

## Outlook and assessment

The large number of tables and evaluations, which has impeded the flow of reading, has been essential to bring the real situation of the genesis of the plays closer to reality. There were two situations in which an author could be determined with certainty using Rolling Delta. The first is the example of *Tamburlaine 1*, where the corresponding text *Tamburlaine 2*, with a window size of 1000 words, already captures Christopher Marlowe as sole author.

The other situation is given with Delta, when the entire text length is used for evaluation and an author is then determined. The prerequisite, however, is that the text really has only one author. If a collaborative text exists, the extent of the collaboration, i.e. the number of contributors, must be derived from somewhere between the window size of 1000 words and the total length.

Unfortunately, there is no formula that can help to determine the exact window size with which collaboration can be clearly established in relation to a specific text. Presumably, every text has its own individual window size somewhere, the evaluation of which corresponds to the real situation in which it was created. The frequently used window size of 5000 Words is a subjectively determined empirical value, which can only capture collaborations with a degree of haziness.

Maciej Eder had already recognised that smaller windows can provide incorrect information, not only in terms of the number of contributors but also in terms of attribution. The window size of 10,000 words, on the other hand, often already corresponds to the result of the delta value related to the whole text. Another problem is the sensitivity of Rolling Delta and the window size chosen. When is it a concrete contribution of a second or third author or a plagiaristic takeover in the sense of a borrowing or a parody?

There were plenty of such examples, one thinks of the many Greene signals. Greene had complained vehemently in his writings about authors with borrowed plumes and probably had Marlowe, Shakespeare and Kyd in mind. Further methodological steps were to be taken to remedy this situation, mainly the creation of classes by means of verified texts against which the research texts could be assessed. But here, too, there were not only similarities, but also discrepancies in the information, which could only partly be attributed to the specific mathematical kernel of nsc, svm and delta.

Rizvi's database with N-grams and collocations could be used for support, but it never had the binding force that it was still assumed to have in the nineties of the last century. At that time, it was also necessary to make use of secondary literature with its assumptions, inferences and settings in order to develop a coherent narrative by bringing together matching parts of puzzles. This can be illustrated in several core theses.

(1) There are some plays that prove to be stylistically identical or at least similar to Marlowe's *Tamburlaines*. The fact that they have been linked to other authors' names by literary history was not based on any secure foundations, or in the case of Kyd's *Cornelia* on personal circumstances in the attribution of the manuscript.

(2) The actual remaining Marlowe canon is stylistically hardly connected with the two *Tamburlaines*, so that the classifications in Figure 8 (stylistic features) remain fully valid. Even the more recent secondary literature by renowned experts sees Marlowe as author as the result of research carried out in the nineteenth and twentieth centuries. There is no contemporary empirical evidence for Marlowe and his canon. This only comes into existence with publications from 1594 onwards. The book title *Phantom Marlowe* attempts to do justice to this situation. The stages of oscillation between a phantom reality and a subjectively developed one are based on Marlowe as a person, on the production circumstances of theatrical works in the early 1590s and on the literary-historical modes of attribution of texts.

(3) The order 'first Marlowe, then Shakespeare' can no longer be maintained after the results of R Stylo. The analysis of a number of early Shakespearean plays and the stylistic features of Shakespeare in alleged Marlowe texts places Shakespeare right at the centre of the formative forces and developments of the Elizabethan play in the early 1590s.

(4) At the same time, the false Marlowe attributions unleashed a flood of literary-historical research which, for example, worked out the influence of Marlowe on Shakespeare's work without even considering that in most cases they were comparing Shakespeare with Shakespeare.

(5) As the example of *Henry V* in Figure 13 shows, R Stylo also succeeds in tracing the actual influence of Marlowe in Shakespeare's work.

(6) A further result which was only made possible by the use of R Stylo, is the exposure of Shakespeare's practice of taking up early plays and re-conceptualising them. At the same time, the theory of the reconstruction of plays

from memory by actors, or the incomplete recording of texts by printers taking notes, proved to be invalid. Early Shakespearean plays such as *King Lear* were forerunners of *King Lear*, *A Shrew* was the early text of *The Shrew*, and the two parts *Contention 1* and *Contention 2* were published in 1623 in the first folio edition as *1- 3 Henry VI*. Thus the conventional dating in the *Shakespeare Handbook* by Ina Schabert, for example, must also be questioned.

(7) Other examples of Shakespeare's revision of early collaborative texts include *The True Tragedy of Richard III* ([www.shak-stat.engsem.uni-hannover.de/authortrtrag3.html](http://www.shak-stat.engsem.uni-hannover.de/authortrtrag3.html)), *Richard III* ([www.shak-stat.engsem.uni-hannover.de/authorrichiii.html](http://www.shak-stat.engsem.uni-hannover.de/authorrichiii.html)), *The Troublesome Reign of King John* ([www.shak-stat.engsem.uni-hannover.de/authortroublejohn.html](http://www.shak-stat.engsem.uni-hannover.de/authortroublejohn.html)) and *King John* ([www.shak-stat.engsem.uni-hannover.de/authorjohn.html](http://www.shak-stat.engsem.uni-hannover.de/authorjohn.html)).

(8) The cult of genius that was ignited by Shakespeare ensured that high expectations of the quality of plays obscured the assessment of earlier efforts which had all the hallmarks of Shakespearean style but which, because of their simplicity, were at best considered apocryphal or anonymous texts. R Stylo analyses of *Fair Em* and *Mucedorus*, however, confirm the style of Shakespeare. The same applies to the commercially successful comedy *The Merry Devil of Edmonton*.

## Reverberations

The Elizabeth Tower of Westminster Palace is still covered in scaffolding and from Big Ben, the heaviest bell in the clock tower, heavy plastic sheeting hangs down, obstructing the view of the tower, at least until the clock mechanism and the chimes are restored. However, just in time for the four hundredth anniversary of Shakespeare's first folio edition of 1623, a further attraction is to be added to the mechanism. The carillon of Big Ben is to have a carousel of figurines added to it. An electrostatic membrane will pick up the chime, trigger an electronically controlled mechanism and small doors will open on three different tracks, from which famous play figures from Elizabethan times will emerge and begin their rotation. Now the space in the clockwork is very cramped so that it would not be possible to accommodate an adequate number of figures, and anyway Big Ben is far too high for the revolving figurines to be seen from Westminster Bridge or similar locations. But from the coronavirus pandemic the experience has been gained that transmitting images directly into living rooms could strengthen a

sense of community. So technicians built only four figures in outline and used a projection technique that had previously only been used with an external light source to give each cloth doll a changeable face and shape. This obviated the need for more than four figures.

Projection was done from within each doll with many small electronically controlled projectors, which could turn Shakespeare into Marlowe in seconds, just as has happened in the long history of literature. These playwrights appear at certain times with their most important protagonists, thus fulfilling educational and didactic purposes that the school system can no longer provide. For Prime Minister Boris Johnson, the installation of the carousel may well represent the most significant success of his period of office - apart from leaving the EU of course.

It is clear that the programmers have a big job to do, as do the BBC figure designers, who made three basic types of figurine. One long, scrawny figure, one small and slim and two medium-sized ones. Each one can be expanded at any time by inflating them.

The carousel will start revolving at one o'clock in the afternoon. From the outer door there steps a medium-sized figure, the young actor William Shakespeare, followed by a buxom blonde, the daughter of a Manchester miller. On the opposite side, from the open door, a slender young man named Marlyn emerges with a Persian goatherd in tow. The pairings meet in the middle. Shakespeare and Marlyn greet each other briefly, for they know each other. The blonde can't do anything with the shepherd, she has William the Conqueror in mind.

At the second stroke of the bell, two adjacent doors open. Shakespeare emerges from one, a scholar from the other. Together they start their journey, confer with each other and finally Shakespeare stops and watches the scholar being swallowed up by the gates of hell at the end of the track.

At three o'clock Marlyn emerges from the mouth of hell and makes his way with figures accompanying him to left and right. One is on the run to Turkey, the other is a Greek goddess bearing the regalia of folly and ruin.

The fourth heavy blow of Big Ben causes Shakespeare to parade across the stage with the *Jew of Malta*, while the oncoming Thomas Lodge holds up a large mirror to them. At a distance, Shakespeare and Barabas are followed by a shrew and the tinker Sly. After the door closes behind Lodge, it opens again, and the merchant Arden shuffles after those hurrying away.

At five o'clock it is tea time in England. The Duke of Guise ponders whether he should open the door of the Parisian tea room at the end of the path he has passed along. He does so in memory of Julius Caesar's fate. King Leir also follows him through this door, where nasty surprises await him.

At chime number six, Shakespeare and Kyd take the English King Edward II into their midst and lead him to the other door, which after closing opens again immediately and lets Marlyn emerge with Bethsabe in a bikini and Cornelia, the latter engrossed in her reading.

At seven o'clock Shakespeare and Kyd let the victims of a history play enter the carousel one after another. Both stand on the inner tracks, while on the outer lane the Dukes Humphrey and Suffolk pass one after the other, then the Cardinal of Winchester and the rebel Jack Cade, and finally the Duke of York.

At eight o'clock in winter it is dark in England too, and goblins and clowns fool around, but when midnight strikes and the day is over, Henry VI makes his way once more, this time carrying the first folio edition of 1623 and a lighted candle in his hands.