Floral foregrounding: corpus-assisted, cognitive stylistic study of the foregrounding of flowers in *Mrs Dalloway*[1]

Marie Møller Jensen, Aalborg University[2]
Katrine Lottrup, Aalborg University
Signe Nordentoft, Aalborg University

Abstract: The study reported here combines quantitative and qualitative methods from both cognitive stylistics and corpus stylistics to analyse the flower-motif in Virginia Woolf's novel *Mrs Dalloway*. The quantitative analysis compares the frequency of flower lemmas in the novel to both a reference corpus consisting of Woolf's other works as well as a general corpus (the *British National Corpus*). The analysis found significant differences between the frequencies in the novel and both corpora. The qualitative analysis is based on the statistically significant results and considers cognitive entrenchment and salience in relation to these. Furthermore, the analysis also links these two notions to different types of foregrounding as conceptualised in stylistics proper. Finally, aspects of repetition, parallelism and symbolism in relation to the flower-motif are considered. In conclusion, it is found that the flower-motif consists of more variables than sheer frequency and that it is the combination of these varied stylistic tools which result in the foregrounding of the flower-motif. Combining both quantitative and qualitative approaches in stylistic analyses proved beneficial in demonstrating the functions of foregrounding and the presence of the flower-motif in *Mrs Dalloway*, but also highlighted the potential of combining insights from cognitive linguistics with more traditional stylistic features.

Keywords: Foregrounding, salience, entrenchment, stylistics, cognitive stylistics, corpus stylistics.

1. Introduction

For a long time, the analysis of great works in literature was a task primarily assigned to the literary critic. Their method is close-reading and their instincts are uncanny. However, progress within the fields of linguistics, stylistics, and cognitive science is now being used to fortify the arguments of the literary critic and the qualitative analysis. Furthermore, quantitative methods are being introduced to complement the qualitative arguments and add a counterbalance to the subjectivity of the field of criticism. Within stylistics (and the broader field of linguistics), the introduction of corpus theory using software programs constitutes a paradigm shift. Corpora of several million words can now be dissected and scrutinised in the search for linguistic patterns, and the collected works of an author may be investigated for quantitatively measurable stylistic traits. For example, Michael Stubbs has used quantitative methods in his work and has managed to provide new insights in Joseph Conrad's *Heart of Darkness* and, in his own words, "identify significant linguistic features which literary critics seem not to have noticed" (Stubbs 2005: 1). Likewise, Michaela Mahlberg and Catherine Smith used corpus stylistic methods to investigate the workings of the literary device called the suspended quotation (Mahlberg & Smith 2012). Furthermore, the work of literary critics is increasingly assisted by the field of cognitive science, making for the hybrid field of cognitive stylistics. As a natural extension of cognitive stylistics, foregrounding theory offers a valuable approach, as it can be used to answer questions such as how a literary motif comes to be a motif and how perceptual prominence is created in texts. New perspectives are provided by the merger of investigations into text cognition and the studies of the processes of reading. Cognitive linguistics and cognitive stylistics are fields that, among others, explore these processes and a balanced combination of these methods from vastly different fields may assist in the ongoing investigation of literary works.

---

[1] The authors wish to thank the anonymous reviewer for constructive and thorough feedback on the first draft of this paper.

[2] Corresponding author: mariemj@cgs.aau.dk

Research article

In this article, *Mrs Dalloway* by Virginia Woolf is used to demonstrate the potential and the applicability of combining such methods. The novel is a compressed, complex account of human identity, subjectivity, interwoven destinies, and the modern self (Woolf 1925/2007). The underplayed plot unfolds in London in the 1920s and yet nature imagery, nature-assisted characterisation, and flower symbolism are abundant. The narrative spans over a single day and evening, where the main protagonist, Clarissa Dalloway, an upper-class lady in her fifties, plans and hosts a party. This main plot is mirrored by another plot of the secondary protagonist, the shell-shocked and unstable World War I veteran, Septimus Warren Smith. Clarissa and Septimus inhabit different social spheres and Clarissa only learns of Septimus' existence after his suicide, which is discussed at her party. However, they never meet or know each other.

The novel has been the subject of close-readings by countless critics. One of the findings that many critics agree on is that nature is central to the novel. Several books, dissertations, and research articles concern the role of nature, and the *Virginia Woolf Miscellany* (Czarnecki 2010) has dedicated an entire edition to this motif. It consists, among others, of the articles ""No Sense of Proportion": Urban Green Space and Mental Health in Mrs Dalloway" by Nora Wiechert and "Nature as Symbol and Influence: The Role of Plants in Mrs. Dalloway*"* by Jeanne Shearer, to name a few. Moreover, Czarnecki & Rohman (2011) have edited a book consisting of 31 contributions consecrated to the motif. A recurring trend is the focus on the flower-motif, which seems to be of special interest to many of the critics and which is also the key interest of this article. For example, Sparks contributes with the chapter ""*Everything tended to set itself in a garden*": Virginia Woolf's literary and Quotidian Flowers: A Bar-Graphical Approach" (Sparks 2017), and Mattison contributes with her chapter "The Metaphysics of Flowers in The Waves: Virginia Woolf's "Seven-Sided Flower" and Henri Bergson's Intuition" (Mattison 2017). Moreover, *Mrs Dalloway* and the flowers that occur in this novel have been given special attention in Zlatkin's contribution *The Flesh of Citizenship: Red Flowers Grew* (Zlatkin 2017) and Lillenfield's *The Besieged Garden: Nature in Virginia Woolf's Mrs. Dalloway and Willa Cather's One of Ours* (Lillenfield 2017). We stipulate that the flower-motif is a recurring focal point because flowers are foregrounded throughout the novel, which explains the great interest given to it by literary critics.

Thus far, critics have had to rely on close-readings and their intuitions in order to examine the workings of literature but new combinations of theories and methods, both qualitative and quantitative, may reveal new facets in the study of the flower-motif. However, we believe that seeing as the field of cognitive stylistics belongs to a theory-based tradition of approaches to literary (and other) discourse, and corpus stylistics belongs to a rather methodologically based approach to literary (and other) discourse, the combination of these particular approaches forms a strong baseline for a rigorous analysis. Cognitive stylistics (primarily qualitative) and corpus stylistics (primarily quantitative) can be combined in an effort to clarify and perhaps fortify the claim that the flower-motif is essential in this 64,750-word long text, while retaining a readerly point of view. Two hypotheses will be tested in the study at hand: the first hypothesis states that there is a difference in the number of flower words between *Mrs Dalloway* and a corpus of Virginia Woolf's works (this will be referred to as H_1), and the second hypothesis states that there is a difference between *Mrs Dalloway* and a reference corpus (here the *British National Corpus*) in the frequency of flower words (H_2). Consequently, the null-hypothesis (H_0) states that there is no difference between *Mrs Dalloway* and the two corpora.

First, we introduce the field of cognitive stylistics and the theory of foregrounding as well as the terms *salience* and *entrenchment*. The next section presents the methodology employed in the study including how the data was collected and treated and how we can interpret the results of the analysis. The analysis itself is divided into a quantitative section and a qualitative section. In the quantitative section, the results from the corpus stylistic analysis are assessed. These results are then considered in the qualitative analysis which investigates processes of foregrounding and considers

them in the light of the notions salience and entrenchment.

2.   A cognitive approach to stylistics

Cognitive stylistics is stylistics merged with disciplines within cognitive science such as cognitive psychology and cognitive linguistics, and concerns the "mental understanding of the world" (Emmott et al. 2014: 268). Traditionally, stylistics focused on the text dimension and was deprived of a theoretical approach to the reading and interpretation of language and literature. Indeed, cognitive stylistics has been defined as "the interface between linguistics, literary studies and cognitive science" by Culpeper & Semino (2002: ix). As a result, "stylisticians began to redress the 'writerly bias' in stylistics by exploring more systematically the cognitive structures that readers employ when reading texts" (Simpson 2014: 40). According to Stockwell, cognitive stylistics "is all about reading literature" (2002:1) and Burke (2006) points out that cognitive stylistics concerns the active reading, reception, and interpretation processes that are activated during the reading process. According to Simpson (2014: 40), there had been an assumption in stylistics that there was "[…] no such thing as 'literary language'. This ground rule has been important polemically because it positions stylistics in direct counterpoint to the sort of literary criticism that places 'the language of literature' beyond the reach of ordinary users of ordinary language". This entails that a more pragmatic and universal, linguistic approach to literary texts can be adopted. Simpson also argues that "literature is perhaps better conceptualised as a way of reading than as a way of writing" (2014: 40).

Cognitive linguistics concerns the storing of mental representations, which are learnt through personal experiences and result in direct or indirect accumulations of knowledge (see for instance Croft & Cruse 2004 for a general introduction). This assumption pervades cognitive stylistics as well (Stockwell 2002: 1-2, Simpson 2014:40-41). This knowledge is categorised into the cognitive schemata and elicits the ability to connect a subject to a context (Stockwell 2002: 78-80 but see also Geeraerts 2006 and Langacker 2008). The schema containing the mental representation of any given concept is a product of a lifetime of experiences that form an "idealised prototypical image", which Lakoff coined as the "idealised cognitive model" (Lakoff 1987: 68-76). Henceforth abbreviated to ICM, the idealised cognitive model

> contains information about what is typical ... and it is a domain of knowledge that is brought into play for the processing and understanding of textual representations. These domains of knowledge are also accompanied by conceptual slots for the things that routinely accompany the mental representations (Simpson 2014: 41).

Needless to say, the ICMs are subjected to constant alteration and expansion in keeping with the development and experience of the individual but also the evolution of society. For instance, Lakoff gives the example of the concept of mother, where the conditions for motherhood are shared "[…] by normal biological mothers, donor mothers (who donate an egg), surrogate mothers (who bear the child, but may not have donated the egg), adoptive mothers" etc. (Lakoff 1987:76). In cognitive stylistic analysis, these ICMs are used for "attempting to account for and describe the cognitive and mental processes that underpin and channel aspects of meaningmaking" (Burke 2006: 218). ICM theory offers a valuable insight because it assists in identifying the norm against which textual deviations work. Norms are as such presupposed by deviation (Wales 1989: 116-117) and, apart from conceptualisation as structural norms (as expressed through grammar), can be hard to define. Hence the arrival of the ICMs which help us account for deviation from an established pattern. It should be noted that these patterns, or models, of course are subjective as not all individuals share the same experiences which inform and constitute particular ICMs, as this idea of a norm is otherwise too intangible and subjective (the subjectivity now being contained within the term 'ICM'). Cognitive stylistics, inspired by cognitive linguistics, is both a writer- and text-, but also reader-oriented field

and Freeman (2002: 43) argues that cognitive stylistics has the potential to explain several aspects of literary texts,

> by revealing the cognitive processes by which a literary work is created and understood, cognitive poetics has explanatory power. It illuminates the conceptual structures of a literary work. It explains how both writer and reader make conceptual projections and mappings that create new meanings.

Freeman concludes that cognitive poetics, another name for cognitive stylistics, has the power to "illuminate those imaginative capabilities that enable poetry to happen" (2002: 43) and that conclusion is transferred onto literary text in the present study. Focusing on the mental processes of the readership is appropriate because this article concerns the perceptual prominence of textual elements and features. As the goal is to understand how a reader comes to perceive some elements as foregrounded, it is fruitful to observe that a special mode of reading is accessed by the reader once they identify the type of discourse that is used (Shen 2002: 213). This entails that, when reading poetic discourse or literary texts, the reader anticipates the use of defamiliarising language[3] and knows that the writer of the text strives to create "poetic effects" as Shen characterises it (2002: 212, and Shklovsky 2015: 159). Shen distinguishes between three theoretic approaches within cognitive stylistics. The first, and most important to this study, is foregrounding theory. The second is the "poetic effect approach" which maintains that poetic discourse or literary text "exploits, for aesthetic purposes, cognitive processes that were initially evolved for non-aesthetic purposes" (Shen 2002: 212, and Mukarovsky 2015: 285-303). These two approaches need not be kept apart as they complement each other. The third theoretic approach is "the conventionalist approach" which proposes that the reader has at their disposal different reading strategies depending on the type of discourse that is read, and that the reader can make use of a "switch" in reading (Shen 2002: 212). Whereas this tripartite approach is not set in stone, what still holds true in cognitive stylistics today is that the focus is on the reader experience. The consequence of incorporating the 'conventionalist approach' is that, even though the existence of a 'literary language' has been rejected, as it rightfully should be in rigorous stylistics, we remain capable of addressing the phenomenon, only from a readerly perspective. Literary language is thus to be understood rather as a literary reading strategy.

2.1 Foregrounding
Foregrounding is a psychological effect (Gregoriou 2014: 87) which can be exploited in writing. One of the reasons a motif can be said to be present in a text could be that psychological effects are systematically exploited around one semantic category or type of ICMs, in this case flowers. When exploring foregrounding in images, the task is relatively simple. Objective features such as lighting and scaling are often manipulated in order to generate foregrounding, to steer the eye towards some particular elements in the image (Gregoriou 2014). The art historian would talk of the golden section, optical effects, and perspective as techniques to obtain an effect of foregrounding.

Foregrounding has been briefly mentioned above but it is an important notion within modern stylistics that demands further explication. Foregrounding theory was introduced by the Russian formalist, Victor Shklovsky, who considered art, and therefore also poetic discourse, to be a way of re-inventing the world through defamiliarisation and a "making strange" of reality as it is perceived (Burke & Evers 2014: 14). Foregrounding is thus the distortion of cognitive processes and some suggest that it works in literary texts in this manner: "stylistic properties of poetic structures (which include stylistic properties of figurative structures) violate and deform cognitive principles in order to achieve effects unique to poetic discourse" (Shen 2002: 212, and Shklovsky 2015: 159). These

---

[3] See section 2.1 for a definition of familiarisation.

cognitive principles stem from the ICMs that have been developed in the individual memory of all readers, and foregrounding theory and cognitive stylistics share common ground because of their focus on the reader experience. Foregrounding may be understood more broadly as the bringing to the foreground of any textual pattern and Simpson distinguishes between foregrounding as *deviation from the norm* and foregrounding as *more of the same* (Simpson 2014: 52).

'More of the same' foregrounding concerns any notable repetition or parallelism (Simpson 2014: 52). The idea of foregrounding through repetition is not without pitfalls, Simpson explains, mainly because it is difficult to decide whether a foregrounded stylistic element, for example, the eye-catching use of semicolons in Virginia Woolf's novel, remains foregrounded throughout the novel or not. One way of addressing this issue is by distinguishing between external and internal foregrounding (Simpson 2014: 52-53, Levin 1965: 226). External foregrounding is established on a macro-level; this text versus other texts. Levin explains external foregrounding as "deviation with respect to norms that are […] external to the poem" (226). This would entail that the frequent use of semicolons is a case of external foregrounding as *Mrs Dalloway* comparatively contains more semicolons than other texts. However, this stylistic feature is normalised as the reading process progresses and will thus not remain foregrounded. When the reader encounters a passage that, noticeably, does not contain the same number of semicolons, that passage becomes an example of internal foregrounding, as it comparatively differs from the norm established *within* the text (Simpson 2014: 52-53, Levin 1965: 226). For instance, Simpson (2014) draws on an example from Ernest Hemmingway's *The Old Man and the Sea* (1952/2012), where the well-known writing style of Hemmingway permeates the novel. The scarcity of adjectives present in relation to the nouns results in a certain writing style (e.g. *the fish*, *the stern* etc.), which the reader accepts as the norm. As a style distinguishable from other works it is an example of external foregrounding. Simpson goes on to highlight a sentence from one of the novel's nodes, where a large, poisonous jellyfish approaches the old fisherman's boat and the narrator describes it as "the purple, formalised, iridescent, gelatinous bladder of a Portuguese man-of-war" (Hemmingway 1952/2012: n.p.). This noun phrase, with four adjectival modifications, becomes a salient stylistic feature as it deviates from the predominant article plus noun structure (Simpson 2014: 52-53). This deviation within a deviation is then internal foregrounding (Simpson 2014). The terminology of internal foregrounding is used to describe the readerly experience and the reader's cognitive processes in relation to each other. The cognitive processes or reading strategy are always at the centre of foregrounding theory in the sense that both are readerly approaches rather than writerly, focussing on the experience and mechanisms of reading.

2.2. Entrenchment and salience
Entrenchment and salience provide highly relevant terminology for assessing and addressing the cognitive aspect of interpreting literature, more specifically when talking about the cognitive 'distance' of a concept or word. According to Schmid (2007), the term entrenchment is a means of addressing the "level of conscious awareness" and "cognitive effort" with which an ICM is activated (2007: 118). In other words, entrenchment is "the degree to which the formation and activation of a cognitive unit is routinized and automated" (Schmid 2007:119). This notion captures the fact that language processing is so quick that it must be the case that certain every-day, frequent words and constructions are stored in a way which lets us access them without much effort. Non-entrenched forms are thus forms which are used less frequently and thus require more effort for speakers and listeners to access. Frequent use of a non-entrenched linguistic unit or cognitive concept may alter the degree of entrenchment as the cognitive effort subsides after a while (Schmid 2007: 118-119). However, there is no definitive answer as to how fast or for how long a non-entrenched concept or linguistic unit becomes entrenched. Croft and Cruse (2004) suggest that there is indeed a correlation between frequent use and degrees of entrenchment: "entrenchment (productivity) of a construction is proportional to the number of instances of the construction at any level of schematicity, and to the

degree of formal and semantic coherence of the instances of the construction" (2004: 309). Yet, they do not offer an answer as to how fast this process works. Determining which forms become entrenched is a complex issue. It is clear, that frequency has a role to play, but studies suggest that factors such as frequency in individual's speech as well as that of the speech community need to be considered as do the frequency of synonymous expressions which refer to the same concept (Schmid 2007: 119).

Salience can be understood as either that which rapidly comes into focus in a given speech (or reading) situation because it is activated, or that which is in focus because of the way the world is ordinarily perceived (Schmid 2007: 119-120). The notion of salience is useful in relation to the theory of foregrounding, as it proposes an explanation as to why some concepts are part of the foreground whereas others remain in the background. Cognitive salience occurs when a concept becomes activated into the reader's centre of focus, the current working memory, and thus becomes salient, whereas other concepts remain inactivated and thus non-salient. Ontological salience occurs when an entity or concept is more prominently present than other concepts in the way the reader experiences the world on a daily basis (2007: 119-120). There are thus two ways in which a concept may be salient, but in either case it is a part of the foregrounding process that a reader experiences. The foregrounded concept or linguistic unit would thus be that which is more salient than other concepts. However, it is important to observe the potential alternation between a concept being salient or entrenched. According to Schmid, entrenchment is linked to salience in that concepts or forms which are deeply entrenched (and thus require little processing cost) are more likely to become salient. Whilst this argument sounds clear cut, it seems to suggest that there is a positive correlation between levels of entrenchment and salience and this might not be the case. Hypothetically speaking, it is possible to present a counter-argument which states that the automated processing of entrenched forms means that the forms *cannot* become salient (and that salient forms cannot become entrenched) seeing as salient forms are forms which attract attention and which thus require higher processing costs (the processing of these forms is not automatic seeing as salient forms are forms which are being attended to). Indeed, we might be able to argue that non-entrenched words are more 'unusual' and thus more salient when you encounter them. At the same time, we can also argue that entrenched words are used more frequently because they refer to concepts that are salient to the speakers and thus more likely to be talked about often[4]. This juxtaposition of attention and salience is natural and according to Croft and Cruse (2004: 46-54) attention is related to the human cognitive abilities, however, natural properties of a subject may draw the attention of the spectator or reader resulting in the enhancement of the subject's salience.

From a cognitive stylistics point of view, the 'deviation from the norm' type of foregrounding could be connected to the notion of salience, whereas entrenchment is more closely related with 'more of the same' foregrounding. This is a rough pairing up of the theories as they are not developed to complement each other. Comparing entrenchment to 'more of the same' foregrounding seems to suggest that entrenched forms may be foregrounded, but that is not the goal of the comparison. 'More of the same' foregrounding draws on parallelism and the bringing to the fore of entrenched forms in such a manner that the entrenched forms display a distortion from the norm. Parallelism thus allows entrenched forms to become salient. For instance, in a paragraph with a high occurrence of a word or phrase, be that colloquial or complex, the repetition of said word constitutes the 'more of the same' type foregrounding as seen in F. Scott Fitzgerald's *The Great Gatsby* (1925: n.p.): "The apartment was on the top floor—*a small* living-room, *a small* dining-room, *a small* bedroom, and a bath" [italics added]. The fact that *a small* is repeated several times makes this entrenched, quantifying phrase foregrounded and thereby also salient.

---

[4] We thank the anonymous reviewer for this observation.

2.3. Levels of categorisation
From the point of view of cognitive linguistics, the levels of categorisation of the multiple flower words are important. In the tables, we include words such as *flower*[5], *rose* and *delphinium*; words that are neither equally entrenched, salient nor existing on the same cognitive levels. In order to fully address the questions of salience and entrenchment, the fact that these words can be said to exist on different cognitive levels of categorisation needs to be addressed. A categorisation of words pertaining to the realm of flowers may digress into minute classification and we would approach the work of botanists and taxonomists which is not the goal here. Rather, a brief explanation will follow. Ungerer and Schmid (1996: 66-67) state that words may be categorised into levels that are either superordinate, basic or subordinate. They explain the theory of levels of categorisation using the example of dogs: the word *animal* thus refers to the superordinate level captured by the semantic category ANIMAL; *dog* refers to the basic level DOG and ALSATIAN, COLLIE or POODLE, which all denote breeds of dogs, thus describe concepts on the subordinate level. The same may be done using flowers as the example. The superordinate level would be PLANT (or on an even higher level, LIVING ORGANISM), the basic level would be FLOWER, and subordinate levels would be ORCHID, DAHLIA, CARNATION, etc., all denoted by corresponding lexical entries, of course. However, such a categorisation is not set in stone and it can be argued that ROSE for example is a basic level category word as well. Ungerer and Schmid argue that "we approach hierarchies from the centre, that we concentrate on basic level categories such as dog and car and that our hierarchies are anchored in these basic level categories" (1996: 64). As such, the cognitive levels of categorisation is not only related to the degree of specificity of attributes. Stockwell argues that the basic level is "the level at which we most commonly interact on a human scale with the category" (2002: 31). Since roses are so frequently encountered in Western culture, they arguably belong to the basic level category now, but the question remains whether that 'pushes' FLOWER to a superordinate level category. The categorisation is in no way objective and widely depends on context. In *Mrs Dalloway*, it is noticeable that the most frequently used flower-lemmas are FLOWER (occurs 53 times) and ROSE (occurs 52 times). This even distribution of the words seems to suggest that both words belong to the basic level. This count also confirms that basic level category words are used frequently compared with superordinate or subordinate ones.

3. Method
In corpus linguistics, there is a distinction between corpus-driven and corpus-based approaches (McEnery et al. 2006: 8, Tognini-Bonelli 2001: 65). McEnery et al. claim the four main differences between the approaches are the "types of corpora used, attitudes towards existing theories and intuitions, focuses of research and paradigmatic claims" (McEnery et al. 2006: 8). This study adopts a top-down approach, making it corpus-based. That means that a hypothesis based on prior knowledge has been developed for testing (de Haan 2010). The concordance software *AntConc* is used to find pre-determined lemmas in a theory-driven analysis. By developing hypotheses for testing, this article observes the definition of McEnery et al. that "[t]he corpus-based approach typically has existing theory as a starting point and corrects and revises such theory in the light of corpus evidence" (McEnery et al. 2006: 10). This is an overall definition of the difference between corpus-based and corpus-assisted approaches: "[t]he corpus-based approach is not as radical as the corpus-driven approach. The corpus-driven approach claims to be a new paradigm within which a whole language can be described. No such claim is entailed in the corpus-based approach" (McEnery et al. 2006: 11)[6].

---

[5] Following the tradition in cognitive linguistics, semantic and conceptual information is presented in small caps, linguistic forms are given in italics and lemmas are represented by upper case.
[6] See also Gries (2012) for more on the differences between corpus-based vs. corpus-driven approaches in corpus linguistics.

As the approach is used in combination with other theories it becomes evident that it is not a radical approach but rather the much more flexible corpus-based approach that is used throughout.

3.1. Corpus design

This investigation makes use of both specialised and general corpora, the Virginia Woolf Corpus and the British National Corpus. In corpus stylistics, representativeness of language types is imperative (McEnery et al. 2010). The two selected corpora live up to those demands for representativeness. The following accounts for the manner in which this is ensured.

The Virginia Woolf corpus is highly specialised because specialised corpora normally include texts within a specific domain or genre (McEnery et al. 2010). In this case, the corpus is both author- and genre-specific. When working with reference corpora, it is necessary to consider characteristics such as corpus length (size) and corpus content (representativeness) in relation to the purpose of use. The corpus of Virginia Woolf's works is somewhat short compared to standard reference corpora (although the ICE-GB[7] is only 1 million words in comparison). However, since the goal of including this corpus is to be able to compare *Mrs Dalloway* to the rest of Woolf's authorship and highlight the foregrounding at play in this particular work, this limitation is of minor importance. When considering the representativeness of the corpus, it is important to ensure "that the corpus is maximally representative of the language or language variety it is supposed to represent" (McEnery et al. 2010: 15). The Woolf corpus is a compilation of Virginia Woolf's most popular works: *Night and Day* (1919), *Kew Gardens* (1919), *Jacob's Room* (1922), *To the Lighthouse* (1927), *Orlando* (1928), *A Room of One's Own* (1929), *The Waves* (1931), *The Years* (1937) and *Between the Acts* (1941). The corpus also includes her lesser known collection of *London Essays* (1931). Below is a table illustrating the different word counts of each text and the total word count of the corpus.

Table 1: Woolf corpus word count

Title	Year of publication	Word count
A Room of One's Own	1929	38,516
Between the Acts	1941	46,572
Jacob's Room	1922	56,197
Kew Gardens	1919	2,844
London Essays	1931	72,572
Night and Day	1919	170610
Orlando	1928	80,432
The Waves	1931	78,349
The Years	1937	131,168
To the Lighthouse	1927	71,481
Total		**748,741**

The study at hand focuses on Virginia Woolf's style of writing fiction and therefore her articles, reviews, critical essays and personal letters have been excluded. Corpus representativeness is thus ensured by including her nine most famous novels and her collection of six essays, which all make use of the same type of discourse, meaning that no 'shift' in reading style occurs when transitioning between texts (Shen 2002). According to Leech, a focus on corpus size is "not-all important" (Leech 1991: 10), particularly since we use normalised frequencies in the analysis, and for the purposes of this investigation, size is not an important parameter in the corpus design as it includes a

---

[7] The ICE-GB consists of one million words of spoken and written British English from the 1990s and is tagged, parsed and checked, see http://www.ucl.ac.uk/english-usage/projects/ice-gb/index.htm.

representative part of Woolf's authorship within the discourse type of literary discourse. There is, however, the issue of full-text corpora to consider. According to Sinclair (2005), "[s]amples of language for a corpus should wherever possible consist of entire documents or transcriptions of complete speech events" (quoted in Reppen 2010:40). By including full texts in the corpus, the probability of Woolf's style to show through is greater, albeit it means that the different topics may also show through. However, this is difficult to avoid and is accounted for in the interpretation of the data from the quantitative analysis. Furthermore, all the included texts are in public domain collected from the Project Gutenberg website (https://www.gutenberg.org/). The Woolf corpus consists of 748,741 words or word tokens.

The second corpus, The British National Corpus (henceforth the BNC), is designed to "represent contemporary British English as a whole" (McEnery et al. 2010: 17). The language variety is thus much broader and it is therefore called a general corpus. With general corpora, the most important aspect is balance, which is a measure for "the range of text categories included in a corpus" (McEnery et al. 2010: 16). The BNC is widely accepted as being balanced (McEnery et al. 2010: 17). The purpose of this project warrants a method within corpus stylistics of "comparing particular uses in textual examples with more general patterns in reference corpora" (Mahlberg 2014: 383). Therefore, the BNC is included in order to be able to say something about the language use in *Mrs Dalloway* in relation to language use in general. The BNC is thus the reference corpus. The BNC is retrieved from the University of Oxford Text Archive (http://www.natcorp.ox.ac.uk/), and consists of different language varieties, for instance, newspaper extracts, online sources, recorded conversations, TV broadcasts, etc. It consists of 979,453,675 words. For a detailed list, see the *List of Sources* (Burnard 2017). There is however one issue with this planned comparison, namely the temporal differences between the corpora. *Mrs Dalloway* and the Woolf corpus are written in the period 1919 to 1941, whereas the BNC consists of texts primarily from 1989-1992 (Burnard 2017). Thus, the comparison does not take into account the evolution in language that has taken place in this time span. However, we argue that since this article focuses on nouns that are not period-specific and not e.g. grammatical or syntactical structures, this issue is of minor concern. Moreover, as McEnery et al. explain, diachronic corpora (historical corpora) are specifically used for the purpose of tracking changes in language evolution (2006: 65). The base assumption of this article continues to be that there is no such thing as literary language (see section 2) which also explains why this temporal difference is disregarded.

The texts by Virginia Woolf are not tagged but the BNC is. Tagging means that the words in the texts are coded for word classes or other categorisations. In order to streamline the extraction of tokens from the data, the PoS (part-of-speech) BNC tags were disregarded and all texts were loaded into a concordancing tool (introduced below). An advantage to using tagged data is that it is easy to differentiate between words which belong to more than one word class (such as *violet* which can both function as a noun designating a specific flower or as an adjective designating a specific colour), although that was not an important consideration in the present study. Another advantage is that compound words (such as compound nouns spelled in two words, e.g. *sweet pea*) are classified as a single lemma. This makes automatic extraction using software easier, however, it is not impossible to extract compound nouns from non-tagged data as we will see below.

3.2 *Extraction of tokens and statistical tests*
The software programme *AntConc* is a concordancing tool which is commonly used within corpus stylistics as it can locate specific lemmas, words or phrases within a corpus of any length. The corpora used in the present study vary in size, but the tool is indispensable for locating the flower words in each corpus. The flower words which this investigation is interested in are lexical words, and in particular nouns. Content words in general are words which express lexical meaning as opposed to function words which express grammatical meaning. This study focuses only on nouns, as it is hard

to imagine a verb which expresses an ontological and nature-bound action without being used in conjunction with a noun (often in the function of subject or object). For example, the lexical verb *to grow* may occur, and while it is true that it stems from an action typically performed by some form of vegetation, it is often used metaphorically and is thus not the type of flower-related word that this study seeks to investigate. If the verb were to describe a nature-bound action rather than a metaphorical action, a flower or plant lemma (noun) would likely occur near the verb and fulfil one or more of the thematic roles required by the verb. Therefore, a focus on nouns will single out the flower lemmas and the instances of flower representations can be counted.

In order to extract the flower words from our corpora, the *AntConc* function 'Word List' was primarily used as this shows the number of occurrences (raw frequencies) of each lemma within a corpus. Thus, *AntConc* was here used as a simple counting tool which allowed us to extract frequencies and other descriptive statistics. Based on the extracted word counts, we then investigated any statistically significant differences in the distribution and occurrence of flower words across the three corpora by use of the log-likelihood statistic, a type of keyness analysis. The log-likelihood statistic is a measure for likelihood ratio based on maximum-likelihood theory (Field 2009: 690):

> The general idea behind this theory is that you collect some data and create a model for which the probability of obtaining the observed set of data is maximized, then you compare this model to the probability of obtaining those data under the null hypothesis.

We used the log-likelihood calculator developed by Paul Rayson to carry out the tests (http://ucrel.lancs.ac.uk/llwizard.html). The LL values are calculated based on a contingency table of observed and expected values in the two corpora which are compared. The calculation of expected values is based on the size of the two corpora, which is why the calculator operates on raw numbers. According to Rayson, the higher the LL value, the more significant the difference between the two frequency scores. In this study, we adopt a significance level of 0.05 which means that the critical value falls at 3.84. In short, if the LL value exceeds 3.84 then there is a significant difference between the frequencies of the specific words under study in the two compared corpora. The calculator helpfully indicates the overuse (+) or underuse (-) of words in corpus 1 relative to corpus 2. The plus or minus sign designates the relative overuse as described above although the reader should note that it does not denote significance (or non-significance). The plus-sign in the column 'relative overuse' designates that the lemma is relatively overused in *Mrs Dalloway*, whereas a minus sign in this column designates a relative overuse in either the Woolf corpus or the BNC (and thus an underuse in *Mrs Dalloway)*.

We adopt this notation below in table 3 as well. The calculations are based on two formulas that relate to a contingency table as described by Rayson and Garside (2000: 3).

Figure 1: Contingency table

	Corpus 1	Corpus 2	Total
Frequency of word	a	b	a+b
Frequency of other words	c-a	d-b	c+d-a-b
Total	c	d	c+d

The log-likelihood is then calculated on the basis of two formulas.

Calculation of expected values:

$$E_i = \frac{N_i \sum_i O_i}{\sum_i N_i}$$

Calculation of log-likelihood value:

$$-2\ln \lambda = 2\sum_i O_i \ln\left(\frac{O_i}{E_i}\right)$$

3.3 Extracted flower lemmas from Mrs Dalloway

The words that figure in table 1 have been located in the text and extracted, using the tool 'Word List' in *AntConc*. The number of occurrences, or raw frequencies, in the text figures next to the flower word. Indeed, as we are interested in lemmas, the numbers in the table can also be conceptualised as each type's token frequency.

Table 2: Flower wordlist

ARUM LILY	1	EVENING PRIMROSE	1	LILY	7
BUD	2	FLOWER	52	ORCHID	7
CAMELLIA	1	GERANIUM	5	PETAL	4
CARNATION	13	HIBISCUS	1	ROSE	53
CLOVER	1	HOLLYHOCK	2	RHODODENDRON	1
COW PARSLEY	1	HYACINTH	5	SWEET PEA	5
CROCUS	1	HYDRANGEA	4	SYRINGA	1
DAHLIA	2	IRIS	3	TULIP	1
DELPHINIUM	2	LILAC	3	**Total:**	**179**

Flower names that are spelled as compound nouns posed an issue, as they were not easily recognised when the 'Word List' tool was employed. For example, it would have been easy to overlook a word such as *sweet pea*, since neither of the words designates a flower on their own. In order to obtain a complete list, we initially employed the *AntConc* 'Word List' tool, which lists the words of a text according to frequency and through that we gathered all the flower words. Since the flower words often (though not exclusively) figured in bundles, the words were checked using the 'Concordance' tool, which enables a reading of the context of each word's occurrence. In order to ensure that they were semantically relevant, we removed occurrences such as the adjective *violet* since it became clear from the context that it was used to denote colour and not a flower. Eventually, the list of flower words reached 179 occurrences as the table shows. The plural and singular forms were collapsed in table 2, since this distinction was not necessary for the present study (i.e. table 2 shows lemmas). Because the aim of this study is to investigate *Mrs Dalloway* through means of comparison, words that only occur once were omitted from table 3, which is the list of lemmas that was used to compare flower words in *Mrs Dalloway* to the Woolf corpus and the BNC. This was done for two reasons: firstly, the low frequency renders these specific lemmas insignificant, and, secondly, there may well be flower words in the corpora that only occur here and not in *Mrs Dalloway*, and some degree of balance is thus achieved by leaving out the words that only occur sporadically.

4. Quantitative analysis

Based on the flower wordlist, 16 lemmas were chosen to conduct the tests for log-likelihood and relative overuse. This section of the analysis considers the result for each flower lemma in relation to the two corpora and, on the basis of the log-likelihood scores for the 16 lemmas, evaluates the two hypotheses. The first hypothesis (H_1) states that there is an overuse of flower words in *Mrs Dalloway* compared to the Woolf corpus. The second hypothesis (H_2) holds that there is an overuse of flower words in *Mrs Dalloway* compared to the BNC. Consequently, the null-hypothesis (H_0) states that there is no significant difference in the use of flower words between *Mrs Dalloway* and the corpora. The following evaluates the significance of occurrences of flower words in *Mrs Dalloway*, the Woolf Corpus, and the BNC. First, the individual lemma will be analysed with a focus on the log-likelihood that they display along with the relative overuse of the lemma.

Table 3: Log-likelihood and relative overuse of flower words

Flower lemmas:	Mrs Dalloway	Woolf Corpus	LL	Relative overuse	BNC	LL	Relative overuse
BUD	2	14	0.39	+	1,771	7.58	+
CARNATION	13	26	20.47	+	346	138.48	+
DAHLIA	2	9	1.19	+	124	17.97	+
DELPHINIUM	2	0	10.12	+	78	19.80	+
FLOWER	52	406	6.43	+	15,937	303.45	+
GERANIUM	5	15	5.3	+	458	1.06	+
HOLLYHOCK	2	6	2.12	+	52	21.40	+
HYACINTH	5	9	8.55	+	438	41.52	+
HYDRANGEA	4	1	16.41	+	96	43.42	+
IRIS	3	7	4.13	+	1,927	13.21	+
LILAC	3	13	1.9	+	422	22.1	+
LILY	7	187	6.2	-	2,239	40.26	+
ORCHID	7	11	13.2	+	808	54.31	+
PETAL	4	55	0.12	-	1,001	24.93	+
ROSE	53	610	0	+	19,609	289.79	+
SWEET PEA	5	0	25.31	+	101	55.96	+
Total:	**169**	**1,369**			**25,619**		

We can see from the table that the following ten lemmas display significant overuse (i.e. the LL value is above 3.84) in *Mrs Dalloway*: SWEET PEA (LL = 25.31), CARNATION (LL= 20.47), HYDRANGEA (LL = 16.41), ORCHID (LL= 13.2), DELPHINIUM (LL = 10.12), HYACINTH (LL= 8.55), FLOWER (LL = 6.43), GERANIUM (LL=5.3) and IRIS (LL = 4.13). With regard to overuse in *Mrs Dalloway*, we see that all lemmas on the list display a relative overuse in the novel, compared to the Woolf corpus, except for two, LILY and PETAL, which is visible from the minus signs in the column 'relative overuse'. It should be noted that even though the LL of ROSE is 0, the relative overuse in *Mrs Dalloway* is still possible (if there were one more occurrence of ROSE in *Mrs Dalloway*, the LL would be 0.03). The initial intuition that the flower-motif is abundantly present in *Mrs Dalloway*, even when compared to the rest of Virginia Woolf's authorship, thus seems to hold true when observing the results from the point of view of an alpha level at 0.05. Therefore, H_1 should not be rejected. When comparing the occurrences of the flower lemmas to the BNC, we see that all lemmas are more used in *Mrs Dalloway* compared to the general corpus (they all feature a plus sign

in the 'relative overuse' column) and that all lemmas but GERANIUM display statistically significant results (with a value above 3.84). This indicates that Virginia Woolf uses flower lemmas in her texts much more often than the average speaker in an average speech-situation would, once again taking into account the issues of comparing corpora that are from different periods as discussed in section 3.1. Consequently, H_2 should not be rejected. The subject-matter of the text, as well as the locations described in the novel, could explain this difference in part, but the results do indicate interesting and significant differences. When comparing the findings in the corpora to *Mrs Dalloway*, using normalised frequencies is also an option that can support the findings in the LL comparison. The table below displays the normalised frequencies of the flower lemmas.

Table 4: Normalised frequency of flower lemmas per million words

Flower lemmas:	Mrs Dallo way	Normalised frequency	Woolf Corpus	Normalised frequency	The BNC	Normalised frequency
BUD	2	30.89	14	18.70	1,771	1.81
CARNATION	13	200.77	26	34.72	346	0.35
DAHLIA	2	30.89	9	12.02	124	0.13
DELPHINIUM	2	30.89	0	0	78	0.08
FLOWER	52	803.09	406	542.24	15,937	16.27
GERANIUM	5	77.22	15	20.03	458	0.47
HOLLYHOCK	2	30.89	6	8.01	52	0.05
HYACINTH	5	77.22	9	12.02	438	0.45
HYDRANGEA	4	61.78	1	1.34	96	0.10
IRIS	3	46.33	7	9.35	1,927	1.97
LILAC	3	46.33	13	17.36	422	0.43
LILY	**7**	108.11	187	249.75	2,239	2.29
ORCHID	7	108.11	11	14.69	808	0.82
PETAL	4	61.78	55	73.46	1,001	1.02
ROSE	53	818.53	610	814.70	19,609	20.02
SWEET PEA	5	77.22	0	0	101	0.10
Total:	**169**		**1,369**		**25,619**	

What these figures show is that the frequency of the flower lemmas, once normalised, is generally higher in *Mrs Dalloway* compared to the two corpora, with the exception of LILY and PETAL. This result matches and supports the result found above, strengthening the argument that H_1 and H_2 should not be rejected.

5.   Qualitative interpretation
The findings in the quantitative analysis form the basis for the qualitative analysis reported below. The first section focuses on entrenchment and salience and the second looks at the use of foregrounding of flower words in particular.

5.1 The entrenchment and salience of flowers
In this section, selected lemmas will be examined in order to determine how the flower words are perceived in *Mrs Dalloway* and how the different degrees of entrenchment and salience attest to the

cognitive complexity of the novel. Words such as *rose*, *flower* or *orchid* are quite familiar to the reader and are thus highly entrenched. Indeed, *flower* denotes a basic level category (which we can perhaps expect to be the most frequent compared to more specific categories) and the word *rose* refers to a prototypical member of the FLOWER category (the same can perhaps be said for *orchid*). This prototypicality may be a likely factor in both the entrenchment of the words but also in the high level of familiarity in readers. This means that the level of conscious awareness of these words is near non-existent because the cognitive effort with which the reader of these words recollects the ICM of e.g. ROSE is very little (Schmid 2007: 118-119). There is an abundance of flower-related lemmas in *Mrs Dalloway.* For instance, the first time a rose is mentioned is on page 13 (see excerpt 3 below), where Clarissa enters the florist's shop. The paragraph consists of 25 lines devoted to Clarissa's impression of the flowers in the shop. The lemma ROSE appears 6 times alongside other flower lemmas such as CARNATION, LILY, DELPHINIUM, LILAC and SWEET PEA. Indeed, flower-related lemmas occur 27 times (Woolf, 1925/2007: 13-14). The sheer number of flower-related lemmas in this paragraph and the intensity with which it is written (lists, repetition, parallelism), indicates, quite early on, that there is a flower-motif in *Mrs Dalloway*. The flower-related words (table 2) are mostly entrenched, with the exception of CARNATION or DELPHINIUM, which are arguably subordinate level category words as they describe more unfamiliar flowers.

If we look at the use of flower words overall in *Mrs Dalloway*, we can argue that the high frequency of use and the repetitions of flower words throughout the novel makes the flower-motif salient. However, when we look at the types of flower words used, we see that the majority are common and familiar flower words (*roses* and *lilies*, for instance), i.e. ones that are likely to be entrenched. For these words, it is the high frequency of the semantic category of FLOWER which makes them salient as the extensive use deviates from what we would expect, i.e. from an external norm. We do find some uses of more unfamiliar (and thus likely to be less on non-entrenched) flower words (such as *delphinium*) and we argue that these are also salient despite their low numbers; firstly, due to their exoticness and, secondly, due to their membership in the sematic FLOWER category. In the following sections, we look in more detail at the foregrounding of flowers in *Mrs Dalloway* through linguistic strategies such as repetition, parallelism and symbolism.

5.2   *Foregrounding in Mrs Dalloway*

In section 2.1 we established what textual foregrounding is, and that it can be obtained by deviating from the norm or through repetition. What is made probable in section 4 is that the flower lemmas are foregrounded in terms of repetition. However, what the quantitative method cannot determine is the manner and the precise procedure of the author. Instead, a systematic analysis of the flower lemmas in their context may clarify these complex questions.

5.2.1 Foregrounding of flowers

As established, the flower words are uniquely foregrounded in *Mrs Dalloway*, when compared to the BNC. Flower lemmas figure abundantly and with an even frequency throughout the text. In their research, Peplow & Carter (2014) use *Mrs Dalloway* as an example of a text that contains much foregrounding in order to investigate the reader experience of complex texts. That is in line with the observations made, so far. However, to analyse the complex workings of the process of foregrounding, this section will, firstly, present a dispersion analysis of the flower words in *Mrs Dalloway* and, secondly, go into more detail with examples from the text.

In order to be able to examine how the flower words perform within the text, it is beneficial to conduct a dispersion analysis, which provides a useful overview of the dispersion or concentration of the occurrences of flower words in the text. When conducting the dispersion analysis, we employed *AntConc*'s 'Concordance plot' tool, which offers identical results to the 'Concordance' tool, however, the results are presented more visually. This tool shows how different words are distributed through

corpora, in this case a single corpus (*Mrs Dalloway*), and presents an understanding of the representation of a motif. The 'Concordance plot' search was conducted via a search file consisting of the flower lemmas from table 3.

Figure 2: Dispersion of flower words in *Mrs Dalloway.*

HIT FILE: 1   FILE: Mrs Dalloway.txt

No. of Hits = 169

As indicated above, the flower words are very present throughout the entire text and are, in several instances, concentrated, bundled up, and packed into small passages, creating the effect of foregrounding through repetition. The following are examples of excerpts in which the flower words are given a perceptual prominence through frequent repetition. Moreover, it appears that Woolf exploits the various cognitive levels of categorisation that the flower words belong to using hyponymy, thus facilitating the cognitive process of accessing the subordinate categories.

Excerpt 1.

And Rezia came in, with her *flowers*, and walked across the room, and put the *roses* in a vase, upon which the sun struck directly, and it went laughing, leaping round the room. She had had to buy the *roses*, Rezia said, from a poor man in the street. But *they* were almost dead already, she said, arranging the *roses*. So there was a man outside; Evans presumably; and the *roses*, which Rezia said were half dead, had been picked by him in the fields of Greece (Woolf 1925/2007: 102 [italics added]).

In this small excerpt, the foregrounding of the lemma ROSE is palpable to say the least, with four occurrences of the noun phrase *the roses* and further two diegetic references to them (*flowers* and *they*). This repetition of both the noun phrase and the diegetic references in this paragraph often function as epiphora, which adds a rhythm to the passage and which also ensures that the words *the roses* (and the underlying concept of ROSE) are salient. This salience of the repeated noun phrase also endows the roses, as artefacts, with meaning, which in turn invites the reading of their symbolism (see section 3.2.5 on the symbolism of flowers).

The narrative voice of the excerpt partially belongs to the shell-shocked veteran Septimus Warren Smith and gives insight into a disturbed mind. The excerpt is an example of Woolf exploiting the cognitive processes in relation to the levels of categorisation. Though FLOWER and ROSE are arguably basic-level categories, the word *roses* is a hyponym of the word *flowers* and, in this context, it certainly is a precision of the category level. In the first sentence of the excerpt, the basic-level category FLOWER is introduced (by the use of the word *flowers*) and the (again, in this context) subordinate level category ROSE is invoked by use of the word *roses* which is used with anaphoric reference to *flowers*. Interestingly, the excerpt has the repetitiveness in common with an excerpt in which Clarissa has just received flowers from her husband:

Excerpt 2.

In came Richard, holding out *flowers*. She had failed him, once at Constantinople; and Lady Bruton, whose lunch parties were said to be extraordinarily amusing, had not asked her. He was holding out *flowers--roses*, red and white *roses*. (But he could not bring

himself to say he loved her; not in so many words.) But how lovely, she said, taking his *flowers*. She understood; she understood without his speaking; his Clarissa. She put *them* in vases on the mantelpiece. How lovely *they* looked! she said (Woolf 1925/2007: 129 [italics added]).

According to Leech (1969), parallelism concerns "the introduction of extra regularities, not irregularities, into the language" (1969: 62, cited in Gregoriou 2014: 94). Both excerpts contain parallelisms. The first has assonance and alliteration ("sun struck", "laughing, leaping", "round the room"), and the repetition of the words *roses*, *half-dead*, *said,* and *Rezia*. The second has repetitions of the words *flowers*, *she*, *how lovely*, and *understood* (among others) and the repetition of an entire sentence occurring twice earlier in the text, "Millicent [/Lady] Bruton, whose lunch parties were said to be extraordinarily amusing, had not asked her" (Woolf 1925/2007: 32 and 33). These elements constitute a type of internal parallelism in these single excerpts, whereas their interrelation on a level of grammatical parallelism creates a stratified foregrounding pattern. The grammatical parallelism is the identical lines of action that occur in both passages. The flowers are brought in by a caring partner, they are put in vases for display and they are commented on ("they are half dead" versus "they look lovely"). Moreover, this excerpt is a good example of Woolf creating an effect of foregrounding through a gradual precision of the cognitive categories. She begins with *flower*, and moves on to the hyponym *roses* immediately afterwards, after which the roses are further specified as being *red and white roses*, thus accessing a subordinate level category with three repetitions. What is revealed here is that the repetition of the flower words does not create the effect of foregrounding on its own. It is rather because so many textual elements are at play simultaneously that the reader experiences an elevated sense of complexity, interrelation, stratification, and parallelism. The quantitative method proved adept at pointing to some of these parallels, the foregrounding of the flower words through repetition, but a close-reading reveals more on the specific workings of these processes.

5.2.2 Foregrounding through repetition
There are several instances of foregrounding through repetition throughout the novel, with passages holding a high concentration of this or that flower, but one passage is particularly loaded with flowers and it is interesting because it is found at the beginning of the novel. It foregrounds the flowers to such an extent that it can be argued that the flowers stay with the reader from this point on because their perceptual prominence is made clear and they become salient. Clarissa arrives at the florist's and an abundance of flowers are being described. They are not only the ones that Clarissa can see but also the flowers she can remember, the flowers that she associates with the rest of her thoughts, as her mind drifts in this stream of consciousness:

Excerpt 3.

She advanced, light, tall, very upright, to be greeted at once by button-faced Miss Pym, whose hands were always bright red, as if they had been stood in cold water with the *flowers*. There were *flowers*: *delphiniums*, *sweet peas*, bunches of *lilac*; and *carnations*, masses of *carnations*. There were *roses*; there were *irises*. Ah yes--so she breathed in the earthy garden sweet smell as she stood talking to Miss Pym who owed her help, and thought her kind, for kind she had been years ago; very kind, but she looked older, this year, turning her head from side to side among the *irises* and *roses* and nodding tufts of *lilac* with her eyes half closed, snuffing in, after the street uproar, the delicious scent, the exquisite coolness. And then, opening her eyes, how fresh like frilled linen clean from a laundry laid in wicker trays the *roses* looked; and dark and prim the red *carnations*,

holding their heads up; and all the *sweet peas* spreading in their bowls, tinged violet, snow white, pale--as if it were the evening and girls in muslin frocks came out to pick *sweet peas* and *roses* after the superb summer's day, with its almost blue-black sky, its *delphiniums*, its *carnations*, its *arum lilies* was over; and it was the moment between six and seven when every *flower--roses*, *carnations*, *irises*, *lilac*--glows; white, violet, red, deep orange; every *flower* seems to burn by itself, softly, purely in the misty beds; and how she loved the grey-white moths spinning in and out, over the cherry pie, over the *evening primroses*! (Woolf 1925/2007: 13-14 [italics added])

There are 27 occurrences of flower-related words in the excerpt. It is a description of the highly subjective stream of consciousness in a calm moment in a flower shop. The flowers are multiplied since not only the physically present ones are described in the second and third line of the excerpt, but also mental representations of flowers. Once again, Woolf makes use of hyponymic relations, introducing first the basic-level category FLOWER, then proceeds to the subordinate level categories. This is done both at the beginning of the excerpt (line 3) using a colon and towards the end (line 15), using two dashes. More flowers are added in lines 11-18. In an allegorical manner, Clarissa's mind drifts to an imagined summer's day and evening and all the flowers that she feels belong intrinsically to the scenery. Moreover, in line 14, it is interesting to note that the *delphiniums*, *carnations,* and *arum lilies* are not commonly known by lay people in the same degree as, for instance, roses or tulips and these are therefore less entrenched flowers. Also, the next few lines following this example show several uses of asyndeton and the omittance of conjunctions can be said to increase the intensity of the flower words. Lastly, this paragraph also exhibits anaphoras in the form of *its delphiniums, its carnations, its arum lilies* and *every flower* along with *over the cherry pie* and *over the evening primroses*. Thus, by adding emphasis on the arrangement of the clauses, not only on the flower words but also in the literary style of the phrases, the 'more of the same' foregrounding is even more noticeable. What further foregrounds the flower words are the fact that they are first listed rather mechanically and then re-listed but with pre- and post-modifiers. The modifiers add emphasis and an internal foregrounding as the imagined flowers are made different from the observed flowers. The first mentioning of the flowers is preceded by *there were*, listing the physically present flowers. Upon re-opening her eyes, Clarissa (or the narrative voice) describes the flowers in terms of similes, colour, brightness, freshness, and personification, adding emphasis to them. This creates an internal deviation from the previously, mechanically listed flowers and thus, this excerpt foregrounds flower words both in terms of repetition and parallelism and in terms of literary deviation from the norm. At first, the flowers simply *are*. In the second half of the excerpt, the flowers *are like, are glowing, are burning*, etc. The shift from an emotionless perception of the flowers to a highly emotive perception and subjective imagining of flowers further adds internal foregrounding. The foregrounding is not only internal but also external as repetition of the same lexical words creates perceptually prominence.
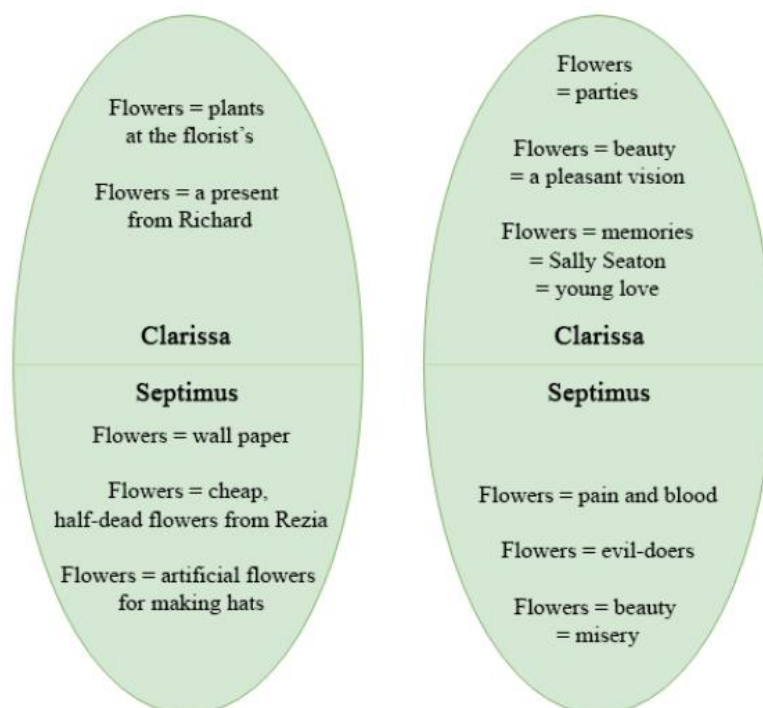
5.2.3 The symbolism of flowers
The flowers are used in a manner that makes them externally foregrounded because they are of a delicate constitution and often represent the romantic, the emotional and the fragile. However, their symbolic function is much more diverse in *Mrs Dalloway*. For example, they are described as weapons, "[b]earing his flowers like a weapon, Richard Dalloway approached her […]" (Woolf 1925/2007: 127) and in more ambiguous terms, "Lady Bruton raised the carnations, holding them rather stiffly with much the same attitude with which the General held the scroll in the picture behind her […]" (115). Roses are described as growing from the flesh of the insane Septimus: "[r]ed flowers grew through his flesh" (74-75). Flowers are used as a metaphor of the social order between social classes: "Sally went out, picked hollyhocks, dahlias – all sorts of flowers that had never been seen together – cut their heads off, and made them swim on the top of water in bowls" (36). In this example

we also see a further conceptualisation of the flowers as animate as they are made to do something (indicating that they do so unwillingly and thus have a will to begin with) but also that they swim (and not float), a type of movement requiring not only a body but also motor skills in order to engage in this particular type of movement. We can perhaps even argue that Woolf here establishes the conceptual metaphor of FLOWER IS ANIMATE or even FLOWER IS HUMAN (Lakoff & Johnson 2011).

Flowers are also used as symbols of budding sexuality: "Then, for that moment, she had seen an illumination; a match burning in a crocus; an inner meaning almost expressed" (35). They are described as "floating lamps" (72) and juxtaposed to lesbianism: "Sally stopped; picked a flower; kissed her on the lips" (38). In this final example, we, again, see a personification almost of the flower, the conceptual metaphor of FLOWER IS HUMAN, with the use of the personal pronoun *her* which is co-referenced with *flower*. It is this personification of the flower as not only human but also female which introduces the topic of lesbianism. This multi-purpose and self-contradictory use of the flowers poses the question of whether the flowers then stay internally foregrounded. It is possible that the internal foregrounding fades throughout the text, but the external foregrounding does not since many of the metaphors are novel and highly defamiliarise both ICMs.

Although the parallelism theory suggests that foregrounding is obtained because of the introduced regularities, there is also the possibility that a frequent repetition defamiliarises a word. In cognitive psychology, the phenomenon is known as *jamais-vu*, meaning 'never seen' in French. It is "the inappropriate impression of unfamiliarity with circumstances that are, in fact, familiar." (Zeman 2009: 215). Repeating the same word over and over could then be defamiliarising an otherwise entrenched word, making it salient. Thus, foregrounding through repetition can be closely linked with foregrounding through deviation from a norm. Both effects are simultaneously exploited in *Mrs Dalloway*, as is evident from the above examples. The parallelism in the usage of flower words is also apparent in the characterisation process as several characters are compared directly to flowers. For example, Clarissa's daughter, Elizabeth, is compared to "a hyacinth, sheathed in glossy green, with buds just tinted, a hyacinth which has had no sun" (134), and Septimus' wife, Lucrezia, is "pale, mysterious, like a lily, drowned, under water" (97). Several other characters are juxtaposed systematically to certain flowers, such as Lady Bruton, a powerful, well-connected socialite, who is often surrounded by carnations, or Septimus who sees half-dead roses, artificial roses, painted roses and roses that pierce his body, but never benevolent flowers.

Figure 3: Non-symbolic and symbolic flower representations.

In the figure above, the flowers are divided into four categories: the flowers that contextually belong with Clarissa (top); the flowers that contextually belong with Septimus (bottom); the flowers as they occur in the narrative (left side); the flowers and what they come to symbolise (right side). What becomes apparent when comparing the right and the left side of Clarissa and Septimus is that there is a rather radical difference in the way that flowers are put in relation to these two different characters. For example, the non-symbolic flowers (left side) that are linked to Clarissa are of a fundamentally different constitution and nature than those linked to Septimus. The symbolic aspect of these flowers, outlined in the right-side figure, matches the non-symbolic qualities and contexts of the flowers on the left side. Clarissa is surrounded by flowers that are fresh and beautiful and they evoke associations in her to parties and youth. Septimus, on the other hand, is linked to flowers that are half-dead and evoke in him grotesque scenarios of horror and anxiety. The figure thus serves as a visual representation of the versatile manner in which Woolf applies the flower words, both on a descriptive level and on a symbolic, associative level.

6. Conclusion

The aim of this paper was two-fold: firstly, it aimed to demonstrate the potential and the applicability of combining methods from cognitive linguistics and stylistics and, secondly, it set out to test two hypotheses relating to the use of flower-related words in Virginia Woolf's *Mrs Dalloway*. These two hypotheses concerned the difference in the number of flower words between *Mrs Dalloway* and a corpus of Virginia Woolf's works (H_1), and the difference between *Mrs Dalloway* and the BNC (used as a general reference corpus) in the frequency of flower words (H_2).

To comment first on the latter aim, the results of the quantitative analysis showed that there was indeed an abundant and statistically significant overuse of flower-related words in *Mrs Dalloway* both compared to the Woolf corpus and to the BNC. We are thus able to confirm the literary critics' intuitions about the presence of a flower-motif in the novel if we assume that word frequencies are in any way linked to this. The qualitative analyses focused on the cognitive phenomena of entrenchment

and salience and linked these two notions with different types of foregrounding. Finally, we also looked at Woolf's use of flower words in connection with stylistic features, such as repetition, parallelism and symbolism, and we found that these structures also aid her in establishing a flower-motif in the novel. It is thus more than simple frequencies which lead to the foregrounding of flowers in *Mrs Dalloway*.

As for the former aim of the paper, the study undertaken demonstrated the benefits of combining both quantitative and qualitative approaches in stylistic analyses, but also the potential of combining insights from cognitive linguistics with more traditional stylistic features. One thing which we have not touched upon, however, is possible reasons for why the flower-motif plays such a significant role in *Mrs Dalloway.* The novel's plot unfolds in London and Westminster and indeed it has often been interpreted as a celebration of urban life (urban here being in juxtaposition to nature). Thus, one might indeed then ask why flowers (and nature more generally) are foregrounded the way they are. One possible explanation might be that by juxtaposing the bustling urban setting of the big city to the tranquil environment of nature, as if the two were not entirely separate, Woolf succeeds in creating a transfer of values from nature to city and vice versa.

This transferal of values between two concepts can perhaps be further elucidated by considering it in terms of conceptual metaphor. Seeing as the conceptual metaphorical construction is 'source domain IS target domain' (e.g. LOVE IS WAR), the source domain ICM (LOVE) is replaced with the target domain ICM (WAR), which is a deviation from the norm of nonmetaphorical writing and an excellent example of the interrelation of the domains (Lakoff & Johnson 2011). Similarly, the ICM of CITY and the ICM of COUNTRYSIDE or NATURE, in *Mrs Dalloway,* are equalled in a super-metaphor, conditioned by the foregrounding of nature. Thus, by conceptualising *city, countryside,* or *nature* as ICMs, it is possible to assess the relationship, and transferal of values, between CITY, COUNTRYSIDE, and NATURE in *Mrs Dalloway.* People are compared to flowers, animals, trees and have animal characteristics. All mantelpieces have vases with flowers on them and the parks seem to take up as much space as the purely urban spaces. The stringent dualistic segregation between nature and culture is effaced, leading the path towards a new experience of city life. The great modernist mantra articulated by Ezra Pound, to "make it new" (Pound 1934) is thus very visible in *Mrs Dalloway*, exemplified, for instance, by Woolf's ambiguous use of flowers, detached as they often are from their role as Romantic symbols of love. The FLOWER ICM is stereotypically feminine, colourful, spirited, and beautiful – benevolent in every way. This ICM is very much challenged in *Mrs Dalloway* as we saw above in figure 1, and Woolf has no qualms about re-interpreting and re-establishing the FLOWER ICM as she uses flower words to depict and describe her characters. This re-interpretation of the FLOWER ICM locally during the course of the novel is, then, another example of how the flower-motif characterises and permeates Woolf's novel *Mrs Dalloway* in ways which we do perhaps not expect.

References

Anthony, Laurence (2014). *AntConc readme helpfile* (vers. 3.4.4, ed. 001, Keyword List §3). Tokyo: Laurence Anthony. URL: http://www.laurenceanthony.net/. Retrieved October 20 2014 (access through software).

Burke, Michael & Kristy Evers (2014). 'Formalist stylistics'. In Michael Burke (ed.), *The Routledge Handbook of Stylistics*. New York: Routledge. 31-45.

Burke, Michael (2006). 'Cognitive stylistics'. In Keith Brown (ed.), *Encyclopaedia of Language & Linguistics* (2nd ed.). Burlington: Elsevier. 218-221.

Burnard, Lou (2017). *List of sources*. URL: http://www.natcorp.ox.ac.uk/docs/URG/bibliog.html. Retrieved 30 December 2017.

Croft, William & D. Alan Cruse (2004). *Cognitive Linguistics*. Cambridge: Cambridge University Press.

Czarnecki, Kristin (2010). 'To the readers: Woolf and nature'. *Virginia Woolf Miscellany*, 78: 1-2.

Czarnecki, Kristin & Carrie Rohman (2011). *Virginia Woolf and the Natural World*. Liverpool: Liverpool University Press.

de Haan, Ferdinand (2010). 'Building a semantic map: top-down versus bottom-up approaches'. *Linguistic Discovery*, 8(1): 102-117.

Emmott, Catherine, Marc Alexander & Agnes Marszalek (2014). 'Schema theory in stylistics'. In Michael Burke (ed.), *The Routledge Handbook of Stylistics*. New York: Routledge. 268-283.

Field, Andy (2009). *Discovering Statistics using SPSS* (3rd ed.). London: SAGE.

Freeman, Margaret H. (2002). 'The Body in the word: a cognitive approach to the shape of poetic text'. In Elena Semino & Jonathan Culpeper (eds.), *Cognitive Stylistics: Language and Cognition in Text Analysis*. Amsterdam: John Benjamins. 23-47.

Fitzgerald, Francis, Scott (1925). *The Great Gatsby*. FeedBooks. URL: http://gutenberg.net.au/ebooks02/0200041h.html. Retrieved 25 April 2018.

Geeraerts, Dirk. 2006. *Cognitive Linguistics: Basic Readings*. Berlin: Mouton de Gruyter.

Gregoriou, Christiana (2014). 'The linguistic levels of foregrounding in stylistics'. In Michael Burke (ed.), *The Routledge Handbook of Stylistics*. New York: Routledge. 87-100.

Gries, Stefan Th. (2012). 'Corpus linguistics, theoretical linguistics, and cognitive/psycholinguistics: towards more and more fruitful exchanges'. In Joybrato Mukherjee & Magnus Huber (eds.), *Corpus Linguistics and Variation in English: Theory and Description*. Amsterdam: Rodopi. 41-63.

Hemmingway, Ernest (1952/2012). *The old man and the sea*. New York: Charles Scribner's Sons, 1952, Project Gutenberg Canada ebook #948, 2012, n.p. URL: https://gutenberg.ca/ebooks/hemingwaye-oldmanandthesea/hemingwaye-oldmanandthesea-00-h.html. Retrieved 25 April 2018.

Lakoff, George (1987). *Women, Fire, and Dangerous Things*. Chicago: University of Chicago Press.

Lakoff, George & Mark Johnson (2011). *Metaphors we live by*. Chicago: University of Chicago Press.

Langacker, Ronald W. (2008). *Cognitive Grammar: a Basic Introduction.* Oxford: Oxford University Press.

Levin, Samuel R. (1965). 'Internal and External Deviation in Poetry'. *Word*, 21(2): 225-237. doi: 10.1080/00437956.1965.11435425

Lilienfeld, Jane (2017). 'The Besieged Garden: Nature in Virginia Woolf's Mrs. Dalloway and Willa Cather's One of Ours'. In Kristin Czarnecki & Carrie Rohman (eds.), *Virginia Woolf and the Natural World.* Liverpool: Liverpool University Press. 90-94.

Mahlberg, Michaela (2014). 'Corpus stylistics'. In Michael Burke (ed.), *The Routledge Handbook of Stylistics*. New York: Routledge. 378-392.

Mattison, Laci (2017). 'The Metaphysics of Flowers in The Waves: Virginia Woolf's "Seven-Sided Flower" and Henri Bergson's Intuition'. In Kristin Czarnecki & Carrie Rohman (eds.), *Virginia Woolf and the Natural World.* Liverpool: Liverpool University Press. 71-77.

McEnery, Tony, Richard Xiao & Yukio Tono (2006). *Corpus-based Language Studies: an Advanced Resource Book*. London: Routledge.

Mukarovsky, Jan (2015). 'Aesthetic function, norm and value as social facts (excerpts)'. *Art In Translation*, 7(2): 285-303. doi: 10.1080/17561310.2015.1049476

Rayson, Paul & Roger Garside (2000). 'Comparing corpora using frequency profiling'. In *Proceedings of the Workshop on Comparing Corpora*. Hong Kong. 1-6.

Reppen, Randi (2010). 'Building a corpus: what are the key considerations?' In Anne O'Keeffe & Michael McCarthy (eds.), *The Routledge Handbook of Corpus Linguistics* (1st ed.). London: Routledge. 31-37.

Peplow, David & Ronald Carter (2014). 'Stylistics and real readers'. In Michael Burke (ed.), *The*

Routledge Handbook of Stylistics. New York: Routledge. 440-454.

Pound, Ezra (1934). *Make it New (Essays)*. London: Faber & Faber.

Schmid, Hans-Jörg (2007). 'Entrenchment, salience, and basic levels'. In Dirk Geeraerts & Hubert Cuyckens (eds.), *Handbook of Cognitive Linguistics*. Oxford: Oxford University Press. 117-138.

Shen, Yeshayahu (2002). 'Cognitive constraints on verbal creativity'. In Elena Semino & Jonathan Culpeper (eds.), *Cognitive Stylistics: Language and Cognition in Text Analysis*. Amsterdam: John Benjamins. 211-230.

Shklovsky, Viktor (2015). 'Art, as device'. *Poetics Today*, 36(3): 151–174. doi: 10.1215/03335372-3160709

Simpson, Paul (2014). *Stylistics: a Resource Book for Students*. London: Routledge.

Sinclair, John (2005). 'Corpus and Text-basic Principles'. In Martin Wynne (ed.), *Developing Linguistic Corpora: A Guide to Good Practice.* Oxford: Oxbow Books. 1-16.

Sparks, Elisa Kay (2017). '"Everything tended to set itself in a garden": Virginia Woolf's Literary and Quotidian Flowers: A Bar-Graphical Approach'. In Kristin Czarnecki & Carrie Rohman (eds.), *Virginia Woolf and the Natural World*. Liverpool: Liverpool University Press. 42-60.

Stockwell, Peter (1999). 'The inflexibility of invariance'. *Language and Literature,* 8(2): 125-142. doi: 10.1177/096394709900800202

Stockwell, Peter (2002). *Cognitive Poetics: an introduction*. New York: Routledge.

Stubbs, Michael (2005). 'Conrad in the computer: examples of quantitative stylistic methods'. *Language and Literature*, 14(1): 5-24.

Tognini-Bonelli, Elena (2001). *Corpus Linguistics at Work*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Ungerer, Friedrich & Hans-Jörg Schmid (1996). *An Introduction to Cognitive Linguistics*. New York: Longman.

Wales, Katie (1989). *Dictionary of Stylistics.* London: Longman.

Zeman, Adam (2009). 'Déjà vu'. In Tim Bayne, Axel Cleeremans & Patrick Wilken (eds.), *The Oxford Companion to Consciousness*. Oxford: Oxford University Press.

Zlatkin, Rachel (2017). 'The Flesh of Citizenship: Red Flowers Grew'. In Kristin Czarnecki & Carrie Rohman (eds.), *Virginia Woolf and the Natural World.* Liverpool: Liverpool University Press. 84-89.

Software:

Anthony, Laurence (2014). AntConc (Version 3.4.4) [Computer Software]. Tokyo, Japan: Waseda University. Available from http://www.laurenceanthony.net/. Retrieved 20 October 2014.

McEnery, Tony & Andrew Hardie (2011). Log-likelihood and Effect Size Calculator. URL: http://ucrel.lancs.ac.uk/llwizard.html. Retrieved 17 November 2017.

Corpora:

Consortium, BNC (2017). *[OTA] British National Corpus, XML edition*. Ota.ox.ac.uk, from http://ota.ox.ac.uk/desc/2554. Retrieved November 17 2017.

Project Gutenberg (2017). *Project Gutenberg*. URL: http://www.gutenberg.org/. Retrieved 30 December 2017.

Woolf, Virginia (1919). *Night and Day*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1922). *Jacob's Room*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1925/2007). *Mrs Dalloway*. Introduction by Elaine Showalter, edited by Stella

McNichol. London: Penguin Books (Penguin Modern Classics).

Woolf, Virginia (1927). *To the Lighthouse*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1928). *Orlando*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1929). *A Room of One's Own*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1931). *The Waves*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1937). *The Years*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (1941). *Between the Acts*. FeedBooks. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.

Woolf, Virginia (2015). *The Moment and Other Essays*. Retrieved from http://gutenberg.net.au. Retrieved 30 December 2017.