A Rhapsody of Words!

Word formation in Shakespeare's neologisms

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Abstract

As the world commemorates the 400th anniversary of the passing of William Shakespeare, I find it fitting that my thesis is about examining the Bard's status as a word coiner and his use of word formation methods to form the neologisms. My thesis answers the following three questions:

1. *To what degree has William Shakespeare's status as a coiner diminished due to the results of new research?*
2. *Do words coined in the corpus of Shakespeare's texts reveal any recognisable trends with regard to the word formation methods used?*
3. *Did Shakespeare strategically choose a certain category of character to give tongue to his neologisms?*

The aim of the thesis is to establish Shakespeare's status as a neologiser, identify any discernible trends in his use of the methods of word formation available to him, and examine if the poet had a conscious strategy when distributing his neologisms among the different characters in his plays. My research for the thesis is primarily based on the *OED Online* 'First Cited in Shakespeare' list of 2015/2016. Some data is also obtained from the *Open Source Shakespeare* database.

My methodology for researching the first question has been to compare the results of Crystal's (2008) categorisation with my own categorisation of the *OED Online* 'First Cited in Shakespeare' list of 2015/2016. Crystal's criteria for categorisation were used for my categorisation. My findings reveal that Shakespeare retains his status as the most prolific neologiser in English.

When answering the second question, I find that Shakespeare's use of word formation clearly reveals his penchant for using familiar material to create catchy neologisms, catering to the majority of his audiences. However, he is also no stranger to flirting with the more new-fangled foreign expressions of the time.

My research for the third question shows that Shakespeare did not consciously distribute his neologisms among strategically chosen characters such as men/women, old/young, villain/hero or main/secondary characters. However, it is clear that he fits his neologisms to the social strata of each character, e.g. nobles, middle class and commoners.

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I dedicate this thesis to my husband, Peter Mendis, the heart and soul of this project.

Abbreviations

Abbreviation	Full name
OED	*Oxford English Dictionary*
OED Online	*Oxford English Dictionary* online edition of December 2015/ January 2016
FiCiS	First Cited in Shakespeare
WF	Word formation
POS	Part of speech
PN	Play neologisms
OE	Old English
OF	Old French
EModE	Early Modern English
OSS	Open Source Shakespeare

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1 Introduction

1.1 The War of Words

The growth and development of languages can be compared to the growth and development of nations. Like nations, languages are born, and while some develop and thrive, others die out. If languages can be seen as nations, then the words that comprise a language can be seen as the people of that nation.

The life of a new word is dependent on its referent. A particular word cannot outlive its referent, unless that word takes on a new meaning and thereby obtains a new referent. If there are several synonymous words for one referent, they divide the semantic field of meaning among them. In that case each of them denotes a particular semantic, stylistic, regional or other nuance. These synonyms may very well survive. If several words happen to be identical in their reference, they will compete for usage and thereby also survival. While one synonym may be used often and soon become a household word, the lesser used synonym may wither away into oblivion. If one of the synonyms takes on another meaning, it thereby ensures its continued existence.

In the 1950s, the word *gay* was a frequently used synonym for *happy*. 'I was happy and gay when you said: 'Name the day!'' is the first line of the lyrics of a Doris Day song. This use gradually died out, probably because the word *gay* became a euphemism for homosexual. Today it is still a household word but used in a totally different context than originally.

It can be concluded that the survival of words is dependent on their usage. Words that are not used will gradually become obsolete, while common core words, words that belong to special areas of use, a definite register, style or genre will have a greater chance of survival.

1.2 Historical background

The English language has undergone several periods of vocabulary expansion. This thesis examines one such period known as the Early Modern English period (henceforth EModE). The English language was subjected to a major period of vocabulary expansion in the course of the 16th and 17th centuries. According to Blank (2006: 222), 10,000 to 25,000 new words

entered the language during this period. What triggered this expansion can be identified by delving into the historical background of this era. Europe, including England, was in the middle of the Renaissance when the ideals and ideas of the classical past were used to create a better present. The major changes taking place in politics, religion, science and culture were reflected in the language.

1.2.1 Politics

The political changes included the transformation of England from a small island nation into a powerful empire. The development of the English naval forces played a very important role in this transformation. In addition to its domestic trade, British foreign trade enjoyed rapid expansion, ably supported by its powerful navy. This strong naval presence enabled the trading companies to turn their interests overseas and explore new markets in search of cheap suppliers and more manpower. These activities led to Britain colonising nations all over the world. Starting with the colonisation of North America and the Caribbean, this process soon encompassed most of the known world. This century heralded the birth of the British Empire.

1.2.2 Religion

The historical period comprising the 16th and 17th centuries was considerably influenced by the Reformation. Having started as a religious movement, the Reformation developed into a moral and political undertaking of international magnitude (Berge 2006: 36-8). Originating in continental Europe in the 16th century, it soon reached England. The politically motivated establishment of the Anglican Church legitimised the king of England as the leader of the English Church, broke ties with the Catholic Church and thereby effectively eliminated the pope's influence over the Church of England. The consequences were not only of a political and religious nature; they also affected the people's conception of the world. There was a feeling of destabilisation since the Catholic Church, for centuries, had been considered the most stable and indestructible of institutions. The situation had now changed both in Britain and in many of the other European countries. The Reformation contributed to considerably increase the faith of the British in their own abilities.

1.2.3 Science

During the Renaissance people showed a general scepticism to the hitherto accepted truths of the time (Berge 2006: 30-2). This scepticism, coupled with a burning curiosity, initiated the outstanding advances made through science. Paracelsus, Copernicus, Kepler and Galileo were among the key scientific figures of the Renaissance. Paracelsus' health reform was a rebellion against the orthodox medicine of the Middle Ages. In the science of astronomy the replacement of the geocentric view with the heliocentric view meant that Copernicus turned the world upside down by removing the Earth from the centre of the universe. Copernicus' theory was supported by Kepler's laws of planetary motion. Galileo's postulate 'Eppur si muove' ('And yet it moves') was experienced as earth-shattering by the Medieval society. It antagonised the entire Catholic Church.

1.2.4 Culture

The Renaissance liberated drama and entertainment. The mystery plays, formerly suppressed by the Reformation, were again revived at the royal court, providing entertainment and pleasure for the courtiers. During the 16th century, theatre became available to the general public in a form that later developed into the professional theatre. This can be attributed to the general increase of the middle class who, like the higher strata of society, wanted their aesthetic needs satisfied (McCrum et al. 1986: 41; Barber 2009: 186). The first public playhouse was built in 1576. Shakespeare's main theatre, the Globe, was built in 1599 (Berge 2006: 59). However, not everyone accepted the new cultural trends. The Puritans, for example, distanced themselves from the theatre. They considered play-acting a lie and were of the opinion that male actors performing female roles on stage promoted homosexuality (Berge 2006: 60).

1.2.5 Language

The English language reflected the life and times of the country. Language identified most aspects of a person's life, from his religious affiliation to his social stratum. People from the higher social strata would use words with foreign roots, while commoners would rely more heavily on words of Anglo-Saxon origin, e.g. *to perform* vs *to do.* Similarly, educated people would prefer longer Latinate words to the shorter variants of native origin, e.g. *performance vs show*. The Protestants and the Catholics would use different terms to refer to religious

liturgy (*worship* vs *The Mass*) and use a vocabulary exclusive to their religious group. For example, *The Rosary* (a prayer to Virgin Mary) or *The Ambry* (the cabinet to keep three holy oils) was associated with Catholics, while *The Book of Common Prayer* was associated with Protestants.

The Reformation was dominated by the controversy between the Protestant Church using English and the Catholic Church using Latin. Most often this controversy was conducted in the public arena and usually in print. The polemicists endeavoured to reach a wide range of audiences. Because most Protestants were of humble origin, English was used to reach them. Consequently polemical books and pamphlets favouring the Protestant Church were published in English (Barber 2009: 185-6). The Protestant Church had the Bible translated into English, and their church services were also held in this language. The Catholic Church stayed with Latin as their primary language for all religious ceremonies and literature. Throughout all social strata, a person's religious affiliation was often revealed by preference of language. The famous queen known as 'Bloody' Mary was Catholic and pro-Latin, while the equally famous Queen Elizabeth I was an ardent supporter of English (Berge 2006: 44-8).

The expansion of the British Empire and copiousness as a social trend were also reflected in the language. During this time the English vocabulary was enriched by numerous borrowings and new formations. The richer language contributed to the enhancement of the eloquence of expression (Donawerth 1984: 156; Rhodes 2004: 192). Increased overseas travel resulted in an influx of all sorts of exotic goods that brought their names with them, e.g. *moccasin*, *jaguar* and *china*. New scientific discoveries needed words to describe them, and a myriad of new inventions resulted in the appearance of new referents that needed new words to name them, e.g. *gravity, atmosphere* and *thermometer* (McCrum et al. 1987: 41; Baugh & Cable 2002: 224).

Some linguistic fashions of the day were mirrored by the theatre. The spirit of copiousness can be seen in what Lerer refers to as *amplification* 'more of', the trope of the Renaissance drama, which was used 'to make speeches longer and more detailed' (2007: 144). *Eloquence* 'speak out' included the whole spectrum of rhetorical techniques. When abused, these techniques were criticised by the academic world and parodied on stage. Shakespeare, among others, ridiculed those who, aspiring to gain the acceptance into a higher social stratum, used loans from e.g. Latin without understanding the meaning of the borrowed word, e.g. *exion* for *action* and *apathaton* for *epitheton*, an EModE variant of *epithet* (McCrum et al. 1986: 43).

The choice of language also distinguished books and their intended readers. Books which had their target audiences in Europe were written in Latin. Barber (2009: 185-6) mentions William Gilbert's book on magnetism (1600) and William Harvey's book on the circulation of blood (1628). Books which were intended for domestic readers were written in English. In the same vein Newton's *Principia* (1689) was in Latin, while his *Opticks* (1704) was in English. There were several reasons for the books intended for native readers to increase in numbers. Firstly, as mentioned earlier, authors participating in religious polemics tried to reach as wide a readership as possible. English was the optimal language for this purpose. Secondly, there was the rising middle class and their pursuit of education (Barber 2009: 186; McCrum et al. 1986: 41). The middle class, increasing in both number and ambition, could not afford a classical education in European universities where Latin was still the medium of instruction (Curzan 2012: 68). They gleaned their knowledge from books written in English. Finally, the growing national pride of the rising British nation was a dominant factor that heavily influenced the need to develop and use the national language.

However, Curzan (2012: 68) highlights the fact that the Renaissance elite, social and professional, still relied heavily on the use of foreign languages and foreign vocabulary even while speaking English. Language served as a benchmark separating social strata (Barber 2009: 187). The middle class primarily spoke English. If any loanwords were used, it was done unconsciously, as these words had been long established and naturalised in English. Even the criminal element of the English underworld devised a language for 'inside use' (Blank 2006: 224-6, McCrum et al. 1986: 43). Not much is known about this language, as it was explicitly forbidden to be used in print. This language was called 'cant' (from Latin *cantare*) and was comprised of many foreign words which were supposedly imported by sailors. The language included all kinds of words, from the ordinary *pannum* 'bread' and *cassan* 'cheese' to more jargon-like, *fokkinge* 'coitus' and *kreppe* 'crap' from Low Dutch. Cant excluded 'outsiders', and in this sense it was similar to the use of 'inkhorn terms'.

1.3 Linguistic background

Apart from language being the mirror of the main historical processes of the Renaissance, the Early Modern English period included various purely linguistic debates regarding e.g. English spelling, pronunciation, standardisation and vocabulary expansion. Polemicists participated in ardent and, at times, heated debates in the public arena.

Among other things, the challenge of bringing the deteriorating English language back to 'its peak' gave rise to discussions as to the method of accomplishing this task. Should one, for example, use loans, restore older grammatical and lexical variants or create neologisms? The participants of these discussions belonged to three schools. There were the Purists, who defended the use of existing words or formation of new ones using Anglo-Saxon roots (Barber 1997: 62; Curzan 2012: 70). The Archaisers advocated the revival of obsolete word forms that could be found in regional dialects. The last group consisted of the Neologisers who favoured Latin as the source of loans into English (Barber 1997: 53, 67).

The polemics between these three schools gave rise to one of the most famous debates of EModE, the 'inkhorn terms' debate. According to Baugh and Cable (2002: 218), the nickname 'inkhorn terms' was given to cumbersome foreign words in an attempt to ridicule the practice of using these terms. The 'inkhorn terms' were longer than the usual short Anglo-Saxon words and therefore 'used up too much ink' quickly emptying the inkpots used by the writers (Curzan 2012: 68-70).

The further development of the English language shows that all three methods were used in different areas. Latin variants are used in academic and other styles associated with formal registers. Anglo-Saxon variants belong to everyday usage and are associated with the colloquial register. Archaisms found their place in poetry because their use lent it an air of antiquity. As the Roman rhetorician Quintilian put it, 'archaisms conferred dignity and majesty upon a verse' and were therefore spared for use as a kind of poetic dialect (Blank 2006: 229). However, not all the words which came into use during EModE made their way into the dictionary. Although we still use many of them, e.g. *assassination* and *atmosphere*, even more are forgotten, e.g. Shakespeare's variant for a nun *cloistress* and the verb *disproperty*. The words that filled a need or found their niche in English stayed in use. This is the best proof of quality (Baugh & Cable 2002: 222).

One of the more specialised debates, known as the 'nature-convention controversy', was about the relationship between a word and its referent (Donawerth 1984: 25-31). Some, like the Renaissance academician Richard Mulcaster and the English poet Abraham Fraunce, were of the opinion that names of things are the result of the 'fancie of man' (Donawerth 1984: 27). Others believed in the existence of a connection between a word and what it stands for, and that those who name things and phenomena become somehow implicated in the divine process of creation. This implication equates mortal men with God. The biblical idea of

creative power received a new emphasis during the Renaissance. Donawerth (1984: 30-1) explains that 'the maker of a name was considered an artist, creating an imitation in little of a portion of the world around him'. The third question of this thesis examines if Shakespeare purposely bestowed certain categories of characters with this 'God-like' feature.

1.4 The influence of the printing press

The invention of the printing press around 1450 and its introduction to England in 1476 by William Caxton contributed vastly to facilitate the spreading of the new ideas and made books more easily available to a wider section of the citizenry. Increased literacy could be observed among the commoners. Some 10% of the country's male population were considered literate by the year 1500 (Barber 2009: 187). The educational literature that was in demand by growing groups of professionals, such as craftsmen, instrument makers and navigators, was also made readily available.

The printing press was also responsible for some of the major linguistic reforms of the time with regard to spelling and grammar among others. The introduction of the printing press divided the history of language into the pre- and post- printing periods. The pre-printing period is characterised by great flexibility and variation. Virtually everybody had the freedom to speak and write according to personal ideas of propriety. The post-printing period, on the other hand, subjected language to standardisation. Printed material served to popularise and spread the linguistic canon. The printing press was thereby one of the primary tools for spreading the language by making access to books possible for almost everybody throughout the country.

1.5 Summary

This chapter has examined some of the watershed events that influenced the historical period my research had focused on.

The chapter focused on the more prominent historical and linguistic events of the Early Modern English period when the national language evolved. The historical section of the introduction briefly described the Renaissance, the Reformation and the scientific discoveries of the period and provided an overview of how these changes mirrored the rapidly developing

language of the fledgling British Empire. The linguistic section highlighted the major disputes of the day, e.g. the ‘inkhorn terms’ controversy, among others. This dispute reflected the struggle of the fast changing language to strike a balance in the lexical augmentation between foreign loans and the native English core. Arguably the most important invention of the period was the printing press. This technological breakthrough was imperative in increasing the involvement of the citizenry in the ongoing changes.

The events of the early Modern English period are chosen as the backdrop for this thesis, as they illustrate the setting that influenced Shakespeare’s use of English. The *Background* chapter provides a more detailed description of how the Bard contributed to the development and literary value of the language.

2 Background: Shakespeare in English

2.1 The legend

The EModE theatre is known to be generally responsive to the burning issues of the day, e.g. the conflict between 'inkhorn terms' and 'plainnesse' was said to be quite popular on the stages of the different playhouses (McCrum et al. 1987: 43). One author of this period was famous not only for his ready response to what was going on around him but also for his extremely creative participation in it. Shakespeare has for the past 400 years occupied the position of the most influential author in English history. However, the 21st century seems to have put the Bard's reputation to the test.

Over the centuries Shakespeare has become a symbol of linguistic creativity. His usage of the English vocabulary is prioritised in the Oxford English Dictionary (henceforth *OED*) and exemplified to an incomparable degree. While Shakespeare has 33,075 quotes in the *OED*, the second most quoted author, Walter Scott, has only 17,111. The reason why the number of quotations from Shakespeare far outnumbers any other English author is the richness of his vocabulary, which is reputed to be far ahead of his contemporaries (Baugh & Cable 2002: 232; Maguire & Smith 2013: 138). According to Elliot and Valenza (2011: 40), Shakespeare knew one quarter of the EModE vocabulary. Crystal provides two figures of 'around 20,000' (only lemmas are counted) and 'over 30,000' (variants are counted) words as Shakespeare's active vocabulary. This is a very impressive number, especially when compared to the 6,000 word vocabulary of the Bible (Crystal 2008: 3-4, 7).

However, modern research questions the Bard's authority. Shakespeare's vocabulary is now considered more of a controversial topic for research rather than an established fact. It is now being claimed that Shakespeare's fame is not due as much to his extraordinary talent as an author but more to the fact that the other authors of his time are underestimated and underexposed. According to Elliot and Valenza (2011: 42), Milton surpassed Shakespeare with regard to the quantity and variety of the vocabulary employed. Recent research examining the richness and variety of Shakespeare's vocabulary has discovered that the Bard was not the leading exponent of the English language. Both his contemporaries Ben Johnson

and Thomas Dekker surpass the Bard's dexterity in using the language. According to Labbe & Labbe (2014: 11), Shakespeare's vocabulary was 'within the average of his contemporaries'.

Shakespeare's lexical creativity is also in question. There is no unanimity among researchers regarding Shakespeare's style or the number of coinages attributed to him. It is already established that 30% of the new words (7,968) of Renaissance England entered the language during the period between 1568 and 1612 when Shakespeare was a very active contributor (Garner 1987: 208). However, Shakespeare's exact role and contribution to this vocabulary expansion is not definitely established. Garner (1987: 208) claims many aspects of Shakespeare's language to be *terrae incognitae* to the English speaking academia.

2.2 Neologisms

2.2.1 Definition

The subject of neologisms is quite controversial. The first challenge is identifying whether a particular word is a coinage. As of today, the number of coinages attributed to any individual author depends on the theoretical framework of the researcher who does the evaluation. To begin with, a definition of what a new word is has to be established, and there is no universal consensus here (Crystal 2008: 4, 40; Shea 2014: 131; Elliot & Valenza 2011: 48; Blake 1983: 20). This lack of unanimity makes it extremely difficult to arrive at the exact number of new words coined by any author, including Shakespeare.

One issue that has to be resolved is whether a word can be considered a coinage if it was in oral use prior to being written down (Goodland 2011: 20-1; Brewer 2012: 348). Clarifying the grey zone between a compound word and a phrase is another issue to be resolved (Shea 2014: 130; Brewer 2012: 353).The broader definition of a compound in the latest edition of the *OED* may result in an influx of coinages which, though present in the Shakespearean corpus, were not included in the 'First Cited in Shakespeare' list (henceforth FiCiS) given in the earlier editions of the *OED*, e.g. *secret-false* and *heavy-sad* (Brewer 2012: 354). Another difficulty is found in a particular category of words coined by conversion. While Bauer (1991: 227) defines the formation of the type 'uncountable noun > countable noun' as a new formation coined by means of conversion, Nevalainen (2001: 425) and Shea (2014: 129-30)

view this type of conversion as having more to do with a change of meaning than it has to do with a new coinage, e.g. *tea* vs *two teas* and *cheese* vs *two cheeses*. Similarly, Bauer (1991: 227) treats formations of the pattern 'proper noun > common noun', e.g. *Which John do you mean?*

2.2.2 The difference in numbers

Throughout English history Shakespeare has been accredited with coining from one third to half of the EModE neologisms (Crystal 2008: 8). The existing estimates of the number of Shakespeare's coinages have hitherto been based on the information provided by among others the *OED*, which has been a major investigative tool (Goodland 2011: 16; Brewer 2013: 352; Shea 2014: 122, 124; Crystal 2008: 9).

The online version of the *OED* (henceforth *OED Online*) provides scholars with the FiCiS list where Shakespeare is identified as the first recorded user of a particular word. As the only sources of information for researching EModE are the surviving documents from that era, it is common practice to assign authorship of a word based on the first found citation. Contemporary scholars give the following numbers: Elliot and Valenza (2011: 34) credit Shakespeare with 3,200 coinages, while Crystal's (2008: 8) number is 2,229 words. Both scholars base their research on the FiCiS list of the *OED*. The difference in their estimates is due to the ongoing quarterly updates of *OED Online.* However, according to Crystal (2008: 9), the estimated number of genuine neologisms that can be accredited to Shakespeare is 1,700 words. This number is also mentioned in Nevalainen (2001: 237).

2.2.3 Accrediting authorship

Whether or not to credit Shakespeare with neologisms is another formidable challenge facing researchers. It is arguably almost impossible to definitely credit the Bard or any other author with EModE literary coinages (Blake 1983: 42; Salmon 1987: 194). Firstly, collaboration between authors writing plays was not unusual during this period, making it difficult to discern the originator of a coinage (Crystal 2008: 40; Potter 2014: 456). Secondly, independent and simultaneous borrowing or word formation by several authors in the EModE period was most probably inevitable (Garner 1987: 212). This makes the accrediting of definite authorship even more difficult. Thirdly, an author credited with a coinage might just have been the first to pen a word which was already in oral circulation (Shea 2014: 130). In

addition, taking into account the background of the immense linguistic creativity of this period, researchers are also cautioned against overestimating the role of an individual even one as great as Shakespeare (Crystal 2008: 8). Finally, researchers deal with the EModE texts that have survived to this day. Potentially, every word contained in these texts can be subject to antedating since there is always a possibility that a different document may reveal an earlier usage (Goodland 2011: 23; Brewer 2012: 348; Shea 2014: 123).

2.2.4 Antedating

An antedating is 'a recorded instance of the use of a word earlier than the previous first use recorded in the *NED*' (Goodland 2011: 9). *NED* refers to the *New Oxford Dictionary* which was what the *Oxford English Dictionary* was called before 1933. The rate of antedating for many words of EModE with previously established authorship has exploded in the last decade. Using new emerging technology, modern researchers have taken antedating to new heights. The process of continuous antedating results in a constant change in the credited authorship of neologisms. This compounds the problem of obtaining an accurate count (Shea 2014: 130).

The initial assignment of authorship for a coinage can often only be assumed. Antedating can in many cases cause the authorship to be reassigned. Crystal (2008: online supplement) points to the inevitability of words from the FiCiS list being antedated based on the new information that is constantly surfacing. With an ever growing number of documents from that period being made available to lexicographers, it is estimated that approximately one third of the coinages ascribed to Shakespeare will be reassigned (Garner 1987: 213; Shea 2014: 126-7; Crystal 2008: 36). Goodland (2011: 20) defines the antedating rate in his research as high as 49% (57/117 lemmas). Shea (2014) takes antedating even further by re-antedating words already antedated in *OED3*.

2.2.5 Shea (2014)

To quantify Shakespeare's neologisms, Shea (2014: 125-6) proposes the following algorithm: the first step is to select the updated entries (*OED3* updates since 2000) in the FiCiS list. The next step is to run the selected words through the available digital databases which have texts up to and including the 17th century. The goal is to establish whether any of the updated words can be antedated. For this purpose Shea used eight different data-bases such as *Early English*

Books Online (EEBO) and the *Cecil Papers Online* among others. The last step of the algorithm is to analyse the words that are still identified as Shakespeare's neologisms after antedating. Shea (2014: 128) analyses these words to establish the word formation types used. He then uses this information to predict what word is most likely or least likely to be defined as a new word. According to Shea, words coined by affixation are more likely to be identified as a coinage than, for example, words coined by other methods (Shea 2014: 130).

As his first step, Shea selected, from the 1,591 coinages in the FiCiS list, the 340 words that were updated by the *OED* and survived antedating. For his second step, he checked these 340 words against the several databases he uses. He was able to antedate 89 of these words that had survived the initial *OED* antedating. As his third step, Shea categorised the remaining 251 words according to their likelihood of being defined as one of Shakespeare's neologisms. Shea found that 43% of the 251 words were formed by affixation and can be considered as Shakespeare's coinages.

2.3 A qualitative approach

As of today, scholars do not appear to be able to accurately quantify Shakespeare's coinages. Some researchers, like Shea (2014: 130), may consider the words coined by affixation to more likely be genuine Shakespeare neologisms. However, as these words are subject to potential antedating, any of them may lose their status as one of Shakespeare's coinages in the future. The results of modern research reveal the potential of antedating to bust the myth that Shakespeare was the greatest word-coiner in the history of the English language. Neologism as lexical innovation becomes even more uncertain, since there is no unambiguous definition as to what a new word is. Thus, establishing a definite authorship and number of coinages to any particular author seems to be a formidable task.

Considering the mythological aura surrounding Shakespeare in general, Crystal cautions the reader about placing too much focus on the quantitative approach to this question (2008: 3). Crystal is supported by other scholars of our time, who state that it is not his bigger or better vocabulary that gives Shakespeare his extraordinary position within English literature. It is his creativity, his daring style and the way he rearranges an arguably insignificant vocabulary available to him into significant poetry that make the Bard a legend (Blake 1983: 50; Elliot & Valenza 2011: 36, 50). Shakespeare's 'licentious' language indicates that he does not belong

to the category of passive language users who abide by the existing rules of language (Bolton 1992: 78). Instead of following the rules, he creates them. The result of this is that 'Shakespeare, born in a country that at times was ashamed of its language, died in one actively exporting it' (Hope 1999: 242). Considering the above mentioned, I choose to take the focus of this thesis away from the issue of authorship. I will focus on neologisms found in Shakespeare's corpus and Shakespeare as an introducer, effective user, validator of inventive efforts and a populariser of expanding vocabulary (Crystal 2008: 8; Watson 2013: 377; Garner 1987: 209).

Watson (2013: 358) insists on the fact that Shakespeare's role as a promoter 'outweighs' his lexical inventions and claims that Shakespeare promoted more words than anybody else in the history of English. Another scholar states that the effective usage of a word is worth more than its first usage (Hope 1999: 249). Watson (2013: 376) perceives the lexical innovations of the time as 'the plumage of the new social elites' and the stage as a market place for acquiring this decorum. Watson (2013: 375) compares the theatre to a one-room schoolhouse where the socially ambitious could learn the elements of higher culture, while those aspiring for casual wisdom could learn the necessary elements of street-slang as a precaution against various street schemers. As long as these new 'city dwellers' continued to flood the Renaissance London, their various linguistic needs were catered to by Shakespeare's Globe and other theatres. As language was one of the tools necessary to climb the social ladder, aspiring people would take the trouble to keep up with latest linguistic innovations (Watson 2013: 375).

2.4 Summary

In this chapter a preliminary examination of Shakespeare's role in English was presented. The Bard and his works are still a favourite topic of research, and the chapter provided an insight into the difficulties of establishing a quantitative estimate of his neologisms. Furthermore, the reasons for these complications were explained. The primary reasons are antedating, authorship reattribution and the lack of an unanimous definition of what a coinage is. The main purpose of this chapter was to describe how Shakespeare's traditionally assumed role as the greatest neologiser in the history of English is changing as a result of modern research methods and recently discovered documents from the poet's era. This constantly changing picture poses challenges for contemporary researchers regarding the robustness of their data.

3 Theory

3.1 Word formation

Before entering into a discussion of Shakespeare's word formation (henceforth WF) trends, I would like to introduce the reader to English WF in general and WF during the Early Modern English period in particular. This introduction will define the main terms of the topic, provide a brief summary of the trends in WF principles characteristic of English in general (according to Bauer (1991) and Nevalainen (2001)), trends during the EModE period (according to Nevalainen (2001) and Barber (1997)) and then focus on Shakespeare's WF (according to the leading researchers in the area).

3.1.1 Word formation in English (Bauer (1991) and Nevalainen (2001))

The word formation methods described by Bauer in his book *English Word-formation* from1991 are compounding, derivation that includes prefixation and suffixation, conversion, back-formation and unpredictable formations such as blends, clippings and acronyms. Nevalainen provides a very comprehensive record of the WF principles used during the Early Modern English period in her chapter 'Early Modern English Lexis and Semantics' in the book *The Cambridge History of the English Language (1476-1776)*. Nevalainen (2001: 377) defines the EModE WF processes in terms of a relationship between free lexemes or bases and bound lexemes or affixes. This relationship depends on the roles taken by the lexemes, e.g. a modifying element (determinant) or the element modified (determinatum).

Thus, **prefixation** is defined as 'adding a prefix (determinant) to the base (determinatum) without a change in word-class', e.g. *hero* > *antihero* (Nevalainen 2001: 377). **Suffixation** is 'adding a suffix to the base, usually with a change of word-class', e.g. *modernise* > *modernizer* (Nevalainen 2001: 377). The main function of suffixation is the grammatical function of changing the word-class of the base (Nevalainen 2001: 392).

Compounding is defined as a lexical unit consisting of more than one base, and functioning both grammatically and semantically as a single word (Nevalainen 2001: 407). Compounds can be divided into two types: endocentric and exocentric. In endocentric compounds one of

the bases represents the whole entity, e.g. *goldfish* and *queen-mother*. Thus, *goldfish* refers to *fish* and *queen-mother* refers to *mother* or *queen*. In exocentric compounds, there is no such entity defined by the compound, e.g. *busybody* and *redskin* (Nevalainen 2001: 408). *Busybody* does not refer to *body* and *redskin* does not refer to *skin*. *Busybody* represents a certain type of person, namely a person constantly meddling into other people's affairs. *Redskin* refers to a certain type of race, namely a Native American.

Conversion is defined as the WF method by which a word is turned from one word-class into another without any formal change, e.g. *work* > *to work* (Nevalainen 2001: 424; Bauer 1991: 227). According to Nevalainen (2001: 424), conversion is a derivational process because it changes the word-class categorisation of a lexical item.

Minor processes of WF comprise back-formation, clipping and blending. **Back-formation** is defined as the derivation of words from longer words with a change in the word class, e.g. *peddle* < noun *peddler* (Nevalainen 2001: 431). **Clipping** is the shortening of a polysyllabic word with no change in the word class, e.g. *miss* < *mistress*. It is a phenomenon that is mostly used in colloquial language. **Blending** comprises 'merging of two words or word-fractions' (e.g. *luncheon* < *lunch* + *nuncheon*) (Nevalainen 2001: 433).

3.1.2 Word formation in EModE (Nevalainen (2001) and Barber (1997))

According to Nevalainen (2001: 351), borrowing was the most prolific source of vocabulary expansion during EModE. All means of WF were also quite extensively employed to create the EModE neologisms with affixation, being the most popular WF method, followed by compounding and conversion (Nevalainen 2001: 351-3).

Barber's research (1997: 219-41) supports this. His research on the vocabulary expansion of the Early Modern English period is based on two samples taken from the first and second editions of the *Oxford English Dictionary* and includes 2,182 words. The first sample included 2% of all entries from the first edition of the *OED* (Barber 1997: 219-20). The second sample included 10% of the entries from different dates between 1511 and 1691 in the second edition of the *OED* (Barber 1997: 219-20). Barber admits that his data in the second sample was biased toward loanwords. His conclusions are as follows. The vocabulary expansion of this period was a result of borrowing from Latin and of the two word formation

methods of affixation, i.e. prefixation and suffixation. These WF methods are the most commonly used methods for coining words during the EModE period and reached their peak between 1590 and 1660 (Barber 1997: 219, 221, 232).

3.1.3 Shakespeare's word formation

Shakespeare's style of WF is described as independent and liberal, employing the methods and materials available to the poet but without 'slavishly' following the fashion of the day (Blake 1983: 42). Thus, contemporary scholars do not think that Shakespeare participated in the linguistic debates of the time (such as the 'inkhorn terms' debate), though this discussion is reflected in his plays (Hope 1999: 248). Being one of the prolific users of the literary devices available to him, Shakespeare did not approve of the rhetorical excessiveness and abuse exercised by some of his contemporaries (Blake 1983: 20, 24).

Crystal (2008: 162) highlights the exploratory character of Shakespeare's WF. Favouring neither Latinate nor Anglo-Saxon bases, Shakespeare employed both to provide the interplay of old vs new and familiar vs unfamiliar. For example, Shakespeare is known for his freedom of expression which is a result of the interplay between long Latin borrowings and monosyllabic words of Anglo-Saxon origin (Blake 1983: 42; Hope 1999: 254; Rhodes 2004: 128-9). Using borrowing as a tool, Shakespeare is said to have relied more on derivational means and experimented with it more readily (Hope 1999: 250).

In general, Shakespeare is considered to have a functionalist view regarding linguistic creativity, because his linguistic choice was governed by the contextual requirements and desirable dramatic effect (Blake 1983: 48; Crystal 2008: 146; Nevalainen 2001: 238). While linguistic purists may have frowned upon the practice of mixing morphemes of native and foreign origin, Shakespeare did not hesitate to employ linguistic hybrids to reach an immediate dramatic effect (Garner 1987: 215-6, 229). This personifies the independent nature of his creativity.

3.2 Suffixation

3.2.1 Suffixation in English

As Bauer (1991: 220) sees it, the challenge of discussing suffixation is to accurately distinguish or specify what suffixes mean. Bauer (1991: 220) bases his classification on the word-class of the derivatives, namely the bases to which suffixes are added.

Among the suffixes forming nouns, Bauer (1991: 220-2) differentiates between suffixes forming nouns from nouns, verbs or adjectives. Denominal suffixes from this group comprise a very productive suffix *-dom* (*girldom*) and also other suffixes such as *-er* (*Birch* > *Bircher*), *-ship* (*kinship*). Deverbal suffixes include a very productive *-iation*, and others such as *-ure* (*closure*) and *-ment* (*management*). Bauer (1991:222) states that derivation is often used to form nouns from verbs. Deadjectival suffixes include *-ce* (*excellence*), one of the most productive suffixes in contemporary English as well as others such as *-ness* (*certainness*) and *-th* (*warmth*).

Bauer (1991: 222-3) points to the relatively low productivity among suffixes forming verbs such as *-en* (*shorten*), *-ify* (*metrify*) and *-ize* (*Vietnamize* 'to give a Vietnamese character to'), the last suffix being the most productive of the three.

Adjectives can be derived from nouns, verbs or adjectives (Bauer 1991: 224). Denominal suffixes include *-al* (*environmental*), *-less* (*flyless*), *-ous* (*venomous*), *-y* (*catty*) among others. Deverbal suffixes comprise the suffix *-able* (*unbelievable*), which is the most productive in this group, *-less* (*tireless*) and *-ful* (*resentful*) among others. The deadjectival suffixes in this group include *-ish* (*greenish*), *-ly* (*goodly*) and *-some* (*queersome*).

Suffixes forming adverbs include the most productive suffix *-ly* (*quickly*), followed by *-ward* (*inward*(*s*)) and *-wise* (*cornerwise*). According to Bauer (1991: 225), suffixes like *-fold* (*threefold*), *-way*(*s*) (*three-ways*) and *-fashion* arguably form adverbial compounds.

Bauer (1991: 225) points out that other word classes, such as pronouns, can also be subject to derivation, e.g. *whyness*. Bauer (1991: 225) also draws attention to borrowings that can be analysed as English coinages building on foreign bases, e.g. *cavalcade, terrestrial* and *agent*.

3.2.2 Suffixation in EModE

According to Nevalainen (2001: 391), the majority of the suffixes in EModE are of foreign origin (due to loan-word accommodation e.g. *-al*, *-ate* and *-ant/ent*. However, it is the native suffixes that are characterised by the greatest productivity, e.g. nominal suffixes *-ness*, *-er* or adjectival *-ed* and *-y*. Nevalainen (2001: 391) notes that derivation by native suffixes does not change the stress pattern of the base, contrary to some of the borrowed suffixes such as *-ation*, *-ian*, *-ic*, *-ious*, *-ity* and others. The main function of suffixation is grammatical, namely changing the word-class (Nevalainen 2001: 391). Therefore, similar to Bauer (1991: 220), Nevalainen (2001: 392-407) categorises suffixes by the word-class they form and the word-class they combine with, e.g. denominal, deverbal and others.

Noun suffixes constitute the largest group of EModE suffixes. Denominal and deverbal noun suffixes of this group can be semantically divided into concrete and abstract suffixes. Concrete suffixes have agentive, diminutive or gender-denoting senses, while abstract suffixes express status and domain (denominal suffixes) or action and fact (deverbal suffixes) (Nevalainen, 2001: 392).

Suffixation appears to be by far the most common method of derivation in Barber‘s research (1997: 233-4). According to the results of his data, Barber concludes that *-ness* (e.g. *bawdiness*) is the most frequent nominal suffix, *-ed* is dominant in the coinage of adjectives (e.g. *leticed*), *-ly* to coin *adverbs* (e.g. *bawdily*) and *-ise* to coin verbs (e.g. *anathemise*). However, due to the ‘uncertainties of categorisation’, Barber excludes from his research suffixes such as *-ing* when used nominatively and both *-ing* and *-ed* when used attributively (1997: 234).

Adjectival denominal suffixes increased in number during EModE. Native suffixes and the two ‘semi-suffixes’ (*-like* and *-worthy*) could usually form adjectives from bases of any origin. Borrowed suffixes were restricted in their compatibility to loans. According to Nevalainen (2001: 400), many competing derivations came as a consequence of the many synonymous suffixes of this period.

I created seven tables to summarise Nevalainen’s categories (Nevalainen 2001: 392-407), namely noun suffixes (concrete and abstract), adjectival suffixes (native and borrowed; deverbal), adverb and verb suffixes (see Appendix I, tables 1.1-1.7).

3.2.3 Suffixation in Shakespeare's corpus

Salmon (1987: 196) points out that Shakespeare used suffixation to provide a balance between stressed and unstressed syllables. Brook (1976: 133-7) provides an overview of suffix usage in Shakespeare. The suffix ***-able*** was used in both active and passive senses. Development of the passive sense, e.g. in *bearable*, is claimed to be connected to the adjective *able*. The suffix ***-al***, e.g. *rival* shows that adjectives with *-al* sometimes can be used as nouns. The suffixes - ***ance***/***-ence*** have the variants *-ancy*/*-ency* could be interchangeable, e.g. *persistency* vs *persistence*. However, later only one variant remained in use. The French present participle suffix ***-ant*** is exemplified with *aydant* and *conspirant*. The suffix ***-ate*** (derived from the Latin participle ending) can be found in *evitate*, *ruinate* and *captivate* (Brook 1976: 134).

The suffix ***-ed*** is used by Shakespeare to form adjectives from adjectives (with insignificant effect on meaning) and adjectives from nouns. When used with nouns, this suffix means 'provided with (the noun)', e.g. *graved* 'buried' (Brook 1976: 134). Salmon (1987: 196) considers Shakespeare's denominal coinages rather obvious in the sense that they probably would have been created by others if Shakespeare had not beaten them to it. The nominal deadjectival suffix ***-en*** 'made of'/'covered with' is found in the metaphorical use, e.g. *leaden slumber* 'heavy sleep' and *silken tearmes* 'delicate language'. According to Brook (1976: 134), there are several hundred nouns in Shakespeare's writings with the suffix ***-er*** indicating dwelling, occupation or activity. Nevalainen specifies that *-er* is one of the most productive suffixes of that period. She lists numerous coinages pointing out that Shakespeare uses *-er* as 'a grammatical shorthand' to identify the agent of an action (Nevalainen 2001: 254). The list of Latinate coinages with *-er* includes *appearer*, *employer*, *insulter*, *moraler*, *proposer*, *torturer* and others. Brook (1976: 134) adds that *-er* can also be doubled, as in *fruiterer*.

The suffix ***-full***, very common with Shakespeare in the sense 'full of', is used in both the passive 'full of N' or the active 'causing N' senses, e.g. *fearfull* and *dreadfull*. The EModE suffix ***-hood*** is a variant of the OE suffix *-head* which denotes a state or a group, e.g. *brotherhood*, *likely-hoode*, *child-hoode (*Brook 1976: 135).

The suffixes ***-ic***/***-ics*** and their variants with *ck* for *c* are exemplified by *Rhetoricke*, *Musicke*, *Mathmatickes* and *Metaphysickes*. The suffix ***-ing*** is used by Shakespeare in verbal nouns and adjectives and often in the plural, as in *weepings*. This suffix is synonymous to suffixes *-ment*

/*-ure*. They are differentiated by their origin and by the aspectival meaning. The nominal suffixes *-ment*/*-ure* were used to denote complete action and instances of an action, while native *-ing* denoted incomplete action or duration (Salmon 1987: 195). The adjectival denominal suffix - ***ish*** is found in Shakespeare's corpus in a toned down or pejorative sense, e.g. *womanish* vs *womanly* and *childish* vs *childlike*. The suffix ***-ist*** is found to denote a person who follows a particular occupation or who holds certain ideas, e.g. *Brownist, votarist, statist*. The suffix ***-ite*** is found in Shakespeare's corpus in the derogatory sense to denote a person from a particular place or belonging to a particular party, e.g. *Nazarite, Ottamittes*. The suffix ***-ive*** 'tending to, inclined to' is found in Shakespeare to convey a passive meaning, e.g. *unexessive (*Brook 1976: 135).

A passive meaning (lost since) can also often be found in adjectives with the suffix ***-less***, e.g. *a carelesse Trifle* 'a trifle not worth bothering about'. Usually the diminutive suffix - ***ling*** is also found to form adverbs from adjectives, e.g. *darkling* 'in the dark'. Brook (1976: 136) points out that in *headlong*, *-ling* has been replaced by *-long*. The adjective and adverb suffix ***-ly*** derived adverbs from nouns, as in *angerly*. Brook (1976: 136) adds that in addition to the older formations with *-ly*, new formations with *-like* appeared, e.g. *life-like* in addition to *lively*. The deverbal nominal suffix ***-ment*** often combined with native bases, e.g. *bodement* was more common at the time than the suffix *-ure* (Nevalainen 2001: 250-3; Salmon 1987: 195). Shakespeare is credited with several first coinages with *-ment,* e.g. *amazement, reinforcement, prevailment, condolement* and others (Salmon 1987: 195).

The suffix ***-or*** varies with OF *-our* and, according to Brook (1976: 136), replaces earlier *-er* in some Shakespeare coinages, e.g. *sailor* and *bachelor*. Garner (1987: 214) adds *exhibitor* to this list of agent-nouns. The suffix ***-ous*** is sometimes confused with *-ious* and *-uous*, e.g. *ingenuous* and *dexteriously* (Brook 1976: 136). The suffix ***-ry*** is reported to be a double suffix formed from Old Northern French *-er* followed by *-ie*, as in *archerie*. Later *-ry* was extended as an independent suffix to other words, e.g. *outlawry*. The suffix ***-ship*** describes a state or a quality in coinages such as *foxship, mistership* and *moorship*. Garner (1987: 215) adds that the suffix *-ship* is used to form abstract nouns, as in *courtship*. The denominal verbal suffix ***-ure*** was used to denote action, a particular instance of an action or its result. Sometimes *-ure* was weakened to *-er* in Elizabethan English, e.g. *wafter* and *climater*. The nominal deverbal suffix ***-ion*** was used to create *addiction* (Garner 1987: 214).

The derivational style of coinage used in Shakespeare's corpus could be best described in terms of 'morphological liberties' (Garner 1987: 216) because Shakespeare freely mixed bases and affixes of native and foreign origin.

3.3 Prefixation

3.3.1 Prefixation in English

The very brief summary of prefixation in English, as outlined in Bauer (1991: 216-20), differentiates prefixes according to their productivity, their class maintenance (whether prefixation occurs with/without a change in the word class of a base) and their ability to combine with various word-classes.

The productivity of prefixes can be divided into different levels. There are productive prefixes, e.g. *be-* (*bewitch*), unproductive prefixes, e.g. *a-* (*asleep*) and semi-productive prefixes, e.g. *en-* (*enslave*). Regarding class maintenance, the majority of prefixes are class maintaining prefixes, e.g. *arch-* (*arch-monetarist*), *mini-* (*mini-war*) and *pro-* (*proconsul*), and class changing prefixes, e.g. *de-* (*deescalate*) and *be-* (*befriend*). As for compatibility, some prefixes are used exclusively with bases having only one word-class, e.g. prefixes used only with adjective bases are *a-* (*amoral*), *cis-* (*cislunar*) and *extra-* (*extrasensory*). Other prefixes are used with bases of various word-classes, e.g. *fore-* (*foretell*), *ex-* (*ex-president*, *exorbital*) and *dis-* (*disbound*) among others (Bauer 1991: 219).

3.3.2 Prefixation in EModE

Nevalainen (2001: 378-91) provides a very thorough survey of EModE prefixation. I summarised this information in seven tables according to Nevalainen's categories, namely negative, reversative, locative, temporal, attitudinal, pejorative and intensifying prefixes (see Appendix I, tables 1.8-1.14).

With regard to prefixation, Barber (1997: 235) finds that the prefix *un-* is the most common prefix used during the EModE period, followed by *counter-*, *im-*, *-pre-*, *in-* and *re-*. Other prefixes like *trans-*, *en-* and *com-* are listed only once in his data. However, Barber is aware of the problem of over- or underrepresentation in the material due to certain peculiarities in his method of sampling.

3.3.3 Prefixation in Shakespeare's corpus

There was a general tendency for development, refinement and expansion in the EModE period. The need for lexical growth was also acknowledged, but there was no unanimity as to how it should be done (Blake 1983: 16). Competition for usage played a key role in the disappearance of the old prefixes and their gradual replacement by the new ones (Nevalainen 2001: 246-7). Some of the old prefixes from Old English (henceforth OE) and Old French (henceforth OF) continued to exist in reduced form, e.g. the prefix *ge-* in *enough*. Some of them disappeared due to the unstressed position in the word, e.g. the OF *dis-* in *disport* > *sport* (Brook 1976: 129-30). The adoption of prefixes entering English during the EModE period was influenced by an actual need for new prefixes and also by the influx of Latinate loans (Nevalainen 2006: 61). The result of this adoption was a variety of mono- and polysyllabic prefixes. This variety was necessary to create a perfect balance between stressed and unstressed syllables, meet the metrical constraints and create the sound effects that the literature of EModE focused on (Blake 1983: 44).

With the introduction of the new prefixes and their later naturalisation, such phenomena as Latinate and hybrid neologisms came into existence. Latinate neologisms consist of Latin bases and at least one Latinate bound morpheme (Garner 1987: 213). The Latinate neologisms were often learned, refined and sophisticated. Hybrids are coinages in which base and bound morphemes belong to different languages, e.g. a considerable number of EModE hybrids were formed using native bases and Latinate affixes. These were frowned upon by the purists, as they supposedly lacked the harmony of the non-hybrid coinages (Garner 1987: 229). Shakespeare appears to belong to the linguistic liberals who were of the opinion that what is not forbidden is allowed. Thus, affixes in general being regarded as 'loose material' could be combined freely with other English free and bound morphemes (Garner 1987: 230). Shakespeare combined both foreign and native morphemes to reach the desired dramatic effect. For example, the following Latinate coinages and hybrids are ascribed to him: *bemonster* (OE + French), *demi-wolf* (French/Latin + Common Germanic), *disbench* (Latin + Common Germanic), *unpolluted* (OE + Latin) and *disroot* (Latin + OE) (Hope 1999: 250; Garner 1987: 216-24).

Scholars have analysed the usage of prefixes in Shakespeare's neologisms and propose several generalisations. Synonymy and polysemy among prefixes resulted in derivational experimentation creating lexical variants (Nevalainen 2001: 246). Thus, the verbal prefix *en-*

was associated in EModE with the elevated forms and general decorum of Latin and was used to produce such metrical variants as *paint*/*enpaint* (Blake 1983: 44). Prefixation was also a common tool for Shakespeare when coining numerous nonce-words (coined and used only by him) to create an immediate dramatic effect, e.g. *provokes* vs *unprovokes* (Nevalainen 2001: 247-8). For example, Barber (1997: 239) found 164 words with the prefix *un-*, of which Shakespeare was, according to the *OED,* the first recorded user. *Un-* is described as the most productive prefix and was often preferred to the Latin *in-* or *dis-* e.g. *unseminared* vs *immoment* vs *discandy*. Shakespeare's choice of prefixes can probably be explained by the interplay of various factors such as dramatic context, metrical constraints, created allusions or general principles of WF. Thus, the French *moment* is perceived as more in harmony with Latin *in-* than the OE *un-* (Nevalainen 2001: 248).

Brook (1976: 128-39) gives an overview of other prefixes used by Shakespeare. He exemplifies the usage of the following prefixes: *a-*, *be-*, *de-*, *dis-*, *enter-*, *for(e)-*, *mis-*, *out-* and *up-*. For example, Shakespeare is found to use ***a-*** in the following coinages: *a-row* 'one after the other', *anew*, *a-good*, *a cold* and *a-hungry*. The prefix ***be-*** is an unaccented variant of the preposition *by* and forms transitive verbs from intransitive, e.g. *bespeack* 'speak to' and *bemock* 'mock at'. It can also form verbs from nouns or adjectives, e.g. *bewhore*, *bemadam* 'to give the name of'. In English it has been used since the OE period to describe deprivation, e.g. *behead*, *bereave*. The prefix ***de-*** in Shakespeare was found to be used in opposing senses, *demerit* 'desert (in a good way)' vs 'desert (in a bad sense: quality deserving blame or punishment)' (Brook 1976: 130).

The prefix ***dis-*** was found by Brook (1976: 131) to be used mainly with Latin and French bases, but native bases can be found in the works of Shakespeare, e.g. *disbench* and *disburthen*. Salmon (1987: 204) points out that the prefix *dis-* entered English during Shakespeare's lifetime and was first used only with foreign bases. Shakespeare's usage of *dis-* with native bases was probably regarded by the purists as barbarism. According to Brook (1976: 131), the prefix ***en-*** could often be confused with the Latin or English *in-*, e.g. *enquire*/*inquire* and *engaged*/*ingag'd*. It is used by Shakespeare to change nouns into verbs, e.g. *enwheel* 'encircle', modify the meaning of a verb: *entwist* 'to twist around' or for metrical reasons (adding an extra syllable), e.g. *endart* and *enguard* (Salmon 1987: 196; Brook 1976: 131). Brooks' examples of the usage of the prefix ***enter-*** (confused with its source, Latin prefix *inter-*) are *enterchange* and *enterview*. His examples of the usage of the prefix ***for(e)-***

are *foredo*, *foreslow*, *forespeak* and *forewearied.* The OE pejorative prefix ***mis***- is often used with French loans, e.g. *misreport* and sometimes replaces the OF prefix *mes*-, e.g. *mischief*. Brook (1976: 131) lists the prefix ***out***- 'exceed, surpass' combining with verbs converted from nouns. His examples are *out-paramour*, *out-tongue*, *out-Herod* and *out-night*.

According to Brook (1976: 132), Shakespeare has more than 600 instances of the usage of the prefix ***un***- (300 occur only once). Brook points out that economy of expression and universal compatibility are two very important qualities of this prefix. Salmon (1987: 204) adds that such economy of expression is a sign of a mature style. Brook (1976: 132) and Salmon (1987: 204) agree that *un*- with verbs converted from nouns conveys the meaning 'remove a quality', e.g. *unchild*, *unhair* and *unsex*. When used with verbs, *un*- conveys the meaning of a 'reversed action', e.g. *unbuild*, *uncharge* and *unshout*.

The prefix ***up***- was used with verbs to express ideas which today are expressed by an adverb following a verb, e.g. *uprous'd* and *up-fill*. Verbs were commonly compounded with prefixed adverb prepositions in OE (locative particles: *over*, *under*, *out* and *up*). However, by the year 1500 the locative particles followed the verb with the exception of the locative particles *out*-, *under*- and *over*-. So, while *underpeep* is created in accord with the WF principles of that time, *after-eye* and *uphoarded* are regarded by Salmon as overriding the WF rules. She presumes some poetic purpose in Shakespeare's choice of this type of coinage, e.g. 'to equate lexical and poetical stress' (Salmon 1987: 198).

3.4 Compounding

3.4.1 Compounding in English

Bauer (1991: 201-16) classifies compounds in terms of word-classes of the elements of compounds. As it is not always clear to which class a particular element belongs, this classification cannot be considered 'very delicate' (Bauer 1991: 202). However, he prefers this classification, as it helps to emphasise the semantic relationship between the elements of a compound.

According to Bauer (1991: 202), the majority of compounds in English are nouns. The biggest group is comprised of compounds where both elements are nouns. Bauer identifies several types of semantic relationships between the elements in the 'noun + noun' group. He

mentions appositional compounds where one element marks the sex, e.g. *boy-friend*. Another category is the dvandva compounds. These are a copulative type of compound that consists of two or more nouns of equal value, e.g. *Cadbury-Schweppes*. The third type comprises exocentric compounds (consisting of two common nouns), e.g. *skinhead*. The fourth type includes compounds where the first element is a gerund, e.g. *shooting match* or proper noun of place/person name, e.g. *Kennedy airport*.

Among the compound nouns where one or both elements are not nouns, Bauer differentiates between the following patterns. Compounds of the '**verb + noun**' pattern are characterised by the noun functioning as the direct or indirect object of the verb, e.g. *kill-joy* or *crashpad*.

The analysis of compounds with the '**noun + verb**' pattern is the most complicated, as the second element may be identified as either noun or verb, e.g. *sunshine* (Bauer 1991: 205).

There are also compounds with rare patterns or somewhat unclear structure. For example, compound nouns of the '**verb + verb**' pattern are found to be quite rare, e.g. *make-believe*. Also the compound nouns of the '**adverb + noun**' pattern with adverbs of time or place are not very common, e.g. *now generation*. Compound nouns of the '**adjective + noun**' pattern are identified as compounds or noun phrases depending on their stress pattern, e.g. *`deep structure* (compound) versus *deep `structure* (noun phrase). Nominalised phrasal verbs are illustrated by the '**verb + particle**' pattern, e.g. *drop-out*. Bauer (1991: 207) provides examples of phrase compounds such as *forget-me-not* and *son-in-law*.

According to Bauer (1991: 207), compound verbs are rare and the majority of them are a result of back-formation or conversion. There are two productive patterns to illustrate this point: the '**noun + verb**' pattern, e.g. *head-hunt* and the '**adjective + verb**' pattern, e.g. *double-book*. The relatively unproductive '**verb + noun**' pattern is exemplified by *shun-pike*. The '**particle + verb**' pattern comprises genuine verb formations, e.g. *overeducate*. The rarely used patterns include the '**verb + verb**' pattern, e.g. *typewrite*, the '**adjective + noun**' pattern, e.g. *bad-mouth* and the '**noun + noun**' pattern, e.g. *breath-test*.

Compound adjectives comprise various patterns. The '**noun+ adjective**' pattern, e.g. *childproof* is the most common one. Bauer (1991: 209-11) differentiates between the more common endocentric type, e.g. *ready-made* and the rarer appositional type, e.g. *bitter-sweet* composed using the '**adjective + adjective**' pattern. Among the rare compound adjectives are

those that are formed using the '**verb+ adjective**' pattern, e.g. *fail safe*, and the '**adverb + adjective**' pattern, e.g. *overqualified*. While the '**verb + noun**' pattern is not unusual, e.g. *roll-neck* (sweater), when forming compound adjectives, the opposite '**noun+ verb**' pattern does not in practice exist. There are examples of newer patterns like the '**verb + particle**' pattern, e.g. *see-through* (blouse) and the '**verb + verb**' pattern, e.g. *go-go* (dancer). Other patterns or structures are thought to be more problematic, e.g. *coffee-table* (book) formed with the '**noun + noun**' pattern; *high-rise* (tower) formed using the '**adjective/adverb + verb**' pattern or *red-brick* (university) formed by the '**adjective + noun**' pattern.

According to Bauer (1991: 212), compound adverbs exist, e.g. *double-quick* and *off-hand*, but it is not clear whether this pattern can be characterised by any sufficient degree of productivity. Additional compounds formed using other word classes do exist but are not very productive. Bauer (1991: 212) gives examples of compound pronouns, e.g. *anyone*, prepositions, e.g. *into* and conjunctions, e.g. *because of*.

Finally, Bauer (1991: 212-6) mentions three other types of compounds such as the neo-classical, the rhyme-motivated and the ablaut-motivated compounds. Neo-classical compounds are 'elements of the classical languages [prefixes, suffixes and combining forms] used in English word-formation', e.g. *biocrat*, *stereology*, *astro-dog* or *megacity* (Bauer 1991: 216). Rhyme-motivated compounds are *teeny-weeny* and *brain-drain*, while the ablaut-motivated compounds based on vowel changes or alternations are exemplified by *zig-zag*.

3.4.2 Compounding in EModE

Both Barber (1997: 237) and Nevalainen (2001: 409) support Bauer's claim (1991: 202) that the majority of compounds are nouns. Barber's research (1997: 237) shows that 89% of compounds are nouns and three-quarters of them are of the 'noun + noun' pattern. Compound adjectives are reported to appear less often, while verbs and adverbs are extremely rare. The discussion surrounding the main types of compounding that were productive during the EModE period is based on word-class distinction of the compound constituents, the determinatum which is the modified element and the determinant which is the modifying element (Nevalainen 2001: 407-24). Compounds with a compound determinant and a zero determinatum (not overtly expressed) are called exocentric. These compounds are of two

kinds, noun-based (*redskin)* and verb-based *(pickpocket)* (Nevalainen 2001: 415). Nevalainen's survey of compound patterns is summarised in Appendix I, tables 1.15-17.

3.4.3 Compounding in Shakespeare's corpus

Compounding is considered to be one of the oldest means of vocabulary augmentation. It allows one to obtain economy of expression and meet metrical constraints in poetic diction. Longer phrases and even whole clauses can be 'telescoped' into concise expressions (Nevalainen 2001: 239). The elimination of *-ly* or *and* supported by the use of hyphens saves one syllable when it is necessary to comply with meter constraints, e.g. *secret-false* (Salmon 1987: 197). For instance, the early works of Shakespeare were found to be rich in adjectives of this kind. However, Shakespeare's nonce forms that have a certain air of freshness and originality like *fortunate-unhappy, heavy-thick, honest-true* are more numerous than the everyday formations like *bittersweet* (Nevalainen 2001: 239, 418). As many of Shakespeare's compounds are formed to provide a coincidence of metrical and lexical stress essential for poetic and dramatic language, they are more acceptable in poetry than in prose, e.g. *night-shriek, to-and-fro-conflicting wind, without-book prologue* (Salmon 1987: 196, 200).

Patterns of noun compounds ascribed to Shakespeare can be differentiated by the first element (noun, adjective, verb or adverb) because the second element is always a noun. Compounds of the '**noun + noun**' pattern are divided into dvandva (formed by two or more nominal constituents of equal value), e.g. *king-cardinal* and *master-mistress* (Nevalainen 2001: 409) and all other '**noun + noun**' compounds (Brook 1976: 137). Those compounds which end with the agent suffix *-er* are claimed by Salmon (1987: 203) to be created mainly for economy of expression, e.g. *shoulder-clapper, night-brawler, bed-presser, purpose-changer* and *horse-back-breaker*.

Compounds with the '**adjective + noun**' pattern are found to be used attributively or independently. When independent, the usage is often colloquial and derogatory, e.g. *thick-lips* (Brook 1976: 138). Salmon (1987: 200) also found some cases where this pattern is used to create the proper name of a character, e.g. *Deepvow* and *Copperspur*.

Compounds with the '**verb + noun**' pattern represent imperative clauses where the noun usually functions as the object, and the clause is often used in a derogatory manner, as in *please-man, lack-love* or *kill-courtesy* (Brook 1976: 138; Salmon 1987: 203).This pattern is

also used to create proper names of characters, as in *Tearsheet, Starvelackey, Pickbone, Patchbreech, Keepdown* and *Lackbeard* (Brook 1976: 138; Salmon 1987: 200).

Compounds with the '**adverb + noun**' pattern also exist, e.g. *back return* (Brook 1976: 138). Sometimes such compounds can be used with prepositions, as in *at over-night* 'in the afternoon' (Brook 1976: 138). Because the normal position of an adverb is to follow a noun, Salmon (1987: 198) comes to the conclusion that such rearrangements were made necessary because of stress patterns. She quotes the following examples: *here-remain, hence-departure* and *here-approach*.

There are very many adjectival compounds in the Shakespeare's corpus. According to Salmon (1987: 200), the explanation for this lies in the fact that poets, in general, describe already existing phenomena rather than name new ones. Compounds with the '**adjective + adjective**' pattern can be divided into three categories (Brook 1976: 138):

- two elements strengthen each other: *wilful-opposite* 'stubborn' (Brook 1976: 138);
- there is a comparison between constituents: *rocky-hard* (Brook 1976: 138);
- constituents represent opposites: *odd-even* (Brook 1976: 138), *dumb-discoursive devil* and *devilish-holy fray* (Salmon 1987: 202).

The so called ***-ed*** compounds represent the most obvious example where compounding is combined with affixation. This type of compounding usually has a nominal or verbal base. They are represented by numerous examples in Shakespeare such as *star-crossed, rash-embraced, child-changed father* (Nevalainen 2006: 240; Brook 1976: 138). Among *-ed* compounds, Salmon (1987: 202) points out those based on physical or mental attributes, e.g. *grey-eyed, beef-witted* and *waspish-headed*. Certain words are used more often as the second element in these compounds e.g. *wit, mind* and *brain*. Nevalainen (2006: 240) claims that *heart* is one of Shakespeare's favourite bases and she found twenty compounds where this base was used. According to Brook (1976: 138), there is a certain number of *-ed* compounds which have a counterpart compound without the suffix *-ed*, e.g. *mad-brain*/*mad-brained*.

There are also some other peculiarities in Shakespeare's epithets. For example, although no preposition is present, some of his compounds still convey a prepositional understanding, as in *love-sick* 'sick with love' (Brook 1976: 138). There is a specific group of epithets based on activity. They usually have a present or past participle as their second element. A noun, an

adjective or an adverb can serve as the first element of these compounds, e.g. *heaven-kissing hill*, *sky-aspiring thoughts*, *lazy-pacing clouds*, *high-grown hill* and *star-crossed lovers* (Salmon 1987: 201). In the case of a noun being a first constituent in such compounds, Brook specifies its function as of a direct object, e.g. *cloud-kissing* (1976: 138). According to Brook (1976: 139), short describing phrases containing participles often become subject to compounding in the Shakespeare's corpus, e.g. *my too much changed Sonne*.

Brook (1976: 138) also mentions some uncertain cases which consist of two adjectives and the first element is used adverbially, as in *crafty sicke*. This gives rise to the question of whether it should be regarded a compound or a syntactic phrase. Salmon (1987: 197) supports this claim with more examples, e.g. *heavy-thick*, *secret-false*, *heady-rash*. She doubts that Elizabethans would perceive these cases as compounds and concludes that they were probably formed to meet the meter constraints (Salmon 1987: 197-8).

3.5 Conversion

3.5.1 Conversion in English

According to Bauer (1991: 226), conversion is a very productive method of English WF. It is considered to have almost no directional restraint as to the various forms of conversion. A word of nearly any part of speech can be converted into another part of speech. This is especially true in the open word-classes such as nouns, verbs, adjectives and adverbs. Bauer (1991: 227) points out that conversion can appear within one word-class, e.g. when an uncountable noun is converted into a countable noun (*cheese* vs *two cheeses*) or a proper noun is converted into a common noun (*Sandwich* vs *sandwich*). It is also considered a conversion when an intransitive verb is converted into a transitive verb or a non-gradable adjective is used as a gradable adjective (*English* vs *very English*). Nevalainen (2001: 425) does not support Bauer's claims and points out that such 'transfers of secondary word-class' are more likely to be an example of a semantic change within one and the same word-class combined with syntactic modifications. According to Nevalainen (2001: 425), such changes can be related to metonymic transfers, which do not effect a word-class affiliation.

Conversion is used very frequently and with such ease that many researchers consider it more of a syntactic process than a WF process. A number of criteria given by Bauer (1991: 228) can be of assistance in differentiating between these two processes. In particular, the following three criteria can help identify conversion to an adjective. If the converted word;

- can be used with degrees of comparison
- and/or can be modified by *so* and *very*
- and/or can be used as a base for *-ly*/*-ness*, then it is an adjective.

However, according to Nevalainen (2001: 424), the dividing line between a conversion and a syntactic process depends more on one's chosen theoretical framework than on preconceived criteria.

According to Bauer (1991: 229-30), the most frequent patterns of conversion are **noun > verb**, **verb > noun**, **adjective > noun** and **adjective > verb**. He adds that all word-classes can be converted, e.g. *but me no buts*. Even syntactical phrases, e.g. *under-the-weather* can be subject to conversion. Bauer (1991: 229) also mentions shift of stress in some pairs, e.g. *im`port*/*`import*. Bauer (1991: 229) defines the pair of words *belief*/*believe* as a partial conversion.

3.5.2 Conversion in EModE

According to Nevalainen (2001: 425), conversion is the third-most frequent WF process in EModE after affixation and compounding. The most common types of conversion in EModE coincide with the most frequent conversion types mentioned by Bauer (1991: 229): noun > verb (*gossip*, *invoice* and *lump*), adjective > noun (*ancient* and *invincible* 'one who is invincible'), verb > noun (*invite*).

Barber's research supports the above mentioned. He specifies that 8% of his material is formed by conversion (Barber 1997: 237). Among the three most common types of conversion found in his material, two coincide with the most frequent patterns mentioned by Nevalainen (2001: 426), namely noun > verb (*apprentice*), adjective > noun (*ancient*). In addition, there are small groups of adjectives derived from nouns, e.g. *Briton* and verbs derived from adjectives, e.g. *dizzy*. For an overview of conversion in EModE based on Nevalainen's (2001: 424-30) survey see Appendix I, table 1.18.

3.5.3 Conversion in Shakespeare's corpus

According to Crystal (2008: 149), conversion is a prominent trademark of Shakespeare's style. Hope (1999: 245) supports this claim pointing out that Shakespeare often plays with the same word, putting it in different circumstances and thereby changing its word-class. Since conversion was a powerful means of reaching economy of expression, it was practiced among the more experienced poets of the time (Salmon 1987: 204). Also Nevalainen (2001: 241) specifies conversion as a popular means of WF during the Elizabethan era. Strong motivations for conversion comprise meeting metrical constraints and the possibility of creating suitable or desired connotations (Nevalainen 2001: 242-3).

Crystal (2008: 149, 162) identifies 200 cases of conversion among Shakespeare's neologisms, and he emphasises verbs and adjectives in particular. Verbs are a result of conversion from nouns (both common and proper), adjectives and adverbs. Adjectives result from denominal or deverbal conversion. Blake (1983: 8) too claims to have found plenty of nouns converted from adjectives within Shakespeare's works.

An example of verbs converted from nouns are *duke* 'to act as duke' and *stranger* 'to turn into a stranger' (Nevalainen 2001: 241). Salmon (1987: 206) provides similar examples of verbs converted from nouns of the structure 'to turn x into y', e.g. *god* 'to turn into a god' and *coward* 'to turn into a coward'. She also provides a more peculiar usage of conversion, e.g. *elf* 'tie in the manner of elves' and *flap-dragon* 'engulf like a morsel floating in liquid' (Salmon 1987: 204). Coinages of this type can also denote bodily activities as in *lip* from *Othello*, '*to lip a wanton in a secure couch*'. Another example is *uncle* from *Richard II*, '*grace me no grace, nor uncle me no uncle*' (Salmon 1987: 205). Concrete nouns are made to function as abstract verbs through metaphorical use, e.g. *virginal* 'touch the palm of the hand as though playing upon the virginals', *mountebank* 'treat with deceitfulness' and *furnace* 'to exhale as though from a furnace' (Salmon 1987: 205).

Among verbs converted from adjectives, there are *dumb* 'to make dumb' and *safe* 'to make safe' (Nevalainen 2001: 241). Salmon (1987: 205) regards this type of conversion as characteristic for the 'dramatic energy of Shakespeare's mature style'. Nouns converted from verbs are represented by *accuse* and *dispose*. However, based on the information gleaned from modern historical dictionaries, Nevalainen (2001: 241) claims that these neologisms might have been coined earlier. Some difficulties in the interpretation of the WF processes

used in Shakespeare's neologisms are noted by Nevalainen (2001: 244), e.g. *childed* and *fathered* are interpreted as verbs or adjectives by different scholars.

3.6 Minor word formation processes and unpredictable formations

3.6.1 Minor word formation processes and unpredictable formations in English

Clipping, blends and acronyms belong to unpredictable formations, as there are factors other than WF principles involved (Bauer 1991: 232). Clipping involves the shortening of any part of a lexeme without changing its meaning or word-class (Bauer 1991: 233). For example, clipping the beginning in *Vietcong* provides *Cong*, clipping the end in *microphone* provides *mike* and clipping both ends in *pyjamas* gives *jams*. Compounds can also be subject to clipping, e.g. *optical art* reduced to *op art* (Bauer 1991: 233). As with clipping, back-formation is a WF method which involves shortening the lexeme. While clipping can shorten any part of the lexeme and does not change the word class of the base, back-formation involves the shortening of only the end of a lexeme and involves a change in the word class of the base. For example, the verb *locate* is back-formed from the noun *location* (Nevalainen 2001: 431).

Blends are defined as new lexemes formed from the parts of two or more other words, e.g. *chunnel* < *channel* + *tunnel* (Bauer 1991: 234). Normally, blends consist of the beginning of the first word and the last part of the second word. In spite of the fact that, as Bauer (1991: 236) points out, there is no clear-cut rule here, this WF process is characterised by substantial productivity. In some instances the difference between blending and clipping is diffuse, e.g. *stagflation* < (*stagnation* + *inflation*) or *arcology* < (*architectural ecology*). Bauer (1991: 233) uses stress to solve this problem. If a new formation retains the original stress pattern of the compound used, it is treated as a clipped compound rather than a blend.

An acronym is a word coined by the initial letters of the source words or phrase, e.g. *WASP* (White Anglo-Saxon Protestant) or *GRAS* (Generally Recognised as Safe). Bauer (1991: 237) notes that the interest in suitable acronyms can be decisive in the choice of the source words of the naming process. He concludes that while some cases can be the result of several

processes of WF, 'the purest cases of WF are when a word is created *ex nihilo*', that is without any linguistic motivation, e.g. *Kodak* (Bauer 1991: 239).

3.6.2 Minor word formation processes and unpredictable formations in EModE

According to Nevalainen (2001: 430), three minor WF processes are observed during EModE, i.e. back-formation, clipping and blending. Research shows that there is no identifiable use of back-formation before 1500 (Nevalainen 2001: 431). Back-formation is often of a colloquial, humorous or technical character. Nevalainen (2001: 431-2) describes six productive types of back-formation that were used in EModE. The results in Barber's research provide only one example of back-formation, the verb *dizz* < *dizzy*, an adjective, implying the use of only one type of back-formation (Barber 1997: 239). For a full overview of six types of back-formation described by Nevalainen see my table 1.19 in Appendix I.

Just as in back-formation, the process of clipping was first established in EModE, e.g. *lone* 1530 < *alone*, *live* 1542 < *alive*, *gainst* 1590 < *against*, *drawing-room* 1642 < *withdrawing-room* and *wig* 1675 < *periwig* (Nevalainen 2001: 432). Scholars agree that clipping the end of a word has comprised the majority of clippings since EModE, e.g. *coz* < *cousin* and *brandy* < *brandywine* (Nevalainen 2001: 432). Barber provides the examples *quack* < *quack salver* and *chap* < *chapman* (Barber (1997: 238-9). Nevalainen (2001: 433) observes that clipping two different lexemes can result in the same shortening e.g. *sub* < *subordinate* or *subaltern*.

Blending was not very frequent in EModE and was created mostly for aesthetic or practical effect, e.g. *divelination* 1591 < *devil* + *divination* or *rebuse* < *rebuked* + *abuse* (Nevalainen 2001: 433).

Apart from the above mentioned types of minor methods of WF, Nevalainen (2001: 430) also mentions the EModE records of reduplications, realised by either an initial consonant change combined with rhyme, e.g. *claptrap* and *hocus-pocus* or a vowel alternation, e.g. *bibble-babble* and *chitchat*. According to Nevalainen (2001: 431), the pick of such formations appeared in the sixteenth century. Other kinds of coinages include sound imitation, e.g. *faugh* 'to bark', misderivation, e.g. *do* < *ado*, misinterpreted as *a do* and popular etymology, e.g. *ancient* 'a flag, a standard bearer' < *ensign*. Barber (1997: 239) refers to the following words

shaped by popular etymology, e.g. *frenne* ‘foreign’ < *fremd*. Also, he refers to small groups of words of ‘imitative’ or ‘echoic’ origin.

3.6.3 Minor word formation processes and unpredictable formations in Shakespeare

The only mention of Shakespeare’s use of minor WF processes was found in Garner (1987: 214). He provides some examples of shortening, such as *cital* and *versal*, referred to as ‘shortening to form aphaeretic words’. He also gives an example where the Bard coined *prudency* by dropping a negative prefix (Garner 1987: 214).

3.7 Summary

The theory chapter included a brief introduction describing the general methods of word formation used in English. It was followed by an overview of the methods used during the Early Modern English period. The methods described are suffixation, prefixation, conversion, compounding and minor methods of word formation such as back-formation, blending and acronyms. The chapter predominantly summarised the existing research done on Shakespeare’s own use of word formation methods.

This chapter forms the foundation and provides a springboard for my research of how Shakespeare used the tools available to him while coining new words.

4 Method

4.1 The Oxford English Dictionary (OED*)*

The Oxford English Dictionary is reputed to be 'the ultimate authority on the language' and is the most comprehensive resource for the historical research of English and therefore the best reference tool of its kind (*OED Online*; Shea 2014: 122). Being the only large-scale diachronic dictionary of the English language, the *OED* is used extensively as an investigative tool in historical linguistic research. The excellent reputation of the *OED* in the field of English studies is built on the reliability and validity of data that the dictionary provides for the academic world (Brewer 2012: 345-7; Shea 2014: 122). This thesis uses the *OED* as the major source of data for its investigation.

4.1.1 The history of the Oxford English Dictionary

It all began in 1857 when The Philological Society of London decided to start an ambitious project of a four-volume dictionary of the English language. *The New Oxford Dictionary* (*NED*) was published in fascicles during 1884-1928. However, instead of the planned ten years for the four volumes, the project took more than forty years and resulted in not four but ten volumes. Around 1933, the original edition of *The New Oxford Dictionary* was also reprinted in 12 volumes under the title *Oxford English Dictionary* (*OED*). Updating the *OED* started soon after the first edition of the dictionary was complete in 1933. These updates, called *Supplements*, were added as separate volumes to the *OED* (*OED Online* history section).

The updating of the dictionary is a continuous project. Additional volumes of *Supplements* were created and published during the period from 1933 to 1986. In 1989 the second edition of the *OED* (*OED2*) was published when the *Supplements* containing new or previously unrecorded lemmas or senses were integrated into the first edition of the *OED* (*OED1*). This 1989 edition contained twenty volumes of *Supplements* (Shea 2014: 124). The first digital version of the *OED* was published in 1992, opening a new horizon for the dictionary. In the year 2000 the *OED* started what is arguably the most ambitious project in its history, the *OED3*. The contents of this edition have undergone the most extensive revision. As of today, this revision is an ongoing process, with quarterly updates published online. This project

started at the letter *M* and is continued alphabetically as well as 'in out-of-sequence' order, meaning that new updates can appear anywhere in the dictionary (Goodland 2011: 9). The scale of the alterations done to the *OED* is reflected in the fact that for the first time material written in 1928 by the chief editor and the early editors has been changed for the first time in the history of the *OED.*

OED's attitude to Shakespeare was clearly stated by the chief editor, James Murray when he named 'all the great English writers of all ages' as his principal sources. (Brewer 2012: 347). Shakespeare is the most cited author in the *OED*, with almost every word credited to him presented in the dictionary. Although a certain preference for Shakespeare may have resulted in an overrepresentation of his works in the *OED,* this cannot be regarded as a hindrance for research.

4.1.2 The Oxford English Dictionary practices

According to Brewer (2012: 349), the official policy of the *OED* when exemplifying historical usage was to have one quotation per century. Therefore, the lexicographers would quote the first known example of a usage of a word but could risk missing out on other quotations using the same word from the same century. However, when using the dictionary, we see that this is a truth with some modification, and the *OED* does not always adhere to its policy.

Both the first and the second editions of the *OED* did not always identify the meaning or the etymology of Shakespeare coinages. According to Brewer (2012: 347), the *OED* contains around 300 examples marked as 'origin and meaning [was] uncertain'. Brewer (2012: 347) highlights the fact that digitalising the *OED* has greatly facilitated the quantifying of each individual author's contribution to the English language. The digital version of the *OED* also makes possible an efficient comparison of entries between the current and previous versions of the dictionary. Although a separate electronic version of *OED2* is no longer available as one united searchable database, the reader can still access individual entries in the *OED2* via the current *OED Online* (Brewer 2012: 351).

4.1.3 The last edition of the Oxford English Dictionary

Brewer (2012: 349, 350) points out that the updating of the latest edition of the *OED* was still in progress in 2011 and only a third of the alphabet had been revised by that time. Thus, at present *OED3* is a fusion of revised and unrevised material from *OED2* (Brewer 2012: 351).

Compared to *OED1and OED2*, the *OED*3 is enriched by a broader range of sources (both literary and non-literary) and modern research (Brewer 2012: 346, 350). This results in a constantly changing picture of Shakespeare's contribution to English. Antedating is a major contributor to the changes. The number of neologisms credited to the Bard decreases. This is verified by Shea's (2014: 124) research, which establishes that the number of neologisms credited to Shakespeare has diminished, with every new edition of the *OED*. Antedating of Shakespeare's neologisms is mainly responsible for the loss of many coinages previously attributed to him. On the other hand, other authors of the EModE period also lose neologisms due to antedating, and sometimes they lose them to Shakespeare.

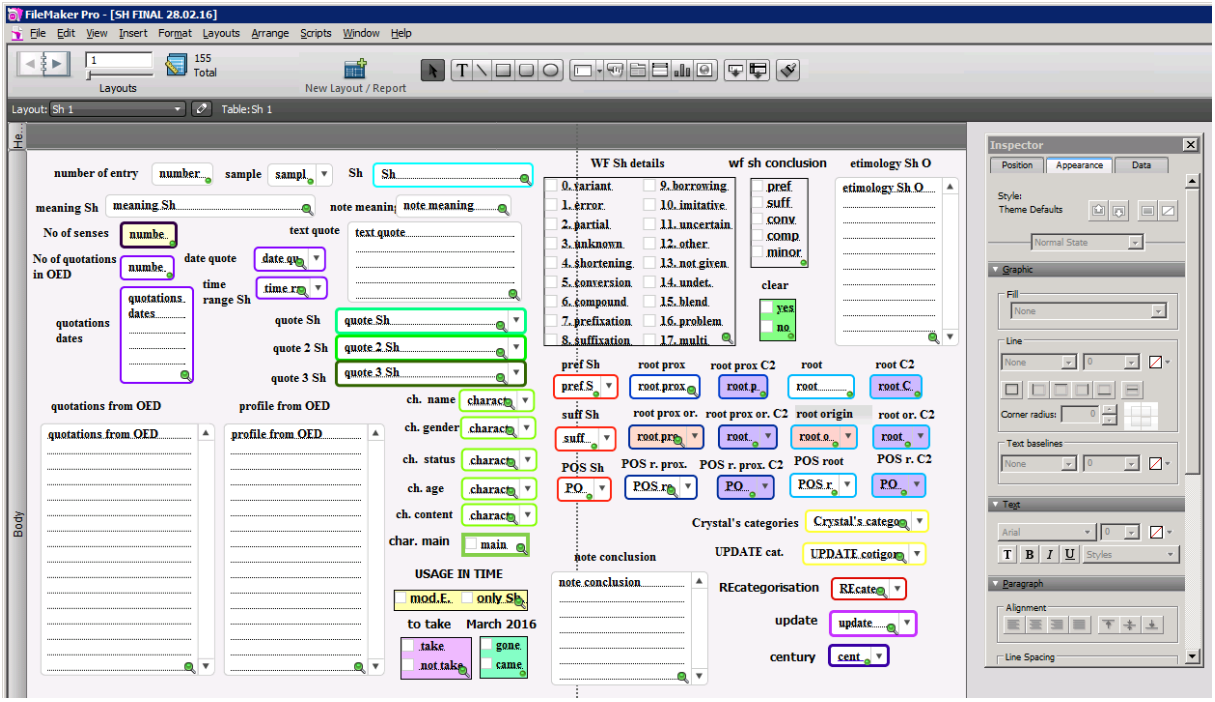
Certain methodological changes, introduced in *OED3*, are also responsible for the increase of neologisms attributed to Shakespeare. Splitting a first-edition entry into two or more new entries and the reattribution of authorship are two examples of such changes. The play *Two Noble Kinsmen*, the authorship of which was originally attributed only to Fletcher, is now also attributed to Shakespeare, who is cited as the co-author. This has added more than 20 new neologisms to Shakespeare's hoard (Brewer 2012: 353). The reason why only Shakespeare is accredited with these neologisms is not given in the *OED*. Moreover, the broader definition of a compound changes some of Shakespeare's phrases, formally analysed as syntactical formations, into compound neologisms, e.g. *life-in-death* (Brewer 2012: 353). Finally, there are coinages that were 'genuinely missed' by *OED1-2*, e.g. *merry-meeting* or *night owl*, in the sense 'a person who is up or active late at night' (Brewer 2012: 354-5).

The data for my thesis is taken from *OED Online*, which at the moment consists of the second and third editions of the *OED*. The third edition (*OED3*) takes the Oxford Shakespeare edition of his works as its foundation (Brewer 2012: 353). According to Shea (2014: 125), unlike *OED*2, *OED3* makes extensive use of Shakespeare's First Folio, resulting in date changes for plays from this source. Thus, the plays *Twelfth Night*, *Measure for Measure* and *Macbeth* among others are now assigned with the date *a*1616 (the year of Shakespeare's death) and 1623 in parenthesis (the year the First Folio was published). Because of the use of the *First*

Folio, a number of the *OED*2's first citations credited to Shakespeare have been post-dated and have lost their status to other authors (Brewer 2012: 353). Thus, the adjective *majestic* was ascribed to Shakespeare with quotation from *Julius Caesar*. This play was dated 1601 by *OED2*. In *OED3* it is dated 'a1616 (1623)', and therefore 'the 1st cited in' status is lost to the poet John Davies with the quote from 1606.

4.2 Construction of the database in File Maker Pro

The current research was carried out using the 12.0v3 version of the program *File Maker Pro* provided by the University of Oslo. One thousand five hundred and four words from the *OED Online* 'First Cited in Shakespeare' list 2015/2016 were analysed with help of File Maker Pro. The following picture shows the entire layout of the research file (see picture 4.2.1).

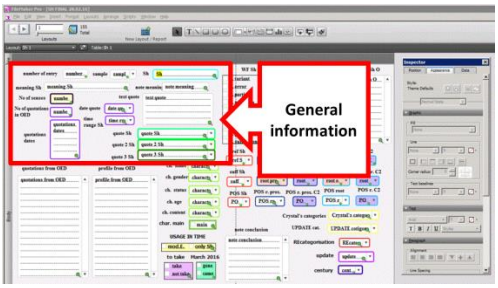
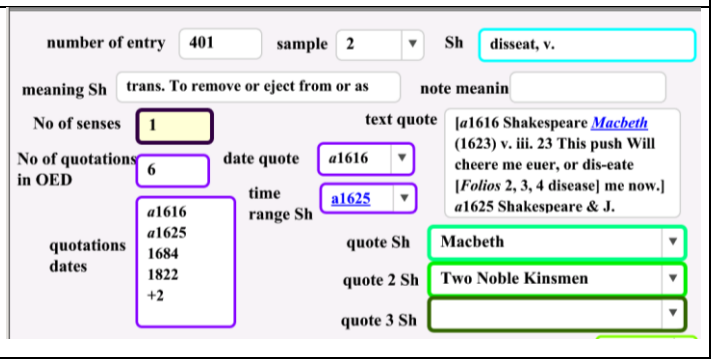


Picture 4.2.1: Layout 'Shakespeare'.

Below are several pictures which explain the use of the File Maker Pro program in detail. The layout '*Shakespeare*' is divided into six sections. The first section contains general information from the *OED* entry for the word analysed (see picture 4.2.2). This section contains the fields with information about:

- the word analysed (field '*Sh*');

- the number of the word in the list 'first cited in Shakespeare' from the *OED*, accessed in the December 2015 – January 2016 (field '*number of entry*');
- the meaning of the word (field '*meaning Sh'*);
- quotes from Shakespeare's texts containing the word in question (field '*text quote*');
- indication of which works contain the quoted word (fields '*quote Sh*', '*quote 2 Sh*' and '*quote 3 Sh*');

Place in the layout	Section in detail
	

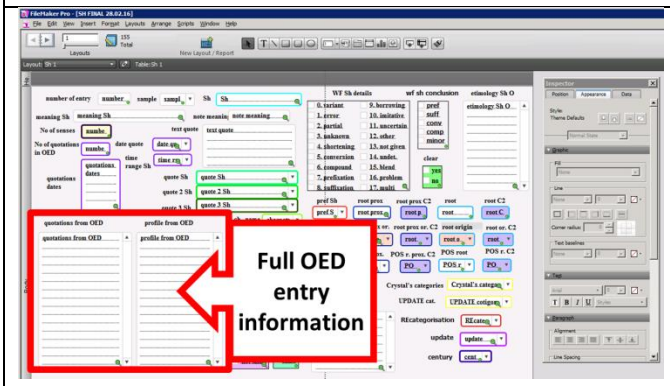
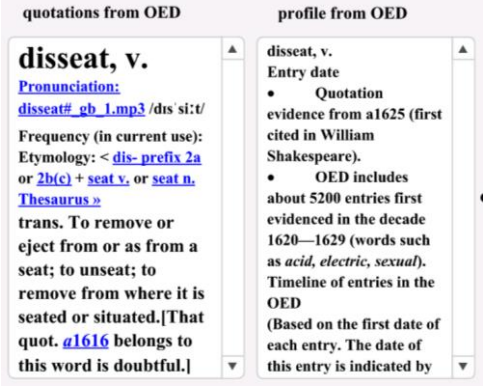
Picture 4.2.2: General information from the OED

- indication of whether there are several quotations in the same *OED* entry (field '*sample'*);
- indication of the date of the quote (field '*date quote*');
- indication of the period when a particular word is used in English (field '*time range Sh*');
- indicators of the number of senses, number and dates of quotations from the *OED* entry (fields '*number of senses*', '*number of quotations*' and '*quotations dates*').

The fields show the distribution of neologisms according to the dates and literary works they were used in. One can, for example, use this to map Shakespeare's most productive period of WF and the play containing the largest number of neologisms. With the help of information from the field '*sample*', it is possible to identify words that are exemplified several times in the *OED* entry. Information from the field '*senses*' shows the distribution of neologisms

according to the number of senses they have developed through time. My hunch is that words that have developed more senses might come from the most famous plays.

The section *Full account* has two fields. These fields gather all the information from the *OED* about a word in one location.

Place in the layout	Section in detail
	

Picture 4.2.3: Full account

This section contains information about:

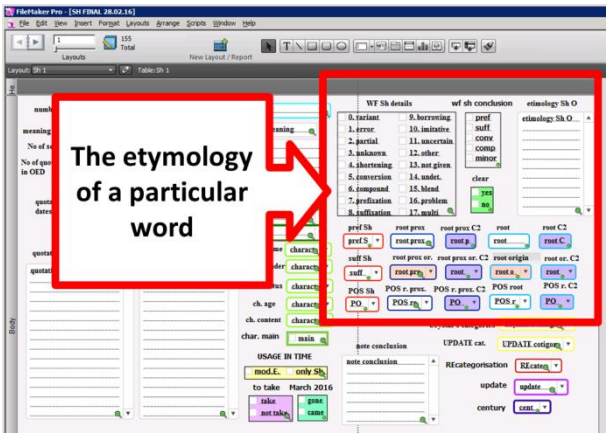
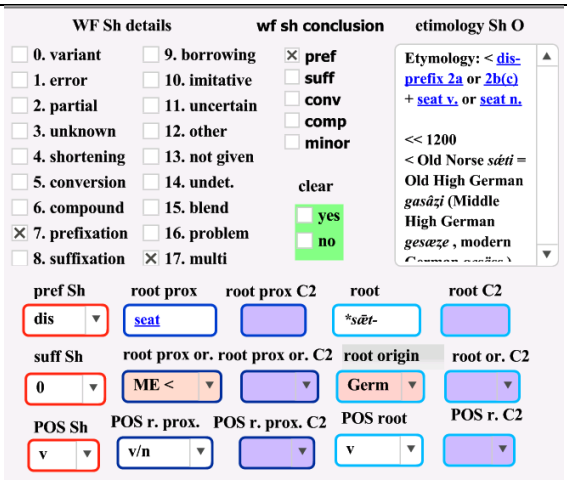
- the whole entry (field '*quotations from OED*');
- the content of an entry from the *OED* (field '*profile from OED*').

This allows me to gather in one place all the information for a particular word, as it appears in the *OED* and greatly facilitates my analysis.

The next section *The etymology of a particular word* contains general information about the etymology and WF methods used in a coinage (see picture 4.2.4). The section contains such fields that provide information as to:

- the etymology section of the word analysed (field '*etymology Sh OED*');
- WF type (field '*WF Sh*');
- detailed information as to the identity of the WF type , interpretations in the *OED* and other pertinent information (field '*WF Sh details*');

- how clearly the WF type is identified in the entry (field '*clear*');

Place in the layout	Section in detail
	

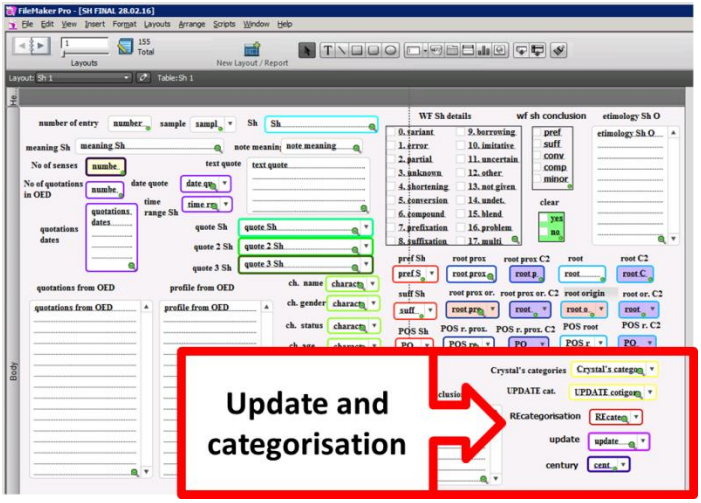
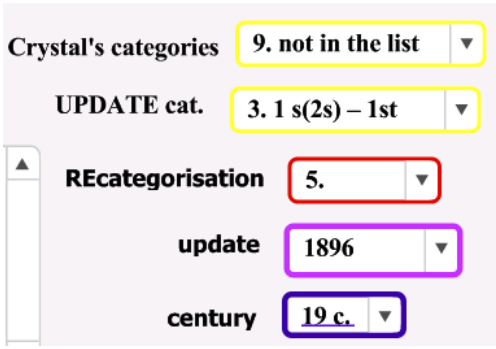
Picture 4.2.4: The etymology of a particular word

- indication of affixes if present (fields '*pref Sh*' and '*suff Sh*');
- indication of the root (proximate, ultimate root of a word or constituents in case of a compound: all four '*root'* fields, top row);
- indication of the language of origin (<u>proximate</u> source of a word, namely before the WF process took place; proximate source of neologism constituents in case of a compound; the language of origin of <u>ultimate</u> source(s), as far as possible (all four '*origin*' fields, mid row);
- indication of the part of speech of the word analysed, its parts if it is a compound and its ultimate source(s), as far as possible (all five '*POS*' fields, bottom row).

The information from this section allows both a general and detailed analysis of the distribution of neologisms according to their WF types. It also helps to identify ambiguous cases with multiple or uncertain etymology. It helps to separate cases where the *OED* does not identify etymology or only provides partial information. Furthermore, this section helps identify the distribution of neologisms as to their language of origin or their part of speech. The conclusions made based on the analysis of the information provided by this section can help answer such questions as to whether Shakespeare:

- ✓ followed a more liberal or conservative trend in WF
- ✓ belonged to the purists or the 'inkhorn term' users
- ✓ favoured any particular affixes
- ✓ favoured a particular method of WF.

The next section *Update and categorisation* contains information about the time of the latest update of a particular word and what place it occupies in Crystal's categorisation, whether it was subject to re-categorisation, and if yes, what place it now occupies in Crystal's categorisation (see picture 4.2.5).

Place in the layout	Section in detail
	

Picture 4.2.5: Update and categorisation

This section also contains fields that provide information about:

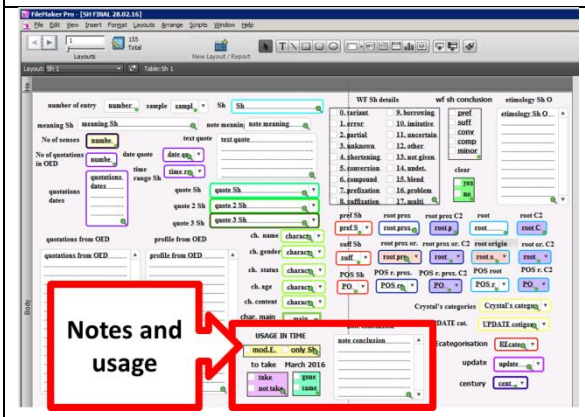
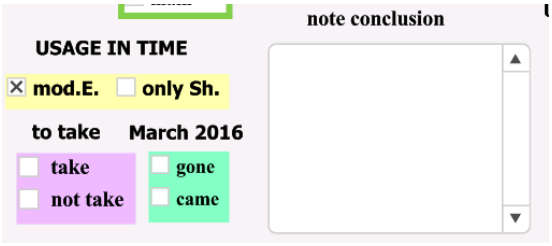
- indicators of the original Crystal categorisation and the current place of a word in that categorisation (fields '*Crystal's categories*' and '*REcategorisation*');
- information of the *OED* updates such as year and century (fields '*update*' and '*cent*ury');

Information from this section:

- ✓ helps to clarify the changes, implemented since 2000, in the *OED* FiCiS list
- ✓ identifies the trends in the field concerned with neologisms attributed to Shakespeare

- ✓ indicates if this number diminishes or increases, as new research updates existing information
- ✓ establishes whether Shakespeare still retains his position as the most prolific neologiser in English or whether he is more of a promoter of new words independent of their authorship.

The next section *Notes and usage* contains information about the usage of a particular word analysed and some additional notes (see picture 4.2.6).

Place in the layout	Section in detail
	

Picture 4.2.6: Notes and usage

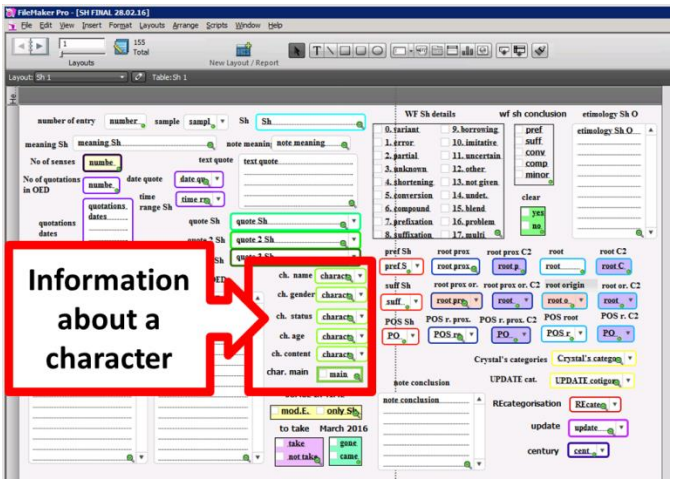
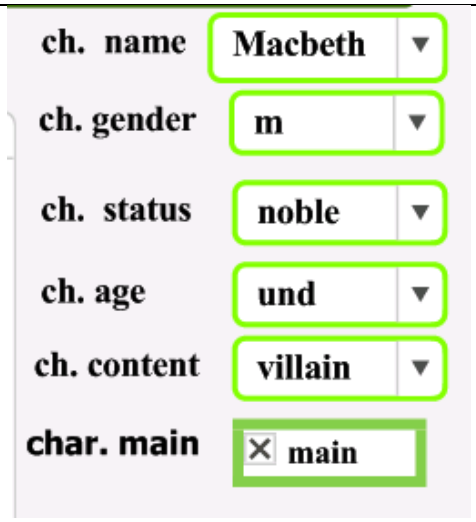
This section contains such fields that provide information as to:

- time of usage, i.e. whether it was used only by Shakespeare or whether it caught on and is used in our time as well (field '*usage in time*')
- anything that is interesting to note (field '*note conclusion*')
- the selection words for any further analysis if needed (field '*take*').
- marking the changes that occurred between January and March 2016, i.e. words that entered or left the FiCiS list (this information was added later and did not influenced the main research (field '*March 2016*')

Information given in the above section helps to uncover any special trends in WF that may be related to the survival of some words into modern times. In the field '*notes*', there is

information from Crystal's list where he indicates Shakespeare's date for a word, as well as when it was first used by another author.

The last section *Character* contains information about Shakespeare's characters and which neologisms they uttered (see picture 4.2.7).

Place in the layout	Section in detail
	

Picture 4.2.7: Character

This section contains information as to:

- name, gender, status, age and who uttered a particular quote (field '*ch. name, gender status, age, content and char. main.*').

The information from this section is used to identify whether Shakespeare consistently used particular characters to promote new words or whether his neologisms were randomly distributed among them. For example, whether verbs are reserved for men of action and nouns for women; whether positively charged words are trusted to the most positive characters and what words can be associated with characters of a particular status. The data for the last section was taken not from the *OED* but from the searchable database of the *Open Source Shakespeare* (henceforth *OSS*) website. The OSS contains all of the Bard's works, except the play *Two Noble Kinsmen*.

4.3 Summary

The *OED* was invaluable as a source of information for the construction my File Maker Pro database. It provided the FiCiS list which forms the basis of my research. I found within its pages invaluable information regarding etymology, usage of Shakespeare's neologisms and the Bard's quotes. The *Open Source Shakespeare* web site also provided important information with regard to Shakespeare's characters. The File Maker Pro program was the primary tool used to organise, systematise and analyse the 1,504 words from the FiCiS list.

5 Results

5.1 First research question: 'What are his words?'

To what degree has William Shakespeare's status as a coiner diminished due to the results of new research?

5.1.1 The research material

The foundation for this research is the 'First Cited in Shakespeare' list of 2015/16 from *OED Online* (henceforth referred to as the *OED Online* FiCiS list). To establish Shakespeare's current status as a coiner, Crystal's FiCiS list (2008) was compared to the *OED Online* FiCiS list. While Crystal's list (2008) credits Shakespeare with 2,229 coinages, today's *OED Online* credits Shakespeare with 1,511 neologisms. However, a closer look at the *OED Online* list reveals that while the authorship for 1,504 coinages belongs to Shakespeare, the remaining seven are attributed to other authors (Appendix III table 3.1).

5.1.2 Crystal's (2008) categorisation

In 2008 Crystal categorised the words from the *OED* FiCiS list of the time according to their likelihood of being genuine Shakespeare coinages. In 2008 the FiCiS list comprised material from *OED2* and the letters M and N from the budding *OED3* (Shea 2014: 124). Crystal uses the date of usage of a particular word based on the information given in the *OED* to establish the basis for his categorisation. Crystal differentiates between eight categories (see table 5.1.1).

I discovered some discrepancies in Crystal's categorised list. The word *apathaton* appears in both category one and category seven. In keeping with Crystal's own criteria, I determine that *apathaton* belongs in category seven. I have removed this word from Crystal's category one, thereby reducing the 309 words in this category to 308. There is also a miscount of one word in the fourth category. The number provided in Crystal's list is 462 words. However, when each word is counted individually, the number comes to 463. Finally, I found that the word *allicholly* is listed once in the third category of Crystal's list, although it is defined as both a noun and an adjective. Based on the current version of the *OED* that defines *allicholly* as two

words and has a separate entry for each word (one for a noun and one for an adjective), I choose to raise the number of the third category by one, from 1,035 to 1,036 (see table 5.1.1).

Table 5.1.1: Crystal's (2008) categorisation with corrections

Category	No of words in the original list	No of words in the corrected list	Definition of the category
1	**309**	**308**	'Shakespeare is the **only** recorded user'
2	**48**	**48**	'Shakespeare is the **only** recorded user of a word in a particular sense, but someone else uses the word in a different sense, though not until at least **25 years later**'
3	**1,035**	**1,036**	'Shakespeare is the **first** of several people using a word, in one or more senses, but the later usages do not occur until at least **25 years later**'
4	**462**	**463**	'Shakespeare is the **first** of several people using a word, in one or more senses, but the later usages occur **within 25 years**'
5	**29**	**29**	'Shakespeare's is the **only** use of a word in a particular sense, but there is a related sense used by someone else **within 25 years**'
6	**151**	**151**	'Shakespeare is the **first** of several people using a word, in one or more senses, whose later usages occur at least **25 years later**; however, a different sense of the word occurs **within 25 years**'
7	**10**	**10**	'Shakespeare's is the first and only recorded usage, but the item is a corruption, such as a malapropism'
8	**185**	**185**	'Shakespeare is the first user of a word in a particular sense, but there is one or more earlier uses in another sense'

The words from the first three categories comprise 1,392 words. They are considered by Crystal as 'strong candidates' to be identified as genuine Shakespeare coinages and also retain this status (Crystal 2008: 161, online supplement). From category four to category eight, the chances that a word is a genuine Shakespeare coinage lessen progressively, as the category number increases.

Brewer (2012: 349) finds Crystal's categorisation to be an 'ingenious' method of dealing with Shakespeare's neologisms. Both Brewer and Shea are, however, sceptical regarding Crystal's dependence on the *OED* as the sole source of reference, knowing that Shakespeare has a dominating influence on the *OED*, which creates a bias towards other authors (Brewer 2012: 348; Shea 2014: 121).

The *OED* has changed its dating policy since Crystal's categorisation (Brewer 2012: 353). This results in changes to some of the original dates attributed to Shakespeare's works. For example, the play *Antony and Cleopatra* was originally dated 1606 in *OED*2. In *OED3*, however, the date is given as '*a*1616' (meaning 'before Shakespeare's death'). Crystal, for the most part, bases his categorisation on the 1989 edition of *OED2* (Brewer 2012: 347).

Secondly, Crystal does not take into account the fact that the *OED*, in any edition, does not give all the quotations in which a particular word is used within any period of time. According to Brewer (2012: 349), the official *OED* policy is one quote per century. This results in Crystal's third category '*Shakespeare is the first of several people using a word, in one or more senses, but the later usages do not occur until at least 25 years later*' being compromised, as there may be gaps in the basic information. However, it should be noted that the *OED* does not always adhere to its policy of one quote per century, and several quotes per century can often be found in the dictionary.

Based on the above, Brewer concludes that although Crystal's categorisation itself is acceptable, his penchant for relying solely on the *OED* for information somewhat compromises the validity of his results (Brewer 2012: 349-50). According to Shea (2014: 122), the *OED* is the supreme diachronic dictionary of the English language and an outstanding reference tool for linguistic research. However, when considering the general lexical coinage in the English language, Shea (2014: 121) doubts that the *OED* can serve as the sole arbiter in the on-going debate as to who coined what.

5.1.3 Antedating

'*These words are not mine*'

Crystal foresees that some of the words from the FiCiS list he used would be antedated and lose their status as '1st used by Shakespeare' (Crystal 2008: 161 online supplement). Out of the 2,229 words listed in Crystal's categories, I find that the *OED* has already antedated 866. Other scholars also agree that the number of coinages credited to Shakespeare is steadily decreasing, with each new edition of the *OED* (Shea 2014: 124; Brewer 2012: 352). However, the broad range of difference between the results of antedating within Crystal's categories, namely from 0 to 97% is surprising (see table 5.1.2).

Table 5.1.2: Antedating rate

1	2	3	4
Category from Crystal's categorisation	**No of words in Crystal's category**	**No of antedated words**	**%**
1	308	33	10.7
2	48	9	18.8
3	1,036	262	25.3
4	463	272	58.7
5	29	16	55.2
6	151	94	62.3
7	10	0	0
8	185	180	97.3

My analysis shows that the categories from one to three, the 'strong candidates' for survival, display an average antedating rate of 18.3%.

(10.7 + 18.8 + 25.3)/3 = 18.3%

The rate of antedating increases significantly in the categories from four to eight, averaging at 54.7%, with the highest rate of 97.3% belonging to the eighth category.

(58.7 + 55.2 + 62.3 + 0 + 97.3)/5 = 54.7%

This substantiates Crystal's hypothesis that the neologisms in the first three categories are the strongest candidates to retain their status as Shakespeare's neologisms.

The exception is Crystal's seventh category. Although there should have been a high number of words lost to antedating, my analysis shows that there is no loss in this category at all. The reason for this is that since these words are mostly humorous corruptions, e.g. *apathaton* as a corruption of *epitheton,* serving the poet's immediate need of the dramatic context, the chances that they were coined by another author and later used by Shakespeare are minuscule. My research shows that the average rate of antedating for Crystal's list as a whole is 41%.

(10.7 + 18.8 + 25.3 + 58.7 + 55.2 + 62.3 + 0 + 97.3)/8 = 41%

This figure of 41% supports previous research done by Goodland (2011: 352).

Table 5.1.3 shows a selection of antedated words enjoying extensive usage in modern English. My impression is that the most commonly used words today are also more likely to have already been antedated than words that are more rarely used. It is interesting to note that many of the well-known names such as *East Indies, Hellespont, Golgotha, Goliath, Madeira,*

Mephistopheles, Newgate, Prometheus and Scotch at one time were considered Shakespeare's coinages. Not surprisingly, these very common household names are now antedated.

Table 5.1.3: Selection of antedatings

category	1	2	3	4	5	6	8
antedating	*well-noted* *well-wished*	*observing* *out-burn* *protester*	*assassination* *employer* *import* *judgement-day* *night-wandering* *outgrow* *overrate* *prophetic* *useful* *useless* *vulnerable*	*employment* *fortune-teller* *generous* *gloomy* *love-letter* *luggage* *madame* *manager* *masterpiece* *paternal* *pedant* *pious* *stanza*	*equivocal* *obliged* *reinforcement* *unquestionable*	*accommodation* *addiction* *auspicious* *cold-blooded* *educate* *epileptic* *gossip* *successful* *secure* *supervize* *transcendance* *wild goose chase* *tutor* *worthless*	*antic* *canary* *cash* *caviare* *competence* *confectionary* *disaster* *entrance* *essay* *instalment* *judicious* *mistaken* *reference* *rendezvous* *squandering*

5.1.4 Previous research

Antedating also influences the results of previous research done on Shakespeare's coinages and will compel scholars to re-evaluate certain sections of their research. Nevalainen (2001: 241) exemplifies Shakespeare's conversion patterns with six examples, two words for each pattern:

- the noun > verb pattern to produce verbs like *duke, stranger*
- the adjective > verb pattern to produce verbs like *safe, dumb*
- the verb > noun pattern to produce nouns like *accuse, dispose*

As a result of antedating, only one example *stranger* is still present as a coinage in the *OED Online* FiCiS list. Salmon in her research (1987: 197, 205-6) also provides examples of prefixation of which almost 50% are now invalid due to antedating, e.g. *after-eye*, *over-veil*, *uphoard*. Out of the four examples provided by Brook (1976: 131) to illustrate Shakespeare's usage of the prefix *fore-* (*forewearied, forespeak, foreslow* and *foredo*), none is currently found in the FiCiS list. There is no evidence that any of these words were ever ascribed to Shakespeare by the *OED*. When researching neologisms, modern researchers should tread carefully.

5.1.5 Postdating

Postdating, based on *OED's* change of dating policy, has also caused a certain amount of words to lose their previous status as Shakespeare's neologisms. For example, the word *auspicious* from *All's Well That Ends Well* was dated 1601 in *OED2*, and Shakespeare was credited as the first user. Therefore, this word can be found on Crystal's list. Due to *OED*'s change in their dating policy, *OED Online* has the same quote dated '*a*1616'. Since John Selden used the word *auspicious* in 1614, he and not Shakespeare is credited as the first user in *OED Online* now. This creates an artificial situation with regard to antedating (Brewer 2012: 353). The verb *antic* from *Antony & Cleopatra* is another case in point where Shakespeare loses first user status to Thomas Nashe. This leads me to assume that some of the 866 antedated words lost their status as Shakespeare's neologisms not due to antedating but because of the change in *OED*'s dating policy.

5.1.6 Mysterious losses

Some quotations seem to have lost their status as Shakespeare's neologisms both in Crystal's list and the *OED Online* FiCiS list in inexplicable ways. The word *high-borne* from *Love's Labour's Lost* was on Crystal's FiCiS list with the date 1588. In *OED2* Shakespeare was identified as the first and only user of the word *high-borne.* In *OED Online*, while other authors are credited as users of the word, Shakespeare is not even mentioned as a user. Michael Drayton is credited as the first user in 1596, and therein lies the mystery.

5.1.7 Newcomers

'Each word made true and good'

In the period of eight years between Crystal's categorisation and the *OED Online* list of 2015/16, 140 new words arrived on the scene. Although there were several sources for these new arrivals, the majority were the result of the antedating/postdating of other authors and changes in authorship attribution. As mentioned earlier, these new words compensated for losses especially in categories one, two and three. Of the 140 newcomers, 100 were distributed within the first three categories (see table 5.1.4).

Table 5.1.4: Newcomers

Category	Newcomers
1	19
2	13
3	68
total	100

Since 100 of the newcomers are distributed among the first three of Crystal's categories, they are according to Crystal strong contenders to survive in the *OED Online* FiCiS list (Crystal 2008: 161 online supplement). Of the 40 that were distributed among the other five categories, one 'newcomer', the adjective *got* which went into category four has already lost its status (*OED Online* update of March 2016). This seems to further support Crystal's criteria for categorisation.

(1)Sources of newcomers

As mentioned above, the primary sources of newcomers are antedating and postdating of other authors, reattribution of authorship and changes in *OED's* definition of what constitutes a compound.

For example, George Peele was credited as the '1st user' of the adjective *bosky*. Antedating resulted in Peele losing this '1st user' status to Shakespeare who is now cited as the first user in *OED Online*. An example of postdating is the shift of '1st user' status for the adjective *upspring* from *Hamlet*. Shakespeare is now credited with the '1st user' status for this adjective instead of Sir Jerome Horsey who was originally ascribed the authorship. The play *Two Noble Kinsmen* contributed 27 neologisms, e.g. *meditance* 'meditation' and the verb *disroot* 'to pull up by the roots' (fig. 5.1.1).

This major contribution from one particular play is the result of a change in authorship attribution. Originally, John Fletcher was the attributed author of the play. Modern research, however, reveals that William Shakespeare was the co-author (Brewer 2012: 353). Based on this research, *OED Online* now credits Shakespeare as the '1st user' of the above mentioned 27 neologisms.

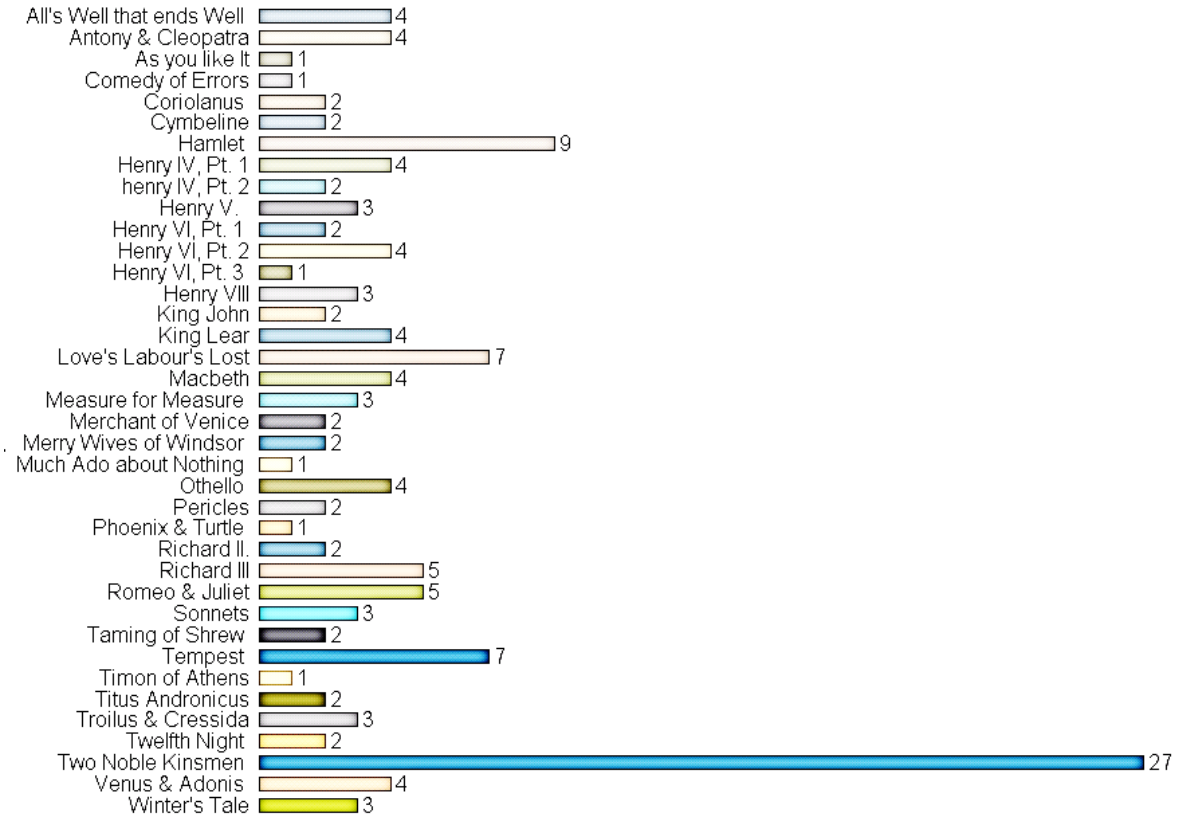


Figure 5.1.1: Distribution of new words in Shakespeare's corpus

There are 29 compounds among the 'newcomers'. The sources of these compounds are either the result of new research or of *OED3*'s new definition of what a compound is (Brewer 2012: 353). Examples from this category of 'newcomers' include compounds like the adjectives *white-handed*, *old-faced* and the nouns *water thief*, *rope trick.* An interesting result of this broader definition is the phrase *memento mori*, first used in *Henry IV, Pt. 1*: '*I make as good vse of it as many a man doth of a deaths head, or a memento mori'*. *Memento mori* literally means 'remember that you must die'. According to *OED3'*s new policy *memento mori* becomes a compound noun meaning 'a warning of the inevitability of death'.

5.1.8 Changes

I applied Crystal's criteria from table 5.1.1 to categorise the *OED Online* FiCiS list of 2015/16. Then, I proceeded to compare Crystal's (2008) categorised list with my categorisation of the *OED Online* FiCiS list. The purpose is to examine if there are any significant changes as to the status of the coinages in any of the categories. Table 5.1.5 summarises the results of my comparison.

Table 5.1.5: changes in Crystal's FiCiS list

1	2	3	4	5	6
Category No	**Crystal's categorised list 2008**	**Neologisms lost**	**Neologisms gained**	**Categorised FiCiS list 2015/16**	**% change**
1	308	88	25	245	-20.5
2	48	17	27	58	+20.8
3	1,036	379	126	783	-24.4
4	463	284	126	305	-34.1
5	29	19	6	16	-44.8
6	151	99	36	88	-41.7
7	10	1	0	9	-10
8	185	185	0	0	-100
Total	**2,230**	**1,072**	**346**	**1,504**	

As we can see from the table, Crystal has 1,392 neologisms in his first three categories.

308 + 38 + 1036 = 1392

However, my categorisation of the FiCiS list of 1,504 coinages (column 5 of the table) shows 1,086 neologisms within the first three categories.

245 + 58 + 743 = 1086

This represents a total reduction of 306 coinages compared to Crystal.

The additional 418 neologisms needed to bring my list on par with the 1,504 coinages from the *OED Online* FiCiS list are distributed among the other five categories. We can also observe from the table that while categories one and three lost coinages, category two gained a total of ten coinages (27 - 17 = 10). The average percentagewise change for the first three categories is 8%.

(-20.5 + 20.8 - 24.4)/3 = 8%

Similarly, the average percentagewise change for the five remaining categories is 46.1%.

(-34.1 - 44.8 - 41.7 - 10 - 100)/5 = 46.1%

The changes in both cases represent losses. These figures support Crystal's hypothesis stating that the 1,392 coinages in Crystal's first three categories are stronger candidates to retain their status as Shakespeare's neologisms than the 838 coinages in the other five categories. This means that, as the *OED* continues its updating, the 418 neologisms distributed in categories

four to eight of my categorised list also have a far greater chance of being removed from the *OED Online* FiCiS list.

5.1.9 Summary

When comparing my categorisation of the *OED Online* FiCiS list with Crystal's categorisation, I found that Shakespeare's status as a coiner has not diminished. My research established that Crystal's categorisation and hypothesis is quite robust. My results also support Brewer's recent research on this subject (Brewer 2012: 356). While the Bard lost '1st user' status to other authors mainly due to antedating/postdating, he also gained new '1st user' status due not only to antedating/postdating of other authors but also due to the reattribution of authorship. Some losses of '1st user' status due to new research were compensated for by new additions discovered by the very same research. Old documents from the EmodE period coupled with new research possibilities are now shedding new light on the older assumptions of Shakespeare's status as a neologiser. This caused a substantial part of the examples provided by researchers like Nevalainen (2001, 2006), Salmon (1987) and Blake (1983) to be now inaccurate. New knowledge calls for the re-evaluation of previous research results. Researchers should today be wary of drawing definite conclusions regarding Shakespeare's neologisms.

5.2 Second research question: ‘So shall my lungs coin words’

Do words coined in the corpus of Shakespeare’s texts reveal any recognisable trends with regard to the word formation methods used?

5.2.1 The research material

Since only 1,200 of the 1,504 coinages listed in the *OED Online* FiCiS list have identifiable word formation methods, my research for this section will be limited to these 1,200 words. The words with missing etymology as well as any words defined by the *OED* as borrowings, errors or variants are not included in the analysis.

The word formation methods analysed are:

- suffixation
- prefixation
- conversion
- compounding
- minor types including shortening and back-formation (see fig. 5.2.1).

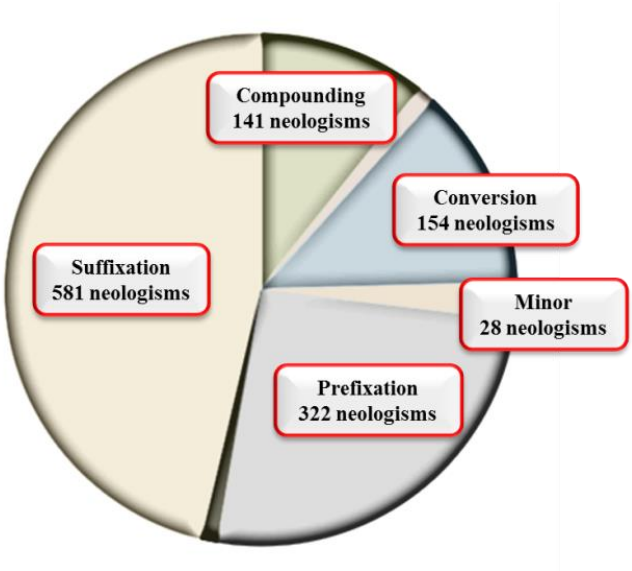


Figure 5.2.1: Distribution of Shakespeare’s neologisms according the WF method used

On occasion Shakespeare also combined two different word formation methods to coin a word. Prefixation is combined with suffixation to coin 13 words, e.g. *non-regardance* where the base *regard* is combined with the prefix *non-* and the suffix *-ance*. There are also 13 formations coined using a combination of suffixation and compounding, e.g. the suffix *-ed* and the compound with the bases *ill* and *star* to form the word *ill-starred* (for the overview of the FiCiS list neologisms categorised according to WF methods used to coin them see Appendix II, tables 2.1- 2.7).

5.2.2 Establishing the methods of word formation

There are some challenges when establishing the exact method of word formation used for coining some of these 1,200 neologisms.

While the *OED* states that locative particles, such as *over, under* and *up,* can be used as prefixes, Nevalainen (2001: 383) opposes this stand point. Nevalainen (2001: 383, 414) is of the opinion that, as these words belong to free lexemes and function independently, they should not be considered prefixes. She suggests that coinages including these words should be considered compounds. Thus, according to Nevalainen, formations *underpeep* and *overbeat* are coined by compounding. The *OED*, however, maintains that they are coined using prefixation. This difference of opinion does not add to or detract from the total number of coinages attributed to Shakespeare. It detracts from the number of coinages attributed to prefixation, while adding proportionately to the number of coinages attributed to compounding and vice versa. Although Nevalainen may have a valid point, I have decided to base my research for this thesis on the *OED* definitions, data and policy.

Table 5.2.1: Clearly defined etymology and word formation method

WF method	Word	Etymology in the OED
prefixation	*discandy*, v	Formed within English, by derivation. Etymons: dis- prefix, candy v. < dis- prefix + candy v.
suffixation	*baseless*, adj.	Formed within English, by derivation. Etymons: base n.[1], -less suffix. < base n.[1] + -less suffix.
compounding	*ballad-monger*, n.	Formed within English, by compounding. Etymons: ballad n., monger n.[1]
conversion	*climate* v.	Formed within English, by conversion. Etymons: climate n.[1] < climate n.
minor	*gooddeed*, adv.	Formed within English, by clipping or shortening. Etymons: English *in good deed*.

When examining the data for the 1,200 words, I find that there is some ambiguity as to the exact word formation method used to coin a considerable number of these words. This

ambiguity is caused because the etymology of the word in question is not always clearly defined in the dictionary. In the instances where the etymology is clearly defined, *OED Online* also provides the word formation method of the coinage (see examples in table 5.2.1).

When analysing the words with unclear etymology, I discovered 31 words that were shown by *OED Online* in a manner implying conversion since the *OED* does not overtly identify any suffixes or prefixes being used to form these words: e.g. *founded*, adjective < *found*, verb (see table 5.2.1). This could result in conversion being mistakenly defined as the method of word formation used to coin *founded*. Most of the 31 words involved are formed by using the suffixes *-ed* and *-ing*. For the purpose of this thesis I will abide by the accepted definition of conversion. Conversion is defined as the word formation method by which a word is converted from one word-class into another without any formal change, e.g. *work*, verb < *work*, noun (Nevalainen 2001: 424; Bauer 1991: 227). Therefore, I consider all 31 words to be coined by suffixation.

Some confusion as to the WF method used can be caused when the *OED* shows a pattern more associated with conversion in words like *snail-slow*: '*snail-slow*, adjective and adverb < *snail* noun'. The adjective/adverb *snail-slow* cannot in theory be formed only with the noun *snail*, as shown in the etymology above. The word formation method for this type of word fits better into the definition of compounding. The word in this case is a lexical unit consisting of more than one base, functioning both grammatically and semantically as a single word (Nevalainen 2001: 407). In cases similar to the above mentioned, I will abide by Nevalainen's definition of compounding.

For the purpose of further analysis, words of unclear etymology, such as the types exemplified in table 5.2.2, will be defined as conversions.

Table 5.2.2: Unclear etymology

Edition	Word	Etymology in the OED
OED2	*squabble*, v.	See squabble n.
OED2	*struck*, adj.	Past participle of strike v.
OED2	*squinny*, v.1	Compare squinny adj.
OED2	*squash*, n.1	Related to, or directly from, squash v.[1].

Multiple etymologies, as indicated by the *OED*, can also be a source of confusion. In these cases, I consistently choose the first indicated etymology. Table 5.2.3 shows three different

types of multiple etymologies. The first type shows two different parts of speech (henceforth POS) as possible sources. The second type indicates that one of the possible sources may be a borrowing. The third case is the most ambiguous, since the first given variant, '*counter-seal,* verb < *counter-seal,* noun' indicates conversion, while the second given variant identifies '*counter-*, prefix' implying prefixation (see table 5.2.3).

Table 5.2.3: Multiple etymologies

Edition	**Word**	**Etymology in the OED**
OED2	*halt,* n.	< halt v.[1], halt adj.
OED2	*compassion,* v.	< compassion n., or probably < French *compassionner* (15th cent. in Littré) to compassionate.
OED2	*counter-seal,* v.	See counter-seal n. and counter- prefix 1.

There are 171 neologisms in the *OED Online* FiCiS list that have missing etymology. The analysis of the word formation methods used to coin these words reveals that compounding might have been used in 56 of the words, e.g. *downstairs*, *football*, *watch-dog*, *so-forth* and *twin-brother* among others. As my analysis only considers words with identifiable word formation methods, these 56 words are not included in the list of 141 words formed by compounding and are not a part of the data used for this analysis.

It is very possible that these words, as a part of *OED*'s updating process, will be defined as being coined by compounding. This will cause the number of the words coined by compounding in the *OED Online* FiCiS list to increase to around 200. The result may be that compounding takes over the third place while pushing conversion down to number four in Shakespeare's word formation. This will put Shakespeare even more in tune with the traditional distribution of the use of word formation methods in EModE (Nevalainen 2001: 351).

5.2.3 Suffixation

(1)Number of suffixes

Suffixation is a word formation method which includes the combination of a suffix and a base. It is mainly used to change the word class of the base (Nevalainen 200; 377, 392). Suffixation appears to be Shakespeare's predominant method of word formation. Out of a total of 1,200 words in the *OED Online* FiCiS list, I found that 581 are coined by suffixation. Based on the data provided by *OED Online*, I identified 43 suffixes that are used by Shakespeare to form these 581 neologisms. The usage of these different suffixes is not evenly distributed among the coinages. Shakespeare's usage of suffixes can be divided into four categories:

- used only once
- used rarely – less than ten times
- used often – more than ten times
- extreme use – more than hundred times.

The question then is what influences Shakespeare's frequency of usage of any particular suffix. The general trend appears to be that the regularity of the usage of a suffix depends mainly on three factors, with two features each. These factors are the origin of the suffix (foreign or native) the age of the suffix (first recorded use in English) and the part of speech desired in the coinage (see table 5.2.4).

Table 5.2.4: Frequency usage factors

	Left column	**Right column**
Origin	foreign	native
Age	new	old
POS	noun / verb	adjective / adverb

Figure 5.2.2 shows how the frequency of use is influenced by the features of the three factors. The more features a suffix possesses from the left column of table 5.2.4, the less likely it is to be used frequently. At the same time, the more features it possesses from the right column, the more likely it is to be used often.

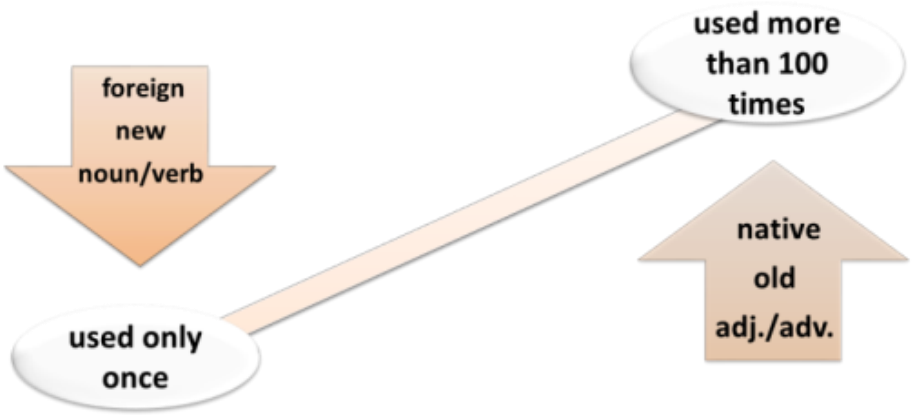


Figure 5.2.2: Frequency scale

As illustrated in figure 5.2.2, the usage scale includes two extremes. At the bottom end of the scale is the 'used only once' category, while the top end is the 'used more than 100 times' category. While most of the suffixes used lie somewhere in between the two extremes, the extremes themselves consist of seven suffixes that are used only once and two suffixes that are used over 100 times (see tables 5.2.5-5.2.8). Suffixes which came into use during the EModE period are considered 'new', while those naturalised into English during earlier periods are considered 'old', e.g. *-able* and *-let* (table 5.2.6).

Table 5.2.5 shows the suffixes that were used only once, table 5.2.6 shows the suffixes that were used less than ten times, table 5.2.7 shows the suffixes that were used more than ten times, and table 5.2.8 shows the extensive use of the suffixes *-ed* and *-ing*.

Table 5.2.5: Suffixes: single use

No	Suffix	No of times used	Place of origin	Time of the 1st use in English	POS	Shakespeare's formation
1	*-dom*	1	native	OE	noun	*birthdom*
2	*-hood*	1	native	EModE (1599) existed in English earlier but in different form: ME *-hod* (*-hode*) < OE *–hád*	noun	*lustihood*
3	*-ic*	1	French < Latin < Greek	EModE	noun adjective	*stigmatic*
4	*-ify*	1	French < Latin	EModE	verb	*fishify*
5	*-ite*	1	Latin	no definite info	noun	*ottomite*
6	*-ot*	1	French < Latin	ME	noun	*carlot*
7	*-th*	1	undetermined	OE	noun	*spilth*

Table 5.2.6: Suffixes used rarely

No	suffix	No of times used	Place of origin	Time of the 1st use in English	POS of the formation (number of formations in brackets)
1	*-able*	6	French < Latin	ME	adjective (6)
2	*-acy*	2	Latin	ME	noun (2)
3	*-age*	7	French < Latin	ME	noun (7)
4	*-al/ial*	6	French < Latin	ME	noun (2) adjective (3) adverb (1: *inventorially*)
5	*-an*	4	Latin	ME	noun (1: *arrivance*) adjective (3)
6	*-ance/ence*	10	French < Latin		noun (10)
7	*-ancy/ency*	5	Latin		noun (5)
8	*-ant*	3	French < Latin	ME	noun (2) adjective (1:*suppliant*)
9	*-ate*	2	French < Latin	ME	noun (2)
12	*-en*	3	Native	OE	adjective (2) verb (1: *disliken*)
13	*-ary/ery*	5	French	ME	noun (5)
14	*-ess*	4	French < Latin < Greek	ME	noun (4)
15	*-ful*	10	Native	OE	noun (1: *bookful*) adjective (9)
16	*-ion*	2	French < Latin	OE, ME	noun (2)
17	*-ish*	3	native French	OE, ME	adjective (3)
18	*-ist*	4	French < Latin < Greek	no definite info	noun (4)
19	*-ity*	2	French < Latin	ME	noun (2)
20	*-ive/ative*	8	French < Latin	ME	noun (1: *primogenitive*) adjective (7)
21	*-ize*	2	French < Latin < Greek	OE (ecclesiastical and philosophical use; formation of verbs on Greek analogies) EModE (1594)	verb (2)
22	*-let*	2	French	OE, ME	noun (2)
23	*-like*	6	Native	OE, ME	adjective (4) adverb (2)
24	*-ling (ling+s)*	2	Native	OE	noun (2)
25	*-ness*	6	Native	OE	noun (6)
26	*-ry*	4	French	ME	noun (4)
27	*-ship*	4	Native	OE	noun (4)
28	*-ward*	2	Native	OE	noun (1: *nayward*) adverb (1: *parkward*)

Table 5.2.7: Suffixes used more than 10 times

No	Suffix	No of times used	Place of origin	Time of the 1st use in English	POS of the formation (number of formations in brackets)
1	*-er/or*	28	Native	OE	noun (27) verb (1: *clamor*)
2	*-less*	42	Native	OE	adjective (42)
3	*-ly* *-ing+ly*	42	Native	OE	adjective (3) adverb (39)
4	*-ment*	21	French < Latin	ME	noun (21)
5	*-(t)(i)ous*	12	Latin	ME	adjective (12)

6	*-ure*	14	French < Latin	ME	noun (14)
7	*-y*	17	Scandinavian French < Latin < Greek Native	EModE ME OE	adjective (17)

Table 5.2.8: Extensive use of suffixes

No	Suffix	No of times used	Place of origin	Time of the 1st use in English	POS of the formation (number of formations in brackets)
1	*-ed*	166	Native	OE	noun (1: *routed*) adjective (165)
2	*-ing*	118	native	OE	noun (24) adjective (94)

(2)Suffixation used to coin various parts of speech

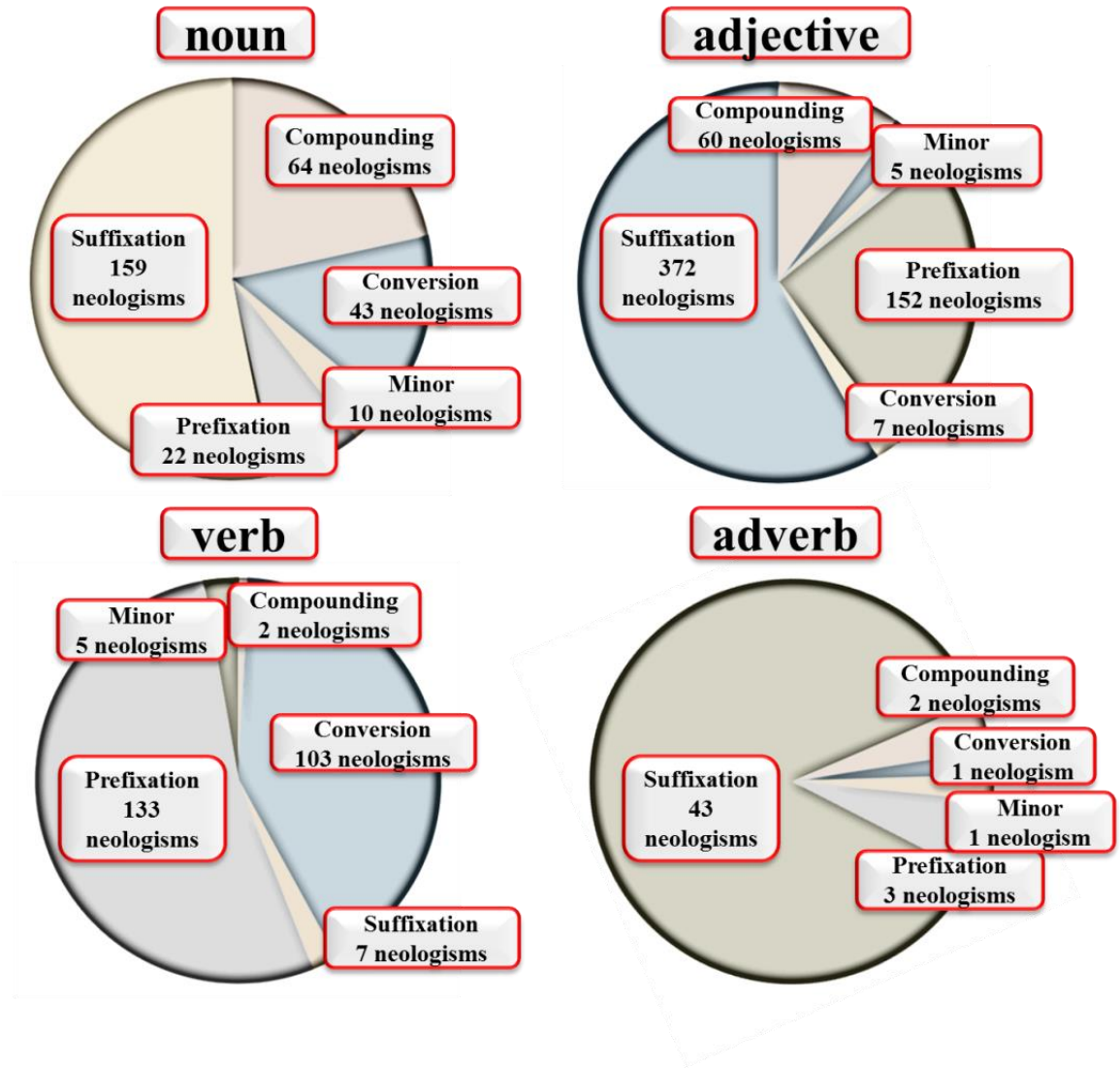


Figure 5.2.3: WF methods used to coin various parts of speech

My research shows that the largest group of words coined by suffixation are adjectives. Shakespeare used 16 suffixes to coin 372 adjectival neologisms. Many of these suffixes have a high frequency of use, e.g. *-ed* and *-ing*. The second largest group of words coined by suffixation are nouns, namely 159 words. However, the frequency of use for the majority of the suffixes forming nouns is rather low, from one to 10 times, e.g. *-ant*, *-ess*, and *-ist*, (table 5.2.5-5.2.7). Figure 5.2.3 illustrates Shakespeare's use of WF methods when coining various parts of speech. The pie charts in this figure illustrate that Shakespeare preferred suffixation when forming all parts of speech with one exception, verbs. While Shakespeare uses suffixation to coin almost 80% of his adverbs, his use of this word formation method drops to almost 2% when coining verbs. The use of prefixation and conversion seem to have been more natural for Shakespeare when coining verbs.

(3)The distribution of suffixes used to form different POS

Figure 5.2.4 illustrates the suffixes that are used to form different POS.

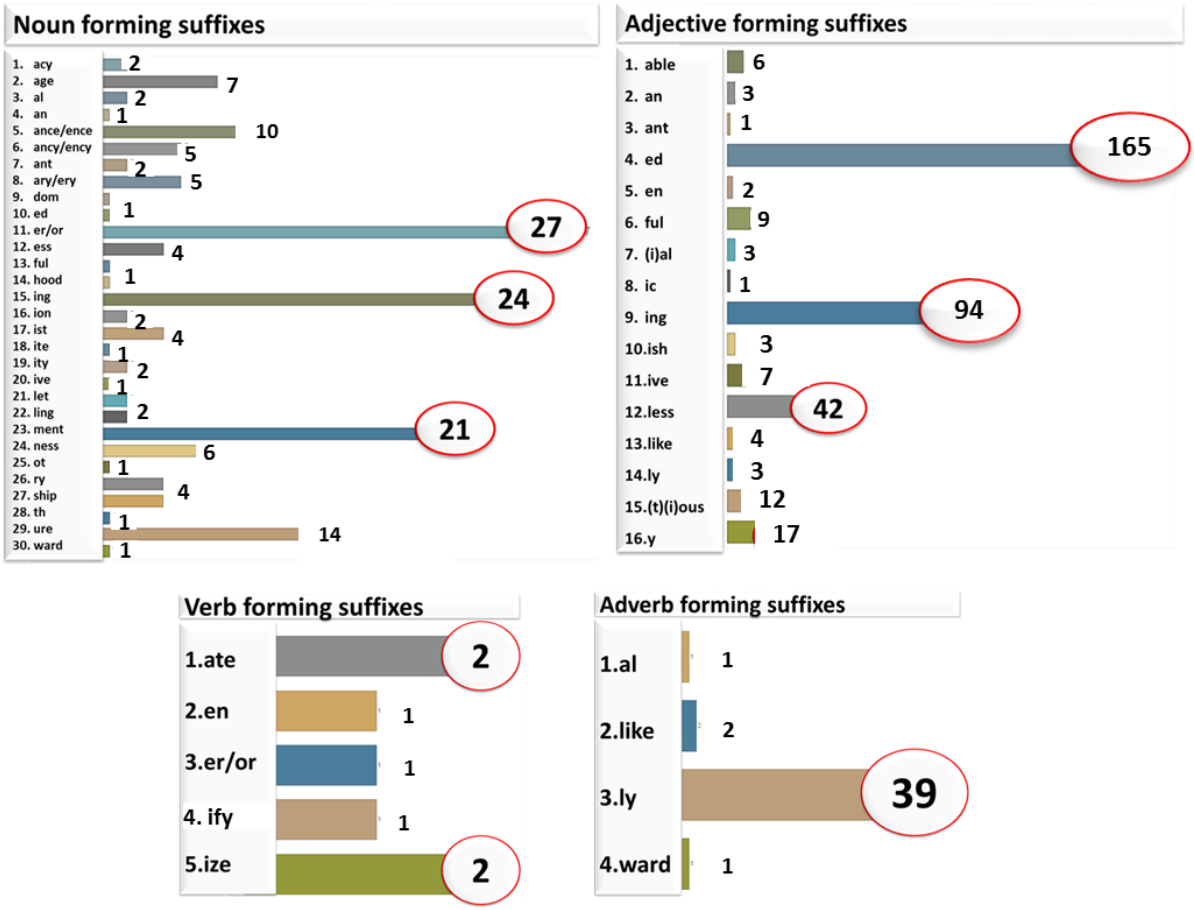


Figure 5.2.4: Suffixes used to form different parts of speech

The most frequently used suffixes are highlighted with a circled number. The figure shows that suffixes of native origin like *-ing, -ed, -er/-or, -less, and -ly* enjoy the most extensive usage, with one exception. The foreign suffix *-ment* is also characterised by comprehensive usage. This suffix is used 21 times by Shakespeare to coin nouns. It is combined mostly with non-native bases. According to Nevalainen (2001: 398), this pattern was established in the 15th century (see table in Appendix I, table 1.2). Shakespeare uses native bases in only four out of his 21 coinages using this suffix. These are *allayment, blastment, fleshment* and *strewment* (full list in Appendix II, table 2.1).

The Bard uses a larger number of suffixes to coin nouns than adjectives, 30 and 16 respectively. Shakespeare uses a lesser number of suffixes (16) to coin a large number of adjectives (372), while using a larger number of suffixes (30) to coin a lesser number of nouns (159) (see fig. 5.2.3). This mirrors the situation when the variation of available suffixes to coin nouns was larger than that of suffixes to coin adjectives (Nevalainen 2001: 391). I can identify only one set pattern from my research: suffixes that are foreign, new and noun or verb forming tend to be used less frequently than suffixes that are native, old and adjective or adverb forming. Thus, suffixes that comprise all the features from the left column of table 5.2.4 (foreign, new and used to form noun/verb) are used from one to six times *-ic* (1) *-ify* (3) *-ite* (1) *-ize* (2). Among suffixes characterised by three features from the right column of table 5.2.4 (native, old and used to form adjective/adverb), there are *-ed* (165) and *-ing* (94). However, most suffixes used in the FiCiS list comprise a combination from the left and right column of table 5.2.4. They characterised by medium usage, e.g. suffixes like *-less* (42), *-ment* (21), *-y* (17) and *-age* (7).

5.2.4 Prefixation

(1)Number of prefixes

Prefixation is defined as a WF method where a prefix is added to the base without a change in the word-class of that base (Nevalainen 2001: 377). My research for this section reveals that Shakespeare uses 27 different prefixes to form the 322 coinages attributed to him in the *OED Online* FiCiS list. The one prefix *un-* is used to form152 or 47% out of the 322 neologisms. To coin the other 53% of the words, 26 prefixes are used. The usage of these 26 prefixes is

not evenly distributed among the coinages. As in suffixation, Shakespeare's usage of prefixes can be divided into four categories:

- used only once
- used rarely – less than ten times
- used often – more than ten times
- extensive use – more than hundred times.

Table 5.2.9 shows the prefixes that are used only once, table 5.2.10 shows the prefixes that are used less than ten times, table 5.2.11 shows the prefixes that are used more than ten times, and table 5.2.12 shows the extensive use of the prefix *un-*.

Table 5.2.9: Prefixes: single use

No	Prefix	No of times	Place of origin	Time of the 1st use	POS of the formation	Usage	Examples from FiCiS
1	*after-*	1	native	OE	noun		*after hours*
2	*arch-*	1	Greek	EModE (1541)	noun	1.in adaptations of foreign titles 2. combines with words of odious sense	*arch-villain*
3	*circum-*	1	Latin	EModE (a1513)	verb	first formed on the Latin analogies, later extended to native / naturalised verbs	*circummure*
4	*demi-*	1	French/ Latin	EModE	noun		*demi-puppet*
5	*fore-*	1	native	OE (c1000)	adjective	productive locative and temporal prefix in EModE	*foregone*
6	*non-*	1	OF < Law Latin	ME (1420)	noun	first only in legal terms and only in nouns	*non-regardance*
7	*sub-*	1	Latin	ME (1386)	verb		*subcontract*
8	*super-*	1	Latin	ME (c1429)	adjective	scientific or technical	*superserviceable*
9	*sur-*	1	OF < Latin	EModE (1482)	noun		*surraddition*
10	*y-*	1	native	EModE (1568)	verb	in poetic language during EModE	*yravish*

Table 5.2.10: Prefixes used less than ten times

No	Prefix	No of times	Place of origin	Time of the 1st use	Usage	POS of the formation
1	*a-*	5	native	OE	came to be regarded as vaguely intensive, rhetorical, euphonic, or archaic, and was prefixed by Spenser and other archaists to words both of Old English and Romance origin for stylistic purposes	noun (1: *apperil*) verb (4)
2	*co-*	7	Latin	EModE (1430)		noun (1: *co-supreme*) verb (5) adjective (1: *commutual*)
4	*inter-*	2	Latin	EModE		verb (2)
5	*mis-*	4	native	ME (1450)		noun (2) verb (1: *misquote*) adjective (1: *misgraffed*)
6	*pre-*	2	Latin	EModE (1559)		verb (1: *predecease*) adjective (1: *preformed*)
7	*re-*	5	French/ Latin	EModE (1605)		verb (5)
8	*self-*	8	native	EModE (1571)	in theological and philosophical writings after Greek pattern	noun (4) adjective (4)
9	*under-*	7	native	ME		noun (3) verb (3) adjective (1: *under-honest*)
10	*up-*	9	native	ME	rendering of Latin *sub-*	noun (2) verb (1: *upswarm*) adjective (5) adverb (1: *upstairs*)

Table 5.2.11: Prefixes used more than ten times

No	Prefix	No of times	Place of origin	Time of the 1st use	Usage	POS of the formation
1	*be-*	18	native	OE		noun (4) verb (17)
2	*dis-*	14	French / Latin < Greek	EModE (1566)		noun (1: *disinsanity*) verb (13)
3	*en-*	16	French/Latin	ME (1380)		verb (15) adjective (1: *enrapt*)
4	*in-*	23	1. native 2. French/Latin	OE ME		verb (14) adjective (13)
5	*out-*	16	native	ME		verb (15) adjective (1: *outbreathed*)
6	*over-*	23	native	OE		noun (1: *overgrowth*) verb (14) adjective (8)

Table 5.2.12: Extensive use of the prefix *un-*

No	Prefix	No of times	Place of origin	Time of the 1st use	Usage	POS of the formation
1	*un-*	152	native	OE		noun (1: *undeserver*) verb (25) adjective (124) adverb (2)

Similar to suffixation, the general trend appears to be that the regularity of the usage of prefixes depends mainly on three factors, with two features each. These factors are the origin of the prefix (foreign or native) the age of the prefix (first recorded use) and usage restrictions (universal or non-universal use) (see table 5.2.13).

Table 5.2.13: Frequency usage factors

	Left column	Right column
Origin	foreign	native
Age	new	old
Restrictions of usage	non-universal	universal

Figure 5.2.5 shows how the frequency of use is influenced by the features of the three factors. The bottom end of the 'frequency of usage scale' comprises prefixes with the features foreign, new and non-universal usage. The top end of the 'frequency of usage scale' comprises prefixes with the features native, old and universal usage

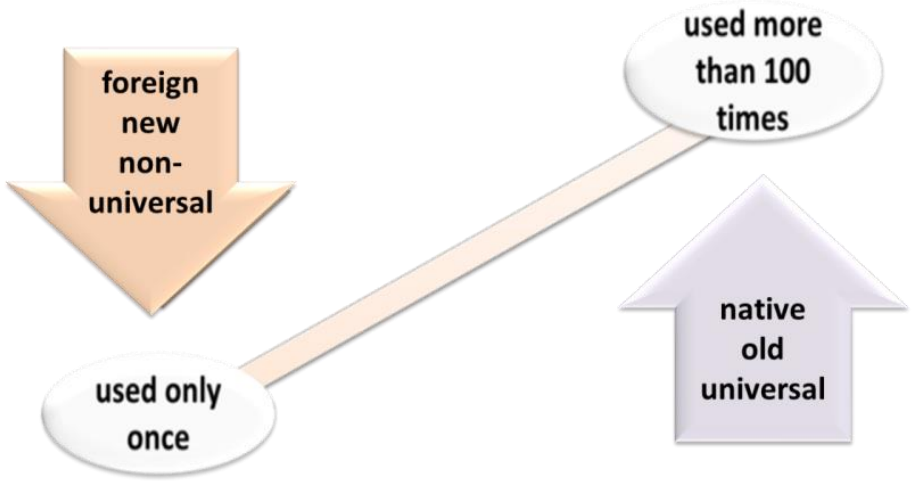


Figure 5.2.5: Frequency of usage scale

(2)Prefixes used only once

The tendency is that prefixes having at least two of the three features from the left column of table 5.2.13 appear at the bottom end of the scale. The prefix *arch*- from table 5.2.9 is a perfect example of the left extreme of figure 5.2.5, as it comprises all the features from the left column of table 5.2.13. It is foreign, new and is non-universal in use. The other seven prefixes in the category 'used only once' have two out of three features from the left column of the 'scale of usage', being mostly foreign and new, e.g. *circum*-. Although this prefix is of universal usage, it still falls into the category of used only once. Its earlier preference for foreign bases can indicate restriction of usage (see table 5.2.9). Another example is the prefix *y*-. It is native, but in its present form it is new and restricted in usage to poetic language in the EModE period (see table 5.2.9).

During the Shakespearean era there was a considerable influx of foreign words that were adopted into the English language. Their usage was quite popular among academics and the social elite. However, I hypothesise that Shakespeare's reserve to use these foreign, unfamiliar and often sophisticated prefixes extensively in his word formation is due to the fact that his audiences consisted mostly of the middle class and the commoners. This may be the reason these prefixes ended up in the lower extreme of the frequency usage scale.

(3)There are no rules without exceptions

There are two prefixes, *after*- and *fore*- that seem to be the exception (table 5.2.9). They belong to the right hand column of table 5.2.13. However, according to the *OED* FiCiS list, these prefixes have only been used once. That such common prefixes are used only once is rather surprising.

I have found four more words in the *OED* that were coined using the prefixes *fore*- and *after*-, and Shakespeare is cited as the first user. They are the nouns *after-meeting* and *fore-skirt* and the adjectives *fore-recited* and *fore-vouched*. Notwithstanding that Shakespeare is cited as the first user, the words are not listed in the *OED Online* FiCiS list. The reason for this is probably that none of these words has a separate entry in the dictionary. Probably, without this criterion being fulfilled, a word cannot appear in the automatically generated FiCiS list. These words can very well be Shakespeare's coinages, thus removing the prefixes *after*- and *fore*- from the 'single use' category. They might not be exceptions after all. However, I base

my research on the existing *OED* FiCiS list and therefore do not include these words in my analysis.

(4)The prefix *un-*

At the top end of the scale there are the prefixes that only consist of the features native, old and non-academic (see right column of table 5.2.13 and fig. 5.2.5). The prefix *un-* is the only prefix used over one hundred times (see table 2.5.12). It is hardly surprising, as this prefix is the most commonly used prefix during the EModE period (Nevalainen 2001: 380, 382). This particular prefix possesses all the features of the right hand column in table 5.2.13. It is native, old and has no restriction of usage. It can be combined with any POS, with both native and non-native bases, and be used in any register. It is used 152 times in Shakespeare's 322 coinages formed by prefixation.

(5)Moderately used prefixes

Between the two extremes are the prefixes that consist of different combinations of the features from the two columns of table 5.2.13. There are prefixes used more than once but less than ten times. They are more likely to have a combination of two features from the left column and one from the right. Prefixes with two features from the right column and one from the left are more likely to be used more than ten times (table 5.2.13 and fig. 5.2.5). A good example of a prefix in the 'more than once less than ten times' category is the prefix *inter-* e.g. the verb *interjoin* 'to join one with another, to join reciprocally'. This prefix is both foreign and new (see table 5.2.10).

Other combinations, however, are also possible. One possible combination is exemplified by the prefix *a-*, which is found in five of Shakespeare's coinages, e.g. the verb *abrook* 'to tolerate' and the noun *apperil* 'peril'. Being native and old (used since Old English), it fulfils the criteria to be a prefix with the high frequency of usage. However, according to *OED Online*, the prefix *a-* was regarded as archaic and rhetorical in the EModE period. Its usage for mainly stylistic purposes may be responsible for its low frequency of appearance among Shakespeare's coinages. Another example, the prefix *self-*, is found in eight of Shakespeare's coinages e.g. *self-abuse.* This prefix is native and new (see table 5.2.10). The word *self* has been used in English since the OE period. According to *OED Online*, it was first recoded as a prefix around the middle of the 16th century. It was used to imitate the pattern for forming

compounds in Greek. During the Shakespearean era *self-* was primarily used in theological and philosophical writings and thereby was subject to a certain restriction of usage.

Some examples of the more often used prefixes are *over-* and *en-*, as in *overstink* and *entame* (see table 5.2. 11). The use of the prefix *over-* is an example of the combination of all three features from the right column. This suffix is native, old and is not subject to any restrictions of usage. This is reflected in its usage in 23 of Shakespeare's coinages. The prefix *en-* is a good example showing that foreign prefixes are not necessarily new in EModE (table 5.2.11). The first recorded use of this French/Latin prefix is in the year 1380. In the Shakespearean era, it was used both with foreign and native bases. It does not reveal any specific restriction of usage. It is claimed that one of the functions of this prefix was to create appropriate metrical variants especially in the 'poetic meter' (Salmon 1987: 196-7). A word with the prefix *en-*, such as *enacture*, was considered to be more elevated than the word *acture* without the *en-* prefix. Apart from *acture*/*enacture*, researchers provide other examples of Shakespeare's metrical variants such as *guard/enguard* and *dart/endart* (Nevalainen 2001: 246; Blake 1983: 43; Salmon 1987: 196). My research, however, does not support their claim that these are the Bard's coinages. According to the *OED Online* FiCiS list, only one pair *acture*/*enacture* is credited to Shakespeare. In addition, the word *enacture* is claimed by the *OED* to be formed by suffixation and not by prefixation. The *OED* has found records establishing that the word *enact* has been used in English since 1430 and John Lydgate is cited as the first user. Shakespeare is credited with adding the suffix *-ure* to the word *enact* to form *enacture*. This was, according to the *OED*, in 1604. As of today, there seems to be no evidence that Shakespeare followed a pattern of 'metrical variants' in his use of the prefix *en-*.

The prefix *dis-* seems to be the exception to the rule, as it predominantly possesses features from the left column of table 5.2.13 and should not have been used more than ten times. However, I found it to have been used 14 times (table 5.2.11). This relatively high frequency of usage for a new and foreign prefix is most probably a result of *dis-* losing its restriction of usage. It went from being used only with foreign bases to being used with all bases, thus acquiring a universal compatibility (Nevalainen 2001: 380-2; Salmon 1987: 204).

5.2.5 Conversion

Conversion is defined as a word formation method by which a word is turned from one word class into another without any formal change (Nevalainen 2001: 424; Bauer 1991: 227). Crystal (2008: 148, 162) identified 200 cases of conversion. After examining the updated *OED Online* FiCiS list, however, I have found only 154 conversions attributed to Shakespeare. Crystal mentions that Shakespeare uses conversion to coin verbs and adjectives (Crystal 2008: 148, 149). My research shows that Shakespeare uses conversion to coin 103 verbs and 43 nouns. The seven adjectives and one adverb form the minority of his coinages using conversion (see fig. 5.2.6).

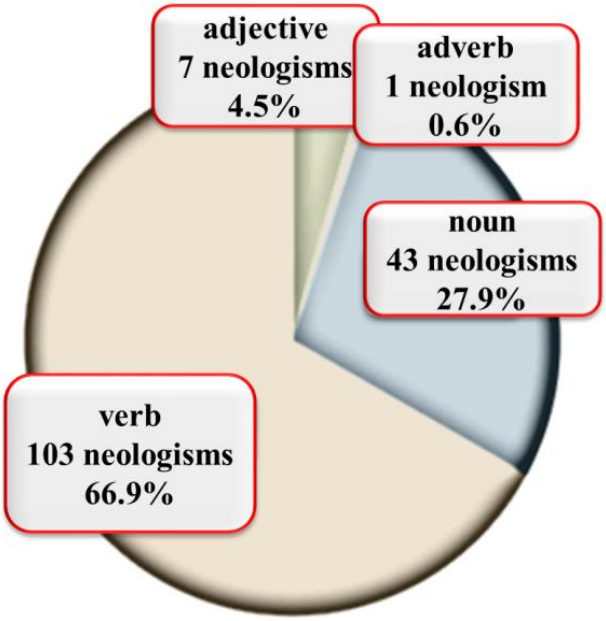


Figure: 5.2.6: Conversion distribution according to parts of speech

My hypothesis for the large number of verbs formed by conversion in comparison to the other POS is that English verbs of Anglo-Saxon origin are short (Rhodes 2004:128-9). Using conversion saves a coiner from elongated neologisms. Verbs usually convey an urgency of action and are most effective when short. Action can be described as a pulse charged with energy and is therefore better expressed with short, often monosyllabic words, for example, *run, eat, fight, love, kill, hit* and *tell* among a myriad of others. The tendency in the English language seems to be that even if not all verbs are necessarily monosyllabic, most of them are short. Shakespeare most probably found that conversion, which does not unduly lengthen the verb, is a most efficient method of word formation for coining this part of speech. Therefore,

the majority of Shakespeare's verbs coined by conversion are kept within two syllables. Table 5.2.14 shows the distribution of verbs from the *OED Online* FiCiS list according to the number of syllables.

Table 5.2.14: Distribution of verbs coined by conversion according to number of syllables

No	No of syllables	No of words	%	Examples
1	1	27	26.2	*barn, bass, brooch, cake, choir* | *quire* (one or two syllables), *crank, drab, drug, elf, fig, film, fit, flaw, ghost, hinge, jaw, port, queen, re, scale, sheet, sire* (one or two syllables), *skiff, soil, throe* | *throw, tod, urn.*
2	2	57	55.3	*askance, barber, beetle, belly, bitume, blanket, bonnet, cater, caudle, channel, chapel, climate, compeer, convive, corslet, craven, cudgel, curdy, dapple, dower, elbow, estate, fever, forward, gibbet, hearse, hurry, humour* | *humor, kitchen, label, launder, mammock, monster, mountebank, muddy, palate, pander, partner, pellet, porter, posset, prologue, servant, sickly, scissor, sister, sliver, spirit, squabble, squinny, stranger, tardy, testern, tetter, torture, uproar, window.*
3	3	13	12.6	*apoplex, attorney, canary, canopy, champion, compassion* (three or four syllables), *counter-seal, lethargy, livery, portcullis, property, sepulchre, surety.*
4	4	6	5.8	*companion, disproportion, incarnadine, inventory, necessity, prerogative.*

There are 84 mono- and disyllabic verbs (81.6%), while the number of verbs with more than two syllables is 19. As it can be seen from figure 5.2.3, the formation of around 95% of verbs is mostly done by two essential WF methods, prefixation and conversion. It appears to be logical, as conversion helps to keep verbs short and prefixation changes the meaning of the verb when necessary.

(1) Conversion patterns for verbs

I have identified that the source for conversion into verbs comprises predominantly nouns with a smattering of adjectives and adverbs. While nouns comprise 93 words, there are only eight adjectives and two adverbs. My results support the general academic findings (Nevalainen 2001: 241; Salmon 1987: 205-6).

(2) Conversion patterns for nouns

Blake claims that 'in Elizabethan times, however, nouns formed from adjectives are plentiful, and this applies as much to Shakespeare as to any other writer of the time' (Blake 1983: 8). However, Blake does not provide any examples to support his statement. Neither does the updated *OED Online* FiCiS list. I could not identify a single coinage where Shakespeare uses

an adjective to form a noun. My research therefore does not support Blake's claim, which seems to be invalid. It may have been valid in 1983, but antedating has probably resulted in his claim losing its validity now. It seems that the ghost of antedating will haunt researchers for a long time to come.

I found that Shakespeare uses two patterns to form nouns, the most frequent one being deverbal conversion. He uses the pattern 'noun < verb' to form 36 nouns, e.g. *attest, overview* and *embrace* and the pattern 'noun < noun' to form seven nouns, e.g. *Hiren, Xantippe* and *dobbin*. Nevalainen (2001: 425), however, suggests that the 'noun < noun' pattern is related more to metonymic transfer than to conversion. Thus, it does not deal with word formation, but rather with a change of meaning of the word. If one subscribes to Nevalainen's opinion, then Shakespeare uses only one pattern to form nouns by conversion, the 'noun < verb' pattern. For the purpose of my research, however, the seven nouns formed using the noun < noun pattern are included as conversions.

(3) Conversion patterns for adjectives

Adjectives formed by conversion are the result of two patterns, denominal and deverbal conversion. Shakespeare does not seem to have found conversion an effective method to coin adjectives, as he used the method to coin only seven adjectives. Although he coined only seven, three of them can be considered as quite successful coinages. These adjectives, *soliciting, soothing* and *struck* have survived to this day.

5.2.6 Compounding

Examining the *OED Online* FiCiS list, I identified 141 words as compounds. This makes compounding the fourth major WF method used by Shakespeare (see fig. 5.2.1).

(1)POS distribution in compounding

My research reveals that adjectives (73) and nouns (64) are the primary parts of speech formed by compounding. A negligible number of other POS are also formed (see fig. 5.2.7).

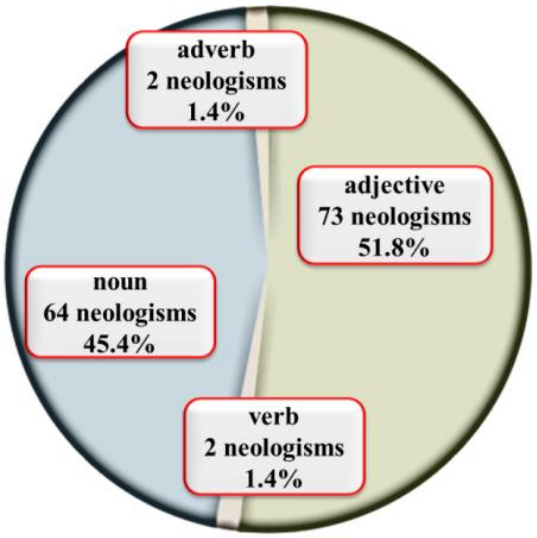


Figure: 5.2.7: Compounding distribution according to parts of speech

(2)Compounding patterns

I identified three primary patterns of compounding that are used to form 43 of the 73 adjectives. The pattern 'noun + adjective' is used to form 20 compounds such as *bloodstained, night-walking* and *fire-new*. The pattern 'adjective + adjective' is used to form 10 compounds such as *blue-veined, hot-blooded* and *high-pitched*. The pattern 'adverb + adjective' is used to form 13 words such as *low-rated, well-educated* and *near-legged*. The second element in all three patterns is an adjective. In the last two patterns only the *-ed* adjectives are used. The remaining 30 adjectives are formed using a variety of other patterns (see table 5.2.15).

Table 5.2.15: Patterns of compound adjectives

	Adjective					
	adjective	noun	verb	adverb	participle	not given
adjective +	10	6		3		2
noun +	20	1			1	6
verb +		1				2
adverb +	13	1		1	3	
comb.form +	1					1
not given						1

I found that Shakespeare used the 'noun + noun' pattern to form 34 of his 64 compound nouns such as *chimney-piece, fairyland* and *death's face*. The other 30 nouns, such as *bass-viol* and *leap-frog*, are formed using nine different patterns of compounding (table 5.2.16).

Table 5.2.16: Patterns of compound nouns

Noun						
	adjective	noun	verb	adverb	participle	not given
adjective +		5	1			4
noun +		34	2	1		4
verb +	1	4		1		2
adverb +						
pronoun +					1	
interject. +		1				
not given		2		1		

This preference for one specific pattern can be explained by the already long established tradition of compounding new nouns (Bauer 1991: 202; Barber1997: 237). Table 1.15 in Appendix I summarises Nevalainen's (2001: 407-16) description of the traditional patterns used for compounding nouns Although Shakespeare seems to have stuck to four primary patterns to coin most of his adjectives and nouns, he nevertheless seems to have experimented with other patterns as well when coining words that belong to these parts of speech. Some of these patterns produce more peculiar coinages than others. For example, the 'pronoun + participle' pattern is used to form the compound noun *all hid*, the 'interjection + noun' pattern for the compound noun *nayword* and the 'verb + adjective' pattern coining the compound noun *end-all* (see table 5.2.16 for all three examples patterns). The word *all* in this instance is indicated by the *OED* as adjective, pronoun, noun, adverb and conjunction.

Table 5.2.17: Patterns of compounding verbs, adverbs and interjection

POS (1st member)	**POS (2nd member)**	**POS (3d member)**	**not identified member**	**examples**
Verb				
	noun		not given	
adverb +	1			*off-cap*
noun +			1	*weather-fend*
Adverb				
	prepos.	noun		
adverb +	1	1		*whereuntil, out at elbows*

A modest number of four compounds consist of verbs and adverbs (table 5.2.17). This suggests that compounding was not the most appropriate method to create these two parts of speech in particular. One compound, *out at elbows*, is an example of the rare instance when more than two constituents are used in a compound (table 5.2.17). I found two such cases in the *OED Online* FiCiS list, namely *out at elbows* and *death-in-life*. In both cases two open parts of speech are connected by a preposition into one compound. Only one of these two

coinages can now be ascribed to Shakespeare, as Shea (2014: 135) antedated the coinage *out at elbows***.**

(3)Body metaphors and epithets

It is interesting to note that Shakespeare referred to the human body when coining many of his compounds. Referring to 14 different constituents of the human body, he coined 24 compounds such as *rose lipped, milk livered, even handed,* and *heartstruck* (table 5.2.18). These compounds were mostly adjectives (18) and also some nouns (7). Body metaphors are bright, illustrative and easy to remember. They suggest a usage that goes beyond the context of the stage and into everyday life. Shakespeare seems to have intuitively or consciously used this type of metaphor to good effect. As mentioned in chapter 5.2.6, Nevalainen claims to have found 20 compounds coined by Shakespeare using *-hearted* as a base. My research does not support this statement, as the current FiCiS list has only two compounds with this base. This difference calls for further investigation but is not within the scope of this thesis.

Table 5.2.18: Adjective compounds that comprise body metaphors

No	**Body part**	**Examples**
1	head	*rug-headed*, adjective, *headshake*, noun
2	face	*death's face*, noun
3	eyes	*young-eyed*, adjective
4	mouth/ lips	*rose-lipped*, adjective, *foul-mouthed*, adjective, *mouth-filling*, adjective
5	ears	*crop-ear*, noun, *ear-piercing*, adjective
6	tongue	*neat's tongue*, noun
7	blood	*hot-blooded*, adjective
8	liver	*milk-livered*, adjective
9	mind/wit	*tender-minded*, adjective and noun, *fat-witted*, adjective
10	cheeks	*rose-cheeked*, adjective
11	heart	*heartstruck*, adjective, *full-hearted*, adjective
12	neck	*wry-necked*, adjective
13	hand	*bow-hand*, noun, *court-hand*, noun, *even-handed*, adjective and adverb, *large-handed*, adjective and adverb, *white-handed*, adjective
14	legs	*near-legged*, adjective

5.2.7 Minor word formation methods

Clipping or shortenings, blends, and acronyms belong to what Bauer (1991: 232) refers to as unpredictable formations. Nevalainen (2001: 430) refers to these formations as minor word formation methods. I have found that, as of today, Shakespeare is credited with 11 coinages formed by shortening, six using blending and none using acronyms. The number of words

coined by minor word formation methods, however, is so small that no trends can be discerned.

Among the words coined using shortening, back-formation is used for six of them, e.g. *illume* and *downtrodd*, four are formed by clipping the start of the word, e.g. *cern* or *loo*, one was coined by clipping both the start and the end of the word, *gally* (Appendix II, table 2.5).

Shakespeare uses blending to form 6 coinages (Appendix II, table 2.6). Number four in this list is the interjection *sola*. *OED Online* is not clear about the etymology of the word but gives two words, which, when blended, can produce the coinage *sola*: *soho* and *hola*. Therefore, I consider this word to be a blend. Shakespeare often uses blends to form words for humorous effect. For example, the humorous blunder *directitude* is used instead of *wrong* or *discredit* and *egma* is used as a humoristic blunder for *enigma* (see Appendix II, table 2.6). None of these words is used outside of Shakespeare's plays. The only play where this type of coinage is used more than once is *Love's Labour's Lost*. This is not that surprising, since this play is characterised by an extensive play on words and language (Evans 1952: 11, 13).

There is a group of 10 words which are coined by a method indicated in the dictionary as imitative (onomatopoetic). I choose to include this group into the minor methods of word formation (Nevalainen 2011: 431). These are words formed to imitate various sounds such as a dog barking, *bow-wow* or a ringing sound, *ding* (Appendix II, table 2.7). This group of coinages has had a good rate of survival, as seven out of ten words are used today, e.g. *bow-wow* and *purr*.

The WF method used for the preposition *in't* could not be identified with any degree of accuracy. According to the *OED*, it is an abbreviated form of *in it*.

5.2.8 The rate of survival of Shakespeare's coinages

'*Yet words do well*
When he that speaks them pleases those that hear'

The rate of survival of the neologisms in the *OED Online* FiCiS list provides an impression of how resilient these coinages have been through the years. According to the *OED*, 1,091 out of the1,504 words listed are still in use today.

It is interesting to note that the rate of survival of the coinages used in certain plays is higher than in others. Each table (5.2.19-5.2.22) shows the works of Shakespeare that contain the lion's share of his coinages according to the word formation methods used and the survival rate of these coinages into the present day. Figures 4.1-4.4 in Appendix IV provide an overview of the distribution of neologisms in Shakespeare's corpus according to the WF method used.

Table 5.2.19: Survival rate in the plays and sonnets of words coined by **suffixation**

Plays	**No of neologisms**	**Used today**	**%**
Troilus & Cressida	34	27	79.4
Hamlet	34	31	91.2
King Lear	28	23	82.1
Macbeth	23	21	91.3
Sonnets	23	17	73.9

Table 5.2.20: Survival rate in the plays and sonnets of words coined by **prefixation**

Plays	**No of neologisms**	**Used today**	**%**
Hamlet	30	23	79.0
King Lear	18	14	77.8
Antony & Cleopatra	16	10	62.5
Sonnets	16	10	62.5
Coriolanus	15	7	43.8

Table 5.2.21: Survival rate in the plays and sonnets of words coined by **conversion**

Plays	**No of neologisms**	**Used today**	**%**
Hamlet	13	9	69.2
King Lear	12	12	100
Antony & Cleopatra	9	7	77.8
Macbeth	8	7	87.5
Troilus & Cressida	9	4	44.4

Table 5.2.22: Survival rate in the plays and sonnets of words coined by **compounding**

Plays	**No of neologisms**	**Used today**	**%**
Love's Labour's Lost	13	13	100
Henry IV, p.1	11	9	81.8
Othello	9	7	77.8
Richard III	8	8	100
Tempest	7	6	85.7

The highest number of coinages formed by suffixation is used in *Troilus & Cressida, Hamlet* and *King Lear*. The plays *Hamlet* and *King Lear* also display the highest number of neologisms coined by prefixation and conversion (see tables 5.2.20 and 5.2.21, column two). Unlike in *Troilus & Cressida, Hamlet* and *King Lear*, the neologisms in *Loves Labour's Lost, Henry IV* and *Othello* are formed mainly by compounding (table 5.2.22).

Probably, these differences in word formation methods used have to do with the different nuances of language necessary to express the different contexts, moods, atmospheres and settings of these plays themselves. These plays do not have much in common, except the author. They extend from battlefield scenarios to the world of love and emotions. To establish an accurate analysis of the reasons for Shakespeare to employ different word formation methods for different plays, the context of each play has to be analysed thoroughly. This analysis is not within the scope of my thesis but could be a subject for future research.

The neologisms formed by conversion in *King Lear* and those formed by compounding in *Loves Labour's Lost* and *Richard III* all show a 100% survival rate (see table 5.2.21-5.2.22, column three and four). The neologisms formed by suffixation from the plays *Macbeth* (91.3%), closely followed by *Hamlet* (91.2%) also show a high survival rate (see table 5.2.19). This seems to indicate that the popularity of the play also contributes to the rate of survival of the coinages. The plays occupying the first place as to the number of coinages and their survival rate (table 5.2.19-5.2.22) have all, with the exception of *Troilus & Cressida*, been extremely popular throughout the last 400 hundred years. This has been further compounded by Hollywood's influence where all these plays, except for *Troilus & Cressida*, have been made into epic films.

There is, however, one exception, the play *Hamlet*. Although being arguably the most popular of Shakespeare's plays ever promoted, whether on stage or on the silver screen, the survival rate of its coinages formed by conversion is lower than that of the four plays *King Lear, Anthony & Cleopatra, Macbeth* and *Othello.* Perhaps, some of these conversions served only to fit the meter and were not meant to go on into popular usage. For example, one of the words, *supervise*, used by Shakespeare as a noun is still in use as a verb today. The verb *supervise* existed in Shakespeare's time and was the original source for Shakespeare's conversion. Although the noun *supervision* existed in EMoDE, Shakespeare uses the verb *supervise* as a noun to overcome meter constraints. It can be seen from the quote below, that the noun *supervision* does not fit into the meter.

'With, ho! such bugs and goblins in my life that, on the supervise, no leisure bated'

1604 Shakespeare *Hamlet* v. ii. 24

5.2.9 Number of senses and survival rate

As for the number of senses in Shakespeare's neologisms, there seems to be a tendency for words with more than one sense to have a higher survival rate (Appendix III, tables 3.2-3.5). The tendency is that the more senses a word has, the better its chance of survival. The survival rate (column four of tables 3.2-3.5) is seen to grow, as the number of senses for a word increases (column one). According to *OED Online,* while an average of around 60% of words having only one sense are in use today, words having five or more senses have a 100% survival rate. However, when comparing words with one sense, the method of word formation used to coin them seems to influence their survival rate. Words with one sense formed by compounding survive the test of time best of all with 80% (Appendix III table 3.5), while words with one sense formed by conversion have the lowest survival rate of 43% (Appendix III, table 3.4).

5.2.10 Summary

To identify whether Shakespeare used any particular word formation pattern to coin new words, I analysed 1,200 neologisms. My research has revealed that Shakespeare used suffixation to coin the majority of his nouns, adjectives and adverbs. The range of usage of his suffixes lies between one and 166. A suffix that is new, foreign and used to form nouns and verbs tends to be used rarely. If on the other hand it is native, old and used to form adjectives and adverbs, it tends to be used often.

Prefixation takes second place in the preferred WF methods used by Shakespeare. This WF method was his favourite for coining verbs. The range of usage is similar to that of suffixation and is recorded as being between one and 152 times. The factors influencing the frequency of usage are also similar to those in prefixation, with one exception. The factor 'restriction of usage' in prefixation takes the place of the factor 'part of speech' in suffixation.

For affixation he preferred old and native affixes. Native prefixes were used in 246 of Shakespeare's 322 coinages. Out of four negative prefixes at his disposal, *in-*, *dis-*, *mis-* and *un-* , Shakespeare preferred the old and native prefix *un-* to its foreign and new counterparts.

He used *un-* 152 times compared to *in-* 23 times, *dis-* 14 times and *mis-* four times. In suffixation Shakespeare used only two suffixes *-ed* and *-ing* more than 100 times. The *-ed* was used 166 times and *-ing* 118 times.

Shakespeare had a tendency to use conversion to form verbs and, to a lesser degree, nouns. In both cases he primarily used two patterns. Denominal conversion was used to form verbs and deverbal conversion to form nouns. Using conversion saves a coiner from elongated neologisms. Verbs usually convey an urgency of action and are most effective when short. Therefore, Shakespeare most probably preferred conversion, which does not unduly lengthen a verb.

Compounding was used by Shakespeare to primarily coin adjectives and nouns. The Bard used two primary configurations for compounding. One was the '*noun + adjective*' configuration and the '*noun + noun*' configuration. In addition, Shakespeare intermittently used 29 other configurations to form his compound neologisms. Shakespeare often referred to the human body when coining many of his compounds. These compounds were mostly adjectives interspersed with a few nouns. Shakespeare used this type of metaphor to good effect, ensuring their usage beyond the stage and into everyday life. Although Shakespeare used around 30 patterns to coin his 141 compound neologisms, only two the '*noun + adjective*' configuration and the '*noun + noun*' configuration were used extensively to form the bulk of these neologisms. The different minor methods used by Shakespeare did not contribute with any noteworthy patterns.

Shakespeare seems to follow a loose pattern when using his four primary methods of word formation. The use of these familiar and traditional patterns in word formation supports the general impression that Shakespeare targeted the common man as his primary audience and wrote in a language that his audience could easily associate with. However, Shakespeare in his word formation intermittently experimented with foreign and sophisticated elements associated with the linguistic avant-garde to add some spice to his writings.

5.3 Third research question: ‘Be wary how you place your words’

Did Shakespeare strategically choose a certain category of character to give tongue to his neologisms?

The third research question examines the possibility of any connections between particular characters in Shakespeare’s plays and the neologisms dedicated to them. An individual’s personality is generally reflected by his language. Shakespeare seems to have consciously exploited this idea to personify his characters by attributing different linguistic styles to them (Donawerth 1984: 6, 142).

The question then arises as to whether Shakespeare had any special considerations when choosing a character to introduce a neologism or whether his choice was totally random. One would imagine that new words become more attractive and catchy if they are introduced by the famous and the powerful. Neologisms introduced by persons with great social standing have better chances of usage and survival. Based on this assumption, it can be assumed that neologisms uttered by characters depicting heroes and nobility would catch on faster and be used more frequently.

5.3.1 The research material

The material used to analyse this hypothesis comprises 1,381 words out of 1,503 taken from the FiCiS list. These 1,381 words are distributed over 38 Shakespearean plays and will henceforth be referred to as PN (‘play neologisms’). The neologisms from the four Shakespearean poems and sonnets were not included in my analysis, as they are not directly connected to any particular character.

I checked the general distribution of PN according to the categories gender, age, social status and the role types of the characters, such as male/female, scoundrel/hero, adult/young and noble/commoner. Figure 5.3.1 shows this distribution.

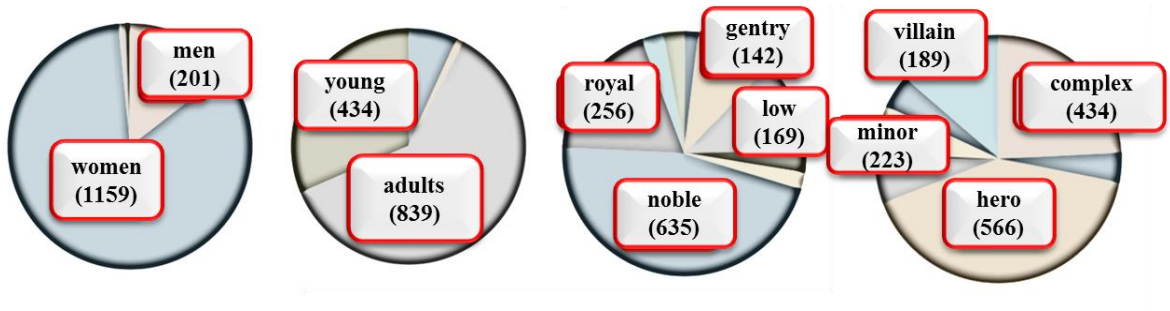


Figure 5.3.1: General distribution of PN

Figure 5.3.1 shows that Shakespeare's PN are given mainly to adult, male characters of noble origin and belonging to the 'hero' category. However, it is not clear whether this distribution reflects a conscious strategy for popularising neologisms, as the majority of the characters in Shakespeare's plays belongs to this category anyway.

5.3.2 POS distribution among characters

'*Words sweetly placed and modestly directed*'

My analysis reveals a connection between the part of speech of a neologism and the social status of the character chosen to utter it. Almost half the neologisms are adjectives in the groups of characters which belong to the higher strata of society, such as royalty, nobility and gentry. The rest of the neologisms in these groups are divided predominantly between nouns and verbs. The share of verbs decreases proportionately with the decline in social status of the group (see fig. 5.3.2). On the other hand, most of the neologisms used by the characters representing the lower strata of society, such as the middle class and the commoners, are nouns followed by adjectives and verbs.

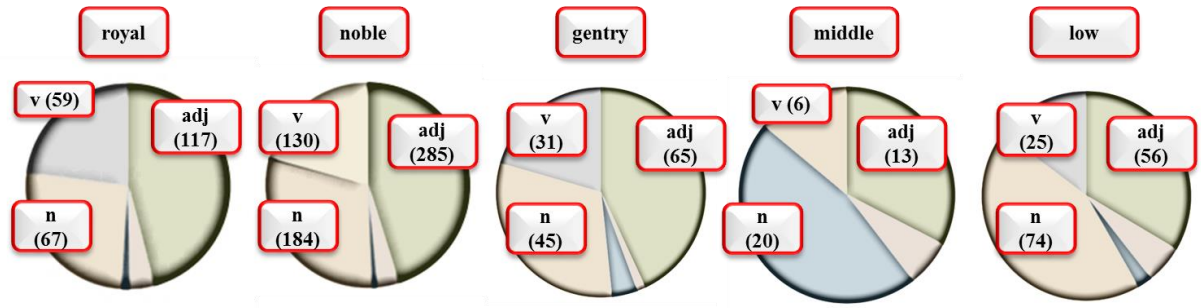


Figure 5.3.2: POS distribution in different groups (1)

There are two social groups that are also of interest, namely the clergy and the military (see fig. 5.3.3). Just as in the groups representing the lower social strata, the most common POS of the neologisms in the military group is the noun. This group is also characterised by the absence of adverbs. The clergy group has a similar POS distribution to the military group, with nouns in the majority. The group that comprises supernatural creatures, such as spirits, ghosts and fairies, has a similar pattern of POS distribution as among the social elite (see fig.5.3.3).

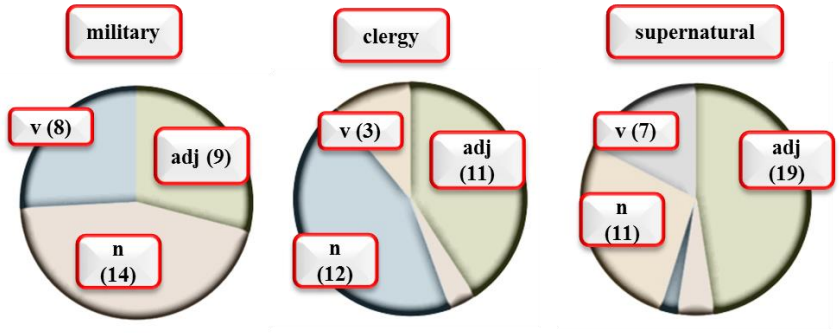


Figure 5.3.3: POS distribution in different groups (2)

In this way there are two primary patterns that POS distribution identifies. The first pattern is characteristic of the upper social strata of royalty, nobility and gentry, while the second primary pattern is characteristic of the lower social strata of the middle and lower classes. The difference between these patterns is that while the upper social strata primarily use adjectives, the lower social strata primarily use nouns.

Eloquent and descriptive language was the privilege of the elite of the time and was used not only as a necessity but also for pleasure (Lerer 2007: 142-4; Donawerth 1984: 156; Rhodes 1995: 192). The lower social strata did not have the luxury of enjoying the esthetical side of language to the same degree. They predominantly used language as a necessity for the practical running of their daily lives. This can be deduced from the fact that while the nobility primarily used adjectives to describe their world, the lower social classes used language in a more practical manner using nouns to define and run their world.

Love's Labour's Lost is a play where the use of language itself plays a major role (Donawerth, 1984: 124). This play shows that theatre can be enjoyed notwithstanding the absence of a cunning plot or strong storyline. Shakespeare's use of an extensive spectrum of rhetorical techniques, such as verbal puzzles, reverse sentences, puns and riddles provides

exceptional verbal entertainment (Donawerth 1984: 142-8). This catered to both the lower and the upper social strata. The lower strata enjoyed the sound and peculiar language patterns while the elite enjoyed the new or surprising meanings of the words (Donawerth 1984: 6, 150). This reveals how the authors of the Renaissance believed in the unlimited power of words to create any reality at will (Evans 1995: 1-3; Maguire and Smith 2013: 141).

5.3.3 Characters in contrast

There seem to be some exceptions to the pattern of POS distribution among the different social strata. I analysed 15 characters of both genders from the whole social strata spectrum to determine whether group patterns are valid for individual characters. The first group comprises five of Shakespeare's male characters of noble origin. Between them they share the most number of neologisms by Shakespeare, as shown in the FiCiS list. These characters are Hamlet (44 neologisms), Macbeth (33 neologisms), Falstaff (31 neologisms), King Lear (23 neologisms) and Othello (21 neologisms) (see fig.5.3.4).

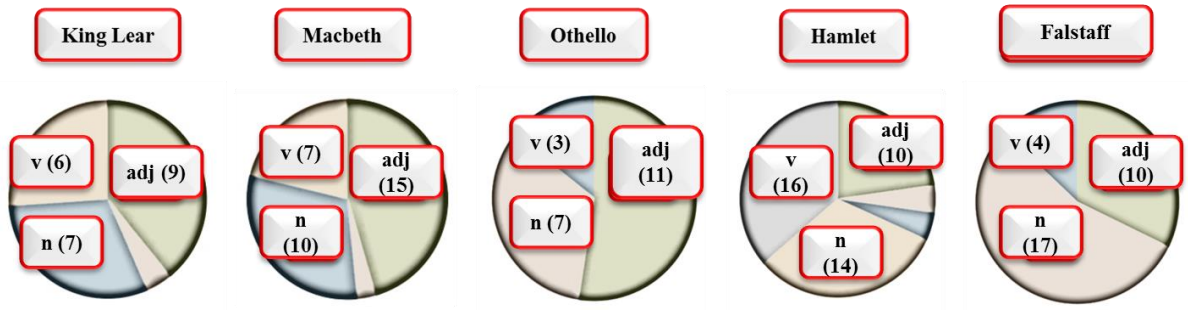


Figure 5.3.4: POS distribution among five male characters of noble origin

Figure 5.3.4 shows that while King Lear, Macbeth, and Othello serve as typical examples of the pattern characteristic of the social elite where adjectival neologisms are in the majority, Hamlet and Falstaff do not seem to comply and are the exception. The distribution of PN according to POS in these two characters has a much smaller share of adjectives than is characteristic of their social strata. Here the respective shares of nouns and verbs are uncharacteristically larger. The distribution of the POS of the neologisms uttered by Hamlet reveals a majority of verbs (16 neologisms), followed by almost equal amount of nouns (14 neologisms). Adjectives (10 neologisms) are only in third place. Regarding Falstaff, the distribution is as follows: nouns (17 neologisms), adjectives (10 neologisms) and verbs (four neologisms). I believe that the explanation lies in the nature of these two characters. Both

Hamlet and Falstaff are far from being typical representatives of the elite social strata of royalty and nobility that they belong to.

Hamlet is sent to a foreign university, while most princes of the era would be educated at home. Universities were the centres for the progressive ideas of the time. This includes the evolving philosophy of humanism, which considers human beings to be the centre of the universe. The humanistic philosophy is governed by facts rather than superstition, and they believe in the harmony between body, mind and soul. Language is used to achieve this harmony. Humanists claim that the knowledge of language also opens the door to other sciences (Donawerth 1984: 20, 22, 24, 40, 128). As a consequence of this progressive influence, I postulate that a mental conflict may have evolved between what was expected from Hamlet as a prince and his new-found beliefs. The medieval ideas of honour and revenge conflicted with the philosophy of humanism. This conflict may have influenced Hamlet to attempt to redefine his world to make some serious existential decisions. Redefinition in itself is better expressed with nouns and verbs and these POS dominate the neologisms dedicated to Hamlet. This is reflected in his language.

The popularity of Falstaff, another character who does not comply with the typical pattern, seems to have been extensive and even children of that era were named after him (Maguire and Smith 2013: 8). Falstaff is of noble birth but he has affiliations not only with the future king of England, Prince Hal, but also with characters from the lower social ranks including those of a dubious nature. Falstaff seems to form a bridge between different social strata, and his behaviour and his ambiguous position as a middle man is reflected in his speech. Although his language is not as ‘flowery’ as that of nobility, it is not as ‘coarse’ as that of the common man. It is correct, down to earth and spiced with just the right amount of humour.

The second group of characters includes male characters from lower strata of society. As mentioned earlier, the POS pattern for this group reveals a primary use of nouns, e.g. the character of ‘host’ from *Merry Wives of Windsor*, or ‘the fool’, a character present in many of Shakespeare’s plays (see fig 5.3.5).

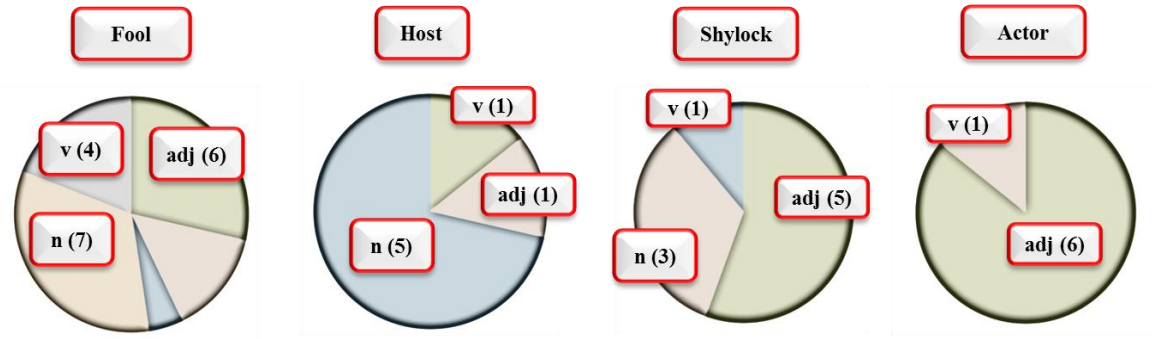


Figure 5.3.5: POS distribution among four male characters of non-noble origin

However, there are exceptions also in this category. The character of Shylock breaks the pattern of noun neologisms predominating the middle and lower classes. Again, the key can be found in the nature of this character. Shylock is famous for his complexity and ambiguity. Although he is a wealthy trader, Shylock focuses not only on the material side of life but also on emotions and ideas. He is depicted by Shakespeare as a deep and reflecting character full of emotions. Emotions and feelings are usually described by adjectives and this is reflected in the pattern of the POS distribution for this character (fig. 5.3.5).

Another exception to the POS pattern of commoners comprises the character of 'actor'. Although actors belonged to the lower social stratum, neologisms used by this type of character are mostly adjectives, the pattern usually used to characterise the social elite. My explanation lies in the nature of their professional occupation. As actors depicted in Shakespeare's plays mostly play the part of nobles, their language reflects the patterns characteristic of this social stratum.

The third group in my analysis comprises six female characters. Three of them belong to the social elite, namely Cleopatra (10 neologisms), Juliet (seven neologisms) and Isabella (eight neologisms) from *Measure for Measure.* The other three characters belong to the lower strata and comprise Mistress Quickly (12 neologisms) characterised in the two plays *Merry Wives of Windsor* and *Henry IV*, pt.2, Nurse (eight neologisms) from *Romeo & Juliet* and Helena (seven neologisms) from *All's Well that ends Well*. The POS distribution is similar also among female characters. My research shows that the female characters of noble birth mainly use adjectival neologisms, while the female characters of the lower strata mainly use noun neologisms (see fig. 5.3.6).

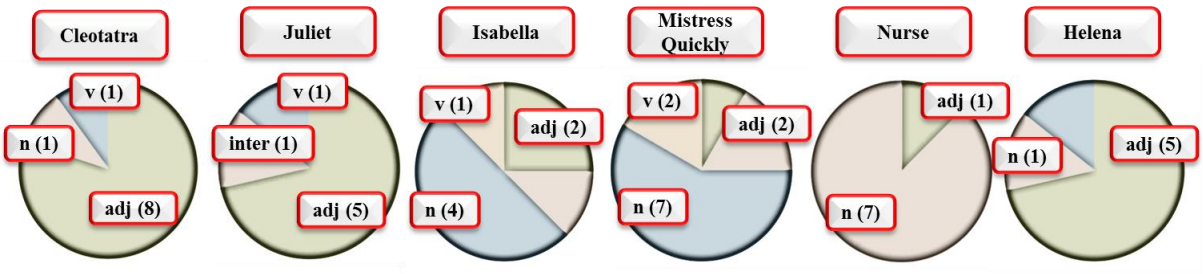


Figure 5.3.6: Female characters use of POS

However, both groups have exceptions, such as Isabella from *Measure for Measure* and Helena from *All's Well that ends Well*. As in the case of Hamlet and Falstaff, I believe the nature of the character is the key.

Isabella, although of noble birth, is attributed with the biggest share of noun neologisms. Isabella is about to enter a nunnery and, by doing this, change her social status from that of nobility to clergy. As we have seen previously, figures 5.3.2 and 5.3.3 show the difference in distribution of the POS of the neologisms used by nobility contra clergy. Although the pie charts for nobility and clergy seem similar at first glance, there is an appreciable difference in the distribution of the parts of speech. The nobility use an overwhelming share of adjectives (285) when compared to nouns (184). The clergy, on the other hand, have an almost equal distribution when using these two parts of speech, adjectives (11) vs nouns (12). We can see that while nouns comprise 45% of the POS used by the clergy, this use is only 29% with nobility. The higher percentage of use of the noun can be attributed to the necessity for the clergy to cater to the spiritual needs of all social strata. Helena from the play *All's Well that ends Well* is the daughter of a physician. She belongs to the middle class but lives among the nobles as a ward of the Countess of Roussillon and aspires to elevate her rank through marriage. I believe that Shakespeare uses her language to emphasise her social aspirations by attributing this character with a majority of adjectival neologisms. The intention of both characters to change their social status is reflected in their language.

5.3.4 WF methods and characters

OED Online provides an etymology that allows the identification of the WF methods used for 1,095 of the 1,381 PN. The word formation methods used to coin the remaining 286 are unidentifiable and consequently these 286 coinages are not a part of my data.

My analysis of the PN distribution shows that, notwithstanding the social status of the characters, suffixation was the predominant method of WF used by Shakespeare followed by prefixation, conversion, compounding and minor methods of word formation (see fig. 5.3.7).

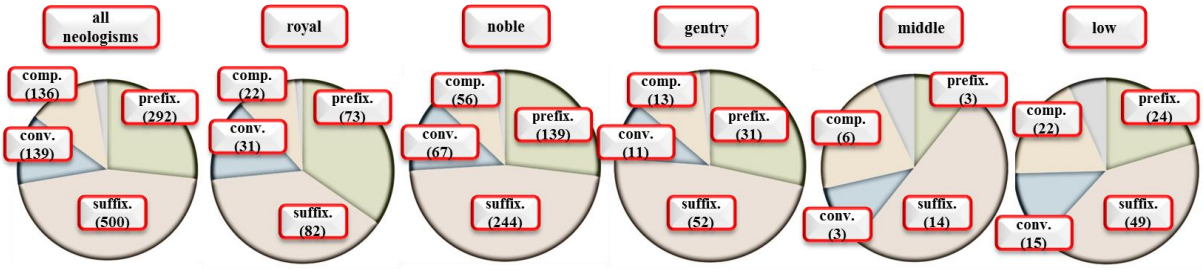


Figure 5.3.7: WF methods distribution in different social categories

The neologisms formed by suffixation are distributed in varying degrees between the various social groups, with the lowest proportion, 38.9% dedicated to royalty and the highest, 50% to the middle class. The other two categories, noble and gentry, are somewhere in between. Similarly, neologisms formed by prefixation vary approximately between 20-35%, conversion between 10-15%, compounding between 10-20% and minor methods between 2-7% (see table 5.3.1).

Table 5.3.1: WF methods used for coining play neologisms

WF methods	**royal**		**noble**		**gentry**		**middle class**		**lower class**	
	number	**%**	number	**%**	number	**%**	number	**%**	Number	**%**
Total	**211**		**518**		**107**		**28**		**118**	
Suffixation	82	**38.9**	244	**47.1**	52	**48.6**	14	**50.0**	49	**41.5**
Prefixation	73	**34.6**	139	**26.8**	30	**28.0**	3	**10.7**	24	**20.3**
Conversion	31	**14.7**	67	**12.9**	11	**10.3**	3	**10.7**	15	**12.7**
Compounding	22	**10.4**	57	**11.0**	12	**11.2**	6	**21.4**	22	**18.6**
minor methods	3	**1.4**	11	**2.1**	2	**1.9**	2	**7.1**	8	**6.8**

The table also shows that all social strata, except the middle class, follow the same pattern with suffixation contributing the largest number of neologisms and prefixation taking second place. The social stratum of the middle class, however, deviates from this pattern, with compounding instead of prefixation taking second place.

5.3.5 Comparison of plays

The plays *Romeo & Juliet*, *Othello*, *Macbeth* and *Antony & Cleopatra* were compared to establish if there were any differences in the WF methods used. I also examined the

connection between the survival rate of a neologism and the number of senses it developed. The four above mentioned plays were chosen because they each have 53 neologisms.

(1)Word formation methods

My research shows that suffixation is the primary method of word formation used in all four plays and does not vary significantly between the plays (see table 5.3.2).

Only four suffixes *-ed*, *-er*, *-ing* and *-less*, out of 43 suffixes are used in every play. As regards prefixation, there is a little more variation between the plays in the number of neologisms formed. Only two prefixes, namely *un-* and *in-*, are used in all four plays (see table 5.3.2).

Table 5.3.2: WF methods used in the four plays

WF	***Antony & Cleopatra***		***Macbeth***		***Othello***		***Romeo & Juliet***	
	number	**details**	**number**	**details**	**number**	**details**	**number**	**details**
suffixation	22	*-an* *-ed* *-er* *-ing* *-less* *-ly* *-ry* *-y*	23	*-able* *-an* *-dom* *-ed* *-er* *-ful* *-ing* *-less* *-like* *-ly* *-ry* *-tious* *-y*	17	*-age* *-ance* *-ed* *-er* *-ing* *-ite* *-ity* *-less* *-ment* *-ship* *-y*	21	*-ed* *-er* *-ify* *-ing* *-ist* *-less* *-like*
prefixation	16	*be-* *dis-* *en-* *in-* *out-* *over-* *un-*	8	*dis-* *in-* *over-* *self-* *un-*	13	*be-* *co-* *en-* *in-* *re-* *un-*	9	*after-* *be-* *in-* *over-* *un-* *up-*
conversion	9	n > v	8	n > v	5	v > n	5	v > n
compounding	1	adj	6	majority: adj	9	majority: adj	5	majority: n
minor							2	

The settings for both *Antony & Cleopatra* and *Macbeth* are in the social strata of royalty and highest nobility. I find that it is only in these two plays that Shakespeare uses the new Latinate prefix *dis-*. There is a connection between the use of the foreign prefix *dis-* and the social status setting of the play. Within the four plays, *dis-* is used four times, thrice in *Antony &*

Cleopatra and once in *Macbeth*. In *Antony & Cleopatra*, Mark Antony uses it twice: once with a Latin base (the verb *dislimn*) and once with a French base (the verb *discandy*), while Enobarbus uses it once with a Latin base (the verb *dispunge*). In *Macbeth*, Macbeth uses it with a Germanic base (the verb *disseat*). In the plays *Romeo & Juliet* and *Othello* set in a non-royal social stratum the new Latinate prefix *dis-* is not used.

According to Salmon (1987: 204) the prefix *dis-* was at first used only with foreign bases. My hypothesis is that such neologisms based on foreign languages were more likely to be used by the social elite. Shakespearean usage supports this idea. However, the usage of *disseat* in *Macbeth* also shows Shakespeare as a linguistic liberal, since he here combines the Latinate *dis-* with a native base. Shakespeare's use of *dis-* also provides the possibility to individualise language by attributing the new and at that time posh *dis-* to the higher social strata.

My analysis of the neologisms formed by conversion seems to identify a certain pattern. The neologisms used in the plays *Antony & Cleopatra* and *Macbeth,* with their settings in the social stratum of royalty, are mainly 'noun > verb' conversions. The majority of conversions used in *Romeo & Juliet* and *Othello* have 'verb > noun' pattern. However, it is not clear if this has any literary or strategic significance.

Compounding is one of the oldest methods of WF in English and it has been used since time immemorial (Nevalainen 2001: 239). This method was used by all of English society independent of social status. An interesting revelation of my research is that there is only one neologism formed by compounding in the play *Antony & Cleopatra.* This number differs significantly from the three other plays. Again, it appears that Shakespeare uses chosen WF methods to reflect the different settings of his numerous plays.

One can see that Shakespeare seems to have a tendency to attribute a minimal number of compound neologisms (0-2 words) to all the plays set in ancient times. The number of plays set in the Ancient World of 'Before Christ' comprises *Antony & Cleopatra, Troilus & Cressida, Timon of Athens, Julius Caesar, Titus Andronicus* and *Coriolanus.* The play *Antony & Cleopatra* is set in ancient Rome and Egypt in the year 41 BC. The other plays from this list have similar settings with regard to time and geography (see table 5.3.3).

My hypothesis is that compounding may have been less associated with antiquity and more associated with modern times. However, this does not mean that Shakespeare necessarily

attributed more compounds to the plays set in the 'After Christ' times. Figure 4.4 (Appendix IV) indicates that this attribution was random (1-13 words). This may mean that Shakespeare also adapts his methods of word formation to fit the historical settings of his plays (see table 5.3.3).

Table 5.3.3: Distribution of compounding in the 'Before Christ' plays

Play	Setting	Historical setting	Compound neologisms
Antony & Cleopatra	Roman Empire: Rome, Alexandria, Syria	BC	1
Coriolanus	Rome	BC	2
Julius Caesar	Rome	BC	1
Pericles	Ancient Greece	BC	1
Timon of Athens	Athens	BC?	2
Titus Andronicus	Late Roman Empire	AC	1
Troilus & Cressida	Troy	BC	0

(2)Survival rate

Table 5.3.4 shows that there is a connection between the number of senses and the survival rate of neologisms. There may be other factors, such as the historical setting, that also influence the survival rate of neologisms. These factors are not researched though, and will not be discussed here.

Table 5.3.4: Survival rate of neologisms in the four plays

No of senses	***Antony & Cleopatra***			***Macbeth***			***Othello***			***Romeo & Juliet***		
	original No of PN	No of used now PN	Rate of survival %	original No of PN	No of used now PN	Rate of survival %	original No of PN	No of used now PN	Rate of survival %	original No of PN	No of used now PN	Rate of sur5.3vival %
total	**53**	**34**	**64.2**	**53**	**44**	**83.0**	**53**	**37**	**69.8**	**53**	**41**	**77.4**
1	33	15	45.5	26	18	69.2	33	19	57.6	27	18	66.7
2	11	10	90.0	17	16	94.1	8	6	75.0	15	13	86.7
3	5	5	100	5	5	100	4	4	100	3	2	66.7
4	1	1	100	2	2	100				4	4	100
5				1	1	100	6	6	100	5	1	20.0
6	2	2	100				1	1	100			
7	1	1	100	2	2	100						
8										1	1	100
13										1	1	100
17										1	1	100
18							1	1	100			

The number of senses (up to seven senses) developed by the neologisms used by royalty in the plays *Antony & Cleopatra* and *Macbeth* seems to be smaller than the number of senses (up

to 18 senses) developed by the strata of nobility and town gentry in *Othello* and *Romeo & Juliet* (see table 5.3.4). It would seem that the neologisms dedicated to simpler language first developed popularity and thereafter developed more senses. The neologisms could also have first developed more senses and thereafter become more popular in use.

5.3.6 Origin

Of the roots Shakespeare used to form his neologisms, around 30% belong to the native core, and about 40% to foreign cores naturalised during ME and EModE. Around 10% of Shakespearean neologisms are borrowings. According to *OED Online*, the remaining 20% are undetermined.

5.3.7 Summary

To answer research question three, I analysed the 1,381 neologisms taken from the Bard's plays.

My analysis revealed that Shakespeare has no conscious strategy for trusting his neologisms to particular characters. The Bard mainly gave his neologisms to 'good', adult, male characters of noble origin. This cannot be considered a conscious strategy because the majority of the characters in Shakespeare's plays belong to this category anyway.

However, other interesting discoveries have been made. One is that Shakespeare gave the majority of his adjectival neologisms to the upper social strata who used language to eloquently describe their world. The lower social strata were given the majority of noun neologisms, as they used language more as a necessary tool to effectively run their world.

Another discovery is that Shakespeare used neologisms to define the essence of a character. Two examples of this are the characters Hamlet and Shylock. Hamlet is torn between the medieval ideas of honour and revenge and his newfound philosophy of humanism. Shylock is struggling to find a balance between the materialistic and the idealistic world. This struggle is reflected by both characters breaking the linguistic pattern of their respective social stratum. Both Hamlet and Shylock were portrayed succinctly through the neologisms given to them by the Bard. The character Isabella is another case in point. Her aspiration to change her social status from nobility to clergy was aptly reflected by the neologisms this character used.

As to the survival of neologisms, those formed using simpler language seem to have a better rate of survival than those formed using more sophisticated language. Shakespeare's clever use of neologisms shows that it is not the number of coinages but how they are used that unveils the genius of the author.

6 Conclusion: ‘Unpack my heart with words’

The following research questions formed the basis for this thesis.

1. *To what degree has William Shakespeare’s status as a coiner diminished due to the results of new research?*
2. *Do words coined in the corpus of Shakespeare’s texts reveal any recognisable trends with regard to the word formation methods used?*
3. *Did Shakespeare strategically choose a certain category of character to give tongue to his neologisms?*

To answer the first question, I used Crystal’s (2008) research as a point of departure. According to Crystal, there are 1,392 neologisms within his first three categories, which are the ones that he defines as the strongest candidates to retain their status as Shakespeare’s neologisms. From category four to category eight the chances that a word is a genuine Shakespeare coinage lessens progressively, as the category number increases (chapter 5.1.2).

To test Crystal’s categorisation from 2008 and establish any significant changes to it, I categorised the 1,504 neologisms in the *Oxford English Dictionary* (*OED*) *Online* ‘First Cited in Shakespeare’ list of 2015/16, using Crystal’s categorisation criteria. I then compared my categorisation with Crystal’s categorisation. The comparison shows that Crystal’s categorisation has 1,392 neologisms in his first three categories. However, my categorisation results in 1,086 neologisms within the first three categories. A total reduction of 306 coinages compared to Crystal. I consider this average reduction of 8 % for the three categories to be quite insignificant when compared to the average reduction of 46.1% in the other five categories (chapter 5.1.9).

The additional 418 neologisms needed to bring my list on par with the 1,504 coinages from the *OED Online* ‘First Cited in Shakespeare’ list come from the other five categories of Crystal’s list. However, these 418 neologisms have a far greater chance of being removed from the *OED Online* ‘First Cited in Shakespeare’ list, as updating continues.

My research shows that Crystal's 'strong candidates' have not changed significantly in number since his 2008 categorisation. Based on this fact, I maintain that Shakespeare's status as a coiner has not changed significantly during the period from 2008 to 2016.

The second question is answered by analysing the word formation methods used to coin neologisms in the 'First Cited in Shakespeare' list of the *OED*. My analysis reveals that the majority of the neologisms are coined by suffixation, followed by prefixation, conversion and compounding. Shakespeare's use of word formation methods differ slightly from the general word formation trend during EModE. Nevalainen's research (2001: 351) shows that, unlike with Shakespeare, compounding is used slightly more than conversion during the EModE period.

Shakespeare primarily used suffixation to coin adjectives. It is interesting to note that only two suffixes (*-ed* and *-ing*) are used to coin the majority (257) of his adjectives. Prefixation is an even more extreme case where one prefix *un-* is used to coin 152 neologisms. The prefix *un-* also happens to be the most used prefix during the EModE period. I also found that the overall use of affixation is influenced by certain identifiable factors. Suffixation is influenced by origin, age and part of speech, while prefixation is influenced by origin, age and restrictions of usage (section 5.2.4 and 5.2.7).

Shakespeare was traditional in his use of conversion and compounding. He used conversion to coin verbs from nouns and vice versa, which was a common practice during this period (Bauer 1991: 229-30; Nevalainen 2001: 426; chapter 5.2.14). The major patterns used in compounding are the 'noun + noun' pattern for coining nouns and 'adjective/noun/adverb + adjective' patterns for coining adjectives (Bauer 1991: 202; Nevalainen 2001: 409; chapter 5.2.17). Twenty other patterns of compounding are intermittently used to create compound nouns and adjectives.

Shakespeare's predominant use of known and familiar constituents in traditional word formation patterns supports the existing assumption that, as the poet's primary audience was the common man, he used a language they could easily associate with. However, this does not stop Shakespeare from occasionally experimenting with foreign and sophisticated elements to cater to the social avant-garde and the budding social climbers of the Renaissance England.

The third question is answered by analysing the connection between the characters depicted in Shakespeare's plays and the neologisms allotted to them. I looked for any sign of Shakespeare bestowing particular types of neologisms on strategically chosen groups of characters. While no special trend is found within any category of characters such as male/female, scoundrel/hero and old/young, a certain trend of distribution of coinages is found within social hierarchy (chapter 5.3.1).

Shakespeare assigns adjectival neologisms mainly to the higher strata of society in his plays, while noun neologisms are assigned to the lower strata. The hypothesis is that while nobles use language to mostly describe their world, commoners use language to run theirs. Shakespeare uses exceptions from this pattern to portray the psychological ambiguity and mental conflicts that characters like Hamlet and Shylock are struggling with. The distribution of neologisms illustrates how Shakespeare uses language to mirror the society and individuals of his time. Not surprisingly, Shakespeare's most popular plays, *Hamlet, King Lear, Troilus and Cressida* and *Love's Labour's Lost* also contain the highest number of neologisms and these coinages have the highest survival rate (chapter 5.2.20).

The research for this thesis also reveals that some examples presented in the past are now invalid. My example referring to *memento mori* (chapter 5.1.8) is antedated (Shea 2014: 134). The ongoing processes of antedating, postdating and the re-assignment of authorship pose continuous challenges for contemporary researchers (chapter 5.1.4).

The scope of this research can be widened by analysing the context of Shakespeare's plays in order to establish the reasons for Shakespeare preferring different word formation methods for different plays. Another subject for future research could be to analyse the dynamics of the changes that will surely take place as the *OED* continues with its updates. Such an analysis would help adjust Shakespeare's status as a neologiser accordingly. It would also be interesting to examine how Shakespeare gave new senses to existing words, thereby enriching the language (Brewer 2011: 350). To analyse if Shakespeare had any special preferences when choosing among the myriad of new words made available to authors of the Early Modern English period is another subject for research.

Among the shortcomings of this research I will mention the following. The *OED* is not yet fully updated. Some words in the *OED* have missing or unclear etymology, which might have influenced the analysis, e.g. use of compounding contra conversion. This incomplete updating

also influences my data on the survival rate of coinages. However, this does not affect the overall results in any significant way. The margin of error is negligible in both cases.

Notwithstanding the continuous changes brought on by new research and updates, my research shows that Shakespeare deservedly retains his place as the most prolific coiner in the history of the English language. The continued popularity of his plays and the extreme survival rate of his coinages in contemporary English justify his position as the most influential author in the history of English literature.

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Appendix I

Suffixes

Table 1.1: Concrete noun suffixes

Concrete noun suffixes					
Suffix	**Origin**	**Forms/meaning**	**Combination**	***Example***	**Note**
-ant/ *-ent*			verb	*attendant* *absorbent*	- accommodates Fr/Lat legal terms - combines with borrowed bases only - also associated with instrumental nouns
-er *-or*	OE	occupation / agentive notions 'an inhabitant of' 'that which V-ing is carried out with' 'where V-ing takes Place'	noun verb	*jobber, tinner* *cosmographer* *philologer* *islander* *lecturer* *beggar* *new-comer*	- the type *-loger* has since given way to *-ist* - from dynamic verbs, both native and borrowed - frequendy attached to compounds
-ess	Fr	female occupation / agentive notions	noun	*ambassadress* *peeress* *heiress*	- combines with borrowed /native bases - added directly to its masculine counterpart or to a reduced form
-let	modelled on Fr & *-et*	diminutive and feminine	noun	*streamlet* *sparklet*	- combines with borrowed and native bases - increasingly productive
-ling		diminutive or depreciative sense	noun verb adjective	*worldling, catling, oakling* *changeling*	- applied to human, names of young animals and plants
-y	Scot.		noun	*hubby* *kitty* *lowry*	seems to have originated in Scottish personal names of the type *Charlie in* the mid-fifteenth century

Table 1.2: Abstract noun suffixes

Abstract noun suffixes					
suffix	**origin**	**forms/meaning**	**combination**	***example***	**note**
-acy		state or quality	noun adjective	*intricacy* *intimacy* *piracy*	- state or quality in derivations based on words ending in *-ate* - adaptive termination with Fr/Lat loans (mostly with adj)

-age	Fr	- collectivity, condition, state, system, material, place or abode - action/fact with resultative and locative senses	noun verb	*baronetage* *leverage* *vicarage* *luggage* *package*	- denote status, domain and other related semantic notions - from personal nouns => a condition, state or collectivity - from non-personal nouns => collectivity, system and material, place or abode - combines with native and borrowed bases
-al			verb	*denial*	- abstract nouns from dynamic verbs - combines with native and non-native bases
-ance *-ence*		- action or the result of action	verb	*reliance* *clearance*	- mostly combines with Roman bases - quite productive
-ancy *-ency*		'state or quality of being x'	noun adjective	*idecency* *intelligency/ intelligence*	- mostly from adjectives ending in *-ant/ent.* - gave in later to *-ance/ence*
-ate		'office, function' or 'institution o f	noun	*triumvirate* *episcopate*	- renders Latin words
-dom	OE	'status, condition', or 'realm'	noun	*mayordom*	- no pejorative sense in EModE
-ery *(-ry)*	Fr	'state, business' 'behaviour of' collectivity 'place of activity, abode'	noun	*rivalry* *bigotry* *soldiery* *machinery* *nursery*	
-ful		'the amount that N contains'	noun adjective	*mouthful* *baskeful*	more productive as an adjective suffix
-hood	OE	'status of' or 'time of'	noun adjective	*squirehood* *hardihood*	- moderately productive in EModE
-ing	OE	- collectivity or substance - activity/state & the result of it - instrumental	noun verb adjective	*silvering* *icing* *savings* *stopping*	derives mass nouns from concrete nouns - abstract nouns denoting activity or state: verbal nouns (gerunds)
-ity	Fr	abstract states, conditions and qualities	adjective	*oddity*	- very productive in EModE - especially with adjectives ending in *-able/ible, -ic, -al* and *ar* - take native and borrowed bases
-ment			verb	*amusement* *fulfilment*	- combines mostly with non-native bases to derive both abstract and concrete nouns
-ness	OE	abstract states, conditions and	adjective	*commonness* *youngness*	- very productive in EModE - prefers native bases

		qualities		*invitingness*	- appears with participles
-ship	OE	'state, condition' or 'rank of' 'a skill at'	noun	*lectureship* *horsemanship*	'a skill at' - a new sense in EModE
-ure			verb	*vomiture* *exposure*	- mildly productive in EModE with verbs ending in *-s* or *-t*, deriving action nouns on the model of loan-word

Table 1.3: Native adjectival suffixes

Native suffixes					
suffix	**origin**	**forms/meaning**	**combination**	***example***	**note**
-ed	native	'provided with N ' 'sense 'having the shape or qualities of N '	noun	*roofed* *domed* *honeycombed* *rose-lipped*	- most frequent in EModE - forms possessive adj - takes both native and foreign bases - used with compounds and syntactic groups
-en	native	'made of, consisting of N' 'resembling, like N'	noun	*earthen* *milken*	- new coinages often have both senses - the alternative way of expressing material
-ful	native	'ful of N' 'having, giving N'	noun	*hopeful* *unuseful*	- derives gradable adjectives chiefly from abstract nouns with the sense - usual formations with *un*
-ish	native	'belonging to N ' 'having the character o f N ' ''nearly, but not exactly *x'* (about colour) approximative sense	noun adjective	*fiendish* *blackish* *tallish*	- derives gradable and non-gradable adjectives chiefly from proper and countable nouns - form adj expressing nationality and origin - many with derogatory sense
-less	native	'without N ' 'not giving N'	noun	*matchless*	- the negative counterpart of *-ful* - more independent coinages later
-ly	native	'having the qualities of N' recurring occurrence (with time expressions)	noun	*cowardly* *weekly*	- forms gradable adj chiefly from concrete nouns
-y	native	'full of N , covered with N , characterised by N ' 'somewhat, suggesting x'	noun adjective verb	*shaggy* *browny*	- most frequent in EModE - derives gradable adj - not limited to native bases
-like	native	'resembling' 'befitting'	noun	*fleshlike* *unwarlike*	- a native competitor for *-ly* - negative coinages since the 16th c. - the semi-suffix *(*Marchand, 1969: 356) because it can also occur independently

Table 1.4: Borrowed adjectival suffixes

Borrowed suffixes					
Suffix	**Origin**	**Forms/meaning**	**Combination**	***Example***	**Note**
- al (-ial)	Lat	'having the character of' 'belonging to'	noun	*horizontal* *burghal* *mathematical*	- most productive - after Latin loans in *-dlis* - combines with nouns of Lat/Gr origin - few from native words - shorter variants in *-ic*
-ary		expresses purpose or tendency	noun	*cautionary*	- first used to anglicise adjectives of Latin origin
-ate			noun	*affectionate*	- derive from foreign bases - mildly productive - ME angl. termination in Lat/ Fr loan words
-ic	from Fr loans	'pertaining to'	noun	*Gallic* *dramatic*	- derives from ethnic and other proper names - technical terms in *-ic* go back to Greek - many loan words in *-y* tend to derive adjectives in *-ic*
-ous	Fr	'full of' 'of the nature of'	noun	*tetterous*	- earlier than the other borrowed adj suffixes - take native (less) and foreign (more) bases - adapts Latin adjectives with no fixed anglicising termination

Table 1.5: Deverbal adjectival suffixes

Deverbal adjectival suffixes					
suffix	**origin**	**forms/meaning**	**combination**	***example***	**note**
- able (-ible)	Fr	'fit for doing' 'fit to be done'	noun (less) verb	*attainable* *actionable* *resistible*	- take borrowed and native transitive verbs - the passive sense is more common than the active one *-ible*, due to Lat loan words, spread to Lat- derived coinages
-ive	Fr	'pertaining to'	verb	*amusive* *babblative*	- anglicise of Fr/ Lat adj ending in *-s* or *-t* - take native bases rare and jocular
-y	native	'having the tendency to'	verb	*choky*	

Table 1.6: Adverb suffixes

Adverb suffixes					
Suffix	**Origin**	**Meaning**	**Combination**	***Example***	**Note**
-like	native		noun	*gentlemanlike* *wifelike*	*-like was* productive as an adjective suffix in EModE. Hence adverbial occurrences with *-like* may be treated either as zero-derivations from homonymous adjectives or as derivations by means of the denominal adverb suffix *-like.*
-ly	OE	manner, respect and degree	noun adjective participle numeral	*bawdily* *partly* *thirdly*	- the most common - derive adverbs of manner, respect and degree
-ward(s)	native	direction	noun	*leftward* *landward*	- rival of *-way(s)* in the sense 'in the direction of'

Table 1.7: Verb suffixes

Verb suffixes					
Suffix	**Origin**	**Meaning**	**Combination**	***Example***	**Note**
-ate	borr.		noun	*fabricate*	- anglicising termination with Latin participles - derives from Latin nominal stems and Romance nouns - very productive
-en	OE	'make x' 'become x'	adjective verb (rare) noun (rare)	*frighten* *madden*	- derive both transitive causative ('make x') and intransitive verbs ('become x') - perhaps originally extensions of earlier suffixless verbs - phonological input constraints, the bases having to end either in a stop or a fricative
-er	native	sound or movement		*gibber* *whimper*	- phonological constraints: an /r/ in the base disfavours *-er*
-(i)fy	Fr/ Lat loans		noun adjective (less)	*beautify* *monkeyfy*	- takes Latinate and native (rare) bases - derogatory senses are common
-ise *-ize*	Fr/ Lat loans	'act as'	verb adjecive	*bastardise* *womanise* *paganise* *personalise*	- most productive - derives transitive (causative) and intransitive instances ('act as') - derive technical terms chiefly from neo-Latin bases

Prefixes

Table 1.8: Negative prefixes

P.380-2	Prefix	Origin	Meaning	Combination	Example	Note
Negative prefixes	*un-*	OE	complementary and contrary semantic relations : 'not', 'the opposite of'	noun verb adjective & participle adverb	*uncharity* *unknow* < *unknowing* *unfortunate* *unabsorbed* *unfortunately*	the most common throughout EModE mostly combines with adjectives
	non-	OF < Law Latin	'not'	nouns adjective & participle	*non-resistance* *non-harmonious* *non-graduated.*	first only in English legal terms and only in nouns
	in-.	Fr / Lat	'not'	noun adjective & participle	*inexperience* *insufferable* *incivilised*	later overtaken by *un-* in some adj e.g. *unable* vs *inability* variants: *im-* + bilabial cons., *il-* + /l /, *ir-* + /r/
	dis-	Fr / Lat		noun verb adjective	*discourtesy* *disapprove* *disreputable*	- combines with Fr / Lat bases - with verbs in the sense 'not', 'fail to' has no synonyms
	a-	Gr	'not'	adjective	*atheological* *apsychical* *asymmetric*	limited productivity in EModE (technical field of discourse)

Table 1.9: Reversative and privative prefixes

p.382	prefix	origin	meaning	combination	example	note
Reversative & privative	*un-*	OE	1. reversative 2. privative: in objective and oblative ('removal') senses	verb	1. *undo* 2. *unburden, unboson*	transitive verbs both from native and borrowed bases
	dis-	Fr / Lat	1. reversative 2. privative: in objective and oblative ('removal') senses	verb	1. *dislink* 2. *disgown, disbar*	mostly with Roman but sometimes also native bases

Table 1.10: Locative prefixes

P.383	Prefix	Origin	Meaning	Combination	Example	Note
Locative prefixes	*a-*	OE	similar to the progressive aspect ('in a state/position of')	noun verb	*aflame, aswim* *adrift, aweather*	- a reduced form of the OE locative preposition *on, an.* - less often with nouns - used as predicative adj/ adv

	circum-	Lat.	'around'	verb	*circumclose*	- mildly productive
	fore-	OE	'in front o f , 'before' (place/time)	noun	*forename* (loc.) *forewoman*	productive locative and temporal prefix in EModE
	sub-		'beneath', 'under'	noun verb adjective	*sub-treasurer* *subcontract* *sublingual*	- mostly with nouns - deverbal formations are rare
	super-		'over', 'above'	noun adjective	*superimposition* *superlunary*	- not frequent - in technical terms formed to match derivations with *sub-*
	inter-		'between', 'among'	noun verb adjective	*interspeech* *intermarry* *interstellar*	- native and borrowed bases - productive since late ME but generalised in EModE

Table 1.11: Temporal prefixes

P.385	Prefix	Origin	Meaning	Combination	Example	Note
Temporal prefixes	*fore-*	OE	'before'	noun verb	*forenight* *forearm*	- less frequent at the end of EModE - with nouns it is mostly locative
	pre-	Lat.	'before' 'exceedingly' (intensifier)	noun verb adjective	*pretaxation* *pre-elect* *pre-pious* (intens.)	- full productivity with Lat verbs - EModE: no formations of *pre-war* (adj < n)
	re-	after Fr/Lat models	'again', 'back'	noun (deverb.) verb	*redelivery* *reboil*	- very productive with trans. verbs (native/foreign) 'repetition of the action'

Table 1.12: Opposition & support prefixes

P.386	Prefix	Origin	Meaning	Combination	Example	Note
Opposition & support (attitudinal)	*co-*	OF</ Lat	'joint', 'fellow'	noun verb adjective	*coheir* *cowork* *commingle*	- mostly with personal nouns - *com-* / *con-* after Fr/Lat

Table 1.13: Pejorative prefixes

P.382	Prefix	Origin	Meaning	Combination	Example	Note
Pejorative prefixes	*mis-*	OE/Fr	'wrongly, badly, amiss' 'unfavourably'	noun (deverbal.) verb	*misfortune* *misconduct* *misname*	very productive 1550 - 1650

Table 1.14: Intensifying prefixes

P. 390	Prefix	Origin	Meaning	Combination	Example	Note
Intensifying prefixes	*arch-*	Gr	- 'supreme', 'highest' - pejorative mean. since the 16th c.	noun	*archpriest* *arch-piece* *arch-enemy* (pejor.)	- about degree/size (reduplicates the native particles *over*/*under* but differs in register/productivity)
	be-	OE	from 'equipped or covered with' to 'beset with'	noun	*beblood* *becrown* *becalm* *bedim*	- very common - denominal-verb derivations - deadjectival verbs - more intensifying than their unprefixed counterparts
	en - em- /p/ & /b/	Fr loans	'to put into x', 'to make into x', 'to get into x'	verb	*encrown* *enwall* *enhappy* *ensweeten*	- very productive - dublicates unprefixed counterparts - rival denominal conversion verbs - metrical function
	sub-		'somewhat/not quite x'	noun adjective	*sub-angelical* *sub-rustic*	- the opposite of *super-* - at first only locative sense
	super-	Lat. loans	'over', 'beyond'	adjective	*superfine*	

Compounding

Table 1.15: Types of compound nouns in EModE (endocentric)

Compound NOUNS					
determinant (D-ant)	**determinatum (D-tum)**				
	Noun				
	types	**examples**	**Semantic relations**	**examples**	**notes**
Noun	copulative subsumptive: N l (is a hyponym of) N2	*oak tree*	Nl (powers/operates) N2 Nl (yields/produces) N2 Nl (has) N2 Nl (is located) at N2 Nl (is *V-ed by* means of) N2	*waterclock* *cow dung* *door-ring, fire place*	- the most common type of comp. noun - mostly determinative and thus endocentric
	copulative attributive types: N2 is N l (D-ant denoting the sex of the D-tum)	*girlfriend*	reverse the functions N2 (controls/works with) Nl N2 (yields/produces) N1 N2 (has) N1 N2 (is located) at N1	*fireman* *sugar cane* *stone-fruit* *tombstone*	
Adjective			an attrib. subject-complement relation 'N is Adj.' - purpose relation	*blackbird* *sick-house*	- many animal beings as well as inanimate
Verb			V + Subject V + Object V + Adverbial (e.g. of purpose)	*draw-boy* *pastime* *plaything*	- not always easy to different function of a D-ant (v or noun)
	Verb				
Noun	V + ing > deverbal N		V + Object (more common) V + Adverbial Subject + V (rare)	*book-keeping* *church-going* *nose-bleeding*	abstract compounds referring to human activity
	V+ er > deverbal agent N		Object + Verb Adverbial + Verb (less)	*book-keeper* *church-goer*	- very productive - mostly denote persons

Table 1.16: Types of compound nouns in EModE (exocentric)

Compound NOUNS (exocentric)					
determinant (D-ant)	**determinatum (D-tum) Zero**				
	types	**examples**	**Semantic relations**	**examples**	**notes**
noun-based	Adj + N	*redskin*	semantic strategy of metonymy: an entity is referred to by a compound that in fact denotes only a part or a characteristic of it: ' N l (has) N2'; where	*redskin* *busybody*	- compounds of a special kind - personal nouns. (mostly pejorative)
	N + N			*blockhead*	

	V + N		N l = x , and N2 = red skin	*leapfrog* *shatterbrain*	- attributive Adj + Noun – most productive
verb-based	V + N	*pickpocket*	Verb + Object - denoting an agent performing the action expressed by the verb phrase	*do-nothing,* *fill-belly* *killjoy* *turnstile*	- most EModE personal noun coinages are colloquial and pejorative (17th c – not pejorative)
	V + Particle		Verb + Object - denoting either agent or action	*go-between* *runaway* *turnover*	

Table 1.17: Types of compound adjectives in EModE (exocentric)

Compound ADJECTIVES (exocentric)				
determinant (D-ant)	**determinatum (D-tum) Adjective**			
	types	**Semantic relations**	**examples**	**notes**
Adjective	copulative		*theologico-moral* *Anglo-Saxon*	- associated with technical terminology - the first part is often a combining form with *-o*
	determinative	hyponymical	*dark green* *very deep orange*	- not very productive - modifiable determination - could alternatively be analysed as adj. phrases (lexical transparency and stress like in phrases)

Conversion

Table 1.18: Types of conversion in EModE

Type	Syntactic-semantic relations	Example	Note
V > N	Predication: nominalize the event, state or activity denoted by the verb (dominant) Object of V (common) Subject of V (rare) Place of V (rare)	*glide* *brew* *cheat* *bend*	- seldom derived from verbs formed with borrowed suffixes, notably *-ify* and *-ise* - from native verbs in *-le* and *-er* are common - prefixed verbs to nouns - common
Adj > N		*Christian* *Japanese* *classics*	- defined as: an adj + noun phrase from which the noun has been ellipted - 3 groups: 1. have a regular plural 2.can appear in both singular and plural, but have no overt plural marking 3. have regular plural forms but no singular
N > V	Causation - 'to put N on something' and 'to remove N from something'. - verb-object complement relation ('to convert x into N') - rare - stative subject complement function ('to be/act as *N)* - typical of personal nouns. - Verb - adverbial locative instrumental - Verb - Object: ornative privative - Verb - object complement - Verb - subject complement	 *bottle* *hand* *gesture* *nickname* *skin* *lump* *butcher*	- predominant type - from suffixed nouns are not common - from prefixed lexemes is commonly limited - denominal verbs are commonly polysemous => semantic opposites (ornative and privative senses of *skin*, or processual and stative of *brother)*
Adj > V	- transitive verb-object complement relation ('to make adj.') - intransitive verb-subject complement relation ('to become adj.'). - Verb-object complement - Verb-subject complement	*plump* *sullen* *empty* *idle*	- less common than the denominal group - deadjectival conversions often compete with *-en* suffixations
Particle > V	'to say x', 'to utter x'	*about* *forward* *pooh*	- a number of locative particles were also converted to verbs in EModE - interjections are perhaps a more common source for verbs
Adj > Adv	intensifiers	*detestable* *extreme* *grievous* *intolerable*	- intensifiers: conversion gave in to –ly later - suffixless forms were often preserved in comparatives and superlatives *(slower, slowest)* and in participial compounds *(new-laid, rough-hewn, soft-spoken).*

Minor methods of WF

Table 1.19: Types of back-formation in EModE

No	Type	Description	Example
1	**V < N (agent/instr.)**	A verb is backformed from what is believed to be or really is an agent / instrument noun	*cobble* 1496 < *cobbler* 1362; *spectate* 1709 < *spectator* 1586; *vint* 1728 < *vintner* 1298
2	**V < N (action)**	A verb is backformed from a real or supposed action noun	*atone* 1555 < *atonement* 1513; *injure* 1583 < *injury* 1382;
3	**V < Adjectival word**	A verb is backformed from an adjectival word which is taken to be a derivative from the verb (present or past participle)	*sunburn* 1530 < *sunburnt* 1400; *speckle* 1570 < *speckled* 1400; *laze* 1592 < *lazy* 1549
4	**N < Adj**	A noun is backformed from an adjective taken to be derived from it	*greed* 1609 < *greedy* OE *land* 1627 < *landlocked* 1622
5	**Adj < N, Adv, Adj**	An adjective is backformed from an abstract noun, adverb or a not adjective, whose base it is taken to be	*ginger* 'dainty' 1600 < *gingerly* 1519; *hydroptic* 'dropsical' 1631 < *hydropsy* 1300 *greensick* 1681 < *greensickness* 1583;
6	**N < derivative**	A 'primary' noun is backformed from what is taken to be its derivative	*soothsay* 'a true or wise saying' 1549 < *soothsayer* 1340 / *soothsaying* 1535

Appendix II

The FiCiS 2015/16 list according to WF methods

Table 2.1: Words formed by suffixation in the *OED Online* FiCiS list of 2015/2016

Suff.	**Coinage**					
able	assailable, adj.	attemptable, adj.	laughable, adj.	mockable, adj.	oathable, adj.	razorable, adj.
acy	immediacy, n.	obduracy, n.				
age	guardage, n.	plantage, n.	portage, n.2	scaffoldage, n.	scrippage, n.	sternage, n.
	ventage, n.2					
al	cital, n.	inventorially adv.	reposal, n.2			
an	Cimmerian, n. and adj.	gallian, adj.	Norweyan, adj. and n.	Philippan, adj.		
ance/ ence	arrivance, n.	imminence, n.	iterance, n.	meditance, n.	non-regardance, n.	omittance, n.
	precipitance, n.	reprobance, n.	sonance, n.	sortance, n.		
ancy/ ency	concernancy	differency, n.	extravagancy, n.	oppugnancy, n.	persistency, n.	
ant	dotant, n.	questant, n.	suppliant, adj.			
ary/ ery	allottery, n.	fedarie, n.	mappery, n.	stitchery, n.	villagery, n.	
ate	castigate, v.	deracinate, v.				
dom	birthdom, n.					
ed	admired, adj.	affectioned, adj.	agued, adj.	assembled, adj.	based, adj.	bated, adj.
	battered, adj.	beached, adj.	becomed, adj.	beggared, adj.	behaved, adj.	betrayed, adj.
	bewailed, adj.	bold-faced, adj.	bonded, adj.	bottled, adj.	burdened | burthened, adj.	butchered, adj.
	caged, adj.	canopied, adj.	casted, , adj.	chaliced, adj.	half checked, adj.	childed, adj.
	cockled, adj.	cold-hearted, adj.	collected, adj.	collied, adj.	compromised, adj.	congregated, adj.
	considered, adj.	consigned, adj.	contaminated, adj.	counted, adj.	crushed, adj.	culled, adj.
	curbed, adj.	daisied, adj.	dedicated, adj.	deep-mouthed, adj.	defeated, adj.	delighted, adj.
	derived, adj.	despised, adj.	destined, adj.	devoted, adj.	dishonoured | dishonored, adj.	disturbed, adj.
	down-gyved, adj.	dropsied, adj.	embarked, adj.	enamelled | enameled, adj.	enchafed, adj.	enchanted, adj.

	encrimsoned, adj.	engrafted, adj.	fanged, adj.	fated, adj.	fathered, adj.	fat-witted, adj.
	fielded, adj.	flawed, adj.	fleckled, adj.	foul-mouthed, adj.	founded, adj.	full-hearted, adj.
	handled, adj.	heated, adj.	hunchbacked, adj.	ill-starred, adj.	ill-tempered, adj.	impressed, adj.
	inched, adj.	incorpsed, adj.	intertissued, adj.	invised, adj.	jaded, adj.	juiced, adj.
	kingdomed, adj.	lengthened, adj.	Lethied, adj.	logger-headed, adj.	looked, adj.2	looped, adj.
	lovered, adj.	lugged, adj.	masoned, adj.	meered, adj.	millioned, adj.	misadventured, adj.
	misbehaved, adj.	misplaced, adj.	misprized, adj.	mobled, adj.	orbed, adj.	outbreathed, adj.
	overparted, adj.	over-roasted, adj.	overscutched, adj.	overteemed, adj.	overweathered, adj.	parti-coated adj.
	pebbled, adj.	pensived, adj.	pioned, adj.	pleached, adj.	pole-clipped, adj.	posied, adj.
	predeceased, adj. and n.	propertied, adj.	qualmed, adj.	recollected, adj.	related, adj. and n.	remarked, adj.
	routed, n. and adj.	sacked, adj.	sanded, adj.	scandalled, adj.	scarfed, adj.	scrubbed, adj.
	seated, adj.	sedged, adj.	sequestered, adj.	sharded, adj.	sheeted, adj.	sheltered, adj.
	shifted, adj.	short-lived, adj.	skirted, adj.	slaughtered, adj.	sledded, adj.	slippered, adj.
	smirched, adj.	snail-paced, adj.	sneaped adj.	soiled, adj.	spectacled, adj.	
	sphered, adj.	splitted, adj.	stelled, adj.	streaked, adj.	sucked, adj.	sued, adj.
	swallowed, adj.	suffered, adj.	swelled, adj.	sweltered, adj.	sympathized, adj.	tangled, adj.
	tented, adj.	thoughted, adj.	three-piled, adj.	tithed, adj.	toged, adj.	tranced, adj.
	twinned, adj.	umbered, adj.	unkinged, adj.	unnerved, adj.	unowed, adj.	unpanged, adj.
	waned, adj.	wappered, adj.	warranted, adj.	wheeled, adj.	winnowed, adj.	wry-necked, adj.
	tender-minded, adj. and n.					
en	disliken, v.	moulten, adj.	thoughten, adj.			
er/or	appearer, n.	batler, n.	blusterer, n.	boggler, n.	budger, n.	buzzer, n.
	cheerer, n.	clamour | clamor, v.	confirmer, n.	correctioner, n.	exhibiter, n.	insulter, n.
	interposer, n.	moraller, n.	pauser, n.	pilcher, n.	plighter, n.	precurrer, n.
	prizer, n.	relier, n.	rumourer | rumorer, n.	seemer, n.	substractor, n.	surviver, n.
	swaggerer, n.	torcher, n.	torturer, n.	waverer, n.		

ess	cloistress, n.	jointress, n.	offendress, n.	soldieress, n.		
ful	barful, adj.	bookful, n.	changeful, adj.	crimeful, adj.	eventful, adj.	fitful, adj.
	hopeful, adj. and n.	increaseful, adj.	preyful, adj.	spleenful, adj.		
hood	lustihood, n.					
(i)al	critical, adj.	preceptial, adj.	sacrificial, adj.			
ic	stigmatic, adj. and n.					
ify	fishify, v.					
ing	abutting, adj.	advertising, adj.	affecting, adj.	amazing, adj.	anchoring, adj.	applauding, adj.
	attending, adj.	auguring, adj.	awakening, n.	backing, n.	bandying, n.	baring, n.
	basting, n.	baubling, adj.	becoming, n.	beguiling, adj.	belonging, n.	beloving, adj.
	betting, n.	bewailing, adj.	bitter-sweeting, adj.	blabbing, adj.	blushing, adj.	boding, adj.
	breaking, adj.	buck-washing, n.	calumniating, adj.	camping, adj.	casing, adj.	censuring, adj.
	circling, adj.	coasting, n.	codding, adj.	compelling, adj.	condoling, adj.	conflicting, adj.
	conquering, adj.	contending, adj.	contriving, adj.	counterfeiting, adj.	coursing, adj.	cudgelling, n.
	cursing, adj.	dangling, adj.	darting, adj.	dawning, adj.	deafening, adj.	deluding, adj.
	despairing, adj.	disliking, adj.	disturbing, adj.	emballing, n.	encroaching, adj.	exacting, n.
	extracting, adj.	forging, adj.	fronting, adj.	galloping, n.	gormandizing, n.	grumbling, adj.
	grumbling, n.	guessing, adj.	guiding, adj.	heaving, adj.	hoarding, n.	hoarding, adj.
	hodge-pudding, n.	hovering, adj.	ill-boding, adj.	increasing, adj.	insulting, adj.	intruding, adj.
	inviting, adj.	issuing, adj.	kissing, adj.	lagging, adj.	mangling, adj.	mousing, adj.
	offering, adj.	overmounting, adj.	overtopping, n.	pacing, adj.	parling, adj.	pelting, n.
	pleading, adj.	plodding, n.	prompting, adj.	pugging, adj.	quartering, adj.	repairing, adj.
	revolving, adj.	rooting, adj.	satisfying, adj.	scraping, adj.	shipwrecking, adj.	shuffling, adj.
	sistering, adj.	sneaping, adj.	soaring, adj.	spelling, adj.	spirit-stirring, adj.	spitting, n.
	splitting, adj.	squeaking, n.	sufficing, adj.	suffocating, adj.	suggesting, adj.	surviving, adj.
	tearing, adj.	unfolding, adj.	unrecalling, adj.	unrecuring, adj.	ushering, n.	vaulting, adj.
	visiting, adj.	warring, adj.	wenching, adj.	writing, adj.	yellowing, adj. and n.	yoking, adj.
ion	indirection, n.	malefaction, n.				
ish	foppish, adj.	skyish, adj.	stockish, adj.			

ist	duellist | duelist, n.	militarist, n. and adj.	questrist, n.	votarist, n.		
ite	Ottomite, n.					
ity	conspectuity, n.	futurity, n.				
ive	corresponsive, adj.	defunctive, adj.	forgetive, adj.	persistive, adj.	primogenitive, n. and adj	reclusive, adj.
	revengive, adj	semblative, adj.				
ize	sanctuarize, v.	sluggardize, v.				
less	airless, adj.	baseless, adj.	bateless, adj.	boundless, adj. and n.	bragless	chaffless, adj.
	chapeless, adj.	chapless, adj.	characterless, adj.	combless, adj.	confineless, adj.	contentless, adj.
	countless, adj.	crestless, adj.	dateless, adj. and n.	dauntless, adj.	dowerless, adj.	effectless, adj. and adv.
	exceptless, adj.	fangless, adj.	fathomless, adj.	featureless, adj.	fineless, adj.	finless, adj.
	graveless, adj.	importless, adj.	languageless, adj.	noiseless, adj.	opposeless, adj.	phraseless, adj.
	priceless, adj.	printless, adj. and adv.	reputeless, adj.	shunless, adj.	smell-less, adj.	soundless, adj.
	stringless, adj.	sumless, adj.	tenantless, adj.	viewless, adj.	wenchless, adj.	wreakless, adj.
let	droplet, n.	herblet, n.				
like	churchlike, adj.	fiendlike, adj.	mistlike, adv. and adj.	piglike, adv. and adj.	pupil-like, adv. and adj.	sunlike, adj. and adv.
ling	lifelings, n. and int.	tanling, n.				
ly	adoptedly, adv.	amazedly, adv.	audaciously, adv.	brainsickly, adv.	cannibally, adv.	cardinally, adv.
	ceremoniously, adv.	chirurgeonly, adv.	crossly, adv.	cullionly, adj.	derogately, adv.	enchantingly, adv.
	goldenly, adv.	greasily, adv.	guiltily, adv.	horridly, adv.	ignobly, adv.	infectiously, adv.
	instinctively, adv.	lamely, adv.	lonely, adj.	minutely, adj.	misbecomingly, adv.	neglectingly, adv.
	notedly, adv.	obscenely, adv.	observingly, adv.	pausingly, adv.	reportingly, adv.	rootedly, adv.
	scholarly, adv.	silverly, adv.	slickly, adv.	sprightfully adv.	successantly, adv.	successfully, adv.
	tamely, adv.	tardily, adv.	threateningly, adv.	trippingly, adv.	uprighteously, adv.	vastly, adv.
ment	allayment	annexment, n.	appertainment, n.	bewitchment, n.	blastment, n.	denotement, n.
	distilment, n.	encompassment, n.	enfranchisement, n.	excitement, n.	extolment, n.	fitment, n.

	fleshment, n.	impartment, n.	insultment, n.	interchangement, n.	investment, n.	recountment, n.
	strewment, n.	subduement, n.	cloyment, n.			
ness	brimfulness, n.	childness, n.	crossness, n.	expertness, n.	slightness, n.	tardiness, n.
ot	carlot, n.					
ry	mansionry, n.	pageantry, n.	savagery, n.	varletry, n.		
ship	courtship, n.	foxship, n.	Moorship, n.	spectatorship, n.		
(t)(i)ous	adoptious, adj.	combustious, adj.	compunctious, adj.	conceptious, adj.	consanguineous, adj.	duteous, adj.
	expeditious, adj.	facinorious, adj.	ingenuous, adj.	irregulous, adj.	pendulous, adj.	rubious, adj.
th	spilth, n.					
ure	acture, n	climature, n.	embrasure, n.	enacture, n.	exposture, n.	expressure, n.
	extincture, n.	insisture, n.	prompture, n.	rejoindure, n.	repasture, n.	reposure, n.
	stricture, n.	wafture, n.				
ward	nayward, n.	parkward, adv.				
y	barky, adj.	batty, adj.	beachy, adj.	bosky, adj.	choppy, adj.	doughy, adj.
	leaky, adj.	plumpy, adj.	primy, adj.	rooky, adj.	seamy, adj.	shelvy, adj.
	skyey, adj.	sphery, adj.	stealthy, adj.	vasty, adj.	brisky, adj.	

Table 2.2: Words formed by prefixation in the *OED Online* FiCiS list of 2015/2016

Prefix	**Coinage**					
a	apperil, n.	arouse, v.	assubjugate, v.	attask, v.	abrook, v.	
after	after hours, n., adv., and adj.					
arch	arch-villain, n.					
be	bedabble, v.	bedazzle, v.	befortune, v.	behowl, v.	belee, v.	belock, v.
	bemadding adj.	bemeet, v.	bemock, v.	bemonster, v.	benet, v.	bescreen, v.
	besmirch, v.	besort (v)	bethump, v.	betrim, v.	betumbled, adj.	bewhore, v.
by	by-room, n.					
circum	circummure, v.					
co(m/n)	co-mingle, v.	co-supreme, n.	commeddle | co-meddle, v.	commutual, adj.	comply, v.	confix, v.
	congreet, v.					
demi	demi-puppet, n.					
dis	disbench, v.	discandy, v.	discase, v.	disedge, v.	dishabit, v.	disinsanity, n.
	dislimn, v.	disorb, v.	disproperty, v.	dispunge, v.	disquantity, v.	disroot, v.
	disseat, v.	disvouch, v.				
en	empatron, v.	enhearse | inhearse, v.	enmesh | emmesh | immesh, v.	enrapt, adj.	enschedule, v.	ensear, v.
	ensky, v.	ensteep, v.	enswathe | inswathe, v.	entame, v.2	enthrone, v.	entreasure, v.
	entwist | intwist, v.	enwheel, v.	embound | imbound, v.	inshell | enshell, v.		
fore	foregone, adj.					
in	immoment, adj.	impaint, v.	impartial, adj.	impawn, v.	imperceiverant, adj.	impleach, v.
	impress, v.	inaidable, adj.	inauspicious, adj.	inclip, v.	incorpsed, adj.	indistinguishable, adj.
	indistinguished, adj.	inhoop, v.	injoint, v.	inscroll, v.	insinew, v.	insuppressive, adj.
	intenible, adj.	intrenchant, adj.	inurn, v.	irreconciled, adj.	irregulous, adj.	
inter	interchain, v.	interjoin, v.				
mis	misdread, n.	misgraffed, adj.	misquote, v.	mistreading, n.		
non	non-regardance, n.					
out	out-breast, v.	outbreathed, adj	out-crafty, v.	outdare, v.	outdared, adj.	outdwell, v.
	out-Herod, v.	outlustre, v.	outpeer, v.	outroar, v.	outsell, v.	outstay, v.
	outswear, v.	outsweeten, v.	outswell, v.	out-villain, v.		

over	overbeat, v.	overdyed, adj.	overeaten, adj.	overglance, v.	overgreen, v.	overgrowth, n.
	overleaven, v.	overname, v.	over-office, v.	overparted, adj.	overperch, v.	over-picture, v.
	overpost, v.	overpower, v.	over-red, v.	overripened, adj.	overscutched, adj.	over-size, v.
	oversnow, v.	overstink, v.	overteemed, adj.	overteeming, adj.	overweathered, adj.	
pre	predecease, v.	preformed, adj.				
re	relume, v.	respeak, v.	restem, v.	resurvey, v.	reword, v.	
self	self-abuse, n.	self-glorious, adj.	self-harming, adj.	self-killed, adj.	self-offence, n.	self-reproving n
	self-slaughter, n.	self-substantial, adj.				
sub	subcontract, v.					
super	superserviceable, adj.					
sur	suraddition, n.					
under	undercrest, v.	under-fiend, n.	under-hangman, n.	under-honest, adj.	underpeep, v.	underprize, v.
	under-skinker, n.					
un	unaccommodated, adj.	unaching, adj.	unacted, adj.	unaneled, adj.	unappeased, adj.	unattainted, adj.
	unauspicious, adj.	unaware, adv. and adj.	unbacked, adj.	unbated, adj.	unbefitting, adj.	unbegot, adj.
	unbless, v.	unbloodied, adj.	unblowed, adj.	unbonneted, adj.	unbookish, adj.	unbosom, v.
	unbraided, adj.	unbred, adj.	unbreeched, adj.	unbuild, v.	uncandied, adj.	unchanging, adj.
	uncharmed, adj.	unchary, adj.	uncheck, v.	unclaimed, adj.	unclew | unclue, v.	unclog, v.
	uncolted, adj.	uncomprehensive, adj.	unconfinable, adj.	uncontemned, adj.	uncuckolded, adj.	uncurbable, adj.
	uncurbed, adj.	uncurl, v.	uncurrent, adj.	uncurse, v.	undeaf, v.	undeeded, adj.
	undeserver, n.	undinted, adj.	undishonoured | undishonored, adj.	undistinguishable, adj.	undivulged, adj.	undreamed | undreamt, adj.
	unduteous, adj. and adv.	unearthly, adj.	uneducated, adj.	unexperient, adj.	unexpressive, adj.	unfair, v.
	unfamed, adj.	unfathered, adj.	unfeed, adj.	unfilial, adj.	unfix, v.	unfledged, adj.
	unfool, v.	unforfeited, adj.	unfrequented, adj.	ungained, adj.	ungalled, adj.	ungenitured, adj.
	ungored, adj.	ungoverned, adj.	ungravely, adv.	ungrown, adj.	unhacked, adj.	unhaired, adj.

	unhand, v.	unhappy, v.	unhardened, adj.	unhatched, adj	unhelpful, adj.	unhidden, adj.
	unimproved, adj.	unintelligent, adj.	unkinglike, adj.	unlicensed, adj.	unlicked, adj.	unlink, v.
	unlive, v.	unmeritable, adj.	unmitigable, adj.	unmitigated, adj.	unnerved, adj.	unowed, adj.
	unpanged, adj.	unpathed, adj.	unpay, v.	unpeg, v.	unpinked, adj.	unplausive, adj.
	unpolicied, adj.	unpossessing, adj.	unpregnant, adj.	unprevailing, adj. and adv.	unprofited, adj.	unprovoke, v.
	unpruned, adj.	unqualitied, adj.	unrecalling, adj.	unrecuring, adj.	unscarred, adj.	unscratched, adj.
	unseduced, adj.	unseem, v.	unseminared, adj.	unsex, v.	unshout, v.	unshrinking, adj.
	unshrubbed, adj.	unshunnable, adj.	unshunned, adj.	unslipping, adj.	unsmirched, adj.	unsolicited, adj.
	unsounded, adj	unstooping, adj.	unstringed, adj.	unsullied, adj.	unsured, adj.	unswayable, adj.
	unswayed, adj.	untalked, adj.	untempering, adj.	untender, adj.	untent, v.	untented, adj.
	unthink, v.	unthread, v.	untimbered, adj.	untired, adj.	untread, v.	untreasure, v.
	untrim, v.	untutored, adj.	unvarnished, adj.	unvenerable, adj.	unvulnerable, adj.	unwappered, adj.
	unwedgeable, adj.	unweeded, adj.	unweighing, adj.	unwept, adj.	unwhipped | unwhipt, adj.	unwit, v.
	unwrung, adj.	unyielding, adj.				
up	upcast, n.	uplocked, adj.	up-pricked, adj.	uproused, adj.	upshoot, n.	upspring, adj.
	upstairs, adv., n., and adj.	upswarm, v.	upturned, adj.	yravish, v.		

Table 2.3: Words formed by conversion in the *OED Online* FiCiS list of 2015/2016

POS	Coinage					
adj.	chidden, adj.	enshield, adj.	shag, adj.	slab, adj.	soliciting, adj.	soothing, adj.
	struck, adj.					
adv.	old, adv.					
n.	attest, n.	avouch, n.	beseech, n.	besort, n.	botch, n.	charneco, n.
	dare, n.	dawn, n.	deem, n.	distemper, n.	dobbin, n.	Edward shovelboard, n.
	effuse, n.	embrace, n.	fleer, n.	glow, n.	go-between, n. and adj.	halt, n.
	hatch, n.	hint, n.	Hiren, n.	howl, n.	immure, n.	impress, n.
	jaunt, n.	leer, n.	Nessus, n.	overview, n.	poppering, n.	repine, n.
	scuffle, n.1	shudder, n.	skimble-skamble, adj., n.,	sneap, n.	soil, n.	sully, n.
	supervise, n.	to-be, n. and adj.	vail, n.	Xantippe, n.	defeat, n.	squash, n.
	switch, n.					
v.	apoplex, v.	attorney, v.	barber, v.	barn, v.	bass, v.	beetle, v.
	belly, v.	bitume, v.	blanket, v.	bonnet, v.	brooch, v.	cake, v.
	canary, v.	canopy, v.	cater, v.	caudle, v.	champion, v.	channel, v.
	chapel, v.	choir | quire, v.	climate, v.	companion, v.	compassion, v.	compeer, v.
	convive, v.	corslet, v.	counter-seal, v.	crank, v.	craven, v.	cudgel, v.
	curdy, v.	disproportion, v.	dower, v.	drab, v.	drug, v.	elbow, v.
	elf, v.	estate, v.	fever, v.	fig, v.	film, v.	fit, v.
	flaw, v.	forward, v.	ghost, v.	gibbet, v.	hearse, v.	hinge, v.
	humour | humor, v.	hurry, v.	incarnadine, v.	inventory, v.	jaw, v.	kitchen, v.
	label, v.	launder, v.	lethargy, v.	livery, v.	mammock, v.	monster, v.
	mountebank, v.	muddy, v.	necessity, v.	palate, v.	pander, v.	partner, v.
	pellet, v.	port, v.	portcullis,	porter, v.	posset, v.	prerogative, v.
	prologue, v.	property, v.	queen, v.	re, v.	scale, v.	scissor, v.
	sepulchre, v.	servant, v.	sheet, v.	sickly, v.	sire, v.	sister, v.
	skiff, v.	sliver, v.	soil, v.	spirit, v.	squabble, v.	squinny, v.
	stranger, v.	surety, v.	tardy, v.	testern, v.	tetter, v.	throe | throw(e, v
	tod, v.	torture, v.	uproar, v.	urn, v.	window, v.	askance, v.
	dapple, v.					

Table 2.4: Words formed by compounding in the *OED Online* FiCiS list of 2015/2016

POS	Coinage					
adj	bear-like, adj. and adv.	bloodstained, adj.	blue-veined, adj.	half checked adj.	chop-fallen, adj.	dog-weary, adj.
	down-gyved, adj.	ear-piercing, adj.	earthbound, adj.	even-handed, adj. and adv.	far-off, adj.	fat-witted, adj.
	fire-new, adj.	foul-mouthed, adj.	full-hearted, adj.	grey-coated | gray-coated, adj.	heartstruck, adj.	high-blown, adj.
	high-pitched, adj.	home-keeping, adj.	hot-blooded, adj.	hunchbacked, adj.	ill-boding, adj.	ill-got, adj.
	ill-starred, adj.	ill-tempered, adj.	lack-lustre, adj. and n.	large-handed, adj. and adv.	low-rated, adj.	made-up, adj.
	milk-livered, adj.	mouth-filling, adj.	near-legged, adj.	night-walking, adj.	nook-shotten, adj.	old-faced, adj.
	parti-coated adj. in	pent-up, adj.	pole-clipped, adj.	reeling ripe, adj.	ribaudred, adj.	right-drawn, adj.
	rose-cheeked, adj.	rose-lipped, adj.	rug-headed, adj.	shard-born | shard-borne, adj.	short-lived, adj.	silver-white, adj. and n.
	small-knowing, adj.	snail-paced, adj.	snail-slow, adj. and adv.	spirit-stirring, adj.	squire-like, adj. and adv.	still-born, adj. and n.
	tender-minded, adj. and n.	time-honoured | time-honored, adj.	trade-fallen, adj.	well-balanced, adj.	well-derived, adj.	well-desired, adj.
	well-educated, adj.	well-flowered, adj.	well forewarning, adj.	well-labouring | well-laboring, adj.	well-possessed, adj.	well-sailing, adj.
	well-seeming, adj.	well took, adj.	white-handed, adj.	wind-shaked, adj.	worn-out, adj.	wry-necked, adj.
	young-eyed, adj.					
adv.	out at elbows, adv. and adj.	whereuntil, adv.				
int.	all hid, n. and int.					
n.	back-swordman, n.	ballad-monger, n.	bass-viol, n.	bedroom, n.	birthplace, n.	bow-hand, n.
	broomstaff, n.	buck-washing, n.	bumbailiff, n.	cheese-paring, n. and adj.	chimney-piece, n.	clod-poll | clod-pole, n.
	cock-light, n.	cock-shut, n.	counter-caster, n	court-hand, n.	crack-hemp, n.	crop-ear, n.
	daybed, n.	death's face, n.	dewdrop, n.	dragon's tail, n.	dry-nurse, n.	end-all, n.
	fairyland, n. and adj.	farm-house, n.	flap-dragon, n.	flirt-gill, n.	gentlefolk | gentlefolks, n.	grass-plat | grass-plot, n.
	headshake, n.	hobnail, n.	ladybird, n.	leap-frog, n.	life-in-death, n.	merry-meeting, n.

	mid-season, n., adj., and adv.	mountain wind, n.	nayword, n.	night-fly, n.	other place, n.	paying back, n.
	pignut, n.	pin buttock, n.	pupil age, n.	puppy dog, n.	purse-taking, n.	pushpin, n.
	rope trick, n.	salt rheum, n.	shooting star, n.	skim-milk, n.	slug-a-bed, n.	sneak-up, n.
	so-forth, n.	still-stand, n.	tiring-house, n.	twin-brother, n.	water-rug, n.	water thief, n.
	wealsman, n.	neat's tongue, n.	dey-woman, n.	off-cap, v.	weather-fend, v	

Minor methods

Table 2.5: Words formed by shortening in the *OED Online* FiCiS list of 2015/2016

No.	Word	Etymology (OED Online)	Method of shortening
1	*gally*, verb	Old English *a-gælwan* to alarm	end and start
2	*gooddeed*, adverb	*in good deed*	start
3	*got*, adjective	*gotten*, adjective	end
4	*illume*, verb	*illumine*, verb	end
5	*intrince*, adjective	abbreviated < *intrinsicate*, adjective	end
6	*loo*, interjection	abbreviated < *halloo* verb	start
7	*cern* (*verb*)	*concern*, noun	start
8	*concupy*	an abbreviation or perversion of *concubine* (cf. *concuby* noun)	end
9	*downtrod*, adjective	*downtrodden*, adjective	end
10	*s'*, verb and adverb	shortening of *sal*, northern dialect form of shall v.	end
11	*'Sblood*, noun	*God's blood*	Start

Table 2.6: Words formed by blending in the *OED Online* FiCiS list of 2015/2016

No.	Word	Etymology (OED Online)
1	*confirmity*, n.	Used humorously, as a blunder for *infirmity*.
2	*directitude*, n.	Humorous blunder, used apparently for *wrong* or *discredit*.
3	*eft*, adjective	A blunder ascribed to Dogberry from *Much Ado About Nothing*; but it is not clear what word is alluded to.
4	*sola*, int.	Compare *soho* int. and n.[1] and *hola* holla int. Obs.
5	*egma*, n.	A ‘stage rustic's’ blunder for enigma n.
6	*incardinate*, adjective	Used humorously as a blunder for *incarnate*.

Table 2.7: Words formed by imitation in the *OED Online* FiCiS list of 2015/2016

No.	Word	Etymology (OED Online)
1	*bow-wow*, int. and n.	Imitative. Other forms are baugh v., bough n., baw-waw n., q.v. An imitation of the barking of a dog.
2	*bump*, n.1	Onomatopoeic: as noun a swelling protuberance caused by a blow.
3	*ding*, n.2 and adv.	Used as an imitation of the ringing sound of a heavy bell, or of metal when struck.
4	*gibber*, v.1	Onomatopoeic; to speak rapidly and inarticulately; to chatter, talk nonsense.
5	*hewgh*, int.	An imitation of the sound of whistling;
6	*hist*, int. and n.	An imitative or expressive formation. Used to enjoin silence, attract attention, or call on a person to listen.
7	*purr*, n.3	An imitative or expressive formation. An act of purring; the low vibrating sound made by a cat.
8	*push*, n.3 and int.	An imitative or expressive formation. An utterance of ‘push’, expressing contempt, impatience, or disgust.
9	*suum*, n.	Imitative of the moaning sound of the wind.
10	*week*, int.	An imitative or expressive formation. Representing a short high-pitched sound, esp. as made by a pig.

Appendix III

Table 3.1: Quotes in the 'First Cited in Shakespeare' list which do not belong to Shakespeare

No	No of the *OED* entry in the '1st cited in sh' list	Quote
1	31	1623 B. Jonson in Shakespeare *Comedies, Histories & Tragedies* sig. A4^{v}, Neat Terence, witty Plautus, now not please; But antiquated, and deserted lye.
2	121	1623 H. Holland in Shakespeare *Comedies, Hist. & Trag.* sig. A5, That coffin now besticke those bayes, Which crown'd him Poet first.
3	904	1623 L. Digges in Shakespeare *Comedies, Histories, & Tragedies* (front matter), Till I heare a Scene more nobly take, Then when thy half-Sword parlying Romans spake.
4	1006	1726 G. Sewell in Shakespeare *Poems* Pref. p. vi, The Republisher of these Poems..prefix'd to them an Essay.
5	1044	1623 H. Holland in Shakespeare *Comedies, Hist. & Trag.* sig. A5, Vpon the Lines and Life of the Famous Scenicke Poet, Master William Shakespeare.
6	1245	1623 J. Mabbe in Shakespeare *Comedies, Histories & Tragedies* sig. A6, From the Worlds-Stage, to the Graues-Tyring-roome.
7	1389	1640 W. Basse *On Death Shakespeare* in Shakespeare *Poems* sig. K8^{v}, Thy unmolested peace in an unshar'd Cave, Possesse as Lord, not Tenant of thy Graue.

Survival rate

Table 3.2: Distribution of the words formed by suffixation according to the number of senses

No of senses	No of neologisms	Used today	Rate %
1	342	229	67.0
2	121	109	90.1
3	45	42	93.3
4	32	32	100
5	15	15	100
6	6	6	100
7	6	6	100
8	3	3	100
9	3	3	100
12	1	1	100
14	2	2	100
18	1	1	100

Table 3.3: Distribution of the words formed by prefixation according to the number of senses

No of senses	No of neologisms	Used today	Rate %
1	219	112	51.1
2	60	57	95.0
3	23	22	95.7
4	9	8	88.8
5	7	7	100
6	2	2	100
7	1	1	100
16	1	1	100
18	1	1	100

Table 3.4: Distribution of the words formed by conversion according to the number of senses

No of senses	No of neologisms	Used today	Rate %
1	58	25	43.1
2	27	24	88.9
3	26	24	92.3
4	11	11	100
5	12	12	100
6	6	6	100
7	5	5	100
8	3	3	100
9	1	1	100
11	1	1	100
15	2	2	100
17	1	1	100
19	1	1	100

Table 3.5: Distribution of the words formed by compounding according to the number of senses

No of senses	No of neologisms	Used today	Rate %
1	79	63	79.9
2	35	33	94.3
3	13	13	100
4	9	7	77.8
5	2	2	100
6	2	2	100
11	1	1	100

Appendix IV

Distribution of neologisms according to WF method and sources

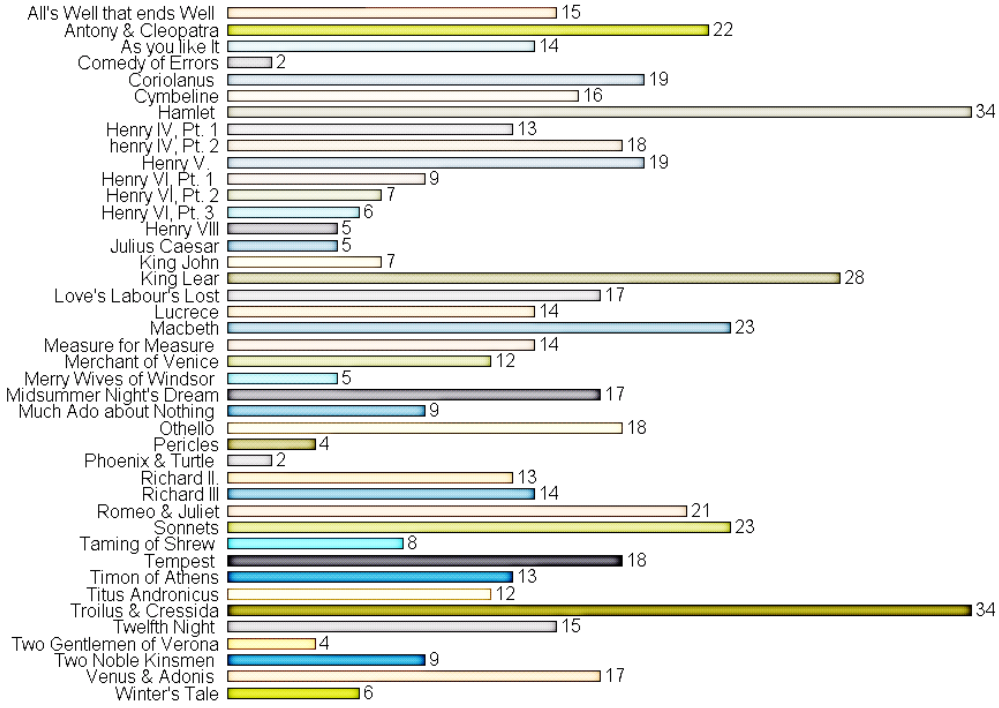

Figure 4.1: Distribution of words coined by suffixation in Shakespeare's corpus

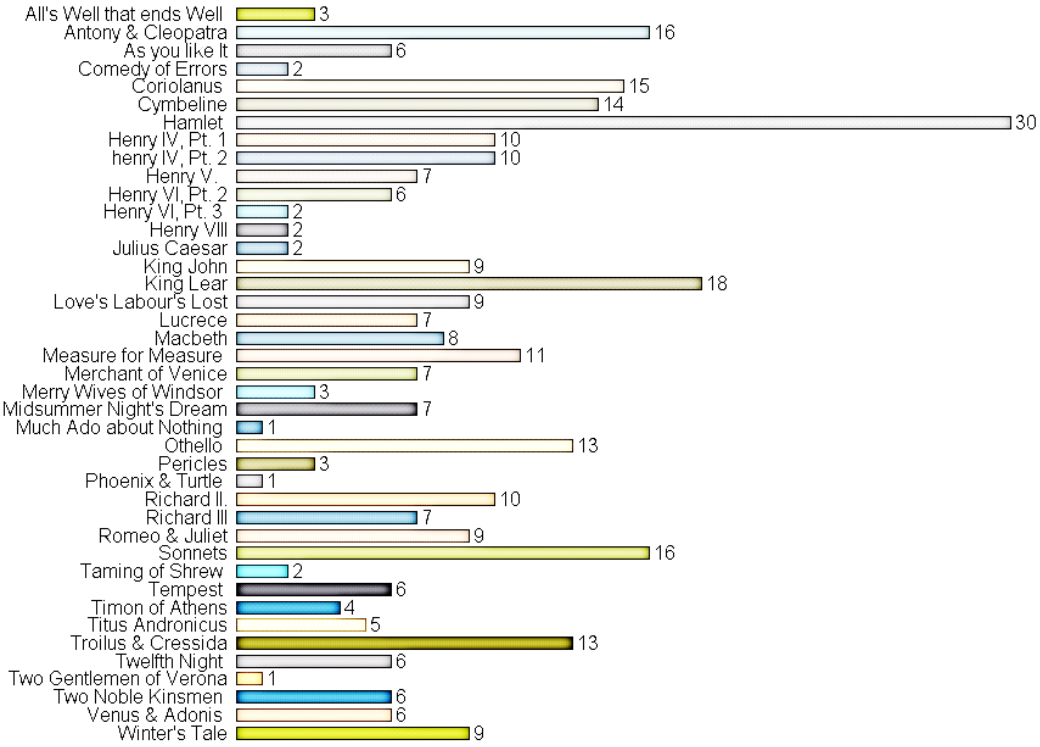

Figure 4.2: Distribution of words coined by prefixation in Shakespeare's corpus

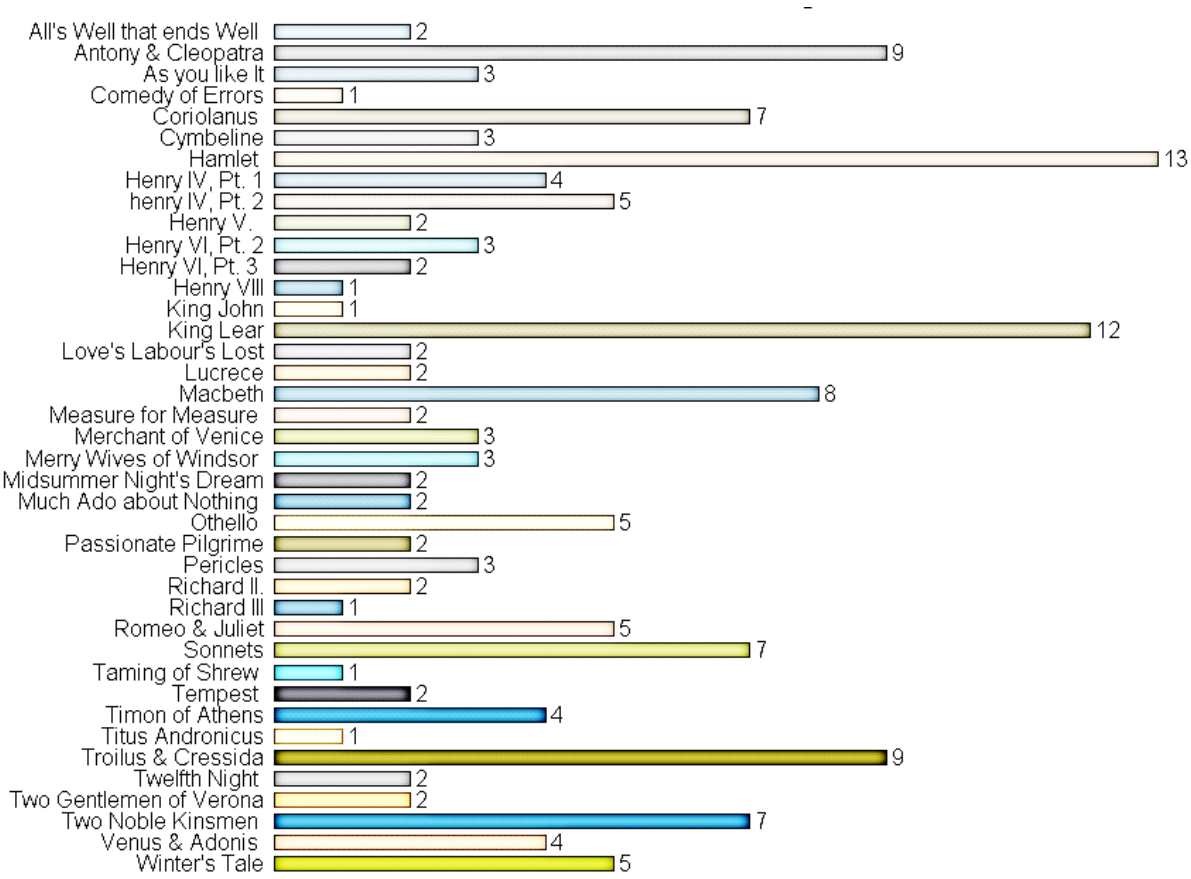

Figure 4.3: Distribution of words coined by conversion in Shakespeare's corpus

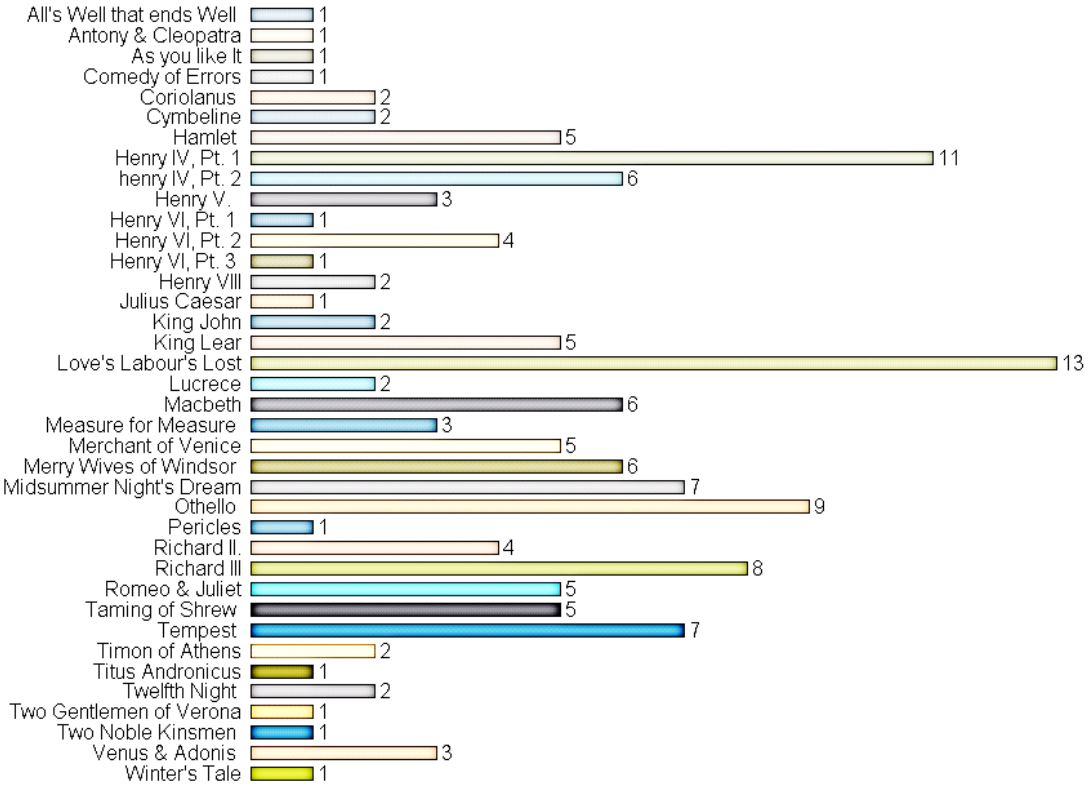

Figure 4.4: Distribution of words coined by compounding in Shakespeare's corpus