-Hill cautioned against treating these words as more significant than others.[18] He insisted that we should consider *all* words (his emphasis). Of course most words do not yield useful evidence because either they do not occur very often in the Folio; or they occur in only one spelling; or they occur in two spellings but one of the spelling variants occurs too infrequently to be safe to use. Nevertheless, there are more than a hundred words for which the occurrences in the Folio can be divided into two sets, each with a different spelling variant and each set having enough members to make the comparison meaningful. For example, the word 'mind' is spelt 59 times as *mind* and 253 times as *minde* (looking only at unjustified lines).[19] Although the counts are far from equal, each is large enough to work with.

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[15] W. Craig Ferguson, 'Compositor Identification in *Romeo* Q1 and *Troilus*', *Studies in Bibliography*, 42 (1989), 211-18. Ferguson had read 'Stretching a Point' because he cites it in a footnote (about the placement of spaces in compositors' typecases).

[16] McKenzie, 'Stretching a Point', 114.

[17] Strictly speaking, Howard-Hill and McKenzie had used different types of psycho-mechanical evidence. Howard-Hill counted 'terminal-spaced commas' and 'medial-spaced commas'; that is, commas at the end of lines which are preceded by spaces, and commas in the middle of lines which are followed by spaces. By contrast, McKenzie counted commas anywhere in a line which are preceded by spaces. As Gabriel Egan points out, the difference might not be trivial (see his unpublished seminar paper '<u>Where are we now in determining Folio compositor stints?</u>').

[18] T. H. Howard-Hill, 'Spelling and the Bibliographer', *The Library*, 5th series, 18 (1963), 2, 8.

[19] For brevity I do not usually list both the singular and plural forms of words. It should be assumed that any count I give for a word includes its plurals; for example, the statement that the *minde* spelling

I shall take up Howard-Hill's suggestion by performing spelling tests for more than the handful of words used by Hinman. I shall start with Compositor B because he set almost half the Folio pages; he is a workman everyone believes in; and we think he can be instantly recognized by his distinctive *do-go-heere* preference and the fact that his pages were almost always set from case y. I shall apply Howard-Hill's dictum that '[t]here is no practical alternative to the belief that when compositorial practices change between groups of texts, a change of compositor is indicated.'[20]

If we look at all the pages currently assigned to Compositor B we find that he set 225 pages up to and including page q1^r, which occurs in *3 Henry VI*, and 224 pages in the rest of the Folio. So by drawing a dividing line at the end of page q1^r, we can split his work into two approximately equal parts. Table 1 gives spelling counts for the spelling variants of 13 words, with separate totals for each part, considering only unjustified lines.[21]

Table 1: Spelling preference reversals in Compositor B's pages

	Page q1^r and Before	After Page q1^r		Page q1^r and Before	After Page q1^r
beauty	8	18	*beautie*	19	3
city	9	25	*citie*	12	9
company	15	30	*companie*	17	1
country	7	34	*countrie*	9	23
duty	6	24	*dutie*	24	13
gift	17	6	*guift*	5	15
honesty	4	14	*honestie*	7	8
humour	1	10	*humor*	19	6
prethee	32	1	*prythee*	2	47
ready	13	25	*readie*	15	3
study	1	4	*studie*	4	0
twenty	8	21	*twentie*	13	0
voice	17	10	*voyce*	9	35

We see that in every one of these 13 examples the compositor's spelling preference gets reversed at the halfway point of his pages in the Folio. For example, the *beauty* spelling occurs less than a third of the time before page q1^r; thereafter, it predominates over the *beautie* spelling. Most strikingly, *prethee* is the almost exclusive spelling before page q1^r but *prythee* is heavily predominant thereafter. No argument that the compositor progressively changed his spelling preferences is available here; for example, the reader can easily check that Compositor B consistently set the *prethee* spelling on unjustified lines until *1 Henry VI*,

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occurs 253 times in the Folio means that *minde* or *mindes* occurs 253 times. Similarly, *mind* includes *minds* and even the solitary occurrence of *mind's*.

[20] Howard-Hill, 'Folio Comedies', 87.

[21] In this and subsequent tables I have not listed every spelling reversal I found. I have excluded words for which the numbers are too small or too close to be safe to use. For example, Compositor B set 19 *need* spellings and 28 *neede* spellings up to page q1^r but 26 *need* spellings and 20 *neede* spellings thereafter (on unjustified lines). This is technically a reversal but I have not listed it as the numbers are too close to each other.

when he first used *prythee* and almost immediately made it his exclusive choice. Nor can we say that this sudden reversal is a misleading impression created by my choosing to exclude justified lines from the counts: if we consider all lines we find 61 *prethee* spellings and 4 *prythee* spellings until page q1ʳ, and 1 *prethee* spelling and 60 *prythee* spellings thereafter, so the reversal is equally clear. Furthermore, it is no use objecting that the split I have chosen at page q1ʳ is based on the reading order of the pages in the Folio, which is not the order in which they were typeset, because that is immaterial to my point. If we had found that the compositor reversed his spelling preferences after typesetting half his pages (without of course knowing at that time that it *was* the half-way point) that would be striking enough. It is even more striking that he apparently varied his spellings in such a way that when the pages were rearranged into reading order after printing, they exhibited a reversal at the halfway point.

Suppose we apply Howard-Hill's dictum and say that this evidence tells us that the pages before and after q1ʳ were set by different compositors. Let us call these men Compositor B1 and Compositor B2 respectively, so Compositor B1's pages are those formerly assigned to Compositor B from the start of the book to the end of page q1ʳ. We continue and observe next that Compositor B1 set 113 pages up to and including page Z2ʳ, which occurs in *Twelfth Night*, and 112 pages after that. So we can divide his work into two approximately equal parts. Table 2 gives spelling counts for 15 words, with separate totals for each part, considering only unjustified lines.

Table 2: Spelling preference reversals in the first half of Compositor B's pages

	Page Z2ʳ and Before	After Page Z2ʳ		Page Z2ʳ and Before	After Page Z2ʳ
body	4	32	*bodie*	7	6
company	6	9	*companie*	14	3
deny	6	19	*denie*	16	4
die	51	13	*dye*	12	52
fly	7	37	*flie*	8	2
happy	3	23	*happie*	8	4
heauy	4	18	*heauie*	11	2
honesty	0	4	*honestie*	7	0
lie	30	14	*lye*	19	34
marry	17	14	*marrie*	25	2
mercy	9	19	*mercie*	13	3
merry	9	16	*merrie*	12	0
mighty	1	11	*mightie*	5	2
twenty	3	5	*twentie*	12	1
voice	15	2	*voyce*	3	6

We can see again that the compositor's preferences get reversed at the halfway point, most strikingly for 'die'. The reader may already have concluded that this way madness lies but, lest there be any doubt, let us continue the process. We suppose that these pages were not all typeset by Compositor B1. Let us call Compositor B1a the man who set the pages from the start of the book until the end of page Z2ʳ, and let us call the man who replaced him at that point Compositor B1b. We now consider Compositor B1a and find that he set 57 pages up to and including page R1ᵛ, which occurs in *As You Like It*, and 56 pages after that. Again, dividing his work into two parts, Table 3 presents spelling counts for 3 words, with separate totals for each part, considering only unjustified lines.

Table 3: Spelling preference reversals in the first quarter of Compositor B's pages

	Page R1ᵛ and Before	After Page R1ᵛ		Page R1ᵛ and Before	After Page R1ᵛ
euery	22	10	*euerie*	13	17
maid	8	16	*maide*	0	18
ready	4	1	*readie*	2	9

We are dealing with a smaller sample of data now, the equivalent of about two full plays in each part, so it is not surprising that there are fewer words for which we find spelling preferences being reversed.[22] But, nevertheless, we have three independent reasons for arguing that Compositor B1a is in fact two men, Compositor B1a1 and Compositor B1a2. Observe that we have not even begun to disintegrate Compositor B2 and Compositor B1b yet.

The phenomenon I have just demonstrated is not peculiar to one compositor. The Appendix provides lists for other compositors of words for which spelling preferences get reversed at the approximate halfway point. Table 4 shows how many spelling reversals I found for each compositor, using both Hinman's original attributions and the ones currently accepted.

Table 4: No. of spelling preference reversals for all compositors

	No. of Spelling Preference Reversals at Halfway Points	
Compositor	Hinman's Original Attributions	Current (Norton) Attributions
A	20	7
B	16	18
C	9	9
D	12	10
E	20	21
F		12
H		6
I		6

The smaller number of reversals seen for Compositor A when we use the current attributions is probably explained by the substantial reduction in his share of the Folio since Hinman.

Are we to suppose that some Folio compositors, including the ones who account for the majority of pages in the book, reversed their spelling preferences for some words at what would later turn out to be their halfway point? If they did then how can we be sure that some pages with different spellings of 'do', 'go' and 'here' were not in fact set by the same compositor, who was reversing his preferences for these three key words? Or were these compositors replaced at their halfway points by other compositors who had the same 'do', 'go' and 'here' preferences but the opposite preferences for some other words? I believe most people's instinctive reaction would be to answer no and dismiss this data. When we observe how easily we were able to disintegrate Compositor B and that we have not even tried to

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[22] I have not listed 13 words, for example 'country', which show reversals but for which the counts are too small to be safe to use.

disintegrate the other compositors yet, it is clear that treating this data as significant would inevitably lead to the invention of many more compositors. Nevertheless, the unattractiveness of a conclusion is not an argument against its correctness. So, to dispel the view that perhaps these spelling reversals really do indicate changes of compositors, I present one further set of data. This time, instead of dividing the Folio into two contiguous parts, I have made a pseudo-random division. Exactly half of the 36 Folio plays have an even number of through lines, while the other half have an odd number of through lines. I shall call these 'even' and 'odd' plays respectively.[23] Table 5 gives spelling counts for 10 words, separately for pages in even and odd plays, all typeset by Compositor A on unjustified lines.

Table 5: Opposite spelling preferences between even and odd plays for Compositor A

	Even Plays	Odd Plays		Even Plays	Odd Plays
answer	2	33	*answere*	9	9
back	1	36	*backe*	9	8
behind	0	11	*behinde*	3	5
feed	0	4	*feede*	2	0
hour	5	30	*howre*	10	15
kind	1	19	*kinde*	8	7
mistris	6	2	*mistresse*	0	17
need	4	25	*neede*	7	8
pit(t)y	1	14	*pi(t)tie*	2	8
ready	0	11	*readie*	4	4

We see that even when we divide the Folio pages according to an arbitrary criterion – whether the number of physical lines in each play is divisible by 2 – we can find several words for which the compositor exhibits opposite preferences in the two parts. As before, the phenomenon can be demonstrated for other compositors, as Table 6 summarises.

Table 6: No. of spelling preference reversals between even and odd plays for all compositors

	No. of Spelling Preference Reversals between Even and Odd Plays	
Compositor	Hinman's Original Attributions	Current (Norton) Attributions
A	31	13
B	9	10
C	14	14
D	14	8
E	22	16
F		10
H		0
I		7

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[23] The even plays are *The Two Gentlemen of Verona, Measure for Measure, Much Ado About Nothing, Love's Labour's Lost, A Midsummer Night's Dream, The Merchant of Venice, As You Like It, The Taming of the Shrew, All's Well That, Ends Well, 1 Henry IV, 2 Henry IV, Troilus and Cressida, Coriolanus, Titus Andronicus, Julius Caesar, Hamlet, King Lear,* and *Antony and Cleopatra.*

There can be no suspicion that different teams of compositors were working on plays with even and odd numbers of lines. This evidence also dispels any suggestion that copy influence might explain the reversals we have seen, since we can hardly suppose that the copy texts contained opposite spellings for even and odd plays. This table proves that the technique I have been using is not safe to use for attribution. It mistakenly sees significance in data which, on closer examination, appears only to show that volatility was normal in compositors' spellings.

But two important problems arise from this conclusion. We have now discovered that not only did compositors have no preferences for some words, alternating between spelling variants as they worked on successive plays; but that even when they did have preferences, they sometimes reversed them overnight. So how sure can we be that we can recognise a spelling preference and safely use it for attribution? Secondly, as I shall show in the following sections, some currently accepted compositor attributions are partly based on the disintegration technique whose unsoundness I have just demonstrated. Could we salvage those attributions by bringing evidence other than raw spelling counts into consideration? These are the questions I now turn to.

The Influence of Copy Spellings

For a minority of Folio plays we believe we possess exemplars of the quartos from which they were typeset. But it is seldom noted that we have no external evidence to tell us whether our beliefs are correct. The beliefs are based on observations of common errors or unusual typographical features in both the quarto and Folio texts, which are most plausibly explained by supposing that they were transmitted by the compositors from quarto to Folio. These explanations are not beyond challenge. At the time Hinman wrote his book it was generally thought that *Hamlet* and *Othello* were typeset in F from marked-up exemplars of quartos. Both propositions have since been shown to be wrong or, at best, doubtful.[24] Any use of copy spellings to derive evidence towards compositor stints is therefore vulnerable at its foundation, if our belief about the copy text changes. Moreover, if our compositor attributions for some plays are dependent on inferences drawn from copy spellings then we need to ask what that means for the majority of Folio plays, for which we do not know the copy. Let us look at the extent of this problem.

Hinman had assigned a selection of pages in the tragedies to Compositor E, starting in *Titus Andronicus*, and ending in quire ss, which is split between *Hamlet* and *Othello*. These assignments were consistent with his finding that the 'intercalary' sequence of pages – in effect a separate production line for Compositor E because of his inexperience – came to an end with quire ss and Compositor E did not do any further work on the Folio. But Howard-Hill reassigned many pages after quire ss from Compositor B to Compositor E. Table 7 shows the division of *do-doe* spellings before and after quire ss in the pages currently assigned to Compositor E.

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[24] See for example Gary Taylor, 'The Folio Copy for *Hamlet*, *King Lear*, and *Othello*', *Shakespeare Quarterly*, 34 (1983), 44-61.

Table 7: Compositor E's *do-doe* spellings

	All Lines		Unjustified Lines	
	do	*doe*	*do*	*doe*
Quire ss and before	213	62	186	59
After quire ss	116	0	97	0

Taking this evidence at face value, it would be unthinkable to assign the pages before and after the end of quire ss to the same compositor. Until the end of that quire the *doe* spellings make up more than 20% of the total; after that quire they do not occur at all. It was the evidence of copy spellings which allowed Howard-Hill to make these attributions to the same compositor. When looking at the spellings in each forme, in the order in which they were printed, it is (just) possible to discern a trend towards greater use of *do* spellings, and a tendency to reproduce the copy *do* spellings much more often than *doe* spellings. On this basis Howard-Hill was able to explain away the absence of *doe* spellings after quire ss as being due to Compositor E's having completed the convergence of his spelling preferences towards those of his colleague Compositor B, by repeatedly distributing type from his pages.[25]

Compositor E does not provide our only example of how copy spellings have been used to make attributions which would otherwise be impossible. I shall also use the examples that Hinman selected to demonstrate Compositor D's spelling preferences. He considered the *do-go* spellings of 12 pages typeset from case z, all of which he attributed to Compositor D, attributions not challenged since then.[26] To make it easier to review, I have collected the evidence in Table 8.

Table 8: Copy influence on Compositor D's spellings

Page	*do-go* (F)	Copy Spellings	Changes (Long to Short)	*doe-goe* (F)	Copy Spellings	Changes (Short to Long)
K2ᵛ	1		1	1		1
K5ᵛ	4	2	2	2	1	1
K6ʳ	5	4	1	1	1	
K6ᵛ	3	3		7	4	3
L2ʳ	1	1		2		2
L4ᵛ	5	5		2		2
L5ʳ	2	2		6	1	5
L5ᵛ	1	1				
L6ʳ				1	1	
L6ᵛ	6	6		4	2	2
N4ʳ	12	11	1	2	1	1
N4ᵛ	7	7		4	1	3
Total	47	42	5	32	12	20

[25] T. H. Howard-Hill, 'New Light on Compositor E of the Shakespeare First Folio', *The Library*, 6th series, 2 (1980), 170-1.

[26] Hinman, *Printing and Proof-Reading*, I, 196-8.

For example, looking at the row for K6ʳ, we see that there are 5 *do-go* spellings on the page, of which 4 are the copy spellings of the quarto used to set the F text, meaning that the compositor changed one long spelling (in this case *goe* at 2312) to a short one (*go*). On the same page there is just one *doe-goe* spelling, which is the copy spelling of the quarto, so there was no change from a short spelling to a long one.[27]

Hinman observed from this data that the compositor changed *do-go* copy spellings to *doe-goe* much more often than the other way round. He set 47 *do-go* spellings but only 5 were changes from the copy; by contrast, of the 32 *doe-goe* spellings he set, 20 were changes. From this Hinman concluded that the compositor preferred *doe-goe*. It is worth observing that this is not the natural conclusion, because it overrules the evidence that the compositor set more *do-go* spellings than *doe-goe* ones, not just in total but in each of the three quires, and that only 4 of the 12 pages show a majority of *doe-goe* spellings over *do-go* ones.[28]

So we have seen that in deciding the spelling preferences disclosed by this data, Hinman in effect disregarded the spellings that match the quarto copy. The rationale for this is that if a compositor sets the same spelling as in the copy, that may be due to the influence of what he has just seen and may not disclose his preference. Had he taken all spellings into account, Hinman might have concluded that the compositor had no clear preference between *do-go* and *doe-goe*, or that he had a slight preference for *do-go*, or even that there were two compositors with opposite preferences. But he could not have reached the conclusion that he actually reached – that there was one compositor who preferred *doe-goe* – because without excluding the Folio spellings that match the copy, the evidence he had was that there are 47 *do-go* spellings and 32 *doe-goe* spellings.

There is then a hidden contradiction in the work of Hinman and other investigators. By making their attributions dependent on observations about whether Folio spellings match copy spellings, they have silently acknowledged that it is necessary to know what the copy spellings are; but they have nevertheless gone ahead and made attributions even for the Folio plays for which we do not know the copy. A browse through Appendix A in volume I of Hinman's book shows how often he used the evidence of copy spellings to argue the case for the attributions he made. Howard-Hill was aware of the importance of the point I have just made, since he wrote that 'evidence resting to any extent on what a compositor may or may not have done with the inferred forms of copy which does not exist, under conditions which

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[27] There are minor differences between my counts and Hinman's, although not enough to affect the substance of his argument. He claimed that 3 *do-go* spellings had been changed from *doe-goe* in the quire K pages, but I have found 4, at 1415, 2218, 2236 and 2312 of *Much Ado About Nothing*. He claimed that only 14 of the 15 *do-go* spellings in the quire L pages have counterparts in the quarto copy but by my observation all of them do. Finally, he claimed that, in the quire N pages, 5 out of 6 *doe-goe* spellings in the Folio were changed from *do-go* in the quarto copy. In fact, only 4 were: the other two spellings, at 741 and 969 in *A Midsummer Night's Dream*, also occur in the presumed quarto copy Q2.

[28] Hinman's counts were made by considering all lines, whether or not they are justified. His conclusion would have been the same had he chosen to exclude justified lines when making his counts, as the reader may verify by using the website.

can only be guessed at and never reproduced, is less likely to be good evidence.'[29] Yet, as we saw earlier, he assigned many pages after quire ss to Compositor E, even though they occur in plays for which we certainly do not know the copy (*Antonty and Cleopatra* and *Cymbeline*) or for which we probably do not (*Othello*). The evidence we do have is tolerably consistent with the attributions but, without the copy spellings, we do not know if different attributions might not be equally consistent.

May we assume that Providence has been so kind as to provide that in plays for which we do not possess the copy text, knowledge of the copy spellings would have made no difference to our attributions, even though it manifestly does in plays for which we know the copy? If we are not entitled to make that assumption then what does that mean for compositor attributions in Folio plays for which we do not know the copy? The gloomiest conclusion to draw is that it is not safe to make attributions for such plays. But there are two considerations which may be thought to mitigate that conclusion.

For five Folio plays it is generally agreed that, while we do not possess the copy text, it must have been a transcript by Ralph Crane: *The Tempest*, *The Two Gentlemen of Verona*, *The Merry Wives of Windsor*, *Measure for Measure* and *The Winter's Tale*. *Cymbeline* may be a sixth and if E. A. J. Honigmann was right then there is also a seventh play printed from a Crane transcript, *Othello*.[30] Crane had strong spelling preferences for the words most commonly used for attribution, so we can guess with a high degree of confidence what the copy spellings must have been.[31] This might tempt us to treat these plays as if we knew the copy spellings, discount the Folio spellings that match the copy, and make our attributions in the way that Hinman did. The procedure does not produce entirely satisfactory results, as Table 9 shows by listing counts of *do-doe* spellings in some pages of *Measure for Measure*.

Table 9: *do-doe* spellings in *Measure for Measure*

Page	All Lines		Unjustified Lines	
	do	*doe*	*do*	*doe*
F1ʳ	1	8	1	8
F1ᵛ	3	2	2	1
F2ʳ-b	2	2	2	2
F3ʳ	2	5	2	2
F4ᵛ	2	8	1	8
F5ʳ-b	2	1	2	1
G2ʳ-a	1	4	1	3

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[29] Howard-Hill, 'Folio Comedies', 61.

[30] E. A. J. Honigmann, *The Texts of 'Othello' and Shakespearian Revision* (London: Routledge, 1996), chapter 6.

[31] T. H. Howard-Hill, *Ralph Crane and Some Shakespeare First Folio Comedies* (Charlottesville: University Press of Virginia, 1972), 66-7. All my references to Crane's preferred spellings are based on this book.

Hinman assigned these pages to Compositors A and D; they have been reassigned to Compositors C and D by subsequent investigators. All three compositors preferred *doe* spellings, so the precise identity of the compositor matters less than the observation that there is a relatively high number of *do* spellings in these pages. Crane preferred *doe* to *do* by a ratio of about ten to one, far higher than the ratios evident from this table. Did he violate his *doe* preference very strongly when writing out the *Measure for Measure* manuscript and were the compositors then influenced accordingly to set many *do* spellings? Or did the compositors find *doe* in the copy but went against both it and their own preferences to set *do* instead? The problem is not confined to one play. Looking only at unjustified lines and only at the five plays unanimously agreed to have been set from Crane transcripts, I have listed in Table 10 the pages on which there are spellings contrary to both Crane's and the compositor's preferences.

Table 10: Discrepant pages in plays printed from Crane transcripts

Word	Discrepant Pages
do	B2^r; B2^v; B3^r; B5^v; B6^v; C1^r; C2^v; C3^r; C5^r; F1^r; F1^v; F2^r-b; F3^r; F4^v; F5^r-b; G2^r-a; G4^v-a; Aa3^v
go	B2^r; B6^r; C2^v; C6^r; F3^r
here	A5^v; G4^r-b

Before continuing, we should note an important theoretical consideration. It is an elementary principle of statistics that for us to draw a conclusion about a population by considering only a sample of its members it is necessary that the sample is representative of the whole. This requirement is usually satisfied by picking the sample at random. Where a non-random sample is selected, the criterion for selection must be unrelated to whatever it is that we are measuring, otherwise the requirement of representativeness may not be satisfied. Here, we are counting spellings but our criterion is directly related to spellings, since we check whether Folio and copy spellings are the same and include or exclude them from consideration accordingly. From this it is obvious that the sample of spellings we are counting is by definition unrepresentative of the whole. As a consequence of this our method is unable to distinguish between a compositor who has a preference and one who is indifferent. To see this, suppose the copy text consistently uses *doe* spellings. The compositor has no preference and sets a mixture of *do* and *doe* spellings. We exclude all the *doe* spellings, since they match the copy, and wrongly diagnose the compositor as someone who strongly prefers *do*. If the compositor(s) who typeset the *Measure for Measure* pages in the table above had been indifferent between *do* and *doe*, the spellings they set might have been exactly the same. Wittgenstein once asked his student Elizabeth Anscombe: 'Why do people say that it was natural to think that the sun went round the earth rather than that the earth turned on its axis?' She replied: 'I suppose, because it looked as if the sun went round the earth.' 'Well,' Wittgenstein asked, 'what would it have looked like if it had *looked* as if the earth turned on its axis?'[32]

Whatever we make of the copy spellings we infer for the Crane plays, we are still left with about half the Folio plays, for which we do not possess the copy texts and cannot infer

[32] G. E. M. Anscombe, *An Introduction to Wittgenstein's Tractatus* (London: Hutchinson, 1959), 151.

anything about what the spellings in them might have been. Nevertheless, if we go back to the roots of this subject, we may find a reason to think that for at least some plays it may not be necessary to know the copy spellings. Compositor attribution studies began with Thomas Satchell's letter to the TLS about spellings in *Macbeth*.[33] The division of the play between Compositor A and Compositor B, which Satchell's letter directly led to, remains unchallenged and appears very convincing, even though we do not know anything about the underlying manuscript. As Hinman noted, most pages of the play show either only *do-go-heere* spellings or only *doe-goe-here* spellings.[34] This provides strong support for the division of the play between the two compositors. It is of course possible that the manuscript from which *Macbeth* was printed was written by two scribes, whether or not they were Shakespeare and Middleton. But it seems extremely improbable that the scribes wrote out alternating pages of the play or that the division of the manuscript between them should correspond so neatly to Folio page boundaries. So we may have a high level of confidence that the spelling differences evident in *Macbeth* indicate the presence of two different compositors. Hinman found some supporting evidence too: there is a strong correlation between the *doe-goe-here* pages and case x, and between the *do-go-heere* pages and case y; in addition, speech prefixes for Lady Macbeth differ between these sets of pages.

Macbeth is the model for compositor attribution on the basis of spellings. But Satchell did not say how many other plays he had tried. Was it by luck that he examined just that play for which compositor attribution is least insecure, or did he try and fail to arrive at the same impressive result with other plays? Of course any Folio play can be divided by counting the *do-doe* spellings on each page; similarly, it can be divided using *go-goe* and *here-heere* spellings. Encouragingly, the division for most plays is quite neat, with few pages showing both spelling variants for a given word, at least when we exclude justified lines. But there are exceptions. I have already noted the discrepant *do* spellings in two Crane plays above. In other plays the most striking exceptions are found in *As You Like It* (a play about whose copy text we know nothing) as Table 11 shows by listing counts in unjustified lines on some pages.

Table 11: *do-doe* spellings in *As You Like It*

Page	*do*	*doe*	Compositor
Q4^v	2	1	D
Q5^r	1	8	D
Q5^v-b	2	1	D
Q6^r	7	3	D
R1^v	2	1	B
R4^r	4	4	C
R4^v	1	4	C
R5^r	1	3	C
R5^v	1	1	C

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[33] Satchell sent his letter to the *Times Literary Supplement* from Kobe in Japan in July 1919 but it was not published until the issue dated 3 June 1920.

[34] Hinman, *Printing and Proof-Reading*, I, 384-6.

Recall that Compositors B, C and D have been defined as having *do*, *doe* and *doe* preferences respectively. Of the play's 23 pages, 9 pages or part-pages are in the table, all of them showing some spellings opposite to the compositor's defining preference; in three of Compositor D's four pages the opposite spellings are in the majority and, without knowledge of the copy spellings, we cannot explain them away. These are far from being isolated examples. Table 12 considers only unjustified lines on pages in plays for which there is no suspicion that a quarto or a Crane transcript was used by the Folio compositors (and therefore we have no knowledge whatever of the copy spellings).[35] On each page listed in the table, the *majority* spellings of the relevant word are opposite to the preference by which the compositor is defined. If we looked for pages where the compositor set an *equal* number of variant spellings for one of the words, we could add a few more pages to the lists.

Table 12: Discrepant pages in plays printed from unknown copy

Word	Discrepant Pages
do	Q4$^\mathrm{v}$; Q5$^\mathrm{v}$-b; Q6; R2$^\mathrm{r}$; V1$^\mathrm{v}$; h2$^\mathrm{v}$
go	H4$^\mathrm{r}$-a; H5$^\mathrm{v}$-a; T6$^\mathrm{r}$; V5$^\mathrm{r}$; a1$^\mathrm{r}$; k2$^\mathrm{v}$; x4$^\mathrm{r}$; bb1$^\mathrm{r}$; hh2$^\mathrm{v}$; xx1$^\mathrm{v}$
here	H2$^\mathrm{v}$; H5$^\mathrm{v}$-b; R2$^\mathrm{r}$; R4$^\mathrm{r}$; S1$^\mathrm{v}$; S3$^\mathrm{r}$; V4$^\mathrm{r}$; i1$^\mathrm{r}$; i5$^\mathrm{v}$; t4$^\mathrm{r}$; t4$^\mathrm{v}$; yy1$^\mathrm{v}$

Taking the most optimistic view of all this, we might say that with the exception of a few dozen pages we can rely on the fact that most Folio pages show only one spelling variant for each of the three key words, and deduce the compositor accordingly, by noting which combination of variants occurs on each page. But that would be too complacent, as I shall show by considering Compositors C and D, whom Hinman defined as having *doe-goe-heere* and *doe-goe-here* preferences respectively.

Looking again at the 12 pages in quires K, L and N, which Hinman assigned to Compositor D by disregarding spellings that match the copy texts, suppose now that the copy texts were not known and he had been left to make the attributions principally on the basis of the spellings of the three key words. Table 13 lists these spellings on the 12 pages, for unjustified lines.

Table 13: Spellings of the three key words on Compositor D's pages

Page	Spellings and TLNs
K2$^\mathrm{v}$	here[1426], goe[1497]
K5$^\mathrm{v}$	goe[2183], do[2189]
K6$^\mathrm{r}$	here[2350], here[2366], do[2380], do[2390]
K6$^\mathrm{v}$	doe[2507], here[2511], go[2517], here[2525], goe[2537], goe[2551]
L2$^\mathrm{r}$	go[119], agoe[131], here[144], doe[155], here[159]
L4$^\mathrm{v}$	do[764], do[766], goe[823]
	doe[919], doe[922], here[929], do[933], goe[934], doe[937], goe[959],
L5$^\mathrm{r}$	doe[964], go[967], hereby[983]
L5$^\mathrm{v}$	here[993], here[1017], here[1036], here[1091]
L6$^\mathrm{r}$	[no data]

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[35] I have conservatively taken this list of plays to be *The Comedy of Errors, As You Like It, The Taming of the Shrew, All's Well That Ends Well, Twelfth Night, King John, Henry V, 1 Henry VI, Henry VIII, Coriolanus, Timon of Athens, Julius Caesar, Macbeth* and *Antony and Cleopatra.*

L6^v	go[1309], doe[1365], do[1368]
	do[739], do[740], goe[741], doe[752], here[755], do[763], do[766], do[784],
N4^r	do[784], do[794], do[800], here[802], do[803], do[818], do[818]
	here[890], here[899], here[901], do[933], do[969], goe[969], here[970],
N4^v	doe[973], goe[973], go[978]

We can see that of these 12 pages there are only two, K2^v and L5^v, which can confidently be assigned to Compositor D because they contain only his preferred spellings. Of the remaining 10 pages, 1 has no relevant spellings and 5 contain either an equal number of preferred and non-preferred spellings or the non-preferred spellings are in the majority, most of the non-preferred spellings being *do*. The data, most strikingly for page N4^r, suggests a compositor who prefers *do*, not *doe*. Because Hinman had made the attributions with knowledge of the copy spellings, he used these pages not as evidence that Compositor D preferred *do* spellings but that he was 'tolerant' of them while truly preferring *doe*. That in turn allowed him to make some attributions to the same compositor in plays for which the copy is unknown; witness the examples from *As You Like It* I gave above. Appeals to a compositor's tolerance are disturbingly numerous, in Hinman's book and in papers by subsequent investigators.[36] It is hard to see how any rigor can be maintained in this subject if we have our cake and eat it too, by using spellings to support our attributions when they suit us but ignoring them when they do not by saying that the compositor must have tolerated them. An alternative explanation is always available, that the compositor is not the man we thought he was or (what amounts to the same thing) did not have the preference we thought he had. The choice between these alternatives is not dictated by the evidence but by the desire of the investigator to make the attribution he wants to make.

We have a similar problem with Compositor C. Hinman wrote that he was 'bound to' attribute the first six pages of quire C, in *The Two Gentlemen of Verona*, to Compositor C.[37] These attributions have not been challenged. They were based on the evidence shown in Table 14.

Table 14: Spellings of the three key words on Compositor C's pages (all lines)

Page	*do-go*	*heere*	*doe-goe*	*here*
C1^r	1	1	5	2
C1^v	1	1	5	1
C2^r	1		4	
C2^v	3		6	
C3^r	2	3	8	2
C3^v		2	4	2

Hinman found that these pages had been typeset from case y, the case most often used by Compositor B. He claimed 9 *doe-goe* spellings on page C3^r but I have stated 8 in the table because the ninth is the catchword *Goe* and I do not elsewhere include catchwords in my spelling counts. These numbers are based on all lines but Hinman discounted for justified

[36] Apart from Hinman's book, there are several examples in the two most important attribution papers, Howard-Hill's 'Folio Comedies' and Taylor's 'Shrinking Compositor A'.

[37] Hinman, *Printing and Proof-Reading*, I, 403.

lines in his discussion. He noted the *doe-goe* preference evident in these pages, which apparently enabled him to rule out Compositor B, although he does not say explicitly why. Despite the *doe-goe* preference, the number of *do-go-heere* spellings is high enough to also rule out Compositor A. Since Compositor C had a *doe* preference, Hinman also made an unstated reliance on Compositor C's tolerance of *do* spellings. But since the evidence he gave shows an equal number of *here* and *heere* spellings, it is not clear why he attributed the pages to Compositor C rather than Compositor D. He noted the 7 *here* spellings that point away from Compositor C, 6 of them in unjustified lines, but he did not note that when justified lines are excluded we are left with the evidence shown in Table 15.

Table 15: Spellings of the three key words on Compositor C's pages (unjustified lines)

Page	*do-go*	*heere*	*doe-goe*	*here*
C1^r	1		5	2
C1^v		1	5	
C2^r			3	
C2^v	2		6	
C3^r	1	3	8	2
C3^v		1	3	2

We have 6 *here* spellings and 5 *heere* spellings, so if the evidence points to either of the two men it points to Compositor D, not Compositor C. Yet Hinman assigns the six pages to Compositor C without even mentioning Compositor D. In any case, it is not clear that it was open to him to say that Compositor C had a sufficiently strong *heere* preference for it to be safely used for attribution. Considering all lines in the Folio assigned by him to Compositor C, we find 62 *here* spellings and 179 *heere* spellings; considering only unjustified lines, we find 37 and 147 respectively.[38] If we also take into account the pages assigned to Compositor C by subsequent investigators, the supposed *heere* preference is even less strong: 86 *here* against 182 *heere* in all lines; 53 against 139 in unjustified lines. There is obviously a clear majority of *heere* spellings but there are enough *here* spellings to make it unsafe to assert that one or two *here* spellings on a page could not plausibly have been set by Compositor C, especially in one of the plays for which we have no clue about the copy spellings.

It seems hard to avoid the conclusion that it is not safe to perform compositor attribution for the majority of Folio plays, since we do not know what spellings the compositors were confronted with and therefore cannot judge the extent to which they may have been influenced to set spellings opposite to those by which we recognize them. The conclusions we draw from spelling counts given in the rest of this paper might have been different had we been able to adjust for the possible influence of copy spellings; but to avoid repetition I shall not state this caveat at every point where it is applicable.

Spelling Preferences

The notion that spelling differences can tell us who typeset a printed text from Shakespeare's time is a little counter-intuitive. The possibility exists only because spellings had not been standardised then, so different people used different spellings of the same words. But the

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[38] The counts of course include not just *here* and *heere* but related spellings such as *hereafter* and *heereafter*.

point is partly self-defeating because the lack of standardisation also means that the same people used different spellings of the same words, the most notorious example of this being the three pages of Shakespeare's will, which have been held to show three different spellings of his own name. Compositors may be regarded as more disciplined than dramatists since, as Blayney argued, they had a professional interest in standardising their own spellings.[39] Howard-Hill went further and argued that the standardisation of spellings in the seventeenth century was partly caused by the expansion of printing.[40]

That compositors in Shakespeare's era did not always have preferences – let alone preferences which remained constant over time – was evident from the table I produced earlier, showing different spelling variants between the 'even' and 'odd' plays (where the only rational explanation was that the compositor did not have a preference). It can also be shown by considering *O/Oh* spellings. Philip Williams wrote: 'For reasons that I now do not pretend to understand, the folio compositors generally reproduced the copy spellings of [*O* and *Oh*].'[41] Taylor and Jowett later provided evidence to support this claim.[42] It is a startling claim since it is the opposite of what we think we know about compositors' treatment of other common words such as *do*, *go* and *here*. But it is borne out by evidence from plays printed in the Folio from quarto copy. For example, the Folio text of *Much Ado About Nothing* has 46 *O* spellings and no *Oh* spellings, while that of *A Midsummer Night's Dream* has 55 *O* spellings and 6 *Oh* spellings. The typesetting of both plays has been attributed to Compositors B, C and D, all of whom set a much higher proportion of *Oh* spellings elsewhere in the Folio than in these plays. Looking at all Folio lines outside these two plays, we find that Compositor B set 598 *O* spellings and 483 *Oh* spellings; Compositor C set 122 and 68 respectively; and Compositor D set 51 and 31.[43] Excluding justified lines reduces the totals to 468 and 405; 95 and 55; and 34 and 20. We may say if we like that the compositors had a preference for *O* but it is clear that they set many *Oh* spellings as well. The explanation for the striking contrast with *Much Ado* and *Dream* becomes clear when we look at the quartos they were typeset from. Q1 of *Much Ado*, from which the F text was set, contains only *O* spellings while the *O/Oh* spellings in Q2 of *Dream* match the Folio spellings in every case. This correspondence can hardly have arisen by chance, given the compositor's practice elsewhere in the Folio. It shows us that the compositors adopted copy spellings for this word. That in turn suggests they may also have adopted copy spellings for some others words and reinforces the

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[39] Peter W. M. Blayney, *The First Folio of Shakespeare* (Washington D.C.: Folger Shakespeare Library, 1991), 10. This is not the Norton facsimile but a booklet written to accompany an exhibition of Folios at the Folger Shakespeare Library.

[40] T. H. Howard-Hill, 'Early Modern Printers and the Standardization of English Spelling', *Modern Language Review*, 101 (2006), 16-29.

[41] Philip Williams, 'New Approaches to Textual Problems in Shakespeare', *Studies in Bibliography*, 8 (1956), 6.

[42] Gary Taylor and John Jowett, *Shakespeare Reshaped: 1606-1623* (Oxford: Clarendon Press, 1993), Appendix II.

[43] I have used the compositor attributions from the Norton facsimile. As the reader may verify from the website, the counts are different if we use Hinman's original attributions, but not materially different.

point that it may not be safe to perform compositor attribution without knowledge of the copy spellings.

It is equally clear that compositors often did not allow themselves to be influenced by copy spellings but chose their own. This is easy to demonstrate; for example, by considering the spellings set by Compositor B in the pages attributed to him in the plays generally agreed to have been printed from Crane transcripts. We do not possess those manuscripts but we can be highly confident that they would have used *doe-goe-here* spellings since these were Crane's strong preferences. Yet, as Hinman documented, the Compositor B pages in these plays show overwhelming evidence of his *do-go-heere* preferences, in each case the opposite of Crane's.

The situation is not clear-cut even for words for which we think the compositors did have preferences. It is not merely that compositors departed regularly from what we believe were their preferences. They even departed from them for words where the copy spellings were the same as their preferences and should therefore have acted to reinforce the preferences. I have given some examples above, for our three key words. For other examples, see page M6ʳ, the penultimate page of *Love's Labour's Lost*. On this page Compositor B set *eie* no less than six times, on unjustified lines, even though the quarto which served as copy text has *eye* in each case and even though he strongly preferred the *eye* spelling in the Folio, setting it 367 times while setting *eie* only 36 times, all in unjustified lines. Similarly, in *Much Ado About Nothing* on page K4ʳ Compositor B set no less than five *ladie* spellings, in unjustified lines, even though he preferred *lady* to *ladie* in the Folio (186 times to 53 times, all in unjustified lines) and even though the 1600 quarto which served as copy text has *lady* in four of these five cases.

In a similar vein, we can find dozens of examples where a compositor spells the same word in two different ways on the same unjustified line. If we widen the net to find cases where the same word is spelt differently on adjacent unjustified lines by the same compositor, we can find scores of examples, several in each play. I give some examples below, with emphasis added, and provide a much longer list in the Appendix.

> Greater *he* shall not be: If *hee* serue God,
> (*Richard II*, 1456, Compositor A)

> Looke what I speake, or *do*, or thinke to *doe*,
> (*The Taming of the Shrew*, 2175, Compositor B)

> I *go*, I *go*, looke how I *goe*,
> (*A Midsummer Night's Dream*, 1123, Compositor C)

> That all *eyes* saw his *eies* inchanted with gazes.
> (*Love's Labour's Lost*, 751, Compositor D)

> If there be *diuels*, would I were a *deuill*,
> (*Titus Andronicus*, 2263, Compositor E)

How might we explain these? We may simply say that compositors were capricious, which would be disturbing since, as Hinman's book shows, there are pages for which the compositor

attribution turns on just a handful of spellings. But there may be another explanation which we can discover by looking at press variants. Hinman found that the phrase 'o-uer…honors bed' was changed to 'ouer…honours bed' on page cc4ᵛ. As he wrote, the correction required was only from 'o-uer' to 'ouer' but the compositor also changed 'honors' to 'honours' even though the former spelling was acceptable and occurs dozens of times in the Folio. Why should he do this? The line is short and did not require justification in the sense in which the word is usually understood. But, as Hinman explained, having unpicked types from the end of the line in order to change 'o-uer' to 'ouer', he could not have used the same space quads to fill up the line that he had used before, because the text was now slightly shorter. He evidently decided that varying the spelling of 'honors' to 'honours' would make it easier to fill up the line than choosing different space quads.[44]

So here we have an example of a spelling being changed in the middle of an unjustified line with plenty of white space at the end, to make it easier to fill up the line. Had the uncorrected sheet not survived, we should never have known that this happened. But we cannot comfort ourselves with the observation that this phenomenon has not been noticed elsewhere in the surviving Folio sheets and therefore must have been rare. This is because there is no reason to suppose that it happened only when a compositor was correcting an error. The compositor in this example evidently decided that adding a 'u' to 'honors' would help him fill the line. If he had set 'ouer' correctly to start with, he might have made the same decision and we should never have known. An experienced compositor could be expected to make many such instant decisions as he worked and most would leave no trace in the printed book. Moreover, the words for which a compositor might choose to vary the spelling would be just those words for which there are acceptable long and short spellings. Those are of course the very words we use for compositor attribution, so even if the phenomenon was rare relative to the number of words a compositor typeset, its effect on our work might be disproportionately high.

William S. Kable warned almost half a century ago that compositors may have shortened some spellings in verse lines to save themselves the trouble of turning the lines over or under. In such cases a line may not look justified but that is because its spellings were shortened.[45] If we combine Kable's observation with what I have just shown, we see that we can never be entirely confident that a spelling is really the compositor's preference (if he had one). What looks like a departure from the spelling expected of a compositor might be due to a snap decision by him to use a longer or shorter spelling in anticipation of the end of the line. Conversely, what looks like the preferred spelling of one compositor might in some cases have been set for the same reason by a compositor with the opposite preference. How often did this happen? We can only guess, but there are many examples which might be explicable in this way. In the Appendix I have given a list of spellings which a compositor set just once

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[44] Hinman, *Printing and Proof-Reading*, I, 285-6. There is another example of this phenomenon in Q1 of *King Lear*. On page K4ᵛ the compositor had wrongly set 'common bossom' as 'coren bossom'. When making the correction from 'coren' to 'common', he also changed 'bossom' to 'bossome', presumably because it helped him to tighten up the line. The uncorrected and corrected pages can be seen at the British Library quartos website.

[45] William S. Kable, 'The Influence of Justification on Spelling in Jaggard's Compositor B', *Studies in Bibliography*, 20 (1967), 238.

in the Folio, while setting a different spelling of the same word at least five times. For example, looking only at unjustified lines, Compositor A set *guiltie* 12 times but *guilty* just once, on page Aa1ᵛ. The most striking example is from Compositor B, who set *thank* just once, on page d5ʳ, having set *thanke* no less than 149 times, all on unjustified lines. If we widen the net to catch spellings of common words set just twice or thrice then the list expands accordingly.

When we perform spelling counts for a large number of words across the whole Folio, we discover a spectrum, not a neat division. Every compositor exhibits some very strong preferences; some preferences weak enough to be called non-existent; and everything between those extremes. The Appendix demonstrates this for Compositor A and Compositor B. A wide spectrum of variation is what we find when we count spellings in the whole Folio. But when we change our view to page level, we find the opposite picture. There is no spectrum: for almost any given word the vast majority of pages show only one spelling variant, as also demonstrated in the Appendix.

What we discover from the data given at length in the Appendix is that even when a compositor did not exhibit a spelling preference for a word in the Folio as a whole, he almost always did exhibit it on any given page. We must grant that on some pages there is only a handful of spellings, sometimes only one, so we must not make too much of this. Yet, the very small proportion of mixed-spelling pages does suggest that some form of self-influence operated on the compositors. Having set one spelling variant on a page, even if it was not his strong preference, a compositor was evidently much more likely to set it again on the same page than use the opposite variant. For most words, there is local stability but global instability. This phenomenon is what makes compositor attributions at page level possible at all, irrespective of whether they are correct as matters of historical fact. It also means that, having made our attributions, we can find almost as many discrepant spellings as we desire, as I shall now demonstrate.

Howard-Hill cautioned against reading too much into the discrepancies we can easily observe in compositors' spellings:

> "An investigator who approaches compositor determination from spellings will not find it difficult to observe that every page, containing text different from every other page, will almost always present a distinctive array of spellings and may, on that account, be each assigned to a different compositor. What inhibits this disintegrationist tendency is the presence of features similar to those of pages set by identified compositors."[46]

This dictum, pragmatic and moderate as it sounds, is not without problems. It begs the question by talking of disintegration. A stretch of text split between two or more compositors can be said to have been disintegrated only if we have first established that it is whole. But we have no independent means to establish such wholeness, so it does not seem sound to privilege one choice over another: if we can disregard discrepant spellings to avoid making two compositor attributions in place of one, we can equally well have regard to those discrepancies instead and make two attributions. Howard-Hill stated no rule by which we

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[46] Howard-Hill, 'New Light', 161.

could make this choice, nor do I believe such a rule is possible in the absence of any external evidence to test it against. What the discrepancies I am about to present show is not that it is necessary for us to reject the corresponding compositor attributions but that we have at least some evidence with which to do so, if we wish to use it for that purpose. We define a spelling as discrepant if it is opposite to the preference shown by the compositor on other pages in the Folio, as usual considering only unjustified lines.

Let us consider page V5ᵛ, in *All's Well That Ends Well.* It was attributed to Compositor B by Hinman, apparently on the basis only of its *do-go-heere* spellings and his deduction from type recurrence evidence that it was set from Compositor B's habitual case y.[47] The attribution has not been challenged since then. Table 16 shows that there are 15 different words for each of which Compositor B set one or more discrepant spellings on this page.

Table 16: Discrepant spellings by Compositor B on page V5ᵛ

Counts of Folio Spellings by Compositor B except on Page V5ᵛ	Discrepant Spellings on Page V5ᵛ and TLNs
{behind}=4, {behinde}=28	behind[1089]
{blood, bloodie, bloody}=386, {bloud, bloudie, bloudy}=19	bloudie[1098]
{brief, briefe}=7, {breefe}=23	briefe[1084]
{deed, deed's, deeds}=90, {deede, deedes}=30	deede[1028]
{euery}=159, {euerie}=33	euerie[1040], euerie[1040]
{eye, eyes}=367, {eie, eies}=34	eies[1007], eies[1071]
{fly, flye, flyes, flys}=113, {flie, flies}=19	flies[1073]
{honor, honor'd, honor's, honors}=222, {honour, honour'd, honour's, honours}=84	honour[1030], honour[1035], honours[1035], honours[1036], honours[1037], honour'd[1043], honour[1046], honour[1059], honour[1072]
{maid, maids}=49, {maide, maides}=30	maide[1044]
{marry}=52, {marrie}=30	marrie[1011]
{mighty}=38, {mightie}=6	mightie[1023]
{pitty, pity}=73, {pitie, pittie, pittie's}=19	pittie[1069]
{scarce}=2, {scarse}=30	scarce[1115]
{she, she'l, she'l'd, she'ld, she'le, she'll, she's}=656, {shee, shee'l, shee'le, shee'll, shee's}=57	shee[1008], shee[1016], shee[1033], shee's[1034], shee[1045]
{yong, yong'st}=119, {young, youngest}=30	young[1033]

[47] Hinman, *Printing and Proof-Reading*, I, 419.

The discrepant spellings are listed in the right-hand column with the TLNs of the corresponding lines. We can see from this column that there are 29 discrepant spellings on this page. Looking at the first row we see that Compositor B set a *behind* spelling at 1089 whereas he set this spelling only 4 other times in all his Folio pages, preferring the *behinde* spelling, which he set 28 times. The next row shows that he set a *bloudie* spelling at 1098, having set *–ou–* spellings of 'blood' only 19 times in the rest of his Folio pages, compared to *–oo–* spellings which he set 386 times. Moving down to 'honour' we see that Compositor B preferred the short spelling in the rest of his Folio pages, setting it 222 times against 84 times for the long spelling; yet he used the long spelling no less than 9 times on this one page.

If these examples were presented in isolation they would be unlikely to be regarded as having much significance. They might be explained away by saying that Compositor B did not have a constant preference for the relevant words or that he was influenced by the spellings in the copy (which we do not know). Nevertheless, there is a cumulative force in these small discrepancies. If we are willing to accept 29 discrepant spellings on this one page and persist in assigning it to Compositor B then what is to stop us from assigning other pages to him that happen to contain a mere handful of *doe, goe* and *here* spellings; for example, page b3ᵛ in *King John*, which was set from Compositor B's habitual case y but which Hinman assigned to Compositor C, because of its 4 *doe-goe* spellings? Of course Compositor B's *do-go* preference is far stronger than his spelling preference (if any) for the words in the table above; but how many weak discrepancies are enough to counterpoise a strong preference? It would be easy enough to devise a formula to decide, but we would have nothing to test it against. So each investigator is left to make a subjective judgement. This is no hypothetical problem. A glance at the paper in which John O'Connor made some compositor reattributions in the comedies shows how often he used small discrepancies to argue his case. For example, the *praier(s)* spelling was set on unjustified lines just 8 times in the whole book, by four different compositors, yet O'Connor uses its single discrepant appearance on page F2ᵛ as an argument against Compositor C's presence on that page, because the compositor had recently set 3 *prayer* spellings on F4ᵛ.[48] If a collection of such data is good enough to displace a compositor attribution then what might O'Connor have made of the long list I have given in the Appendix of pages where a compositor used a spelling he never used anywhere else in the Folio, or the hundreds of discrepancies like the ones above? To be consistent, he would have needed to argue that there might be many more compositors at work in all those pages.

I have demonstrated the extent of self-influence, by which a compositor might set more than one non-preferred spelling on a page, in effect impersonating another compositor, or at least creating doubt about our attribution. So when do we say that there are enough discrepant spellings on a page for us to reject the attribution; and how could we know when what appear to be the preferred spellings of one compositor are in fact the non-preferred spellings of another, explained by self-influence? It is difficult to see how these questions could be convincingly answered unless we discover some external evidence to help us calibrate our data.

I have taken it for granted so far that we assert the presence of a compositor in a page because it exhibits a clear preference for some spellings over others. Before moving on we should note

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[48] John O'Connor, 'Compositors D and F of the Shakespeare First Folio', *Studies in Bibliography*, 28 (1975), 105.

the exception to that rule that Hinman made for Compositor E. He had begun by noting that there is an 'olio' of spellings in the compositor's early work. Referring to *Titus* and *Romeo*, he wrote that '[in] these two plays, therefore, spellings alone may be taken as a sufficient basis for the identification of Compositor E…'[49] His meaning was the opposite of the obvious one: he meant that the spellings of the three key words do not exhibit any clear preference. He was basing a compositor identification not on spelling preferences but on the absence of them. This can be easily demonstrated. If we look at the pages assigned to Compositor E by Hinman, ignoring subsequent revisions by Howard-Hill and others, we see the counts in Table 17.

Table 17: Spellings of the three key words by Compositor E

All Lines		Unjustified Lines	
do-go-heere	*doe-goe-here*	*do-go-heere*	*doe-goe-here*
435	264	371	224

From these figures alone we could not assert a spelling preference strong enough to be safe for attribution purposes. But because all the pages assigned by Hinman to Compositor E were typeset in the Folio from surviving quartos, he was able to disregard Folio spellings which match the copy and thereby deduce that the compositor had the same *do-go-heere* preference as his more senior colleague Compositor B. If, *contra* Hinman, we now believe that *Hamlet* and *Othello* were set from manuscripts rather than quartos then some of his explanation loses its force for those plays, but it remains intact for *Titus* and *Romeo*. Moreover, his deduction was supported by the independent type-recurrence evidence by which he discovered the phenomenon of the intercalary formes, and the unusually high number of typographical errors in those formes.

We should grant that Hinman's explanation, that the production line which turned out the intercalary formes was created for a special compositor, is a plausible one. But it is not the only one, since we could explain the observed data just as easily by saying that Jaggard, faced with a temporary staff absence or a temporary surplus of work, had set up a separate production line which was operated by a succession of journeymen. Philip Gaskell wrote that 75% of printers in London in 1668 were journeymen.[50] The proportion was probably similar in 1623 since, as he also taught us, there were no very significant changes in the printing trade in those years. Journeymen were not associated with work of high quality. When Hamlet speaks of bad actors he fancies that 'some of nature's journeymen had made men and not made them well, they imitated humanity so abominably.' A master printer might expect to find more errors in a journeyman's work and might demand extra care over the proof-reading of his pages. A journeyman would not have a typecase to call his own but would work on whichever case was available on the day. As the person of lowest rank he would be expected to make himself generally useful, perhaps by distributing type for the regular compositors. If two journeymen of similar but not identical habits worked on the same book,

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[49] Charlton Hinman, 'The Prentice Hand in the Tragedies of the Shakespeare First Folio: Compositor E', *Studies in Bibliography*, 9 (1957), 7.

[50] Philip Gaskell, *A New Introduction to Bibliography* (Oxford: Clarendon Press, 1972), 176.

we might wrongly diagnose their differences as the inconsistency of a single workman. In other words, work by a sequence of journeymen could be expected to contain more than the usual number of errors, leave behind a greater number of surviving proof-sheets, be set from different typecases, not be part of a regular pattern of composition (a journeyman being called in only when needed), and display greater inconsistency of spelling than the work of one compositor. These are just the characteristics by which Hinman defined Compositor E.

Finally, we may also observe that whereas McKenzie used external evidence to show that at least some compositors' practice with spacing before commas was so arbitrary as to defy prediction, we have now seen internal evidence (including in the Appendix) that the Folio compositors had equally arbitrary spelling practices, at least for enough words to enable us to call the attributions into question if we wish.

Compositors F, H and I

I have given most attention so far to the five compositors noted by Hinman, because of his seminal work and because those compositors account for most Folio pages. I shall now look at the post-Hinman compositors, because the arguments for their existence rest on particularly vulnerable foundations.

Compositor F was invented by Howard-Hill. He considered the pages assigned to Compositor A by Hinman in five comedies printed early in the Folio[51]; and in *The Winter's Tale* and *Richard II*. He presented spelling counts for 17 words to show that Compositor A of the early comedies exhibits different preferences to those found in *The Winter's Tale* and *Richard II*. For convenience I give Howard-Hill's counts in Table 18, listing only the totals, since only they are material to his argument.[52] I have given the figures that Howard-Hill gave, although I disagree with many of them and it is not clear to me whether he considered all lines or only unjustified lines.

Table 18: Howard-Hill's spelling counts for the disintegration of Compositor A

	Early Comedies	*The Winter's Tale* and *Richard II*		Early Comedies	*The Winter's Tale* and *Richard II*
chuse		2	*choose*	21	
cousin		17	*cosin*	2	1
deare	2	2	*deere*	4	3
deuill		2	*diuell*	15	
graunt	1	3	*grant*	2	
grief/ue	13	24	*greefe/ue*		
Heauen		25	*heauen*	12	1
howre	1	1	*houre*	7	2
indeed	1	11	*indeede*	18	2
mistresse		7	*mistris*	22	2

[51] *The Tempest*, *The Two Gentlemen of Verona*, *The Merry Wives of Windsor*, *Measure for Measure* and *The Merchant of Venice*.

[52] Howard-Hill, 'Folio Comedies', 85-7. I have excluded his counts for 'do', 'go' and 'here' since he did not use them in his argument.

scarce	1	1	*scarse*		
suddaine	1	1	*sodaine*	3	
yeere	2	9	*yeare*		
young	2	12	*yong*	15	1

The basis of Howard-Hill's argument is clear from this table. For example, looking at the first row we see that the *choose* spelling is preferred in the early comedies but the *chuse* spelling in the later plays; similarly, *Heauen* is the exclusive spelling in the later plays but *heauen* was overwhelmingly preferred in the early comedies. Although the table contains counts for 14 words, some are of little or no value for Howard-Hill's argument. For example, since the *greefe/ue* and *yeare* spellings do not occur anywhere in the passages he considered, they are of no relevance here. Similarly, I cannot see anything significant in the counts for the variant spellings of 'dear', 'grant', 'scarce' and 'sudden'. So Howard-Hill's argument is founded on the variant spellings of between 8 and 12 words. It is fair to note that he also presented the evidence of elisions and some psycho-mechanical evidence. Nevertheless, his disintegration of Compositor A into Compositors A and F could not have been taken seriously without the spellings evidence in the table above.

To support the disintegration, Howard-Hill wrote: 'The evidence is such that it is not possible to believe that a single compositor is found in A's pages of the comedies and histories without serious doubt being cast on the principles on which compositor identifications from spelling are made.' I have already quoted his dictum that 'when compositorial practices change between groups of texts, a change of compositor is indicated.' A few years later he wrote something which may at first sight be taken to be the opposite view: 'The arguments of investigators who assume constancy of spelling practices throughout long periods of composition rest on grounds as infirm as those of the bibliographers who established minutely-detailed timetables of presswork as if a printer had only one job on hand at a time.'[53] Howard-Hill did not reconcile these dicta but we may suppose he meant that differences in spelling indicate a change of compositor unless we can assert, as he did with Compositor E, that the differences were part of a progressive change in one compositor's preferences. Howard-Hill did not suggest a progressive change in Compositor A's preferences; it would have been fatal to his argument to do so. Between the last of the early comedies, *The Merchant of Venice*, and the first of the later plays to be typeset, *Richard II*,[54] Compositor A had been found by Hinman to have worked only on *The Taming of the Shrew* and *All's Well That Ends Well*, so if there had been a progressive change in his spellings, we would be able to see evidence of it in those plays. But there is no such evidence, as the reader may verify at the [Shakespeare's Text](#) website: *Shrew* and *All's Well* show the same spellings as the early comedies, reinforcing the point that the spellings apparently changed overnight at the start of the printing of the histories.

The reader will recall that I have already demonstrated by my *faux* disintegration of Compositor B that the technique Howard-Hill used with Compositor A's spellings – to divide them into two parts and show that they differ between the parts – is invalid. Once we discount Howard-Hill's spellings data, the existence of Compositor F rests on the slender

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[53] Howard-Hill, 'New Light', 171.

[54] Hinman showed that work on *Richard II* was started before *The Winter's Tale*.

evidence of some elisions and the psycho-mechanical evidence discredited by McKenzie. Paul Werstine has already argued that Compositor F is not distinguishable from Compositor D.[55] By my argument, Compositor F was not distinguishable from Compositor A to start with. This inevitably raises the question whether Compositor D is distinguishable from Compositor A. Hinman defined Compositor D as a man who had the same *doe-goe-here* preference as Compositor A but who was much more tolerant of *do* and *go* spellings. I have already suggested that tolerance is not a sufficiently rigorous criterion on which to base compositor attributions. But it is not possible to go further than this for now. Hinman found that case z had been used in 28 of the Folio's 883 pages. He assigned most of these to Compositor D and the rest to Compositor A. Subsequent investigators assigned all of the case z pages to Compositor D. Moreover, Hinman only assigned those pages to Compositor D for which the case was either case z or it was unknown. So clearly there is a very close relationship between Compositor D and case z. Any attempt to integrate Compositor D back into Compositor A must include an examination of the type recurrence evidence by which Hinman detected the use of case z, and that work is outside the scope of this paper.

My example of the disintegration of Compositor B also rebuts a method by which O'Connor purported to distinguish Compositor D from Compositor F. Between them these two compositors set thousands of *–y* or *–ie* spellings and both overwhelmingly preferred the *–y* ending. O'Connor found some words for which he could plausibly assert an *–ie* preference by Compositor D but for which the *–ie* endings were not used by Compositor F. He put this forward as a way to distinguish the two men. But as we have seen, there are words for which the pre- and post-*3 Henry VI* Compositor B shows opposite preferences between *–y* and *–ie* endings, notably *company/companie*. The difference signifies nothing. In a sample of thousands of spellings, O'Connor was bound to find a few apparent anomalies from which he could assert a difference which is more illusory than real.[56] He wrote that the evidence he had found 'shows how mass counts may hide actual preferences', meaning that Compositor D's *–ie* preference for some words had been submerged in the total counts of *–y* and *–ie* endings. That is the opposite of the principle which MacDonald P. Jackson applied when attempting to distinguish the two compositors of the quarto of *Troilus and Cressida*. He wrote that the compositors 'were extremely variable in their spacing of commas, so that it would be quite impossible to discriminate their shares on this basis alone – it is only in the overall proportions that a significant difference appears.'[57] O'Connor saw that the totals reveal no significant difference, so he zoomed in for an anomaly he could seize upon. Jackson saw that at page level the data was intractable and so he zoomed out until the page-level variability was

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[55] Paul Werstine, 'Scribe or Compositor: Ralph Crane, Compositors D and F, and the First Four Plays in the Shakespeare First Folio', *Papers of the Bibliographical Society of America*, 95 (2001), 315-39.

[56] O'Connor, 93-6. Some of the other data O'Connor relies on is also minimal. For example, Compositor D uses the *readie* spelling just once on an unjustified line, and Compositor F never, yet O'Connor lists this as one of the words which demonstrate that they could not have been the same man.

[57] MacDonald P. Jackson, 'Punctuation and the Compositors of Shakespeare's *Sonnets*, 1609', *The Library*, 5th series, 30 (1975), 16 (footnote omitted).

submerged in the totals. As with the appeals to tolerance, the worry is that the conclusion to be reached influenced the investigator's chosen method, not the other way round.

I turn next to Compositor H, whom Taylor invented and to whom he assigned many pages in *Troilus and Cressida* that were formerly with Compositor A.[58] The direct evidence for Compositor H's existence consists solely of spellings. Taylor had used psycho-mechanical evidence to distinguish between two new compositors, H1 and H2, but then overruled that evidence to conflate them into Compositor H. This is despite the fact that he had called psycho-mechanical evidence a 'near-infallible' indicator of Compositor C's presence and had used it to rule out that presence in the pages he wanted to assign to Compositor H. Taylor distinguished Compositor H from Compositor A by using a selection of spelling variants and showing that Compositor A's preferences differed from those of Compositor H. But he had deduced Compositor A's preferences by excluding the pages that Howard-Hill had taken away from him and assigned to Compositor F. For example, Taylor observed that Compositor A almost always capitalises his 'devil' spellings and prefers *Deuil(l)* whereas Compositor H prefers *diuel(l)* spellings. But if we now treat the invention of Compositor F as not based on sufficient evidence and give his pages back to Compositor A, we acquire enough *diuel(l)* spellings to make the claimed difference between Compositor A and Compositor H doubtful. Unsurprisingly, the same happens with *heauen*: Howard-Hill had separated Compositor A and Compositor F partly by noting that Compositor A prefers to capitalise this word. Taylor separated Compositor A and Compositor H by making the same claim. But if we give the Compositor F pages back to Compositor A, we can no longer claim that Compositor A always capitalised the word and so the alleged difference with Compositor H disappears. Taylor is right that Compositor A strongly prefers *young* to *yong* whereas Compositor H spells *yong* exclusively. But we acquire more *yong* spellings for Compositor A when we give the Compositor F pages back to him, significantly weakening his *young* preference; and, given that we do not know the copy spellings for much of Compositor A's work in the Folio, we cannot be sure how strong his preference really was. The same is true for 'indeed'. In some other cases, the numbers are so small that they hardly qualify as evidence. For example, the solitary *duetie* spelling in *Troilus* is not very strong evidence for Compositor H when we consider that the spelling occurs just three other times in the whole book, once on a page (I3ᵛ) assigned by Hinman to Compositor A. Similarly, the discrepancies for some other words Taylor used – 'meet', 'pluck', 'traitor' and 'voice' – are very small, particularly when we give Compositor F's spellings back to Compositor A. What is left of Taylor's evidence are the six words 'beat', 'blood', 'dear', 'deed', 'master' and 'sweet'. For these, the disintegration of Compositor A by Howard-Hill did not have a material effect on the discrepancies Taylor highlighted. Are these six words enough to justify the existence of Compositor H? I showed earlier how variable compositors' spellings could be and how preferences could change overnight. That should cause us to doubt that they are enough.

Compositor I was carved out by Taylor mainly from Compositor C: of the 23 pages Taylor assigned to him, 21 came from Compositor C and the other 2 from Compositor A.[59] Hinman had felt obliged to invent Compositor D so that there would be someone who, while preferring *doe* and *goe*, could be called upon to tolerate *do* and *go* spellings when they were

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[58] Taylor, 'Shrinking Compositor A', 100-2.

[59] Taylor, 'Shrinking Compositor A', 103-6, 113.

found in inconvenient places. Taylor first asserted Compositor I's presence so that there would a compositor who, while preferring *heere*, could also be called upon to tolerate *here*. The pages he wanted to assign to Compositor I do not contain terminal-spaced commas and on this basis he ruled out the possibility that they were set by Compositor C. But, as McKenzie was later to show, such psycho-mechanical evidence is not as reliable as Taylor had assumed. Taylor also exhibited counts from the whole Folio for words ending in *–nesse/–nes, -ie/–y* and *–ies/–yes/–ys*. He purported to distinguish Compositor I by these counts. But he made no allowance for the influence of copy spellings (because for most Folio plays they are not known), even though he had made allowances for Folio words matching their copy spellings elsewhere in his analysis; and he did not make clear whether he had counted words in justified lines. For this reason, it is hard to know how much to rely on his counts. Nevertheless, let us look more closely at the *–nesse/–nes* spellings. Table 19 shows the counts Taylor gave:

Table 19: Taylor's counts for *–nesse/-nes* spellings

Compositor	*-nesse*	*-nes*
A	243	1j
B	815	20 (+34j)
C	132	10 (+10j)
D	59	2 (+4j)
E	163	13 (+2j)
F	35	1 (+1j)
H	44	1j
I	54	20 (+3j)
C* (*1* & *2H4*)	30	0

For the *–nes* spellings Taylor gives separate figures for justified and unjustified lines but it is not clear whether the figures in the *–nesse* column include or exclude justified lines. There are of course hundreds of *–nesse* spellings in justified lines. I have found 41 words that occur in both *–nes* and *–nesse* spellings[60] in the Folio but the total of all such spellings in all lines is 1167, which is far less than that obtainable from Taylor's table, so I am unable to understand what he counted. It is possible that the computer program which was written at his request to produce the above numbers took into account the more than two hundred words that occur in the Folio only in *–nesse* spellings, such as *gentlenesse* and *noblenesse*. That would have been wrong, since a word which is always spelt in the same way should not be counted in tables which purport to distinguish between compositors by means of spelling variants, because it will skew the data. My attempt to repeat Taylor's work, based on the words that occur in both spelling variants, produces the counts in Table 20:

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[60] basenes, bitternes, boldnes, busines, darkenes, darknes, goodnes, gouernes, greatnes, happines, hardnes, highnes, hollownes, kindnes, likenes, lownes, madnes, meeknes, newnes, quietnes, rashnes, readines, rudenes, sadnes, sauagenes, sawcines, sicknes, smoothnes, stilnes, strangenes, sweetnes, tendernes, thankfulnes, vnkindnes, vnthankfulnes, wantonnes, wearines, whitenes, wickednes, wildernes, witnes.

Table 20: My counts for *–nesse/-nes* spellings

Compositor	All Lines		Unjustified Lines	
	-nesse	*-nes*	*-nesse*	*-nes*
A	201	2	160	0
B	533	58	441	14
C	76	18	55	10
D	31	5	25	2
E	108	10	91	10
F	26	1	24	0
H	21	0	16	0
I	41	23	40	20

My table is not an exact equivalent of Taylor's because he gave separate figures for Hinman's Compositor C*, whom he was about to turn into Compositor J, a compositor who has since been rejected. But the difference is not important because the numbers for Compositor C* are small. My table does show that Compositor I set a higher proportion of *–nes* spellings than anyone else, as Taylor claimed, but this is much less convincing than it seems at first sight. For there is one compositor in the table whose division of *–nes* and *–nesse* spellings, while not particularly close to that of Compositor I, is much closer than anyone else's. Intriguingly, that compositor is Compositor C, the very man from whom Taylor had carved out Compositor I. I have shown how greatly compositors' spellings fluctuated; more exactly, I have shown that a compositor could consistently set one group of spellings for the first part of his work and then switch to a different group in the second part. Taylor picked the last 21 pages that Hinman had assigned to Compositor C, and he reassigned them to Compositor I by showing that the spellings had changed. This is essentially the same procedure that Howard-Hill had used to disintegrate Compositor A and whose startling effects I have demonstrated with my *faux* disintegration of Compositor B. It is therefore unnecessary to consider Taylor's data for the *-ie/–y* and *–ies/–yes/–ys* spellings which, even if correct, falls to the same objection.

Taylor's other pieces of evidence for Compositor I were the spellings of 'staid' and 'rank', for which Compositor A preferred the *stay'd* and *ranke* spellings. But Compositor I only used 'rank' 3 times, spelling it as *ranck, rancke* and *ranke*, which is hardly enough to assert a preference for *ranck(e)* over *rank(e)*. The 3 *staid* spellings in Compositor I's stint are good evidence, but there are only 3 of them, we do not know the copy spellings and, after the variability of spellings I have shown, I believe Taylor was far from correct to say that 'even a single piece of good evidence would be quite sufficient' to make the attributions he wanted to make.

Finally, as we have seen, since our understanding of compositors is based on their work in the Folio as a whole, any reattribution from one compositor to another has a potential domino effect which we must not ignore. Reassigning some pages from one compositor to another may change one or both of their spelling preferences for a word we did not consider when making the reattributions; that in turn may make another attribution elsewhere in the Folio either more or less safe. To see the point, consider *Macbeth*, a play whose compositor attributions have not been questioned since Hinman made them, basing them substantially on Satchell's foundational work. Hinman assigned most of page mm2[r] to Compositor B but

the last 45 lines[61] to Compositor A, on the basis of type recurrence evidence and two *Lady* speech prefixes in those lines (since Compositor A very strongly preferred that prefix but Compositor B did not). Now, these 45 lines contain a *show* spelling, a spelling which, according to Hinman's attributions for other plays, Compositor A set 15 other times in unjustified lines (even though his preferred spelling was *shew*) so it was not surprising to find him setting it on mm2^r. But all 15 of these spellings were on pages taken away from Compositor A and given to Compositor F, Compositor D or Compositor I by subsequent investigators, making the solitary *show* spelling on mm2^r highly discrepant (and not likely to be a variation to help fill up the line because *show* and *shew* take up about the same space). Anyone who divides a compositor into two has a responsibility to consider what impact that division has on our understanding of the compositor whose share has been diminished; otherwise the work is not complete.

Statistical Analysis

This section is the one most likely to scare away readers; but if the reader will stay with me, I shall try to explain the concepts I discuss without assuming more than a layman's knowledge of mathematics.

MacDonald P. Jackson's work is to be admired for its almost unique willingness to apply statistical tests to compositor attributions. Nevertheless, I shall try to show that the technique he used most often is liable to lead us badly astray. This technique is the calculation of a chi-squared (χ^2) probability in order to demonstrate that a proposed split of pages between compositors is statistically significant.

Statistical significance is a technical term. A division of data into two is said to be statistically significant if it is unlikely to have arisen by chance (and therefore it signifies something). Suppose there are 20 students in a class; 15 of them pass the final exam; and the other 5 fail. The next year there are only 19 students in the class, of whom 12 pass and 7 fail. Our intuition might not regard this difference in the pass rate as particularly significant. I shall show in a moment how we find out the probability (called p) that the difference in results between the two years arose just by chance, but accept for the moment that it is 0.5; in other words, 50%. But suppose that of the 19 students in the second class, 7 had passed and 12 failed. This time our intuition might suggest that there is a significant difference. Perhaps the second exam was harder, or the students less talented or less well taught. We find that in this case the probability is 0.02; in other words, only 2%. So our intuition is vindicated that this difference is significant: it is not very likely to have happened just by chance. It is conventional to regard a probability of less than 0.05 (in other words, 5%) as statistically significant. If the probability that the data we have observed arose by chance is greater than 5%, we think it prudent not to treat it as significant and we refrain from drawing a conclusion from the data. We have to look for other data to prove what we want to prove. It is also conventional that the probability we calculate should be the so-called 'two-tailed probability' because it is a higher number and helps to prevent us from asserting significance too readily.

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[61] Hinman, *Printing and Proof-Reading*, I, 385. Hinman gave lines 'b1-15' to Compositor B and 'b16-67' to Compositor A, but he erred because there are only 60 lines in column b. I have assumed that he intended the split to be at the end of line b15, thus giving 45 lines to Compositor A.

We may present our data in the form used in Table 21, which in statistics is called a 2x2 contingency table.

Table 21: Example of a 2x2 contingency table

	Pass	Fail
Class 1	15	5
Class 2	7	12

When the data is in this form we may calculate in two ways the probability that it arose by chance. One is the χ^2 calculation; the other is the Fisher Exact Test. The Fisher Exact Test calculation is very hard to perform without a computer although, as the name suggests, it gives us an exact answer. The χ^2 calculation can be performed with the aid of tables printed in statistical handbooks or in Excel or similar spreadsheet programs. It does not give an exact answer but gives us an upper limit, the probability we seek being guaranteed to be less than that limit. The Fisher test is accurate for both small and large numbers, while the χ^2 test is less accurate for small numbers. For small numbers there is something called a 'Yates correction' which we do not need to consider here but which makes the answer given by the χ^2 test a little more accurate. At the time that Jackson did most of his work on compositor attribution, the internet was not available, nor were personal computers with spreadsheets, so he usually performed the χ^2 calculation, although he did use the Fisher test too. Today, we should always use the Fisher Exact Test for such data because Microsoft provide a website which allows us to type in the four numbers in our table and press a button to obtain the probability.

A typical example of Jackson's statistical treatment of such data is the following, about Compositors A and B of the quarto of Shakespeare's sonnets:

> "A's nine pages of Sonnets contain 24 colons and 3 commas at the ends of the quatrains; B's fourteen pages contain 11 colons and 18 commas at the ends of quatrains. If the figures (24:3 and 11:18) are arranged in a 2x2 contingency table and analysed by Yates's Chi-square, we obtain the highly significant result χ^2 = 12.9, p < 0.0005."[62]

We may ignore the χ^2 value of 12.9 given by Jackson as it is an intermediate step in the calculation, which the Fisher test does not need. The 2x2 contingency table he referred to is given in Table 22.

Table 22: Jackson's 2x2 contingency table for the compositors of the Sonnets

	Colons	Commas
Compositor A	24	3
Compositor B	11	18

The Fisher test gives the probability (p) as 0.00009, in other words 0.009%, which is so small as to provide a very high level of statistical significance, as Jackson claimed. In this and other

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[62] Jackson, 14.

papers, Jackson used this technique to argue that the compositor attributions he was making had been confirmed by data which was statistically significant, usually very highly significant.

To show how easy it is for this technique to mislead us, I return to the Compositor B data with which I began this paper. It is only necessary to look at the 2x2 contingency table for one word, given in Table 23.

Table 23: 2x2 contingency table for Compositor B's spellings of *prethee/prythee*

	prethee	*prythee*
Page q1^r and before	32	1
After page q1^r	2	47

As the reader may easily verify from the Microsoft website, the probability here is so small as to be almost off the scale. This is very highly statistically significant data. If we follow Jackson's technique, we could say that we have proved statistically that the same compositor could not have set the pages before and after page q1^r. In fairness to Jackson I should point out that he did not make his attributions for the quarto of the sonnets on the basis of a single test. He used a set of spellings given by Alice Walker to make a tentative division of the pages in the quarto between two compositors. He then tested that division by exhibiting a number of pairs of counts taken from those divisions, for example of colons and commas at the end of quatrains, and showing that they are also statistically significant. So it may be thought that we can safely use this technique, provided we do not rely on a single test but on several tests, each of which confirms the proposed compositor attributions. But I do not think any such comfort is available to us. Apart from 'prethee' we found a dozen words for which the reader may easily verify that the spelling differences are statistically significant, so we have several independent tests to confirm a disintegration of Compositor B if we wanted to make it.

Lest it be thought that my Compositor B example is artificial, since no scholar has attempted to divide him into two halves, I present a final example. Recall that when looking at the spellings of Compositor E we found the data to be as in Table 24.

Table 24: 2x2 contingency tables for Compositor E's spellings of *do-doe*

	All Lines		Unjustified Lines	
	do	*doe*	*do*	*doe*
Quire ss and before	213	62	186	59
After quire ss	116	0	97	0

We have here two 2x2 contingency tables, one for all lines and one for unjustified lines. Performing the Fisher calculation for each one, we confirm twice that there is a statistically significant split at quire ss. The test is telling us that the probability that the pages before and after quire ss were set by the same compositor is negligible. Yet, modern scholarship accepts that all these pages were indeed set by one man, Compositor E.

What does this mean? Tests such as χ^2 and the Fisher Exact Test are widely used in many disciplines, including those in the humanities, to assert statistical significance and thereby 'prove' some proposition. They 'work' because the real-life data they test approximates sufficiently well to the mathematical models that underlie the tests. What we have discovered

is that Folio spellings are so variant that they do not conform even approximately to these models. The human factor – the sheer unpredictability of the ways in which Folio compositors spelt – is too great for these techniques to be safe to use. The mathematical models cannot account well enough for the fluctuations in the data caused by copy influence, the ever-present need to fill the lines tightly, temporary shortages of type or even just arbitrariness.

I do not mean to suggest that statistical techniques have no place in this subject. We have more than 800,000 spellings available to study, a huge sample. The data invites statistical treatment. But any techniques we use must first be tested on control samples and shown to be safe.

General Theories of Compositor Analysis

> Science is to-day so predominant in the affairs and actions of the world that a desire has grown up to bring within its scope, at least in name, many subjects which cannot properly be said to belong there, and *inter alia* to claim for textual criticism the qualities of a science and to refer to its methods as 'scientific'.
>
> (McKerrow, *Prolegomena*)[63]

With the problems I have discussed above it may be tempting to think that what we need are more rigorous, scientifically tested theories to use in our work. Although McKerrow was writing about textual criticism rather than bibliography, I want to go further and argue that it is misguided to try to invent general theories of compositor analysis and unwise to put them into practice.

There have been two attempts to advance something approaching a general theory. The first was in an early paper by Hinman. The following is a sample of what he wrote:

> "In short, the grouping of unrelated forms by appeal to coincidence of position is legitimate and desirable, but only when the coincidence occurs at several points and involves a considerable number of words of established form. It follows that we must of necessity begin our grouping of all significant spellings as either *A*-forms or *B*-forms by considering the most extensive of the subordinate groups. Thus when we have determined which, in the book being examined, is the largest group of morphologically related variants, we must call the alternative spellings in this group *A*-forms and *B*-forms. If these forms do not fall on fairly distinct groups of pages, so that these words alone furnish positive evidence of two different spelling habits, it will be very improbable that two compositors set up the book. But if the alternative forms of these words do fall on distinct groups of pages, we may proceed to determine the *A*- and the *B*-forms of the remaining words and groups of words by appeal to coincidence of position – whenever the undetermined spelling appears with numerous words of established form. The basic evidence either for or against two compositors, therefore, will be furnished by the largest single group of morphologically related

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[63] R. B. McKerrow, *Prolegomena for the Oxford Shakespeare: A Study in Editorial Method* (Oxford: Clarendon Press, 1939), vi.

significant words; but this evidence ought to be confirmed by the testimony from other words and, especially, from other groups of words."[64] [footnote omitted]

With the sincerest respect to the memory of a scholar of Hinman's distinction, this passage is an example of merely generalising the language in order to create the impression that a general theory has been advanced. There is nothing useful for anyone to take away from this kind of theorising except the obvious 'look at the variant spellings of some common words, see if you can spot a pattern, and then check other words too.' Moreover, there is no indication why this theory should be accepted and used. Hinman does not say how many books he has tested it on and whether he has followed the normal scientific procedure of making a falsifiable prediction from the theory. It would in any case have been impossible for him to do so since we possess no independent evidence which would allow us to test such a theory, at least not for Shakespeare's era. With that unavoidable handicap there is a peculiar danger in applying grand theories since, in the absence of proof or disproof, the more sweeping the theory the greater the number of false attributions it may cause us to make if it happens to be wrong.

Howard-Hill began one of his own early papers by citing Hinman's theory and he undertook to widen its scope.[65] It is unnecessary to dwell on its details since it is open to the same objection as Hinman's theory. Its author used his immense learning and close knowledge of early modern books to develop some ideas of how the data he had observed might have come about. Mimicking the inductive process used by scientists he then generalised the language in which he had formed his ideas, to give them the appearance of a general theory. But he did not bear in mind that a scientist would also take the essential deductive step of applying the theory to some data not already used to develop the theory and for which there was an independent way of testing the predictions made by the theory. Without that step the theory is just an assertion of common sense and, as any mathematician knows, and as D. F. McKenzie demonstrated in our own subject, common sense is sometimes demonstrably wrong.

We need to work on the basis that this subject is a branch of history, not science. Particular human beings at particular times and places in the past carried out particular operations on particular pieces of metal. Like other historians we are attempting to recover those events. It is as misguided to try to construct a pseudo-scientific theory like the one in the passage quoted above as it would be to construct a theory to decide who did what in the battle of Agincourt. Apart from the misguidedness of the attempt, there is also the dilemma that, since we have a fixed amount of data, if we use only a small sample of it to construct the theory then the theory may not be well-founded; but if we use a larger sample, to make the theory more secure, we will have little data left to apply it to.

The realization that we are acting as historians and not scientists is in one sense liberating. It offers a lifeline for the use of psycho-mechanical evidence to make compositor attributions. For if we treat the printing of each book as a historical event rather than as an instance of the

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[64] Charlton Hinman, 'Principles Governing the Use of Variant Spellings as Evidence of Alternate Setting by Two Compositors', *The Library*, 4th series, 21 (1941), 85-6.

[65] Howard-Hill, 'Spelling and the Bibliographer', 2, 12 et seq.

operation of a general theory then we need not treat McKenzie's work as a fatal impediment to the use of psycho-mechanical evidence collected from the Folio. It may be taken as possible that McKenzie's compositors worked in ways wholly at variance with the predictions from psycho-mechanical evidence but that the Folio compositors worked in accordance with them. If we refrain from general theories and try to give a historical account of how the Folio was printed, interpreting the surviving evidence as a historian would, we may well be at least as right as we would be through any pseudo-scientific method. This is not to say that by thinking like historians rather than scientists we can reduce the rigor we demand from ourselves. If anything our work becomes harder. A scientist giving a theory to explain something in nature may use any mathematical model that gives answers that match the observations from experiment. The question whether his theory is 'true' or 'false' is to a large extent meaningless. But when we make compositor attributions we are purporting to state historical facts. We are saying '*this* happened one day in 1623'. Recognition of the responsibility this places on our shoulders is, it seems to me, disturbingly absent from compositor attribution studies.

Conclusion

> 'It is not my intention to suggest that compositor-study is so unreliable as to be pointless…'.
>
> (Blayney, *Texts*)[66]

My work appears to have arrived at the conclusion, which Blayney hesitated to reach, that compositor attributions are chimerical, being derived by the use of certainly unproven and probably unsound methods. I have argued that scholars have misdirected themselves in trying to dress compositor attribution in the robes of science. That misdirection has been the parent of spurious theories, never tested on control samples, which have purported to define principles by which compositors set type. The complete absence of external evidence has meant that the theories cannot be refuted, only called into question. They pass muster through examinations of carefully chosen subsets of the data. The data is sometimes impossibly difficult to check and, even when it is taken on trust, its significance is a mirage.

Furthermore, investigators have no reliable method by which to make allowance for the human factor. A scientist studying the motion of a stone rolling down a hill has an almost unlimited supply of stones and hills and she knows that the same conditions will reproduce the same motion. But a compositor hunter is attempting to recover the behaviour of specific human beings at specific moments in the past. We can never know if the same compositor behaved slightly differently at two different moments, perhaps because he was influenced by copy, was trying to fill a line, or had a temporary shortage of type. Nor can we know when he was absent for a day or two and was replaced by a journeyman who had similar but not identical habits. A historian would hesitate long before asserting as a fact, in the complete absence of external evidence, that a human being must have done something on one day because he had done the same thing on another day. Yet that is what compositor hunters are obliged to do routinely.

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[66] Peter W. M. Blayney, *The Texts of King Lear and their Origins, vol. I: Nicholas Okes and the First Quarto* (Cambridge: Cambridge University Press, 1982), 154.

Finally, this paper has presented evidence to show that once we cast our net much wider than the handful of spellings which have hitherto been used to distinguish between compositors, we discover that almost every page has a majority of spellings of some or other words which are different to the ones we should expect given the alleged compositor's practice in the rest of the book. We have seen that we can almost arbitrarily disintegrate compositors into two because we can always find several words that exhibit different spellings in the two halves (and with the flourish of statistical significance too). The variety of spellings is so great that evidence can be found to support or rebut almost any attribution. The Folio compositors' spelling habits were clearly a lot more variable than we had hoped. That reality makes enough attributions doubtful to call into question the point of doing this work at all.

Hinman found typographical evidence to show that two typecases were in use throughout the printing of the Folio, and perhaps a third typecase for a few quires in the comedies. From this and the phenomenon of the intercalary formes, which Hinman also discovered, we can be fairly confident that there were at least three compositors. I have tried to show that very little else can be safely asserted as historical fact. It may be time to consider the possibility that even if the division of *Macbeth* made by Satchell is true, it is only a lucky glimpse into a past whose darkness we cannot otherwise see into.

APPENDIX

The data given in the lists below is capable of being checked by any interested reader, using the [Shakespeare's Text](#) website.

Different Spelling Variants on the Same or Adjacent Lines

A separate list is given below for each play. For example, we see that in *The Tempest* the compositor set a *he* spelling on line 794 but a *hee* spelling on the next line. I have considered only unjustified lines.

The Tempest. 794]he; 795]hee's; 924]he; 925]hee's; 927]hee's; 928]he; 980]he; 981]he,hee's; 1450]he,he; 1451]he,hee'l; 1860]goe; 1861]go,goe; 1907]he; 1908]hee'l. *The Two Gentlemen of Verona.* 249]do; 250]doe; 543]she; 544]shee; 708]sonne; 709]son; 1207]here; 1208]heere; 1220]here; 1221]heere's. *The Merry Wives of Windsor.* 110]answer'd; 111]answere; 112]answer'd; 176]mistresse; 177]mistris; 385]humors; 386]humour. *Measure for Measure.* 431]powre; 432]power; 770]honour; 771]honor; 855]shew; 856]shew,show; 881]he; 882]hee's; 1194]he; 1195]hee'ld; 1826]doe; 1827]do. *The Comedy of Errors.* 64]wee; 65]we; 407]answere; 408]answer. *Much Ado About Nothing.* 517]answer; 518]answered; 1690]shee's; 1691]she; 1962]enemy; 1963]enemie. *Love's Labour's Lost.* 26]do,doe; 153]studie; 154]study; 292]maide; 293]maid; 294]maide; 436]maide; 437]maid; 751]eies,eyes; 1537]read,reades; 1911]doe,doe; 1912]do; 2004]cry'd; 2005]cried; 2103]do,doe. *A Midsummer Night's Dream.* 243]he,he; 244]hee; 578]do,do; 579]doe; 650]queene; 651]queen; 1123]go,go,goe; 1226]we; 1227]wee; 1913]heere,here; 1945]bloody; 1946]bloudy. *The Merchant of Venice.* 1508]she; 1509]she,shee; 1738]do; 1739]doe; 1947]answer; 1948]answered; 1967]answered; 1968]answer; 1991]euerie; 1992]euery; 2682]keepe; 2683]keep. *As You Like It.* 495]do; 496]doe; 705]oh; 706]o,oh; 723]sonne; 724]son,son; 741]blood,bloudie; 1027]hee; 1028]he; 1048]citie; 1049]city; 1075]answered; 1076]answer'd; 1207]euerie; 1208]euery; 1771]do,doe; 1892]he,hee's; 2163]shee; 2164]she,she; 2242]hee; 2243]he,he. *The Taming of the Shrew.* 53]sweet,sweete; 218]she; 219]shee; 327]sweete,sweets; 710]very; 711]verie; 1172]she; 1173]shee's; 1187]she; 1188]shee; 1189]shee; 1190]she; 1272]olde,young; 1273]old,yong; 1460]he; 1461]hee; 1616]she,shee; 1903]hee'l; 1904]he; 2175]do,doe; 2314]sunne; 2315]sun; 2316]sunne. *All's Well That Ends Well.* 454]blood,bloud; 928]be,bee; 1565]deare,deerest; 1593]she; 1594]shee;

2907]hee; 2908]he; 3023]guiltie,guilty,he,he's; 3024]he,hee'l; 3025]he. *Twelfth Night*. 45]sweete; 46]sweet; 114]be,bee; 443]hee'l; 444]he; 687]wee; 688]we,we; 1004]indeede; 1005]indeed; 1522]he,hee'l; 1528]madame; 1529]madam. *The Winter's Tale*. 153]he; 154]hee'le; 155]he; 476]he; 477]hee; 695]she; 696]shee's; 905]shee; 906]she; 961]she; 962]shee'l; 2308]dye; 2309]die; 3363]son; 3364]sonne. *King John*. 460]child; 461]childe,childe; 487]sin; 488]sinne; 614]lye; 615]lies; 659]we; 660]wee; 749]shee; 750]she; 751]hee; 752]he; 753]shee; 754]she; 893]maid,maide; 995]here; 996]heere; 1039]war,war,warre; 1148]answers; 1149]answere; 1275]blood; 1276]blood,bloud; 1699]mercie; 1700]mercy; 2093]truely,truly. *Richard II*. 1294]lookes; 1295]look'd; 1296]looke; 1456]he,hee; 1659]we,wee; 1985]lie,lye; 2483]be; 2484]bee; 2550]read'st; 2551]reade; 2558]oh; 2559]o. *1 Henry IV*. 1775]he; 1776]hee's; 2552]he; 2553]hee; 2749]bee; 2750]be; 2967]leade; 2968]lead. *2 Henry IV*. 2887]hee's; 2888]he. *Henry V*. 1438]he; 1439]hee'le; 2293]hee'le; 2294]he. *1 Henry VI*. 284]she; 285]shee; 368]we; 369]we,wee; 1509]we; 1510]wee; 1511]we; 1989]drum; 1990]drumme; 2367]he; 2368]hee'l. *2 Henry VI*. 61]reade; 62]read; 640]we; 641]wee; 1369]he; 1370]hee's; 1371]he; 1486]hee'le; 1487]he; 2312]body; 2313]bodie; 3283]olde; 3284]old. *3 Henry VI*. 25]do; 26]doe; 51]he; 52]hee; 656]been; 657]beene; 1247]son,sonne; 1248]sonne; 1323]he,hee's; 1529]he; 1530]hee'le; 2466]hee; 2467]he; 2610]war; 2611]warre; 3031]oh; 3032]o; 3049]heere; 3050]here. *Richard III*. 283]graunt; 284]grant; 285]graunt; 564]marry; 565]marrie,marrie; 737]sunne; 738]sun; 1348]hee's; 1349]he's; 2906]son,sonnes; 3656]euery; 3657]euerie; 3712]bloudy; 3713]blood,blood; 3807]drum; 3808]drumme; 3882]bloudy; 3883]blood. *Henry VIII*. 214]runne; 215]run; 645]hee's; 646]he; 1054]he; 1055]hee'l; 1056]he; 1615]queene; 1616]queen; 2024]deede; 2025]deeds; 2794]shee'l; 2795]she; 3200]hee; 3201]he. *Troilus and Cressida*. 67]look'd,looke; 134]she; 135]shee; 165]hee; 166]he; 279]he; 280]hee; 349]hee; 350]he; 745]he,hee'l; 1396]he; 1397]hee; 1542]go,goe; 1980]deare; 1981]deere; 2287]do,do; 2288]doe; 2748]shee's; 2749]she's; 3002]do; 3003]doe; 3311]do,doe. *Coriolanus*. 503]drum; 504]drummes; 1565]hee,hee; 1566]he; 1701]do; 1702]doe; 1790]hee'l; 1791]he; 2345]traitor; 2346]traytor; 2390]bee; 2391]be,be; 2406]bee; 2407]be,be; 2448]o,oh; 2709]speak'st,speake; 3010]flies; 3011]flyes; 3465]countrie; 3466]country. *Titus Andronicus*. 242]do; 243]doe; 327]son; 328]sonnes; 1086]do; 1087]doe; 1645]she; 1646]shee's; 1647]she; 2017]he; 2018]he,hee'l; 2263]deuill,diuels; 2515]suns; 2516]sunne. *Romeo and Juliet*. 219]she; 220]shee; 261]she; 262]shee's; 312]read; 313]reades; 347]show; 348]shew,shewes; 621]shewes; 622]showes; 796]sunne; 797]sun; 1415]thanke; 1416]thanks; 1677]speaks; 1678]speakes; 1686]he's,hee's,hee's; 1954]happy; 1955]happie; 1976]o; 1977]oh; 2017]do; 2018]adoe; 2361]speak; 2362]speak'st,speake; 2595]oh; 2596]o,o; 2656]she; 2657]shee's; 2943]oh; 2944]o. *Timon of Athens*. 513]he,hee'ld; 904]hee's; 905]he; 1081]denied; 1082]deny'de; 1217]heere; 1218]here's; 1349]be,bee. *Julius Caesar*. 1209]reade; 1210]read; 1684]read; 1685]reade; 1804]hee; 1805]he; 2116]be,bee; 2186]die; 2187]dye; 2511]he; 2512]hee's; 2541]lyes; 2542]he,lies; 2543]hee; 2544]he. *Macbeth*. 127]drum; 128]drumme,drumme; 1741]he; 1742]hee's; 2189]he; 2190]hee's; 2483]sonne; 2484]son. *Hamlet*. 730]guifts; 731]gifts; 3154]queene; 3155]queen. *King Lear*. 219]she,shee's; 826]she; 827]shee'l; 1174]he; 1175]hee's; 1806]goe; 1807]go; 2709]he; 2710]hee's; 2711]he; 2877]go; 2878]goe; 3148]dye; 3149]die. *Othello*. 1957]shee'l; 1958]she; 2139]lyes; 2140]lies; 2229]speake; 2230]speak; 2333]houres,howres; 3117]oh; 3118]o; 3159]o,oh; 3160]o,o; 3178]oh; 3179]o; 3226]o; 3227]oh; 3245]she,shee'l; 3354]shee's; 3355]she; 3358]she; 3359]she,shee'l. *Antony and Cleopatra*. 373]she; 374]shee; 378]be; 379]bee; 541]deed; 542]deede; 2135]shee; 2136]she; 2474]soldiers; 2475]souldiers; 3174]she; 3175]shee's; 3194]he,hee's; 3331]he; 3332]hee'l; 3333]he. *Cymbeline*. 1277]she,shee; 1868]he,hee's; 2274]oh; 2275]o; 2524]he; 2525]he,hee'l; 2648]he,hee; 2732]hee's; 2733]he; 2756]he; 2757]hee's; 2991]he,hee'l; 2992]hee'l; 3093]he; 3094]hee; 3764]read; 3765]reades.

Unique Spellings

The table below gives lists for each compositor of some spellings of common words which he set on only one page, while setting a different spelling at least five times, often much more, elsewhere in the Folio. As usual, I have considered only unjustified lines but a similar list can be presented for all lines.

Compositor A. Aa1ᵛ: guilty[137]; c6ʳ: humor'd[1528]; f2ᵛ: yeare[2372]; χgg4ᵛ: keep'st[2547]; h2ʳ: heauy[348]; h2ᵛ: cosin[383]; h2ᵛ: vncle[407]; i2ʳ: diuell[1856]; i3ʳ: beates[2115]; i4ʳ: sun[2347]; k3ʳ: weary[223]; l1ᵛ: fury[1339]; o4ʳ: down[17]; aa5ᵛ: crie[1125]; aa5ᵛ: suite[1163]; mm2ʳ: show[565]

Compositor B. S5ᵛ: been[854]; V6ᵛ: you'le[1293]; c2ʳ: sudden[520]; d5ʳ: thank[2805]; g3ʳ: suit[675]

Compositor C. D4ᵛ: find[668]; F4ʳ: alreadie[762]; G2ʳ: readie[1830]; I4ʳ: graunt[307]

Compositor D. F5ʳ: suit[1077]; K6ᵛ: thanks[2548]; N4ʳ: pitty[802]; N6ᵛ: down[1462]

Compositor E. dd3ʳ: you'l[1337]; dd4ʳ: sirra[1529]; ee5ʳ: readie[577]; Gg3ʳ: graunt[407]; qq4ʳ: howre[510]; ss1ʳ: scarse[2801]; ss1ᵛ: mercie[2912]; ss2ᵛ: breefe[3144]; ss5ᵛ: ladie[515]; xx6ʳ: acte[1424]

Compositor F. A1ᵛ: howr's[124]; A1ᵛ: indeed[200]; A1ᵛ: mind[187]; B3ᵛ: companie[2245]; B5ᵛ: need'st[319]; G6ʳ: cries[2795]; G6ᵛ: marrie[2917]

Compositor H. ¶4ʳ: deeds[1190]; ¶6ʳ: wars[1805]; ¶¶5ʳ: lies[3064]

Compositor I. t4ᵛ: voice[405]; v1ʳ: speaks[1071]; v3ʳ: counsaile[1583]; v3ᵛ: greefes[1720]; nn6ʳ: look[377]

Spectrum of Spelling Preferences

The lists below for Compositor A and Compositor B show, for a large selection of words that occur in two spelling variants, the number of times the compositor set each variant, considering only unjustified lines. As is clear from these lists, each compositor had some very strong preferences, some very weak ones, and everything between those extremes. For example, we can see from the first line that Compositor A set *already* 7 times but *alreadie* 10 times. In most cases the count for the short spelling is given first, but that is immaterial since my purpose is to show the spread of spelling variants, not the quantity of any particular variant. The reader may confirm at the [Shakespeare's Text] website that the same variation is found in all compositors.

Compositor A. act[16,0]; already[7,10]; answer[35,18]; back[37,17]; be[840,5]; beat[22,1]; beauty[0,10]; been[31,75]; behind[11,8]; blood[173,8]; body[33,0]; brief[8,0]; child[21,0]; choose[0,7]; city[0,22]; company[10,11]; counsel[14,11]; country[2,8]; cousin[1,70]; cry[49,1]; dear[41,4]; deed[37,6]; deny[14,4]; devil[1,21]; die[9,65]; do[10,370]; down[1,90]; drum[10,19]; duty[2,16]; either[10,23]; enemy[3,25]; every[77,0]; eye[126,0]; feed[4,2]; find[17,40]; fly[55,1]; fury[1,7]; gift[10,0]; go[7,188]; grant[3,16]; grief[57,0]; guilty[1,12]; happy[25,12]; he[633,116]; heavy[1,25]; here[273,26]; honesty[0,7]; honour[111,6]; hour[35,25]; humour[1,7]; indeed[23,12]; keep[1,65]; kind[20,15]; lady[103,0]; lead[8,3]; liberty[0,6]; lie[0,66]; lip[4,11]; look[16,125]; madam[0,47]; maid[7,0]; majesty[2,68]; marry[15,0]; meet[48,14]; mercy[22,7]; merry[12,0]; mighty[0,28]; mind[18,45]; mistress[8,17]; need[29,15]; oh[115,72]; old[53,4]; pity[15,10]; power[71,9]; prethee[11,8]; proud[1,29]; queen[1,128]; read[12,20]; ready[11,8]; run[13,31]; scarce[8,0]; she[109,48]; show[1,67]; sin[4,23]; soldier[0,65]; son[1,107]; speak[4,141]; study[3,4]; sudden[27,3]; suit[17,1]; sun[1,35]; sweet[55,4]; thank[7,42]; think[5,133]; traitor[2,36]; truly[8,0]; twenty[0,23]; uncle[1,55]; very[62,0]; voice[4,37]; wait[8,0]; war[28,65]; we[475,80]; we'll[4,42]; weary[1,12]; win[6,16]; year[1,37]; you'll[0,11]; young[2,44]

Compositor B. act[43,26]; already[41,10]; answer[161,19]; back[7,129]; be[2389,55]; beat[7,43]; beauty[26,22]; been[1,94]; behind[5,28]; blood[387,20]; body[92,17]; brief[8,23]; child[5,67]; choose[28,0]; city[34,21]; company[45,18]; counsel[43,15]; country[41,32]; cousin[54,14]; cry[93,34]; dear[19,193]; deed[90,31]; deny[67,22]; devil[72,6]; die[77,174]; do[1348,20];

down[3,206]; drum[21,40]; duty[30,37]; either[117,13]; enemy[58,17]; every[159,35]; eye[367,36]; feed[20,28]; find[11,188]; fly[113,20]; fury[18,12]; gift[23,20]; go[588,18]; grant[34,8]; grief[5,126]; guilty[22,9]; happy[63,15]; he[2257,120]; heavy[48,23]; here[61,753]; honesty[18,15]; honour[223,93]; hour[177,6]; humour[11,25]; indeed[100,31]; keep[12,184]; kind[4,97]; lady[186,53]; lead[17,44]; liberty[21,12]; lie[71,139]; lip[44,22]; look[41,331]; madam[191,9]; maid[49,31]; majesty[60,27]; marry[52,31]; meet[49,72]; mercy[51,19]; merry[36,16]; mighty[38,7]; mind[7,120]; mistress[108,6]; need[47,46]; oh[487,406]; old[202,9]; pity[73,20]; power[151,47]; prethee[33,49]; proud[69,0]; queen[12,236]; read[41,43]; ready[38,18]; run[62,14]; scarce[3,30]; she[659,62]; show[11,187]; sin[11,56]; sirrah[21,25]; soldier[51,88]; son[34,297]; speak[23,465]; study[5,4]; sudden[1,40]; suit[1,48]; sun[37,50]; sweet[216,36]; thank[1,149]; think[22,411]; traitor[97,2]; truly[41,5]; twenty[29,13]; uncle[15,25]; very[178,43]; voice[27,44]; wait[7,21]; war[50,177]; we[1273,16]; we'll[116,2]; weary[24,8]; win[38,11]; year[60,23]; you'll[52,1]; young[119,31]

Most Pages Show Only One Spelling Variant

For the same set of common words used above, I now give the total number of pages on which the word occurs at least twice, and the number of those pages on which only one of its spelling variants is seen. As usual, all counts are taken from unjustified lines. We see from the first entry that the word 'act' occurs twice or more in unjustified lines on 10 pages, of which 7 show only one spelling variant, either *act* or *acte* (including plurals). The evidence is clear that for all words most pages show only one spelling variant.

act[10,7]; already[9,6]; answer[67,46]; back[54,45]; be[829,771]; beat[20,14]; beauty[19,15]; been[59,46]; behind[4,4]; blood[189,160]; body[33,29]; brief[9,7]; child[29,22]; choose[7,7]; city[19,13]; company[18,14]; counsel[18,15]; country[14,8]; cousin[37,33]; cry[40,26]; dear[96,78]; deed[39,25]; deny[25,16]; devil[31,28]; die[100,79]; do[642,523]; down[91,90]; drum[21,9]; duty[24,19]; either[40,37]; enemy[20,15]; every[80,70]; eye[196,171]; feed[8,5]; find[83,70]; fly[42,37]; fury[3,1]; gift[11,10]; go[353,309]; grant[11,9]; grief[57,53]; guilty[5,4]; happy[21,15]; he[722,546]; heavy[22,19]; here[475,376]; honesty[5,3]; honour[152,100]; hour[58,50]; humour[11,8]; indeed[42,35]; keep[81,79]; kind[26,23]; lady[130,110]; lead[18,12]; liberty[6,4]; lie[93,58]; lip[17,12]; look[213,161]; madam[97,85]; maid[32,17]; majesty[52,43]; marry[35,28]; meet[48,33]; mercy[21,14]; merry[21,19]; mighty[9,8]; mind[52,45]; mistress[52,47]; need[27,21]; oh[399,254]; old[91,82]; pity[31,28]; power[80,65]; prethee[19,19]; proud[26,24]; queen[113,97]; read[34,19]; ready[13,12]; run[28,18]; scarce[3,3]; she[310,230]; show[76,61]; sin[28,18]; sirrah[11,8]; soldier[44,33]; son[149,119]; speak[248,223]; study[5,1]; sudden[12,11]; suit[16,16]; sun[33,17]; sweet[132,100]; thank[60,51]; think[214,184]; traitor[33,30]; truly[9,7]; twenty[15,14]; uncle[32,29]; very[101,88]; voice[19,14]; wait[6,5]; war[79,65]; we[555,506]; we'll[39,38]; weary[6,4]; win[15,12]; year[32,25]; you'll[7,7]; young[59,47]

Sample List of Discrepancies

It would be unfeasible to list all discrepancies here but I hope to convince the reader that they are abundant by listing a sample of them for a sample page in every quire. The pages are listed below in reading order. For each page I list a set of words for which there is a discrepant spelling on the page. For example, looking at the first entry we see that on page A6ʳ the compositor set a spelling of 'deny' which was different to his majority spelling elsewhere in the Folio.

To check any entry in this list the reader may use the Concordance at the [Shakespeare's Text](#) website to find the discrepant spelling on the page, note the compositor the page is attributed to, and then do another search to see the spelling variants the compositor set for that word on all pages. This process, easy enough to do for at least a few words although inevitably tedious for more than a few, will allow the discrepant spelling to be seen in the context of the compositor's usage elsewhere in the Folio. I

have produced the list below using only unjustified lines and the compositor attributions in the Norton facsimile, second edition. I obtained very similar results by using all lines and by using Hinman's original attributions: the discrepancies differ but their quantity and quality remains about the same.

A6ʳ (deny, die, every, eye, fly, he, indeed, marry, sun, very); B2ʳ (answer, beat, blood, do, son, sun); C3ʳ (blood, company, duty, honour, oh, proud, sun); D4ᵛ (find, fury, lie, mistress, she, young); E6ʳ (blood, eye, find, oh, sin); F6ʳ (beauty, body, deed, die, indeed, lie, mercy, oh, ready, voice); G2ᵛ (deny, die, every, lie, mercy, pity, power, sin, very, year); H4ʳ-a (do, go, honour, hour, merry, oh, year); I2ʳ (company, deny, go, liberty, need, oh, old, twenty, voice); K3ᵛ (blood, dear, eye, here, honour, hour, sweet); L6ᵛ (dear, do, eye, go, maid, oh, sweet); M6ʳ (beauty, counsel, dear, deny, every, eye, guilty, heavy, honesty, madam, majesty, sin, very, weary); N4ʳ (blood, do, eye, fly, happy, honour, lie, oh, pity, run, show); O2ʳ (brief, devil, do, go, hour, merry, mind, wait); P4ʳ (blood, body, enemy, every, feed, honour, indeed, very); Q6ᵛ (company, die, enemy, feed, honesty, lie, look, merry, pity, prethee, voice); R1ʳ (answer, body, city, company, cry, die, fly, go, look, oh, pity, she, sin, sun, weary); S3ʳ (deed, every, eye, gift, happy, here, indeed, lady, merry, mighty, oh, ready, sirrah, twenty, very, voice); T4ʳ (beat, body, city, company, every, feed, liberty, look, marry, oh, prethee, very); V5ᵛ (behind, blood, brief, deed, every, eye, fly, honour, maid, marry, mighty, pity, scarce, she, young); X2ʳ (already, drum, honesty, honour, indeed, lady, maid, marry, need, oh); Y5ᵛ (die, hour, maid, prethee, sun, sweet, very, year); Z5ʳ (company, lady, lip, meet, twenty, year); Aa3ʳ (answer, counsel, look, oh, read, she); Bb2ʳ (maid, oh, power, prethee, run); Cc1ᵛ (answer, dear, either, oh, power); a4ᵛ (beauty, city, eye, fury, here, indeed, lady, lip, marry, mighty, pity, read, traitor); b4ᵛ (blood, body, either, happy, heavy, lead, look, maid, majesty, need, oh, ready); c5ᵛ (back, dear, drum, happy, oh, sweet, we, we'll); d5ʳ (deed, keep, lie, need, oh, thank); e5ᵛ (back, here, kind, meet, need, oh, read, ready, we); f3ᵛ (behind, happy, here, indeed, kind, meet, we); g6ᵛ (counsel, he, hour, indeed, meet, old, voice, war, we); χgg4ʳ (he, here, hour, meet, oh, pity, power, she, war); h3ᵛ (act, counsel, duty, honour, kind, power, read); i3ʳ (beat, company, country, find, hour, mind, think); k3ʳ (already, been, behind, drum, honour, run, weary, win); l3ʳ (behind, blood, either, honour, meet, oh, thank); m1ʳ (die, either, madam, maid, majesty, oh, soldier, war); n4ᵛ (cry, either, lip, majesty, oh, prethee, sweet, war); o3ʳ (beauty, body, cry, deed, die, enemy, meet, need, oh, war); p3ᵛ (counsel, enemy, guilty, lady, she, war, win); q1ʳ (here, indeed, liberty, lie, majesty, need, soldier, war, young); r1ʳ (country, every, maid, majesty, marry, need, son); s3ʳ (back, happy, here, hour, look, meet, pity, she); t2ʳ (country, drum, soldier, sun, think); v1ᵛ (do, find, go, hour, meet, oh, sun); x1ᵛ (beauty, down, honesty, pity, sun); χ2ʳ (beauty, go, here, need, oh, suit, sun); ¶2ʳ (act, go, honour, meet, sun, young); ¶¶2ᵛ (cry, dear, gift, pity, sudden, sweet); ¶¶¶1ʳ (war); aa2ᵛ (beat, he, lie, look, oh, pity); bb4ʳ (city, country, lie, mercy, need, soldier, voice); cc2ʳ (country, cry, duty, grant, honour, lady, lip, oh, soldier, sun); dd6ᵛ (child, cry, dear, devil, fly, grief, indeed, mind, oh); ee1ᵛ (dear, devil, find, go, mind, oh, sun, traitor, uncle); ff3ᵛ (dear, deed, do, find, heavy, here, honesty, liberty, show); gg2ʳ (beauty, blood, dear, enemy, fury, here, merry, weary); Gg5ᵛ (gift, indeed, need, oh, think, wait, year); hh1ᵛ (every, grant, liberty, maid, oh, sun, young); kk4ᵛ (dear, grant, humour, look, need, run); ll3ᵛ (die, duty, heavy, meet, ready); mm1ʳ (behind, country, die, kind, run); nn6ᵛ (blood, go, here, hour, lie, oh, read, show); oo6ᵛ (die, enemy, fly, honour, lead, meet, need, oh, power, run, she, very); pp1ʳ (back, die, majesty, oh, very); qq2ᵛ (answer, dear, eye, gift, he, here, majesty, sun, think); rr5ʳ (drum, here, need, oh, power, read, sweet); ss5ʳ (counsel, dear, enemy, find, here, maid, oh, son, very, young); tt3ʳ (dear, devil, honesty, power, sin, soldier, suit, win); vv2ʳ (cry, fly, heavy, honesty, lip, oh, run, sweet); xx4ʳ (company, dear, feed, lie, maid, oh, power, win); yy2ᵛ (be, indeed, lead, oh, think, win, young); zz5ᵛ (dear, feed, fly, read, thank, think); aaa3ᵛ (already, body, look, maid, mind, need, oh, read, year); bbb3ʳ (either, fly, honour, lie, oh, power, soldier, sweet).

Spelling Preference Reversals at Halfway Points

For each compositor this section lists the words for which his spelling preference reverses at the halfway point of his stint (considering only unjustified lines as usual). The signature given is of the

page at the halfway point. The halfway points and the words are of course different for each set of compositor attributions. Using Hinman's original attributions the list is:

Compositor A (h6v). answer; back; behind; child; choose; counsel; die; drum; either; fury; indeed; lip; madam; mistress; need; prethee; suit; we'll; win; young.

Compositor B (r4v). beauty; city; country; duty; gift; honesty; humour; need; oh; prethee; read; ready; sirrah; study; twenty; voice.

Compositor C (P4v). brief; dear; devil; enemy; humour; majesty; queen; study; truly.

Compositor D (L2r). company; dear; do; eye; meet; need; oh; pity; read; sirrah; sweet; year.

Compositor E (ff3v). beat; beauty; child; choose; city; country; find; fury; gift; go; heavy; here; majesty; merry; mind; sun; traitor; wait; we'll; you'll.

Using the current attributions, from the Norton facsimile, the list is:

Compositor A (k3v). already; behind; drum; hour; kind; mind; prethee.

Compositor B (q1r). beauty; city; company; country; duty; fury; gift; honesty; humour; need; oh; prethee; read; ready; sirrah; study; twenty; voice.

Compositor C (K4v). choose; devil; hour; liberty; merry; oh; run; study; wait.

Compositor D (N4v). beat; body; dear; do; feed; happy; honour; very; voice; year.

Compositor E (Gg3r). answer; choose; company; country; cry; dear; deny; devil; drum; enemy; find; gift; majesty; marry; oh; sudden; suit; traitor; we'll; you'll; young.

Compositor F (C5v). answer; counsel; deed; die; fly; oh; power; show; son; suit; sun; war.

Compositor H (2¶2r). cry; enemy; gift; honour; mighty; traitor.

Compositor I (x3r). cry; hour; mind; oh; queen; suit.

Spelling Preference Reversals between Even and Odd Plays

For each compositor this section lists the words for which his spelling preference is different between even and odd plays. Using Hinman's original attributions the list is:

Compositor A. answer; back; behind; child; choose; company; counsel; dear; deed; devil; drum; either; feed; fury; heavy; hour; indeed; kind; lip; madam; meet; mistress; need; proud; study; suit; traitor; truly; win; you'll; young.

Compositor B. beauty; city; feed; gift; honesty; marry; need; twenty; uncle.

Compositor C. dear; deny; die; duty; enemy; humour; liberty; lie; majesty; queen; study; suit; traitor; truly.

Compositor D. company; dear; deed; devil; do; every; eye; mistress; oh; read; show; sweet; very; we'll.

Compositor E. beauty; child; choose; cry; dear; deed; deny; enemy; find; fury; go; here; marry; merry; mistress; pity; sin; sudden; sun; traitor; voice; we'll.

Using the current attributions, from the Norton facsimile, the list is:

Compositor A. answer; back; behind; company; feed; hour; indeed; kind; mistress; need; pity; ready; study.

Compositor B. beauty; city; duty; feed; gift; honesty; marry; need; twenty; uncle.

Compositor C. choose; counsel; dear; honour; humour; liberty; majesty; merry; queen; study; suit; truly; wait; win.

Compositor D. answer; body; every; eye; oh; power; show; sweet.

Compositor E. child; choose; dear; deed; devil; find; gift; go; heavy; here; honesty; oh; sin; suit; sun; traitor.

Compositor F. counsel; deed; die; fly; grant; maid; oh; power; show; voice.

Compositor H. None, because this compositor is found in just one play.

Compositor I. blood; cry; hour; lie; oh; read; show.

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