

A Corpus-Based Analysis of William Shakespeare's *The Winter's Tale*

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ARTICLE INFORMATION

Received: October 12, 2020

Accepted: November 25, 2020

Volume: 3

Issue: 11

DOI: 10.32996/ijllt.2020.3.11.11

KEYWORDS

AntConc program, content words, corpus-based analysis, The Winter's Tale, word frequency

ABSTRACT

This study was a corpus-based analysis of William Shakespeare's *The Winter's Tale*. A corpus based on the original text of the play was built for analysis. Then, a program called AntConc was used to acquire the top 200 frequency words from the corpus. Finally, five of the most frequently occurring content words were manually selected to analyze their relationship with the main characters or the content/implications of the play. The results obtained via the AntConc program showed that (1) lord appeared 89 times in the corpus and ranked 50th among the top 200 frequency words. It has the power and implication of making people forget their original intention and self, deceiving people, and causing people to forget how to cherish the people around them. (2) Shepherd occurred 65 times and ranked 68th. It symbolizes the idea of hope. (3) Daughter appeared 34 times and 125th. It assumes a crucial role throughout the whole play and makes the story go smoothly. (4) Honour occurred 34 times and ranked 126th. It represents the transformation of danger into safety. (5) Beseech appeared 18 times and ranked 198th. It can be understood as turning bad results into good results.

1. Introduction and Literature Review

In the past, most literary criticism or literary analysis was done via text analysis, and Shakespeare's *The Winter's Tale* is no exception. Based on the past literature, text analysis of *The Winter's Tale* can be reviewed from the following two points in time sequence.

1.1 From the 19th Century to the 20th Century

Snider (1875) claimed that *The Winter's Tale* is characterized by frequent and direct sensory meaning, especially in time and space. These two elements form the basis of the world of senses. In addition, the play has three parts. The first part describes the guilt of the King of Sicily and ends with penitence. The second part shows that Bohemia was a pastoral area that was not affected by the tragic conflict in Sicily. Unfortunately, it eventually triggered conflicts within its own country. The last part talks about the world of confession. The King of Sicily repented of his past behaviors and began to look for what he had lost before. Scott (1963) discovered that *The Winter's Tale* is based on seasonal mythology and Flora's symbols to make the work more reminiscent. It can let readers know about the analogy of human life. In addition, the flowers of Perdita's world were fresh and natural, but this is due to the introduction of the moral of the story, thus reinforcing this point of view. Finally, *The Winter's Tale* attributes its symbolic value to Shakespeare. Gurr (1983) showed that the bear and the statue of Hermione are matching counterparts in the two halves of *The Winter's Tale*. First, the bear brings the tragic half to a miserable conclusion, and the status provided by Hermione in life summarizes the second half. If these two characters are combined, it can establish a full teasing interaction between art and nature. Furthermore, the theme of *The Winter's Tale* expresses that sacrifice and love are interrelated and explores the possibility of resurrection. If people can learn from their own mistakes, they can experience miracles. Helprin (1983) found that due to Leontes' regrets of past mistakes, his hard-won self-recognition was rewarded with the reunion of his daughter who was believed to have died. Furthermore, McLellan (1984) pointed out that the dialogue between the nobles, Chamillo and Archidamus, of the two countries reveals that the reason for changing the friendship between the two kings is "illusion". Confusing reality with fantasy, Leontes was suspicious of those

who were around him and really needed to be believed. Therefore, reality cannot change friendship, but illusion and suspicion can.

1.2 The 21st Century

McGoodwin (2000) showed that human suffering, stupidity, and pessimism about the world are the key views in Shakespeare's *The Winter's Tale*. For example, Leontes' jealousy and punishment led to social corruption. In addition, myths play an important role. The meanings of the principal myths were death and regeneration since the myths referred to the cycle of nature, such as the end of harvest, the change of seasons, etc. Aasand (2014) claimed that *The Winter's Tale* contains different elements and it is difficult to distinguish whether the play is a comedy or a tragedy. Some people think that this work is both mysterious and amazing and contains sadness and black humor. This is why it fascinates critics and readers. Moreover, Borey (2000) and Hu (2000) reported that this work has a happy ending. This is because Hermione, a character in the work, would eventually be resurrected. They thought that this is a predicted fact rather than an exaggerated modification. Also, although *The Winter's Tale* is strange and disturbing, the content combined with the belief in social structure makes this play one of Shakespeare's most promising and inspiring works. James (2002) pointed out that the theme that needs attention in drama is time because time may be the power of destruction and healing in human life and the controversy between art and the concept of the time. Shakespeare made time an important role in *The Winter's Tale*. Time had been ruthlessly moving forward, and Leontes had been full of negativity in the 16 years from doing wrong things to repenting. Despite the happy reunion at the end, the time Leontes spent on separation and suffering could not be recovered. On the other hand, *The Winter's Tale* also emphasizes regeneration and redemption and uses time as a medium for human growth and healing. Therefore, the 16 years can be understood as the driving force for progress. Bate and Rasmussen (2009) stated that *The Winter's Tale* is a combination of death and rebirth. Exploring personal unreasonable jealousy will have regrettable results. Furthermore, Ahmed (2018) pointed out that Shakespeare's works can be divided into three parts: history, tragedy, and comedy. In addition, *The Winter's Tale* can be regarded as a tragic comedy because it is neither funny nor purely tragic. After creating many tragedies, Shakespeare wanted to express that life is more than suffering. The combination of sorrow and happiness can only create life. Although life is full of pain and sorrow, there are also happy moments. There is no doubt that life is intertwined with these things. People cannot define life as a tragedy simply because they encounter misfortune. Depression and happiness are the foundations of life, so Shakespeare combined these two elements into this work.

From the review of the past studies conducted via text analysis above, it is found that these research results seem to have some findings in common. First of all, the results of Snider (1875) and James (2002) appear to be consistent: both are discussing the importance of time and space in *The Winter's Tale* and emphasizing that the passage of time can make a person change his/her mind. Second, McGoodwin (2000) and Bate and Rasmussen (2009) jointly pointed out that *The Winter's Tale* is a combination of death and rebirth. They all believe that even if someone fails, as long as he/she is willing to work hard, he/she can still use his/her own power to create a happy future and give himself/herself an opportunity to regenerate. Leontes is such an example.

Literary studies via text analysis such as those discussed above normally take lots of time for researchers to complete. With the development of artificial intelligence (AI), literary analyses may now be done more easily and faster, and much more time can be saved. In addition, results obtained via AI can be more accurate and reliable. Although AI has currently been applied to many analyses in various fields of research, in the field of literature, there still seems to be few studies conducted via the scientific concept of AI. Consequently, the present research attempted to re-analyze Shakespeare's *The Winter's Tale* through the technology software *AntConc* to see if it could excite different sparks. Below are the questions this study sought to address:

RQ1: What are the top 200 frequency words in Shakespeare's *The Winter's Tale*?

RQ2: What important roles do five most iconic content words among the top 200 frequency words play in *The Winter's Tale* in terms of their relationship with the main characters or the content/implications of the play?

2. Methodology

This study aimed to analyze William Shakespeare's *The Winter's Tale* via the concept of corpus along with the software of *AntConc*.

2.1 The Author of *The Winter's Tale*: William Shakespeare

William Shakespeare was born in the United Kingdom in 1564. He was one of the outstanding and world-recognized playwrights in British Renaissance. In addition to a playwright, he was a poet and an actor. Being a playwright, he wrote many popular works that were later translated into various languages. His creations were very extensive, including plays, sonnets, long narrative poems, and etc. The types of his plays were also very diverse, including historical dramas, tragicomedies, and

prose comedies. Among all Shakespeare's tragedies, the four most famous ones were *Macbeth*, *Othello*, *King Lear*, and *Hamlet*. Regarding his comedies, *A Midsummer Night's Dream*, *The Merchant of Venice*, *Twelfth Night (What You Will)*, *The Taming of the Shrew*, and *The Winter's Tale* were also very well-loved. The characteristics of Shakespeare's works often demonstrated realism and romantic atmosphere. His works were performed in different cultures and interpreted in various languages.

2.2 The Winter's Tale

The original text of the play consists of 26,650 words. It describes that the King of Sicily (Leontes) and the King of Bohemia (Polixenes) were friends in their childhood. One day, Polixenes visited the Kingdom of Sicily. However, Polixenes was eager to return to his own kingdom to handle some affairs and take care of his family. Leontes tried to persuade him to stay, but he did not succeed. Hence, Leontes decided to send his wife, Queen Hermione, to convince Polixenes. After his wife's successful lobbying, Leontes was confused about why his wife could easily convince Polixenes. All at once, he began to suspect that there was a shady relationship between Hermione and Polixenes and that his child was an illegitimate child. Therefore, Leontes ordered Camillo to poison Polixenes and murder his own son, Mamillius. Camillo did not comply with the command of Leontes. He fled to Bohemia with Polixenes. Leontes arrested his own wife for the suspicion of adultery. The Queen gave birth to a daughter during her imprisonment, and Leontes ordered Antigonus to abandon the baby. The Queen then died because of sorrow. Afterwards, Leontes started to repent of his own misjudgment and make a promise to mourn his dead wife and son every day for the rest of his life.

One day, Hermione appeared in Antigonus' dream and told him that her abandoned baby's name is Perdita. Perdita was luckily rescued by a shepherd and his son, Clown. When found, the baby was surrounded by lots of money, which made the shepherd become rich. However, without knowing about this, Leontes spent 16 years mourning his wife and children.

In Bohemia, Polixenes and Camillo discovered Florizel, the son of Polixenes, who fell in love with the shepherdess, Perdita. Florizel was planning to marry Perdita. However, Polixenes did not agree to the marriage and threatened them. With Camillo's help, Florizel and Perdita fled to Sicily. Polixenes did not keep chasing them until Perdita reunited with her father, Leontes and her real identity was exposed. The two kings finally reconciled with each other and agreed to the marriage of Florizel and Perdita.

After a certain period of time, Paulina and Leontes went to visit the sepulcher of Hermione. When Leontes was watching the statue of Hermione and recalling the process of getting along with each other, her soul miraculously appeared. Suddenly, Leontes had an idea that made him decide to live with his daughter without suspicion and trust each other.

2.3 Instrument

This project utilized a corpus-based approach with the AntConc (3.2.4w) concordance program as its instrument. Basically, the AntConc program comprises several tools: a concordance tool, a concordance plot, a file view, clusters (N-Grams), collocates, a word list, and a keyword list. The concordance tool allows users to discern how words and phrases are commonly used in a corpus of text. The concordance plot allows users to see the position where search results appear in target texts. The file view tool allows users to investigate in more detail the results generated in other tools of AntConc. The clusters allow users to find common expressions in a corpus. The collocates allows users to examine non-sequential patterns in language. The word list allows users to quickly find which words are the most frequent in a corpus. The keyword list allows users to explore words in the smaller corpus to compare it with the other reference corpus for such features as word frequency or stylistic characteristics. From the introduction of the main function of each of the tools, it can be seen that the word list is to demonstrate word frequencies. Therefore, the word list aided in discovering the most frequent words from the original text of Shakespeare's *The Winter's Tale* in the current study.

2.4 Data Analysis

This research proceeded in three steps. These steps were carried out by using AntConc 3.2.4w. For the first step, the original text of Shakespeare's *The Winter's Tale* was collected/built as a corpus and made into an MS-Word document (.doc). Then, the researchers of the present study converted the MS-Word document into a plain text file (.txt). In the third step, from the plain text file, AntConc generated a word frequency list for the corpus via the tool of word list, and the results displayed the most frequent words in an ordered list.

3. Results

3.1 The Top 200 Frequency Words in Shakespeare's *The Winter's Tale*

In an attempt to analyze the corpus built for the original text of Shakespeare's *The Winter's Tale*, the current study initially sought the most frequent 200 words via the word list tool of AntConc program. The raw data of the top 200 frequent words in the corpus is displayed in Table 1.

As can be seen in Table 1, the word *the* reoccurred the most often. It was used as a function word and had the highest ranking with 857 occurrences. The other most frequently occurring words were *I* (718), *and* (657), *to* (636), *of* (475), *you* (472), *a* (435), *my* (405), *that* (338), and *not* (305).

Table 1: *The Word Frequency List of the Corpus for The Winter's Tale (1~200)*

Rank	Freq.	Word	Rank	Freq.	Word	Rank	Freq.	Word
1	857	the	68	65	shepherd	135	30	very
2	718	i	69	65	were	136	30	where
3	657	and	70	64	let	137	29	even
4	635	to	71	64	thee	138	29	great
5	475	of	72	63	see	139	29	true
6	472	you	73	62	may	140	28	antigonus
7	435	a	74	61	hermione	141	28	art
8	405	my	75	61	them	142	28	bohemia
9	338	that	76	60	at	143	28	ever
10	305	not	77	59	know	144	28	never
11	267	it	78	59	upon	145	27	bear
12	263	your	79	58	king	146	27	hand
13	254	be	80	57	father	147	27	why
14	252	is	81	57	florizel	148	26	boy
15	247	in	82	57	had	149	26	heart
16	239	have	83	57	like	150	26	made
17	230	for	84	56	here	151	26	none
18	227	as	85	55	should	152	26	own
19	224	but	86	55	too	153	26	whose
20	222	me	87	54	man	154	25	love
21	211	with	88	54	most	155	24	best
22	202	this	89	54	queen	156	24	business
23	194	so	90	53	an	157	24	call
24	185	he	91	53	these	158	24	prince
25	173	his	92	51	must	159	24	servant
26	147	her	93	51	us	160	24	wife
27	146	leontes	94	51	when	161	23	better
28	131	thou	95	51	yet	162	23	death
29	129	by	96	50	gentleman	163	23	hear
30	129	what	97	49	some	164	23	himself
31	127	no	98	49	tis	165	23	poor
32	124	camillo	99	47	make	166	23	since
33	124	him	100	46	out	167	23	thought
34	121	which	101	45	go	168	22	again
35	120	if	102	45	take	169	22	before
36	117	she	103	45	their	170	22	could
37	115	will	104	45	well	171	22	fear
38	114	sir	105	44	first	172	22	pray
39	113	shall	106	44	mine	173	22	thus
40	110	are	107	43	much	174	21	brother
41	110	do	108	43	think	175	21	court

42	109	on	109	42	who	176	21	does
43	109	we	110	41	enter	177	21	might
44	104	good	111	41	hath	178	21	three
45	104	now	112	40	life	179	21	way
46	103	all	113	39	give	180	20	exeunt
47	92	or	114	39	nor	181	20	both
48	91	more	115	39	perdita	182	20	gone
49	90	was	116	39	son	183	20	hast
50	89	lord	117	38	been	184	20	off
51	87	come	118	38	did	185	20	old
52	86	there	119	37	any	186	20	sweet
53	85	paulina	120	37	speak	187	20	tell
54	82	how	121	37	such	188	19	about
55	81	from	122	36	time	189	19	both
56	80	polixenes	123	36	up	190	19	bring
57	79	thy	124	35	can	191	19	day
58	78	would	125	34	daughter	192	19	eyes
59	77	one	126	34	honour	193	19	mamillius
60	77	they	127	34	nothing	194	19	other
61	75	autolycus	128	33	look	195	19	present
62	74	say	129	32	lady	196	19	put
63	72	am	130	31	being	197	18	away
64	72	clown	131	31	done	198	18	beseech
65	72	our	132	31	has	199	18	court
66	72	then	133	30	cannot	200	18	gone
67	71	than	134	30	though			

3.2 Five Most Frequently Occurring Content Words in Shakespeare's *The Winter's Tale*

After all the top 200 frequency words were manually categorized into content words and function words, five most frequently occurring content words were selected to analyze their relationship with the main characters or the content/implications of Shakespeare's *The Winter's Tale*. These five content words were *lord* (89), *shepherd* (65), *daughter* (34), *honour* (34), and *beseech* (18) (see Table 2).

Table 2: Five Most Frequently Occurring Content Words in *The Winter's Tale*

Word	Freq.	Rank
lord	89	50
shepherd	65	68
daughter	34	125
honour	34	126
beseech	18	198

4. Discussion

The current study primarily aimed to investigate the top 200 frequency words in William Shakespeare's *The Winter's Tale*, followed by using five most iconic content words among the 200 words to analyze their relationship with the main characters or the content/implications of the play. The list of the top 200 frequency words has been placed in the section of Results (see Table 1). Below is the discussion of the importance of the five content words in the play.

4.1 Lord

As Table 2 shows, *lord* appeared 89 times and ranked 50th. The core spindle of Shakespeare's *The Winter's Tale* was to discuss what happened between two kingdoms. Two lords, Leontes of Sicily and Polixenes of Bohemia, were the main characters of the story. They were each other's childhood playmates. In the beginning of *The Winter's Tale*, Leontes suspected that his wife, Hermione, had an affair with Polixenes. Not only did Leontes kill his wife and son, but he also abandoned his daughter.

Due to his illusion, jealousy, and suspicion, Leontes caused his own family to break down. Hence, the word *lord* in the story means if a person wields power, he/she may easily forget his/her original intention and self. In addition, he/she cannot understand how to cherish the people around him/her.

4.2 Shepherd

Shepherd occurred 65 times and ranked 68th in the corpus of *The Winter's Tale*. Actually, the shepherd also played a critical role in the play. Perdita was Leontes' daughter and a princess of Sicily. Due to Leontes' suspicion, she was abandoned at the Bohemia beach but was fortunately saved by a warmhearted shepherd. If the shepherd did not appear promptly, Perdita had died absolutely, and she would not have had the opportunity to return to Sicily. Consequently, the word *shepherd* symbolizes hope in the story.

4.3 Daughter

Based on the results of this study, *daughter* appeared 34 times and ranked 125th. The character of *daughter (Perdita)* was the decisive factor in resolving the disputes between the two kings (Leontes and Polixenes). Moreover, it made Perdita's father repent what he had done. The story revealed Perdita's identity as a Sicilian princess, and *daughter* was the key to continuing the follow-up development of the plot. Meanwhile, the character of *daughter* also turned *The Winter's Tale* from a tragedy into a comedy and turned around the lives of the King of Sicily and many people. Therefore, *daughter* assumes a crucial role throughout the whole play, and the character also makes the story go very smoothly.

4.4 Honour

As Table 2 reveals, *honour* appeared 34 times and ranked 126th in the corpus. In the story of *The Winter's Tale*, Perdita did not know that her true identity was Leontes' daughter, and she considered herself to be just a normal shepherdess. Then, she fell in love with the prince of Bohemia; however, Polixenes, the prince's father, disagreed to their marriage. Polixenes thought that Perdita's identity was too ordinary, so he threatened her not to keep meeting the prince by killing her and the shepherd (Perdita's adopted father). However, when Polixenes heard the shepherd's explanation and suddenly knew Perdita's true identity, he immediately agreed to the marriage between Perdita and the prince. Thus, the word *honour* symbolizes the transformation of danger into safety in this work.

4.5 Beseech

Beseech appeared 18 times and ranked 198th, according to the data obtained via the AntConc (3.2.4w) concordance program. In the story of *The Winter's Tale*, when Leontes suspected that her wife had an affair, she explained everything and *besought* Leontes to believe her. When Leontes abandoned her daughter, a woman in Sicily *besought* him not to do so. Furthermore, when the son of the Bohemian king fell in love with Perdita and would like to marry her, the King of Bohemia, Polixenes, did not agree to their marriage. The son then *besought* the king to agree. As stated above, the term *beseech* can be understood as turning bad results into good results in the story.

5. Conclusion

This study attempted to explore the top 200 frequency words in William Shakespeare's *The Winter's Tale*, followed by using five most iconic content words among the 200 words to analyze their relationship with the main characters or the content/implications of the play. From the discussion of the results above, *lord*, *shepherd*, *daughter*, *honour*, and *beseech* respectively represent different meanings in *The Winter's Tale*. *Lord* has the implication of making people forget their original intention and self, deceiving people, and causing people to forget how to cherish the people around them. *Shepherd* symbolizes the idea of hope. *Daughter* assumes a crucial role throughout the whole play and makes the story go smoothly. *Honour* represents the transformation of danger into safety. *Beseech* can be understood as turning bad results into good results. In addition, these research findings suggest that AI technology can be effectively used in the analysis of literary works and is efficient and of great help.

Regarding the limitations of the current research, as the main tool of analysis, Antconc was supposed to be useful and helpful. However, when encountering blank spaces, the software usually could not recognize them. Instead, it would convert them into unrecognizable symbols or miscalculate them into the data of frequency words. If the research data had not been carefully handled, the validity and reliability of the study might have been affected. Consequently, it is strongly suggested that prospective researchers of the same interest use the latest version of the software to obtain the list of frequency words. Moreover, they should spend time prudently examining the word list and getting rid of irrelevant symbols or numbers. By doing so, the following manual analysis of the data can be accurate and effective, and the outcome will be trustworthy.

Funding: This research was funded by the School of Foreign Languages, Fuzhou University of International Studies and Trade, and The APC was funded by the School of Foreign Languages, Fuzhou University of International Studies and Trade.

Acknowledgments: The author thanks the blind reviewers of this paper for their insightful and constructive comments. He is also grateful for funding from the School of Foreign Languages, Fuzhou University of International Studies and Trade, China.

Conflicts of Interest: The authors declare no conflict of interest.

References

- [1] Aasand, H. L. (2014). *The Winter's Tale: A Broadview Internet Shakespeare Edition*. Peterborough, Ontario: Broadview Press.
- [2] Ahmed, A. (2018). *The Winter's Tale Tragi-Comedy*. Retrieved from <http://www.askliterature.com/drama/it-has-been-said-that-shakespeare-lost-the-light-hearted-gaity-of-his-youth-where-once-he-had-laughed-he-now-in-his-maturity-smiledpensively-not-without-melancholy-discuss-this/>
- [3] Bate, J. & Rasmussen, E. (2009). *The Winter's Tale*. Retrieved from <https://www.penguinrandomhouse.com/books/205701/the-winters-tale-by-william-shakespeare/9780812969191>
- [4] Borey, E. (2000). *The Winter's Tale Sources*. Retrieved from <https://www.gradesaver.com/the-winters-tale/study-guide/bibliography>
- [5] Gurr, A. (1983). The Bear, the Statue, and Hysteria in *The Winter's Tale*. *Shakespeare Quarterly*, 34(4), 420-425. Retrieved from www.jstor.org/stable/2869858
- [6] Hu, M. (2000). Obedience and Inversion: Antigonus and Camillo as Substitutes and Complements. Final paper for English 124f at Harvard University, 2000.
- [7] James, D. (2002). *The National Arts Centre English Theatre Programs*. Retrieved from http://artsalive.ca/pdf/eth/activities/wintale_guide.pdf
- [8] McGoodwin, M. (2000). *The Winter's Tale Summary*. Retrieved from https://www.mcgoodwin.net/pages/otherbooks/ws_winterstale.html
- [9] McLellan, E. (1984). *About The Winter's Tale*. Retrieved from <https://www.cliffsnotes.com/literature/w/the-winters-tale/about-the-winters-tale>
- [10] Scott, W. O. (1963). Seasons and flowers in *The Winter's Tale*. *Shakespeare Quarterly*, 14 (4), 411-417.
- [11] Snider, D. J. (1875). Shakespeare's "Winter's Tale". *Journal of Speculative Philosophy*, 9(1), 80-98.