Elizabeth Bowen's "narrative language at white heat": A literary-linguistic perspective

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Abbreviations

LS The Last September

TN To the North

Heat The Heat of the Day

eADM The extended Argument Dependency Model

1. Introduction: The experience of reading Bowen's "narrative language at white heat"

In her novel *The Heat of the Day*, Bowen describes London's cityscape during the Second World War. In sentences such as "Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter" (*Heat* 98), Bowen depicts bombed-out buildings, obstructed roads and the psychological effects of this destruction on Londoners, here, on a typical morning after a night of bombing raids.

On a first reading, the syntactic relations in this sentence are obscure. The reader might misinterpret the phrase "each day" as an adverbial in a subordinate clause, expecting it to be followed by the subject of a main clause:

a) [Out of mists of morning, charred by the smoke from ruins each day], rose to a height of unmisty glitter;

Although the above interpretation is in keeping with the sentence structure, the expectation of a subject phrase is not fulfilled and the misreading becomes apparent when parsing the second verb, "rose". Even though processing this verb is initially straightforward as it is unambiguously active past tense, "rose" requires a subject which precedes it. At this point, the reader needs to correct the initial adverbial misrepresentation of "each day" into the subject phrase of a main clause:

b) [Out of mists of morning, charred by the smoke from ruins], [each day rose to a height of unmisty glitter];

Because it is not easy to identify the main and subordinate clauses and the subject, the sentence is difficult to process, impeding access to its meaning. From a literary scholar's perspective, such difficulty and the processing disfluency it produces might be seen, as with war, as an "expression or representation" of "[c]haos" or "disorder" (Bullot and Reber 2013, 135). That means, sentence form and the reading experience are seen as symbolic or expressive of content.

While I do not contest the validity of such an approach, I view sentence form and disfluency from a very different angle: In this thesis, I examine how Elizabeth Bowen uses narrative prose language to produce aesthetic pleasure in readers. I hypothesise that sentence structures such as the one discussed above can elicit a sudden difficulty or a sudden ease in sentence processing. Overcoming this difficulty is the source of aesthetic

pleasure in reading literary texts and is based on a general cognitive mechanism which is not specific to reading or the perception of art. Even though Bowen utilises this mechanism as part of her poetic practice, this effect is not limited to her writing but may be present in other literary texts by other authors, too. In order to account for such sentences in Bowen's novels, I combine an existing neuroaesthetic model of the perception and appreciation of art (Leder, Belke et al. 2004; Leder and Nadal 2014) and a neurocognitive model of sentence processing (Bornkessel-Schlesewsky and Schlesewsky 2009a) into a new model of literary sentence processing which can explain the potential of syntactic ambiguity and negation to elicit difficulty during sentence processing, and the potential of parallelism, alliteration and rhyme to facilitate it. All these forms are hallmarks of individual sentences in selected narrative episodes in Bowen's novels, and I suggest that they all have the potential to produce aesthetic pleasure in readers.

I approach these sentence structures from a literary-linguistic perspective, a field of research which is concerned with "the application of linguistic theory to literature" (Fabb 2001, 446; Fabb 1997). Even though I do not offer new interpretations,[1] this thesis is written from a literary point of view because I draw on Bowen's novels *The Last September*, *The Heat of the Day* and *To the North*, on her own writings about her poetic practice as a novelist, and on literary scholarship on Bowen and her language. At the same time, this thesis is also written from a linguistic perspective because I am interested in "generali[sing]" (Fabb 1997, 1) about sentence processing and aesthetic pleasure in reading literary texts. I combine literary and linguistic theories and practice by referring to Bowen's novels and to her own writings about her poetic practice as a source for explaining how literary sentence processing might work. These insights should, ideally, be valid for individual novels in Bowen's œuvre and also for any other literary text written in English. In order to provide such a general view on aesthetic pleasure in reading, I draw on neuroaesthetic research into the perception of art and on neurolinguistic research into sentence processing, conjoining them into a model of literary sentence processing.

In the Introduction, I outline central notions of Bowen's poetic practice and review literary scholarship on Bowen's language, and I then describe my method and approach. In Chapter 2, I introduce the model of literary sentence processing and aesthetic pleasure which I develop in this thesis. In Chapters 3 and 4, I consider the role of syntactic ambiguity and negation in Bowen's novels. In Chapter 5, I examine parallelism,

[1] For a similar approach to literary texts see MacMahon (2009a).

alliteration and rhyme in her œuvre. In the concluding Chapter 6, I sketch three avenues of future research which can draw on my findings.

1.1 Bowen's poetic practice: Composition, form and reading

Although Elizabeth Bowen never formulated a unified manifesto outlining her poetic practice (Lee 1999a, 205), she published essays, speeches and broadcasts which shed light on her position on diverse issues such as the process of literary writing, the role of language in prose and poetry, and the cognitive and aesthetic experience of reading. Many of Bowen's ideas about literature and prose language are particularly suited for a literary-linguistic analysis from the vantage point of neurocognitive research. However, any interpretation of her ideas from such a perspective must be subject to caution because Bowen's writings predate modern neuroscience.[2]

A larger corpus of Bowen's critical prose has now been published and studied (Bowen, Greene et al. 1948; Bowen 1962a; Bowen 1975; Hepburn 2008; Hepburn 2010a; Lee 1999a, 204-228). While literary scholarship has addressed general questions of aesthetics and specific aspects such as the role of sound in Bowen's novels (Hepburn 2013; Lassner 2010; Lee 1999a, 204-228), there is as yet no detailed study addressing the emphasis of her non-literary writings on language or the processes of literary writing and reading. Meanwhile, it has been recognised that Bowen's "letters and critical writings invite more critical attention" (White and Thurschwell 2013, 1), and this is what I intend to contribute to.

Language is the central aspect in Bowen's poetic practice, and she herself holds "that the most powerful elements in me as a writer are my sense of atmosphere and my sense of language. The latter, however, is too often faulty" (Bowen and Jones (1950) 2010f, 272). This "sense of language" plays a role in Bowen's considerations about language in the novel, in her own poetic practice and in her critical responses to other authors. The significance of the novel as an art form, its distinction from poetry, and its significance for the individual reader revolves around the form and aesthetic effect of its language.

[2] However, there are hints that Bowen read at least one monograph by Vernon Lee about language, literature and the beautiful from a psychological perspective, namely *The handling of words, and other studies in literary psychology* (Lee (1923) 1927; Bowen, Beales et al. (1941) 2010d, 248; Hepburn 2010b, 370) and perhaps also *The beautiful* (Lee (1913) 2013).

In the following, I consider four notions in Bowen's poetic practice which are central to my thesis: First, Bowen defines the processes of writing and reading narrative prose language as "eventful" activities.

> For the writer, writing is eventful; one might say, it is in itself eventfulness. More than any activity, it involves thought, but the thought involved in it is by nature captive, specialized and intense. . . .
> Reading is eventful also. It, too, engages the faculties, so closely that reflection is only possible when the book has been finished and put down. At first reading one has little but reflexes – or so I find. (Bowen (1961) 1962d, 9, my omission)

According to Bowen, both writing and reading involve "thought" which is "specialized and intense" and "faculties" which are initially "little but reflexes", and in this thesis, I therefore focus on their role during real-time sentence processing in reading literary prose texts. I aim at finding sentence structures which engage these faculties and reflexes in different processing stages, and at predicting and explaining aesthetic effects.

Secondly, Bowen considers the form of the language of her prose as the source of aesthetic experiences during reading. Prose language is bound up with literary tradition and genre. As a literary critic in her own right, Bowen discusses "The poetic element in fiction" ((ca. 1950) 2010b)[3] and characterises herself as "a writer of stories – as a person confronted at once by the limitations and the possibilities of narrative prose" ((ca. 1950) 2010b, 153). By "story" Bowen refers to a general notion of narrative, regardless of (Western) genre and the length of the text. Bowen considers narrative as a cognitive and cultural universal in which traces of contemporary literary genres are already present: "In its infancy, the sheer, actual story was, surely, immersed in one kind of poetry, the primitive poetry of people" ((ca. 1950) 2010b, 153), an element of expression which can be understood intuitively and easily. According to Bowen, this poetic element has been lost in the historical development of the novel, but it remains central for her. By contrast, the contemporary novel is a fundamentally different genre.

> When the novel came, the story began to diverge from poetry. . . . The novel compelled the story to take to itself a whole new function – that of explanation, and

[3] "The poetic element in fiction" (Bowen (ca. 1950) 2010b, 153-161) was probably part of a 1950s lecture series (Hepburn 2010b, 360).

> then analysis – it became, if not anti-poetic, unpoetic. It took on the character of a document. (Bowen (ca. 1950) 2010b, 153)

The novel, a genre which has been divided from its originally central expressive element, was, historically speaking, in danger of losing its capacity to affect readers emotionally and aesthetically, therefore ceasing to be of significance.

Further, Bowen elaborates on the role of language as the source of aesthetic experience in the contemporary novel, which must make language a central concern in order to renew itself and thus maintain its social, artistic and aesthetic significance.

> if we are to continue to tell stories, and I do believe that it will always be required that the story should be told, we must be able to use the narrative language at white heat, and if in our experimentation we bungle or fail, if our language offends and seems incomprehensible, the allowance for the attempt, the hope of capturing, not for ourselves but for art and comprehension, a new position, a new forward post for the story must be allowed for. As storytellers we seek and we must have the poetic element now. We need to be subject to that force, that poetry, of which Shelley says, 'It compels us to feel what we perceive and to imagine that which we know.' (Bowen (ca. 1950) 2010b, 161)

In Bowen's view, the novel is an important genre for society, and the creative use of "narrative language at white heat" as a means of contemporary expression is its prime asset. If this linguistic "experimentation" does not succeed, the novel will lose its value as an artistic and aesthetically engaging genre.

The "narrative language at white heat" is the central tenet of Bowen's poetic practice. In my understanding of this metaphor, the novelist and the process of writing a literary text resemble a blacksmith forging a piece of wrought-iron work in extreme heat ('White heat', 2003a, 1883; 'White hot', 2003b, 1883). In order to express an idea in an original and creative manner, the writer must forge his raw material, namely "words", "sounds" and "meanings" (Bowen (ca. 1950) 2010b, 161), into a literary form. Bowen uses variations of the phrase "white heat" in several critical writings, and she herself uses the phrase "The white-heat precision" ((1941) 1999, 156) as a critical term.[4] Elsewhere

[4] Bowen describes Flaubert's language in *L'Education sentimentale*: "Analysis of the shortest sentence is necessary before one is able to render, in English, anything like the equivalent of its content – the very

in a discussion, V. S. Pritchett uses "a sort of white heat" to mean "driving force" (Bowen, Beales et al. (1941) 2010d, 249), and Hugh Sykes-Davies understands it as connoting a "sense of urgency and importance" (Bowen, Beales et al. (1941) 2010d, 250). In the same conversation, Bowen agrees that "without that white-hot feeling of importance" a writer "couldn't even learn to write well, he couldn't even put his words together in the sort of way a good novel needs" (Bowen, Beales et al. (1941) 2010d, 250). This suggests that Bowen does not explicitly strive for a specific linguistic form, and hence she does not offer a definition, but rather that she searches for a form which elicits a desired reading effect. Bowen herself refers to *The Heat of the Day* as the novel in which experimentation with language was a prime aim, even if she rates it as unsuccessful:

> About the writing itself, a certain overstrain which you felt … probably came from a too high tension from my trying to put language to what for me was a totally new use, and what perhaps was, showed itself to be a quite impossible use. And yet … I shall always be glad that I at any rate tried to write *The Heat of the Day*. (Bowen and Brooke (1950) 2010e, 283)

This new literary form, whether evaluated as successful or not by the author herself, has the purpose of triggering processing difficulty as an intended effect in the reader. In other words, Bowen's experimental writing aims at complicating conventional reading and comprehension processes ((ca. 1950) 2010b, 160-161).

Such linguistic and interpretive difficulty, and to a lesser degree linguistic and interpretive ease, are central to Bowen's poetic practice, aspects on which she elaborates:

> We are making our demands on the imagery of the poetic language, we are trying to fuse our words, not only in their meanings, but as Shelley said, they could be fused also in their sounds. We aim, perhaps, for the concatenation, for the overtone, for what is apparently inharmonious. We take words with our roughness, for their unacceptability just as much for their smoothness or their grace. Our idea of style … is not purely suppleness and surface for its own sake. It is something of a muscularity and a strength, but it is also a style which should be capable of being luminous and transparent. (Bowen (ca. 1950) 2010b, 161)

simplicity of each sentence having been achieved by the concentration of Flaubert's entire feeling for art" ((1941) 1999, 156).

> I'm not thinking of a 'good style' in the schoolmaster's sense at all – no split infinitives and prepositions at the end of the sentence, sentences of varying length, and that kind of thing. (Bowen, Beales et al. (1941) 2010d, 250)

Bowen's aim is to free narrative prose language from those "apparent restrictions" ((ca. 1950) 2010b, 160) which prevent its aesthetic appeal, that is, which do not produce aesthetic pleasure. Instead, she aims to use prose which resembles poetic language. However, this desired narrative prose "language is bound in inference, if not in outward style, to be poetic" (Bowen (ca. 1950) 2010b, 158). Textual structures resembling poetry in its effects are not used for their own sake but serve to elicit an aesthetic, not an intellectual response. This argument is in line with Bowen's "ideal" of "replac[ing] analysis by a pure image – as in poetry" (Bowen and Jones (1950) 2010f, 270).

Achieving such new literary prose forms and their desired effects relies on the composition of selected narrative episodes in Bowen's novels, which she calls the "descriptive pieces":

> I have often killed myself forging out passages which escaped the notice of ninety-nine readers out of a hundred. The last thing a writer seems able to impart is his own interior sense of what is significant. The reader most dear, and most rare, to me is he or she who, instead of merely praising the book, *perceives* it. What I might cold-bloodedly call my 'descriptive pieces' (e.g., the opening passage of *The Death of the Heart*, or the 1940-London pages in *The Heat of the Day*) seldom are overshot by anybody who cares for my work at all. (Bowen and Jones (1950) 2010f, 272, italics and parentheses in orig.)

In this quote, three ideas stand out: Bowen herself aims at conveying to the reader an idea of which parts of a narrative are "significant", that is, important. The reader who "perceives" a novel is most likely to pick up that sense of significance. No sensitive reader will leave the descriptive pieces unnoticed, which also create "variation":

> There should be variation, too, in what we may call the texture of our prose – … some passages are better for being written lightly; others demand a packed, possibly somewhat 'difficult' concentration of ideas and images. The former passages, probably, will be either narrative or dialogue; the latter analysis or description. (Bowen 1962b, 214)

Even though Bowen's argument here is not that explicit, I take it to mean that the descriptive pieces are those which are difficult to read yet are the most significant in her novels. The reading experience itself triggers the reader to attribute the perceived aesthetic qualities and a sense of significance to the narrative episode.

In addition to the descriptive pieces, Bowen refers to another type of episode, "the bridge passages", which in her view are essential to "[t]he mechanisation" of the novel and serve "as a means to link between illuminations" ((ca. 1950) 2010b, 157). I assume that Bowen defines her descriptive pieces as illuminations. Formal poetic features, both non-linguistic and linguistic, are most prevalent within selected paragraphs and narrative episodes, and poetic structures are therefore markers of narrative and aesthetic significance.

As Bowen puts it, in extension of her white heat metaphor, such episodes must be "forged out" (Bowen and Jones (1950) 2010f, 272); the writing process is more effortful than for other passages, either because some ideas are more difficult to express than others, or because these episodes are meant to have an especially poignant effect on the reader:

> Changes I make, in revision, are for the sake of clearness. I hate opaque, thick passages in prose. . . . I revise like one prunes – snipping away dead wood. . . . What I mean by 'dead wood' is anything too cerebral, too confused – anything which fails to convey sensation. I make particular war on analysis. (Bowen and Jones (1950) 2010f, 269)

As this quote illustrates, Bowen emphasises the experiential aspect of reading. Bowen's statement that she takes out text which seems to be "too cerebral" indicates her aim to affect readers immediately, in a way which does not require conscious cognitive or intellectual reflection and interpretation of the text. Many of the linguistic structures I analyse in this thesis, that is, ambiguity, negation, parallelism, alliteration and rhyme, have presumably been "forged" into their final form during this stage of revision.

Bowen's claims corroborate my argument that the primary aim of literary language within her novels is to affect the reader through aesthetic perception rather than through intellectual understanding. Bowen describes her idea of poetic effects:

> What do I want to do to my readers? Convey to them an idea, an image or a sensation – I suppose, really, all three simultaneously – to which they shall react

> with my own intensity. I want them, as they read, to experience a series of reactions, of which the effect shall be cumulative. I desire, in fact, that when my reader has finished the book or story, all the reactions experienced in its course shall run together within him, to form *something*. I want my book to have crystallised, in and for the reader. Failure to have crystallised[5] means aesthetic failure. (Bowen and Jones (1950) 2010f, 271-272, italics in orig.).[6]

In order to convey ideas, images and sensations, Bowen creates novels which bear a set of aesthetically relevant object features, and these enable the reader to engage with the texts on several levels. The creation of these structures is an intentional aesthetic and poetic agenda, and the strategies Bowen uses to achieve these aims form a set of emerging poetic practices. Despite her emphasis on aesthetic effects, Bowen stresses that the reader must, at all times, be able to understand the text.

The third strand of thought in Bowen's critical writings asserts that reading literary texts serves cognitive and emotional needs in ways other text types do not ((1946) 1999).

> For one thing, we require to be transported, to transcend boundaries – not, I think, merely with a view to 'escape' but out of a necessity for enlargement. Positive rather than negative, this wish carries us to the portals of a world that is at once 'other' and our own, a terrain with potentials we barely sense in the everyday. A story deals in the not-yet-thought-of but always possible. (Bowen (31 August 1958) 2008, 325)

Literary as opposed to non-literary language has the purpose of conveying an aesthetically engaging experience which the reader cannot anticipate or grasp cognitively. Aesthetic experience may mean pleasure, which Bowen sees as "a gain" ((1951) 2010a, 179), rates "amongst the highest of human goods", and of which she says that it represents "the due play and the proper fulfilling of faculties" ((1951) 2010a, 178):

> Perception plays a great part in it [pleasure]. In the rare consciousness of living the perfect moment, there occurs a widening sense of illumination, even of nobility. Indeed in all true pleasure there is an element of the sublime – in the pleasures of art and intellect, of travel, of friendship, love and homelife, of duty and

[5] Bowen also uses the term "crystallise" elsewhere ((1945) 1999, 41, 48).

[6] This interview "was pre-recorded on 3 May 1950 for a programme called 'Arts Magazine.'" and probably "was broadcast on 10 May 1950" (Hepburn 2010a, 371; Bowen and Jones (1950) 2010f, 267-273).

> accomplishment. Is there not even a sort of pleasure, far from perverse, in our ability to confront and surmount pain, to bite upon and then rally from failure? (Bowen (1951) 2010a, 178)

Pleasure is a universal sensation or experience and is not specific to either the perception of art or the experience of reading. Bowen's notion that there is pleasure in overcoming pain or difficulty is central to my thesis, and I suggest that Bowen draws on this cognitive and emotional mechanism in her poetic practice. In the following, I outline the views of literary scholars on the experience of reading Bowen, and especially on difficulty.

1.2 Literary scholarship on Bowen's language

Up until the 1980s, Bowen was considered "an interesting secondary figure" (Lee 1999a, 2; Bennett and Royle 1995, xvi; Miller 2000, 17) and accordingly her work has neither been the subject of considerable research, nor included in the academic canon (Corcoran 2004, xi-xv, xiii; Lassner 2010, 669-670; Lee 1999a, 226, 221-228). Nevertheless, Bowen's considerations about the form of her novels, the descriptive pieces and individual sentences are to some degree reflected in observations by those literary scholars who have commented on the significance of form, on sentence processing, interpretation and aesthetic effects. Referring back to Bowen's notion of the eventfulness of writing and reading ((1961) 1962d, 9), Corcoran observes a sense of "self-consciousness about reading and writing" (2004, 3) in her novels.

To begin with, literary scholars have held that Bowen's novels show narrative episodes which are experientially different from other passages. Scholars have reported subjective reading impressions reminiscent of visual modes of artistic representation – whether consistently mimetic or not – such as paintings, film stills, film sequences or photographs (Bennett and Royle 1995, 16, 153; Ellmann 2003, 79). Difficulties with interpreting Bowen's literature and placing her within a canon of contemporaneous writers have been voiced in relation to such passages. What stands out for me is the tendency to use analogies for the description of the effects of these passages on the reader. Neither the narrative and linguistic form, nor the processing mechanisms involved in reading these passages have as yet been analysed.

Even though Bowen's language in general and her sentence structures in particular have been topics in literary scholarship on her work, her explicit commitment to artistic linguistic verve and originality have not yet been systematically studied. Rather than

attracting systematic critical interest, Bowen's style has been evaluated in rather negative terms by early scholars. Brooke refers to her style as "idiosyncratic" and "convoluted" (1952, 18, 26; cit. in Osborn 2009a, 2), while Heath considers her language a "pointless verbal excess" (1961, 44; cit. in Osborn 2009a, 2). More recent approaches to Bowen's novels include descriptions and evaluations of the role of the prose language in her work, and here literary scholars have chosen a more objective terminology. Formal syntactic irregularities and semantic anomalies in Bowen's prose have been pointed out as characteristic of her work: "[C]ontorted syntax" (Mooney 2009, 16) is generally viewed as characteristic of Bowen's language, and "negative construction, repetition, inversion, and ellipsis" (Corcoran 2004, 3; Teekell 2011, 61) are listed as examples. It is generally held that Bowen's language is difficult to read and understand, including syntax, images, lexicon and punctuation (Corcoran 2004, 3; Hinrichs 1998, 174; Jordan 2008, 57; Lassner 2010, 670, 671; Osborn 2009b, 34, 35). Despite this prevailing negativity of judgments, Bowen's language is seen as characteristic of her highly individual and recognisable "voice like no other" (Lee 1999a, 13; Bennett and Royle 1995, 25; Ellmann 2003, 60, 67; Mooney 2009) and her "deeply unconventional" style (Corcoran 2004, 3).

The status of this individual style is another topic in literary scholarship: On the one hand, literary scholars do not seem to perceive these characteristic textual structures as an intentional aesthetic choice. Rather, it has been suggested that Bowen's prose might be the accidental result of her ineptitude as a writer. In Osborn's words, Bowen's "punctuation is so often ungoverned that one wonders, at times, if the errors were intended or the result of negligent proofreading" (2009b, 38). There is as yet no linguistic analysis showing that Bowen's prose language is indeed a poetic choice and not a "mannerism" (Corcoran 2004, 3; Kitagawa 2000, 485). On the other hand, her characteristic style has been singled out as the most important and interesting aspect of her writing:

> The 'vibrating force' of her language is the force which precedes everything else in her; and it is, before everything else, why she is worth our attention. (Corcoran 2004, 4; cit. Bowen 1962a, 214)

Corcoran puts forward the claim that this style should be subject to "a meticulous and revealing linguistic study being performed on her prose", a study "of the kind which Adam Piette performs on the work of, among others, Joyce and Beckett" (2004, 4).[7]

[7] Piette, Adam. *Remembering and the sound of words. Mallarmé, Proust, Joyce, Beckett*. Oxford: Clarendon Press, 1996.

More recent contributions to Bowen studies focus on "textual modernity" (White and Thurschwell 2013), yet this collection does not engage with linguistic perspectives. This may reflect a general reluctance in literary scholarship to engage more actively and systematically with an interdisciplinary, joint literary-linguistic approach to language in literature (De Beaugrande 1993; Gerbig and Müller-Wood 2006; Müller-Wood, Sarhimaa et al. 2012).

Finally, literary scholarship on Bowen's novels has noted a specific experiential aspect of reading her prose language: Reading her texts is difficult, and this difficulty supposedly leads to an experience of alienation or defamiliarisation of the reader from the text (Corcoran 2004, 3-4; Hinrichs 1998, 174-183; Jordan 2008, 57; Osborn 2009b, 4-6). As Osborn observes:

> we [readers] cannot, with anything akin to certainty, attribute the vague sense of awe and dread that we experience … to either the manifest political conflict or the personal conflict embedded within the more public context represented in her plots . . . (2006, 189)

While this difficulty of attributing emotions to narrative content in Bowen's novels "is perhaps what disturbs us most powerfully on reading her work" (Osborn 2006, 189), Bowen's readers may likewise experience a sense of "beauty" (Osborn 2006, 192). Osborn states that thematic analyses cannot provide answers to these questions and links Bowen's style to meaning, genre and reader expectations (2006; 2009b).

Regardless of the terminology used, most scholarly accounts assume a causal link between sentence structures and reading experience. Sentence structures in Bowen's language are identified as the source of incomprehension, which produces a sense of alienation and dread. There are two major lines of argumentation in literary scholarship: On the one hand, it has been argued that Bowen's prose language produces immediate, involuntary "visceral[…]" (Osborn 2006, 187) responses in readers. However, this physical aspect of reader experience is neglected in scholarly work on Bowen's novels. On the other hand, her prose sentences arguably elicit "some disorientation of sense, some deviation from standard meaning" (Osborn 2009b, 34). In particular, Bowen's use of syntax and punctuation are said to serve neither the purpose of "comprehension" (Osborn 2009b, 43) nor as a clear indicator "of meaning" (Osborn 2009b, 44). In addition, semantic and pragmatic aspects of her texts are seen as contributing to difficulties in processing, comprehension and interpretation (Hinrichs 1998, 174-183). For example,

some of Bowen's "tropes" are described as "artificial, elaborate and unfamiliar" (Osborn 2009b, 41; Bennett and Royle 1995, 15-16, 18, 66-68; Ellmann 2003, 5-6) and may inhibit "the easy concord between the reader and the writer" (Osborn 2009b, 40; Corcoran 2004, 3). Bowen's prose language is difficult on a syntactic, semantic and pragmatic level because it undermines the reader's linguistic and literary "expectations" (Corcoran 2004, 4), in other words, her style makes the reception and enjoyment of her texts cognitively more demanding (Osborn 2009a, 7). Therefore, "the intensity of reading" Bowen's novels need not "coincide with any clarity of understanding" (Osborn 2006, 187), and instead reading may result in an "unfamiliar and often frustrating contest between absorption and distraction" (Osborn 2009b, 41; Hinrichs 1998, 174).

To summarise, literary scholarship has identified and examined crucial aspects of Bowen's poetic practice which are of interest for this thesis. However, literary scholarship has as yet neither engaged with the abstract form of Bowen's novels nor with the linguistic structures of her prose language. There is as yet neither a collection of linguistic structures that can be considered as characteristic of Bowen's style, nor a linguistic analysis of such structures. Further, the notions of difficulty and ease in reading and incomprehension are not explicitly framed as an aesthetic experience which constitutes a part of Bowen's poetic practice. None of the supposed links between the syntax of the text, syntax processing by the reader, comprehension and aesthetic experience have ever been analysed and explained in detail. None of the above-mentioned notions concerning the reader draw on linguistic, neurolinguistic or neuroaesthetic research to support their claims, nor do they offer an explanatory account of sentence processing during the reading of Bowen's novels. However, I consider these observations by literary scholars as valid and valuable research, and they offer a fruitful starting point for my thesis.

1.3 Parameters of analysis: *The Last September, To the North* and *The Heat of the Day*

Bowen's literary œuvre comprises several collections of short stories, and ten novels which were published between 1926 and 1968. I have selected *The Last September* ((1929) 1998), *To the North* ((1932) 2006) and *The Heat of the Day* ((1948) 2002) for analysis because these novels differ from each other in respect of theme, and in their narrative and formal textual structure – their "shapes" (Bowen and Jones (1950) 2010f, 272). I have chosen recent editions of all novels, and to my knowledge there is no definitive edition of either of them. However, there is a slight deviation in punctuation

between two editions of *The Last September* (Bowen (1929) 1985; Bowen (1929) 1998). Since I do not have access to Bowen's manuscripts to verify which version is the original, I include this deviation into my argument where necessary. My text corpus consists of a collection of narrative episodes from the above novels. I have analysed episode and sentence structures, which, to my knowledge, has not been done before in regard to Bowen's novels.

The Last September, *To the North* and *The Heat of the Day* serve as examples of how and why difficulty and ease in sentence processing during literary reading may elicit aesthetic pleasure. These novels form a particularly well-suited set of examples because the relation between sentence structure, the experience of reading and ensuing aesthetic effects is not a new topic of inquiry yet has not yielded a conclusive account so far. I therefore approach a contentious issue in literary scholarship on Bowen's novels.

In an initial selection, I chose narrative episodes and individual sentences which are particularly difficult to read and elicit a pronounced sense of initial aesthetic displeasure, eventually yielding pleasure. Some of these episodes and sentences have been pointed out as difficult by literary scholars, while others have been mentioned by Bowen herself. In a second step, I narrowed the corpus down to episodes which are linguistically and semantically similar. I have selected 11 episodes from *The Last September*, 13 episodes from *To the North* and nine episodes from *The Heat of the Day*. These vary in length, from under half a page to several pages, a finding in line with Miall's (2004, 112) definition of narrative episodes.[8] I have conducted formal analyses of syntactic structures and non-linguistic patterns in *The Last September*, *To the North* and *The Heat of the Day*. In these episodes, linguistic and narrative organisation coincide, as they may in literary texts generally (Fabb 1997, 212; Miall 2004, 112, 127). All narrative episodes I have examined are formally coherent in that they show syntactically ambiguous sentence

[8] First, episodes in my corpus often begin and end with dialogue or shifts in temporal or spatial orientation (Miall 2004, 112, 127). Secondly, Bowen's episodes are semantically coherent parts of a story, which is the case when there is an "internal continuity in participants, time and location" (Fabb 1997, 193; Miall 2004, 112). All episodes in my corpus are land- or cityscapes, and fictional characters either occur as implicit onlookers or are absent (Miall 2004, 112, 127). Relationships between characters are discussed, often in reference to physical settings. This is in keeping with Bowen's observation that she is "a writer for whom place manifestly looms large" even though "[s]cene is only justified where it can be shown, or at least felt, to act upon action or character" ((1945) 1999, 40). Thirdly, Miall (2004, 127, cf. 112, 120) holds that narrative episodes may play a role in how readers regulate changing emotions in reference to the text. This notion can be supported by my finding that only selected episodes appear to engage the reader in specific ways. Moreover, the three novels have opening and ending episodes which resemble each other in linguistic, semantic and narrative aspects (Fabb 1997, 206-207). This is in keeping with Bowen's statement that openings are especially important to her ((1956) 1962f, 115-116; cit. in Lee 1999a, 214).

structures, negation on the word and sentence level, as well as parallelism, alliteration and rhyme, at the boundaries but also within the episodes.

In the following, I will briefly introduce the three novels and their structures, and indicate the episodes I have selected for analysis. *The Last September* is set in Ireland in the autumn of 1921 and describes life at an Anglo-Irish Big House preceding the Civil War. This novel shows the greatest degree of formal organisation of the three novels. It is subdivided into three equally long sections (circa 70 pages), which mirrors the narrative structure: Section one is entitled "The Arrival of Mr and Mrs Montmorency" (63 pages), section two is entitled "The Visit of Miss Norton" (70 pages), and section three is "The Departure of Gerald" (66 pages). Each of these has chapters of about ten pages. Part 1 (1-8) and part 2 (9-16) comprise eight chapters each, and part 3 comprises seven chapters (17-23). I have selected 11 episodes from this novel, nine of which are from part 1 (Chapters 1, 3, 4, 8), one from part 2 (Chapter 15), and one from part 3 (Chapter 24). Most of the aesthetically engaging episodes are situated in the first third of the novel. The opening and ending episodes of *The Last September* resemble each other in narrative structure and therefore frame the novel (Ellmann 2003, 66).

To the North is set in early 1930s London and describes the life of two young sisters-in-law, Cecilia and Emmeline Summers, who share a house after the death of Cecilia's husband, Emmeline's brother. *To the North* has 28 chapters of about ten pages each. As the title suggests, one protagonist, Cecilia, continually moves to the North, from a holiday in Italy back home to London, and the second protagonist, Emmeline, continues that move in a concluding car drive from London northwards. The selection of episodes was more difficult here because displeasurable and pleasurable reading experiences seemed to be limited to individual sentences and to only a few episodes. I have selected one episode from Chapter 1, one from Chapter 3, two from Chapters 5, 7 and 9 each, and one from Chapters 11, 16, 17, 18 and 28 each.

The Heat of the Day is Bowen's novel of the Second World War which tells the story of Stella, who does "not unimportant work" (Bowen (1948) 2002, 24-25) related to the war. Stella's lover Robert Kelway is a spy, as it emerges over the course of the novel. The novel traces Stella's confrontation with another man, also called Robert, who reveals her lover's activities to her. *The Heat of the Day* describes the atmosphere of war-time London, especially that of the Blitz in 1940 and 1942. *The Heat of the Day* is formally less coherent than the other two novels, and as Bowen herself points out:

> I was aiming to give an effect of fortuity, of a smashed up pattern with its fragments invecting one another, drifting and tapping rather like the broken ice which I described in the opening passage ten years before in *The Death of the Heart*. (Bowen and Brooke (1950) 2010e, 283)

In *The Heat of the Day*, Bowen was seeking to produce an effect similar to "the convulsive shaking of a kaleidoscope, a kaleidoscope also in which the inside reflector was cracked" (Bowen and Brooke (1950) 2010e, 283). Accordingly, and in contrast to the two earlier novels, *The Heat of the Day* has a non-linear narrative structure, with 17 chapters of about 20 pages each. The second from last and the final chapter are an exception, with Chapter 16 comprising 11 pages and the final chapter comprising 43 pages. I have selected nine episodes: The opening episode from Chapter 1, one episode from Chapter 3, three episodes from Chapter 5, two episodes from Chapter 7, and the ending episode from Chapter 17.

The selection of examples is not exhaustive, and readers other than me might find more or different ones. I have not tested the statistical significance or relative frequency of sentence structures in comparison to other literary texts, but I consider the selection to be qualitatively representative of the three novels (Miall 2007; Miall and Kuiken 1994).

1.4 A literary-linguistic perspective on Bowen's language

My thesis is situated within the field of literary linguistics. On the one hand, there has for a long time been a growing interest in combining literary and linguistic studies (De Beaugrande 1983; De Beaugrande 1989; De Beaugrande 1993; Fabb, Attridge et al. 1987; Gerbig and Müller-Wood 2006; Miall and Kuiken 1999; Miall and Kuiken 1994; Müller-Wood, Sarhimaa et al. 2012). On the other hand, theoretical and experimental research in neuroaesthetics and neurolinguistics is increasingly interested in examining the cognitive and neural foundations of reading, in non-literary and literary contexts. Yet drawing on and conjoining work from different fields involves risks as well as new opportunities (Coulson 2007; Eibl 2007; Jackson 2002; Koepsell and Spoerhase 2008; Miall 1995; Willems and Jacobs 2016). Some of these joint approaches are theoretical and very general. For instance, Armstrong's monograph *How literature plays with the brain* (2013) is written from a literary scholar's perspective. However, its argument is weakened by the extensive use of analogies between brain anatomy, neuronal processes and the kind of ideas human beings can have. By contrast, Zeki's work on conjoining neurobiology

and the humanities in the field of neuroaesthetics, seen from a neurobiological perspective (1999; 2014), is equally general, but its claims are based on experimentally tested assumptions. Others conduct experimental research on minute aspects of language processing in reading, such as Obermeier et al.'s (2013) work on poetry.

The aim of my thesis is to unify Bowen's critical notions about reading prose language and the observations of literary scholarship with research in neuroaesthetics and neurolinguistics. I seek to model an account of sentence processing during reading literary texts. Based on Bowen's writings about her poetic practice, the observations made by literary scholars and the results of my formal analyses, I pose these research questions:

(A) How do syntactic ambiguity, word and sentence level negation, and parallelism, alliteration and rhyme in Bowen's "narrative language at white heat" elicit difficulty and ease during sentence processing?

(B) How do difficulty and ease in sentence processing relate to aesthetic displeasure and pleasure during reading literary texts?

As the central hypothesis of my thesis, I propose that linguistic and interpretive difficulty during sentence processing is part of Bowen's poetic practice and is intended to elicit specific and predictable aesthetic effects in the reader. In doing so, I argue against the conception prevalent in literary scholarship on Bowen's novels that linguistic and interpretive difficulty associated with aesthetic displeasure are signs of a flaw in the text-reader relationship (Kind 2013, 130). In my view, the experience of suddenly alternating processing difficulty and ease is a source of aesthetic displeasure and pleasure, especially within selected narrative episodes. I suggest that ambiguity and negation can give rise to a sudden processing difficulty, yet have the potential to elicit aesthetic pleasure once this difficulty has been overcome. By contrast, parallelism, alliteration and rhyme elicit a sudden processing ease, and this in turn can elicit aesthetic pleasure. The alternation of difficulty and ease is not predictable for the reader, remains surprising and can be reproduced during re-readings of the same sentence.

In order to develop such a model of literary sentence processing, I combine theoretical and experimental neuroaesthetic research on the aesthetic experience of art reception and reading with linguistic accounts of structural aspects of literary language and with neurolinguistic accounts of sentence processing in ordinary and in literary language. To demonstrate the predictive and explanatory force of this new model of

literary sentence processing, I examine the forms of Bowen's literary prose and discuss their potential aesthetic effects. In the three main chapters of this thesis, Chapters 3, 4 and 5, I quote individual sentences for close analysis, as I did at the beginning of the Introduction. Although such formal syntax analyses do not represent neurocognitively real processing mechanisms, they are a tool of demonstrating the predictive and explanatory force of the model of literary sentence processing. I draw on experimental results in neurolinguistics and neuroaesthetics to gain knowledge – which is not accessible by subjective introspection – about the neurocognitive sources of difficulty and ease in real-time processing (Bornkessel-Schlesewsky and Schlesewsky 2009a, 2; Ingram 2007, 77-78). I do not offer experimental evidence for my own claims but combine the transferred knowledge about literary sentence processing with the responses of literary scholars who have discussed Bowen's language and offer descriptive accounts of their subjective reading experience, sometimes of the same sentences which I discuss.

Whenever I refer to "the reader", I therefore speak of a hypothesised reader reaction to sentence structures for which there is comparable empirical evidence in neurolinguistic studies of sentence processing. However, there are always individual differences in subjective reading experiences, especially when looking at literary reading rather than at the artificial setting of neurolinguistic studies, or when comparing lay and expert readers, who are likely to differ in their reading strategies (Mar 2004; Schumacher 2014, 156). Moreover, experimental research in large parts refers to non-narrative and non-literary texts, and their results are only applicable to my thesis under caution.

Nonetheless, I argue that a substrate of insights from neurolinguistic and neuroaesthetic studies can be used, tentatively, to consider literary texts and the reading experience they afford from a new perspective (Miall 1995, 280, 295-296; Oatley 2003, 493). (For a similar argumentation about the use of experimental evidence in a theoretical thesis see Fabb (30 April 2015)). Informing theoretical literary-linguistic analyses of Bowen's novels with results from theoretical and experimental neurolinguistic and neuroaesthetic research can contribute new perspectives on her novels to literary scholarship by being more precise in examining sentence structures while also being able to look at a greater variety of examples and greater complexity in linguistic structures in literary texts. Neurolinguistic and neuroaesthetic research can therefore help to answer questions about Bowen's texts which have so far been unanswered or even unanswerable from a literary perspective.

As a literary-linguistic thesis which partly draws on empirical research, it is indirectly related to but not identical with the earlier tradition of theoretical and empirical research on reading in literary studies, Reader Response theory, as represented by Stanley Fish and Wolfgang Iser. Iser considers gaps, *Leerstellen*, in the literary text to be a necessary precondition for literary reading. Gaps may occur on the narrative or the textual level such as in the syntactic, semantic or pragmatic structure of a text. However, Iser concedes that he can only name the potential existence of such gaps yet cannot offer an explanatory account (1971, 23). Further, Iser postulates that the degree to which a text challenges the reader to fill these gaps is an indicator of literary tradition, and Joyce's *Ulysses* serves as an example for Modernism which strongly relies on gaps in the text to involve the reader actively in the constitution of meaning (1971, 28-30). While I do not directly draw on Reader Response theory, some of the authors I work with refer to it (Hinrichs 1998; Miall and Kuiken 1994; Miall and Kuiken 1999; Miall 1995; Miall 2004; Miall 2007; Schrott and Jacobs 2011b; Jacobs 2015).

More recently, literary scholars have proposed models of literary reading which are related to the model I propose. For instance, Miall and Kuiken develop "a three-component model of literary reading" which is based on empirical research and offer a definition of "literariness" (1999, 121, 122, 125). According to this model, stylistic foregrounding elicits defamiliarisation, which in turn gives rise to the "modification of personal meanings" (Miall and Kuiken 1999, 121, 123). In this view, "literariness" results from the reader's "psychobiological inheritance that involves linguistic capabilities, feeling expression, and self-perception" (Miall and Kuiken 1999, 125). Their basic assumptions are relatively similar to the theoretical postulates of the model of literary sentence processing I describe in this thesis, thereby offering indirect support. However, my assumptions about neurocognitive processes in reading are inspired by a different and more recent state of research in neurolinguistics and neuroaesthetics. For instance, while Miall (1995) draws on LeDoux (1986)[9] for an account of "anticipation" and "feelings" in literary reading, I refer to Huron (2007), who draws on LeDoux (1996)[10] for an account of "expectation" during the reception of music (See Chapter 2). On the basis of the model I propose, I formulate a set of specific predictions, whereas Miall and Kuiken (1999) do not. Moreover, the neurocognitive model of literary reading by Jacobs includes most of

[9] LeDoux, J. E. "The neurobiology of emotion." *Mind and brain. Dialogues in cognitive neuroscience*. Eds. LeDoux, J. E., and W. Hirst. Cambridge: Cambridge University Press, 1986. 301-354.
[10] LeDoux, Joseph E. *The emotional brain.* New York: Simon and Schuster, 1996.

the ideas proposed by Miall and Kuiken (1999), and covers a neuronal, a neurocognitive, an affective-emotional and a behavioural level of explanation (Schrott and Jacobs 2011b, 492-520; Jacobs 2015).[11] This model does not contradict my assumptions, however, it seeks to account for literary reading as a whole, whereas I primarily focus on specific sentence structures which may be difficult to process and which may impact on aesthetic pleasure during literary sentence processing.

To summarise, in this thesis I hypothesise that individual sentence structures which are part of Bowen's "narrative language at white heat", especially in the "descriptive pieces", can render reading difficult or easy, yet in doing so, they give rise to the aesthetically pleasurable experience of "enlargement" and make reading "eventful". The model I develop reduces literary reading to sentence processing mechanisms, yet this is not to say that this is all that constitutes literary reading. Rather, this model can describe a central mechanism which governs literary reading, and its potential to elicit aesthetic pleasure. Therefore, the model is applicable to authors and texts other than those examined in this thesis.

[11] Bowen's term "eventful" is similar to that used by Schrott and Jacobs who speak of cognitive events (2011a, 429, "ein Denkereignis").

2. A model of literary sentence processing and aesthetic pleasure

In this chapter, I propose a model of literary sentence processing and aesthetic pleasure, that is, I offer a model which predicts and explains the potential of individual sentences in literary texts to elicit pleasure through impeding sentence processing. As in the example from *The Heat of the Day* in the Introduction, the difficulty of reading and correcting an initial misreading may be relatively subtle so that the reader may not be conscious of it. Yet I argue that the process of encountering and resolving difficulty produces aesthetic pleasure, and this should be ongoing during reading.

Although I suggest that sentence processing in reading non-literary and in reading literary texts underlie the same neurocognitive mechanisms, I also postulate that readers are likely to respond differently to processing difficulties in non-literary and literary texts. I further assume that Bowen treats each individual sentence in her novels as an artistic object, and that each sentence in the descriptive pieces exploits sentence processing in a desired manner. This special status of the sentence also holds for the reader, who treats each individual sentence in Bowen's novel as part of an artwork. That means that readers may be willing to accept difficult sentence structures as part of the artistic form of a literary text, while they might reject the same sentence in a non-literary text. While readers of Bowen's novel *The Heat of the Day* might accept the sentence "Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter" (98), even find it pleasing, it would be perceived as odd in a newspaper article. In the remainder of this thesis, I will refer to the process of reading literary texts as *literary reading* or *literary sentence processing*. This is a terminological choice and does not imply that reading as such differs in literary and other texts.

The aforementioned model of literary sentence processing must account for the concepts of processing fluency and the source of aesthetic pleasure on the one hand, and the sources of processing difficulty in the linguistic structure of Bowen's sentences on the other. For the purpose of developing such a model of literary sentence processing, I therefore combine existing accounts of aesthetic experience and pleasure – the model of aesthetic appreciation and aesthetic judgments (Leder, Belke et al. 2004; Leder and Nadal 2014), the fluency account (Reber, Schwarz et al. 2004), the concept of contrastive valence (Huron 2007) and that of opioid neurotransmitters (Biederman and Vessel 2006) – with an existing neurocognitive model of sentence processing – the extended Argument Dependency Model (eADM) (Bornkessel-Schlesewsky and Schlesewsky 2009a). All

accounts focus on two principal aspects, namely the time course and the functional distribution of processing: On the one hand, all accounts hold that perceivers process different aspects of a stimulus over time, and that this process encompasses several stages. While the exact number of proposed processing stages differs, all accounts assume, explicitly or implicitly, that these stages divide into early, automatised and late, deliberate processing. On the other hand, the relative ease or difficulty of processing (relative to a baseline processing cost) is used as a means of assessing the temporal and the functional distribution of the postulated processing stages. Neuroaesthetic research, including the fluency account, the concept of contrastive valence and research on opioid neurotransmitters in engaging with new stimuli, has as yet not been talked about in relation to neurolinguistic research generally, or the eADM in particular. I suggest that these diverse accounts cover distinct yet overlapping neurocognitive processes, all of which are potentially involved in literary reading and can therefore be integrated into a two-stage model of literary sentence processing and its aesthetic effects.

First, processing sentences in non-literary and literary texts alike comprises an automatised early linguistic processing stage. This stage applies to each lexeme in a sentence. In this stage, word category recognition and basic syntactic structuring occur, and the reader determines the link between the grammatical subject, verb and object phrase of a sentence. Parallel to that process, readers compute the plausibility of a lexeme by drawing on lexical-associative and semantic knowledge, which is informed in part by discourse context. Processing in the early stage is text-type independent and should hence be the same for sentences in non-literary and literary texts. In non-literary and literary sentences, this early stage is associated with processing fluency if processing is fast and easy, and with processing disfluency if processing is slow and difficult. Generally, fluency elicits pleasure, whereas disfluency elicits displeasure. In English, particular sentence structures are likely to elicit processing disfluency in early processing and hence trigger displeasure. This mechanism may be deliberately exploited for the poetic practice of literary authors and their texts.

Second, sentence processing of both non-literary and literary sentences comprises a late, deliberate processing stage which occurs after the early stage. This stage too applies to each lexeme in a sentence. In this stage, the reader forms an overall interpretation of the sentence by matching all previously attained information about the individual words in a sentence. Readers may match one linguistic form with different meanings in a non-literary text than they would do in a literary text, and this possibility arises from readers

drawing on world-knowledge and emotional environment in late processing. This late processing stage is associated with cognitive fluency if processing is fast and easy. Conversely, this processing stage is associated with cognitive disfluency if processing is slow and difficult. Cognitive fluency elicits pleasure, whereas cognitive disfluency elicits displeasure. This mechanism may be of importance in literary rather than non-literary texts.

The central tenet of my model is that aesthetic pleasure during literary sentence processing stems from the difference between early linguistic disfluency and late cognitive fluency, though not from the level of cognitive fluency itself. The resolution of difficulty in interpretation is inherently rewarding – an assumption supported by the concept of contrastive valence and the role of opioid neurotransmitters in engaging with visual stimuli. This relies on a basic processing mechanism which treats processing difficulty as indicative of a new, unknown and even potentially harmful stimulus, and rewards the engagement with such stimuli with an experience of pleasure. In the late processing stage, readers will tend to try and solve difficulties which they encounter in the early stage, and this requires the testing of different and potentially competing hypotheses about the structure and meaning of a sentence. Successful resolution of early difficulty results in cognitive fluency in late processing. Both expert and non-expert readers may experience aesthetic pleasure after resolving difficulty during reading: For non-expert readers, the initial difficulty may be relatively high, leading to high levels of disfluency. The achieved cognitive fluency may be relatively low but sufficient to elicit aesthetic pleasure. For expert readers, the level of initial disfluency may be lower, yet the level of achieved cognitive fluency may be relatively high. For the expert reader, the difference between early disfluency and late cognitive fluency may be greater, leading to greater aesthetic pleasure. However, readers may acquire a reading expertise over the course of reading a novel, thereby increasing their individual capacity to deal with difficulty and experience aesthetic pleasure.

This model is relatively unrevealing if applied to sentences which are simple, grammatical and easy to process. Such sentences may be judged as acceptable by the reader, both within a non-literary and a literary text. Conversely, the model is more revealing in relation to syntactic sentence structures which are difficult to process, such as the example from *The Heat of the Day* discussed in the Introduction. In a non-literary text, the reader may reject such a sentence as faulty, while the same sentence structure may be considered as forming part of a poetic practice in a literary text. The syntax may

be perceived as an instantiation of an artistic form. Instead of rejecting the sentence as faulty, the reader may engage with the syntactic form and experience the process of engaging with it as part of the reception of the literary text as an artwork. The generic context of any individual sentence which is unusual or perhaps even ungrammatical is therefore central to its potential to elicit aesthetic pleasure in the reader.

For the present study, the combination of difficulty in early processing and ease in late processing is particularly significant. As already discussed in the Introduction, literary scholarship on Bowen's novels holds that the "irregularities in the language, form, and content of her compositions" (Osborn 2006, 189) impede the comprehension and literary interpretation of individual sentences (Corcoran 2004, 3; Hinrichs 1998, 174; Osborn 2006, 189; Osborn 2009b, 34, 35). In an attempt to address this notion, I hypothesise that specific aspects of Bowen's syntax impede early, automatised processing. This difficulty in early processing should elicit processing disfluency and lead to displeasure, as would also happen in non-literary texts. In late processing, the reader may overcome this difficulty, and the process of understanding eventually leads to cognitive processing fluency and aesthetic pleasure, as would only happen in reading literary texts. The source of aesthetic pleasure is the difference between early disfluency and late cognitive fluency, not the level of cognitive fluency in itself. This model of literary sentence processing is not specific to the demands of Bowen's literary language, but should also help predict and explain effects of other literary texts which show unusual or ungrammatical sentence structures.

While the model is one of sentence processing during literary reading, it is based on more general insights into sentence processing and aesthetic pleasure. Whenever I speak of aesthetic pleasure, I mean pleasure in response to works of art rather than every-day items. In particular, the notion that fluency, i.e., the relative ease of understanding, is the source of pleasure, is related to the idea that literary reading may be regarded as a way of acquiring knowledge about the structure and the contents of narrative texts. This acquisition of knowledge is guided by preconceived concepts (Zeki 1999) which are linguistic, semantic and pragmatic in nature. The experience of encountering and solving difficulties during literary reading therefore involves processing mechanisms and the formation of percepts which are not specific to language and reading but can be specifically activated by language.

In the remainder of this chapter, I show why and how neuroaesthetics and neurolinguistics can be combined into the above model of literary sentence processing

and aesthetic pleasure. In order to do so, I will discuss neuroaesthetic research into the aesthetic experience of art reception and neurolinguistic research into sentence processing: In 2.1, I outline basic principles of neuroscience which underlie both neuroaesthetics and neurolinguistics. In 2.2 and 2.3, I discuss neuroaesthetics and neurolinguistics respectively, before I illustrate the compatibility of both fields for the model of literary sentence processing in 2.4. Finally, in 2.5, I offer specific predictions for the aesthetic effects of ambiguity, negation, parallelism, alliteration and rhyme in Bowen's literary language.

2.1 Neuroscience: The human brain and experimental methods

Neuroaesthetics and neurolinguistics belong to the field of neuroscience. While neuroaesthetics investigates the neurobiological and neurocognitive bases for aesthetic experience, neurolinguistics examines those of language processing. In both fields, theoretical and experimental research covers diverse topics, such as the anatomy of the brain, the role of neurotransmitters, the time course of information processing, and the ease and difficulty of information processing.[12]

Two of the most important experimental methods for assessing the functional role of cortical and subcortical areas in specific processes are ERP and fMRI: For examining the temporal dimension of processing mechanisms in the human brain, researchers use Event Related Potentials (ERP): ERP is an "electrophysiological technique" which is "based on the human electroencephalogram (EEG)" and offers "a measure of changes in

[12] The surface of the human brain consists of the cerebral cortex, a thin layer of tissue which encompasses six layers of cells and consists of grey matter (Carter 2014, 66-67). The cerebral cortex can be described in three distinct ways, all of which are relevant in neuroaesthetics and neurolinguistics. While these different ways of mapping the brain partly overlap, they do not always fully "coincide" (Carter 2014, 67; Amunts 2008, 33). First, the left and right hemisphere of the brain can be subdivided into lobes, each of which can be further subdivided into distinct gyri ("bulges") and sulci or fissures ("grooves") (Carter 2014, 66). Secondly, the cortex can be subdivided by taking into account the cytoarchitecture, i.e., the structure of cells, and the receptorarchitecture, i.e., the presence and distribution of receptors for neurotransmitters (Amunts 2008, 33). Thirdly, brain regions can be defined according to their function. This means that these anatomical areas may have distinct functions and show activity in response to specific stimuli. For instance, the visual cortex in the occipital lobe of the cerebral cortex is responsible for processing visual stimuli, and different aspects of a stimulus are processed in distinct areas within it (Carter 2014, 82-83, 255). Likewise, Broca's area in the frontal lobe and Wernicke's area in the temporal lobe of the left hemisphere are the two classical language areas, thought to be involved in semantic and syntactic aspects of language processing (Amunts 2008, 36, 39; Carter 2014, 148-149). In addition to the cerebral cortex, the brain has subcortical parts, not visible on the surface. The anatomical areas in the cerebral cortex and in subcortical areas of the brain are not activated in an isolated manner, but cooperate with other areas, forming "neural networks" in which "thousands of neurons and the connections between them (synapses)" (Carter 2014, 41) are activated together (Leder and Nadal 2014, 455).

the electrical activity of the brain" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 4). In the brain, neurons form groups and transmit signals in the form of electrical charges. Increases in local activity indicate that specific processes are currently ongoing in an anatomical or functional area of the brain. Increases in activity are always measured relatively to default state activity. For ERP measurements, electrodes are attached to the scalp of test subjects and trace electrophysiological changes over time in response to experimental stimuli. In neurolinguistics, these changes are then interpreted as indicative of specific language processing operations (Bornkessel-Schlesewsky and Schlesewsky 2009a, 4-11; Carter 2014, 6, 12). To map the spatial distribution of tasks in the brain, researchers use functional Magnetic Resonance Imaging (fMRI). fMRI exploits the fact that the human brain is never inactive and always requires a default level of blood oxygen. When cognitive load increases, blood oxygen demand rises in the brain. For example, processing a sentence which is difficult to understand requires more cognitive effort and hence more blood oxygen than processing a sentence which is easy to understand. fMRI does not directly measure the amount of blood oxygen in the brain but performs specific measurements which then allow researchers to draw conclusions about reinstatements of the default state level activity after increases in activity (Bornkessel-Schlesewsky and Schlesewsky 2009a, 3-35; Carter 2014, 12-13; Ingram 2007, 286-296). Combining the results from temporal ERP and spatial fMRI mappings of neural activity allows researchers to draw conclusions about the time course and the spatial distribution of specific processing mechanisms. This is important because the temporal and spatial distinction of activity in the brain is seen as an indicator of the functional separation of individual processing aspects. For instance, sentence processing involves syntactic and semantic processes. These can be traced back to temporally and spatially distinct neural activity. Increases in local activity can be traced to problem detection and problem solving in relation to syntactic or semantic aspects.

In the following, I am discussing theoretical models and results of experimental studies in the fields of neuroaesthetics and neurolinguistics which are significant for this thesis because they allow me to conceptualise the time course, the functional differentiation and the cognitive load of specific aspects of sentence processing during literary reading. This enables me to predict and explain specific processing problems and aesthetic effects in relation to ambiguity, negation, parallelism, alliteration and rhyme. In the following, I outline major research questions, models and research results in neuroaesthetics and neurolinguistics respectively. In this and in the subsequent section, I

will point out why these two fields of research are compatible in certain respects and therefore can be combined in the model of literary sentence processing.

2.2 Neuroaesthetics: Sources of aesthetic pleasure

In this section, I introduce the field of neuroaesthetics before characterising the term "aesthetic pleasure" and illustrating the time course and possible sources of aesthetic pleasure, as accounted for by the processing fluency account, the concept of contrastive valence and that of opioid neurotransmitters.

Neuroaesthetics is a relatively young field, which began to produce theoretical and experimental work in the early to mid-2000s,[13] and is only in some respects continuous with the philosophical research strand of aesthetics which originates in the eighteenth century and is "devoted to conceptual and theoretical inquiry into art and aesthetic experience" (Levinson 2005, 3; cit. in Juslin 2013, 246).[14] The term "aesthetics" itself was coined by the eighteenth century philosopher Alexander Baumgarten (Goldman 2005, 255) and in its original meaning describes "cognition by means of the senses, sensuous knowledge" and was later expanded to include "the perception of beauty by the senses especially in art" (Goldman 2005, 255; Guyer 2005, 25).[15] Current aesthetics research centres on object properties, subjective attitudes of the perceiver and the experience of perceiving an object.[16] By contrast, the term "neuroaesthetics" was coined by the neurologist Semir Zeki in order to illustrate his claim "that the production and appreciation of artistic features could be related with specific brain processes" (Leder and

[13] At this time, the advance of experimental methods such as ERP and fMRI allowed for new insights into "understanding the biological foundations of higher cognition" (Leder and Nadal 2014, 455; Bromberger, Sternschein et al. 2011, 1; Cela-Conde, Agnati et al. 2011, 40-42, 44; Chatterjee and Vartanian 2014, 370, 374; Di Dio and Gallese 2009, 682; Jacobsen 2014, 472; Vessel, Starr et al. 2012, 1). The earliest formulations of an "empirical aesthetics" with regard to neurological foundations were made by Berlyne, such as in 1966 (Cela-Conde, Agnati et al. 2011, 41; Leder and Nadal 2014, 454), though many of his assumptions could not be confirmed (Leder and Nadal 2014, 454-455; Martindale, Moore et al. 1990).

[14] However, philosophers as far back as Aristotle and Plato have been concerned with similar questions, inspiring further research (Guyer 2005, 25-26; Reber, Schwarz et al. 2004, 364).

[15] This definition of aesthetics has been expanded by, for instance, Kant, who included "nature" alongside art, and more recent approaches focus "not only on judgements or evaluations, but properties, attitudes, experience and pleasure or value as well, and its application is no longer restricted to beauty alone" (Goldman 2005, 255).

[16] Aesthetics considers the "concepts" of "aesthetic properties", "aesthetic experience" and "aesthetic attitude", all of which "are inter-definable" (Goldman 2005, 255; Levinson 2005, 3), and "art" (Levinson 2005, 4). According to Levinson, aesthetic properties "are perceptual or observable", "directly experienced" and must be "relevant to the aesthetic value of the object that possesses them" (2005, 6; Goldman 2005, 258). A central problem is the distinction between non-aesthetic and aesthetic properties (Goldman 2005, 256; Levinson 2005, 6).

Nadal 2014, 455; Di Dio and Gallese 2009, 682). Neuroaesthetics is in some ways a continuation of traditional aesthetics but is also in many respects a very different field. For instance, Reber et al. (2004) identify an objectivist and a subjectivist view in aesthetics, which assume that object properties or subjective factors respectively determine aesthetic experience. However, in their neuroaesthetics account Reber et al. assume a third view, the interactionist perspective, proposing that object properties and subjective factors interact to produce aesthetic experience (2004, 364-365). Thus, while neuroaesthetics takes up some basic strands of inquiry from traditional aesthetics, the focus lies on the underlying neurological processes. For example, while Levinson understands "beauty" and "sublimity" (2005, 6) as object properties, neuroaesthetics would argue that these can be defined in terms of neurocognitive processes in the perceiver's brain (Ishizu and Zeki 2011; Vessel, Starr et al. 2012, 7; Zeki and Ishizu 2014).

Moreover, neuroaesthetics is, on the one hand, continuous with aesthetics in that it examines aesthetic experiences within the context of art such as painting, sculpture, music and poetry (Di Dio and Gallese 2009, 685, 686; Leder 2013, 28-29; Lüdtke, Meyer-Sickendieck et al. 2014; Obermeier, Menninghaus et al. 2013). In the attempt to account for aesthetic experience within the context of art reception, theoretical models and experimental studies in neuroaesthetics therefore refer to the humanities, especially the history of the visual arts (Cela-Conde, Agnati et al. 2011, 39-40, 47; Chatterjee and Vartanian 2014, 372; Leder 2013, 27-28; Leder and Nadal 2014, 443-444; Zeki 2013; Zeki and Ishizu 2014). On the other hand, neuroaesthetics is discontinuous with aesthetics because researchers investigate the neurobiological and neurocognitive foundations of aesthetic experience, aesthetic emotion, and of aesthetic judgment and appreciation, and for that purpose draw on previous research in "cognitive neuroscience" (Chatterjee and Vartanian 2014, 370; Di Dio and Gallese 2009, 682, 686) and neuropsychology (Bromberger, Sternschein et al. 2011; Cela-Conde, Agnati et al. 2011, 41-42).

Aesthetic experience and aesthetic pleasure

In aesthetics and neuroaesthetics, the terms aesthetic experience and pleasure are central, and neuroaesthetics draws on the earlier tradition in its attempt at a definition. In aesthetics, aesthetic experience means "distinctive experiences or states of mind", such as "attitudes, perceptions, emotions, or acts of attention" (Levinson 2005, 6). It has been suggested that aesthetic experiences differ from non-aesthetic ones in a "detachment from

desires, needs and practical concerns" (Levinson 2005, 6). For instance, in classical aesthetics, aesthetic experience was taken to be a state of "disinterested interest" (Chatterjee and Vartanian 2014, 372). However, disinterested interest does not denote a state of detachment from the object that is perceived but rather pertains to "mental states" which "occur when viewers are deeply engaged with an object without accompanying desires to acquire, control, or manipulate it" (Chatterjee and Vartanian 2014, 372). A definition of aesthetic experience as derived from Kant (Goldman 2005, 259) therefore renders aesthetic experience as "the full engagement of our mental (perceptual, cognitive, affective) capacities and the felt intensity of the experience that results" (Goldman 2005, 262).[17] This definition applies to the reception of artworks in particular.

Experiences which are generally understood as aesthetic in neuroaesthetics are "pleasure, fear, disgust, sadness, confusion, awe, joy, [the] sublime, and beauty" (Vessel, Starr et al. 2012, 7). These may occur in art and in other contexts. In neuroaesthetic terms, aesthetic experience generally consists of distinct and measurable neurocognitive correlates. In this approach, aesthetic experience cannot be described in terms of formal characteristics of the objects that are perceived (Zeki and Ishizu 2014) but instead, aesthetic experience relates to the perceiver. As such, aesthetic experience can be defined as "hedonic" (Vessel, Starr et al. 2012, 1) and "profoundly gratifying" (Biederman and Vessel 2006, 247). By definition, aesthetic experience involves "sensation and perception" (Vessel, Starr et al. 2012, 1), as well as "emotion and self-reflection" (Vessel, Starr et al. 2012, 1, 2, 9; Chatterjee and Vartanian 2014, 372; Oatley 2003). In aesthetic experience, the "sensory-motor, emotion-valuation, and meaning-knowledge neural systems" (Chatterjee and Vartanian 2014, 370) interact with each other and with "reward-related centres" (Di Dio and Gallese 2009, 682; Belke, Carbon et al. 2010, 215; Biederman and Vessel 2006).[18] While the "ability" of individuals to have aesthetic

[17] In this process, the "engagement" of the "subjective capacities" of the individual perceiver "correlates with focus on representational, expressive, symbolic and higher order formal properties, as these interact and emerge from more basic sensory and formal properties" (Goldman 2005, 262-263). This applies to art in particular, and according to Goldman, "[g]reat art challenges" the perceiver on all three levels, and that "[t]o meet all these challenges simultaneously is to experience aesthetically" (2005, 263). However, aesthetic experience does not exclusively rely on the object or its properties but requires aesthetic attitude: While Goldman considers aesthetic attitude as the third central concept in aesthetics, his argument is the same as in Levinson's (2005, 263-266) treatment of aesthetic experience, centering on the notion of disinterested interest.

[18] The "reward circuit" involves "reward representation, prediction and anticipation, affective self-monitoring, emotions, and the generation of pleasure" (Leder and Nadal 2014, 455). There is "attention-related enhancement of activity in sensory processing and heteromodal convergence zones" (Leder and Nadal 2014, 455). A third neural network is responsible for "evaluative judgment" and the "allocation of

experiences is grounded in "universal" mechanisms (Vessel, Starr et al. 2012, 11), these experiences are highly "subjective" because they depend on contextual factors such as an individual's knowledge about and previous encounters with an object, as well as "cultural norms" (Vessel, Starr et al. 2012, 1). All these factors appear to be processed according to "personal relevance" (Vessel, Starr et al. 2012, 11), in other words, processing always depends on the individual reader's previous and current experience with a specific stimulus.

Aesthetic experiences in relation to works of art are similar to every-day experiences, yet they are detached from any direct need for a real physical response and involve "disinterested interest", as described earlier (Chatterjee and Vartanian 2014, 372; Brown, Gao et al. 2011, 250; Vessel, Starr et al. 2012, 1). Aesthetic experience should not be conflated with art or art reception because it can occur in a variety of contexts (Bullot and Reber 2013, 164; Chatterjee and Vartanian 2014, 370; Leder and Nadal 2014, 445; Zeki 2014, 13). Conversely, art may not always evoke or aim at evoking aesthetic experiences in the perceiver. Aesthetic experience should not be conflated with appreciation of "aesthetic value" (Reber, Schwarz et al. 2004, 365). Especially within the context of modern and abstract art, aesthetic pleasure may not be seen as desirable and may consequently not form the basis for aesthetic judgments (Cela-Conde, Agnati et al. 2011, 41; Leder, Belke et al. 2004, 490-491; Leder and Nadal 2014, 445, 446).

Based on this body of neuroaesthetics research, I characterise aesthetic pleasure in literary reading as meaning to "perceive-feel-sense an artwork" (Di Dio and Gallese 2009, 682). For my thesis, aesthetic pleasure is an experience which is in part triggered by the structure and content of the text but relies on the processing experience itself. This includes universal characteristics of language- and narrative processing, as well as the individual knowledge and experience of a reader. Literary reading differs from non-literary reading in that aesthetic pleasure primarily depends on the reader's evaluation of processing ease and difficulty caused by specific structural aspects of a text. In the following sections, I will look at early and late stages of processing in aesthetic experience, at sources of aesthetic pleasure and at the role of neurotransmitters in these processes.

attentional resources" as well as "retrieval of information from memory to contextualize the stimuli and judgment" (Leder and Nadal 2014, 455).

A model of aesthetic appreciation and aesthetic judgment

I will now illustrate the tenets of Leder et al.'s (Leder, Belke et al. 2004; Leder and Nadal 2014)[19] historically and contextually sensitive "model of aesthetic appreciation and aesthetic judgment", which forms part of the model of literary sentence processing I propose. Leder et al.'s model explains the neurocognitive mechanisms underlying aesthetic experiences in art reception (Leder, Belke et al. 2004, 489). Perceivers who have an aesthetic experience, appreciate or judge artworks recruit at least the three distinct neural networks of perception, cognition and affect. These interact and give rise to what is perceived as a coherent aesthetic experience (Leder and Nadal 2014, 455).[20] According to the model, aesthetic emotion such as pleasure during art reception has sources in early, automatic perceptual, and in late, deliberate cognitive processing mechanisms. Because aesthetic pleasure or displeasure are independent of aesthetic judgment, positive or negative aesthetic emotions during the reception of art do not always result in favourable aesthetic judgments or appreciation of a painting, sculpture or novel as a good work of art. This distinction between early, automatic and late, deliberate processing inspires my assumption of such distinct stages during sentence processing.

Leder et al.'s model is modular and postulates five hierarchical processing stages which divide into early and late processing (2004, 490-491). In the early and the late processing stage respectively, different cognitive, affective and emotional processing mechanisms "occur simultaneously" (Leder, Belke et al. 2004, 493), parallel to which aesthetic emotion arises and is maintained (Leder, Belke et al. 2004, 501; Leder 2013, 33). Before the perceiver begins to engage with a work of art, contextual aspects, such as the situation in which a work of art is encountered or information and expectations the perceiver may have about the artwork, artist or genre, may influence perception (Leder, Belke et al. 2004, 493-494; Leder 2013, 29-30). In the early, "automatic" processing stage, the perceiver performs "perceptual analyses" (Leder and Nadal 2014, 448; Leder, Belke et al. 2004, 494-495; Leder 2013, 30-31).[21] In visual perception, this includes

[19] I refer to the earlier version of the model (Leder, Belke et al. 2004) for the description of the processes involved because the more recent article does not offer an explicit description of the model (Leder and Nadal 2014).

[20] The processes underlying aesthetic experience and appreciation do not rely on a single anatomical area in the brain (Leder and Nadal 2014, 455, cit. Cela-Conde et al., 2012; Chatterjee, 2014; Vessel et al., 2012). All neural networks involved are likewise important parts of non-artistic and non-aesthetic "domains of human experience" (Leder and Nadal 2014, 456; 455-456; Brown, Gao et al. 2011).

[21] In visual arts, "[b]asic" (Leder and Nadal 2014, 494) processing of the stimulus occurs in this stage. I suggest that "[p]erceptual analyses" (Leder, Belke et al. 2004, 494; Leder and Nadal 2014) would correlate

colours and forms. Subsequently, object familiarity, novelty, complexity and prototypicality play a role. For example, colours, forms or contents may be understood as prototypical of an individual "artist or an art school" (Leder, Belke et al. 2004, 496). These factors all play into "implicit memory integration" of which the perceiver is not consciously aware (Leder, Belke et al. 2004, 495; Leder 2013, 31-32). This stage concludes with the "explicit classification" of perceptual analyses with semantic and stylistic aspects, a process of which the perceiver is aware and which requires "knowledge" (Leder, Belke et al. 2004, 497). In the late, "deliberate" stage of processing, perceivers interpret the work of art in relation to themselves, and within a historic and cultural context (Leder, Belke et al. 2004, 497), which is called "cognitive mastering" (Leder, Belke et al. 2004, 499-501).

When we engage with artworks, two "relatively independent" outcomes are likely, namely "aesthetic emotion" and "aesthetic judgment" (Leder, Belke et al. 2004, 492, 502-503; Leder and Nadal 2014, 448; Chatterjee and Vartanian 2014, 371). Aesthetic emotion results from the "continuous affective evaluation" of the artwork throughout the engagement with it (Leder and Nadal 2014, 448; Leder, Belke et al. 2004, 501-502). While understanding and interpreting an artwork "results in positive changes for the 'affective state'", inducing positive aesthetic emotions such as "pleasure or satisfaction" (Leder, Belke et al. 2004, 501), "unsatisfactory processing" leads to negative aesthetic emotion (Leder, Belke et al. 2004, 502, 503; Belke, Carbon et al. 2010, 216).[22] Independent of the nature of aesthetic emotion, the perceiver forms "aesthetic judgments" (Leder, Belke et al. 2004, 502). Because aesthetic emotion and judgment are outcomes independent of each other, the perceiver may form a negative aesthetic judgment even when visually enjoying an artwork and vice versa. For instance, the perceiver may enjoy viewing a painting, yet conclude that this painting "is a poor example" of a particular artist's œuvre (Leder, Belke et al. 2004, 502, 503).

The postulated independence of aesthetic emotion and aesthetic judgment may be exploited by artists who seek to challenge their perceivers on a cognitive rather than a perceptual level. For instance, the perceptual aspects of visual processing, such as colour and shape recognition, can be unproblematic, whereas understanding and interpreting the meaning of the artwork are more demanding (Leder, Belke et al. 2004, 502-503; Leder

with auditory or visual processing of a linguistic input string in a model of literary sentence processing. This is of no further interest in this thesis.

[22] For research on empathy in aesthetic experience see (Casati and Pignocchi 2007; Freedberg and Gallese 2007; Gallese and Freedberg 2007; Lüdtke, Meyer-Sickendieck et al. 2014).

2013, 33). If there are different possible interpretations of the artwork – for example when it is visually or linguistically ambiguous – the reader must engage with them "until a satisfactory result is achieved" (Leder, Belke et al. 2004, 500; Belke, Carbon et al. 2010, 219). Leder et al. call the repeated testing and rejecting of interpretations "loops of processing" (2004, 500). Running such loops, that is, the process of interpretation itself, may give rise to pleasure if it produces cognitive fluency (Leder, Belke et al. 2004, 500; Leder and Nadal 2014, 448; Belke, Carbon et al. 2010, 219).[23]

Even though most of the assumptions on which the model is based stem from research into processing (modern) visual art, it is not modality-specific and can accommodate literary reading (Leder, Belke et al. 2004, 466, 489-490, 504; Schrott and Jacobs 2011b, 495). While accounting for shared processes in the aesthetic experience of works of art in different perceptual modalities is important (Di Dio and Gallese 2009, 686; Jacobsen 2014, 471; Leder, Belke et al. 2004, 504), attention must be paid to specific processes of art reception in painting, music and literature which "may differ quite substantially along sensory, perceptual, affective, conceptual, executive and more parameters" (Jacobsen 2014, 471; Cela-Conde, Agnati et al. 2011, 41). For instance, literary texts rely on the structure of language and the decoding of "concrete semantics" in a way visual art does not (Leder, Belke et al. 2004, 504).

In the following, I outline major research results in the wake of Leder et al.'s (2004) influential model (Jacobsen 2014, 471, 472; Leder 2013, 28-29, 34-35; Leder and Nadal 2014, 448, 455-456)[24] addressing functional and temporal processing, and I sketch results obtained by ERP and fMRI, experimental methods which allow researchers to map the functional involvement of brain areas in aesthetic experiences generally and in the perception of art more specifically (Belke, Carbon et al. 2010, 220-221; Cela-Conde, Agnati et al. 2011, 42-43; Jacobsen 2014). I consider the distinction between early and late processing, the concept of processing fluency, that of the role of opioid neurotransmitters and of contrastive valence. As these concepts and experimental studies mostly refer to visual processing, I therefore turn to a neurocognitive model of sentence processing in the subsequent section in order to account more specifically for the linguistic mechanisms which support reading.

[23] The review of the initial model (Leder, Belke et al. 2004) includes the term "fluency" in the figure of the model (Leder and Nadal 2014, 448), yet the role of fluency in aesthetic emotion is not discussed.

[24] In neuroaesthetics, information processing models dominated the early phase of modelling aesthetic perception (Cela-Conde, Agnati et al. 2011, 42; Leder, Belke et al. 2004; Leder and Nadal 2014), rather than connectivity models (Chatterjee and Vartanian 2014, 371).

Early and late processing

As I have suggested earlier in the sketch of the model of literary sentence processing, the aesthetic pleasure felt during literary reading may develop over time, encompassing an early and a late processing stage. This assumption is grounded in ERP studies which offer evidence for the notion that "evaluative judgments" about visual stimuli as beautiful or not beautiful are formed over time (Jacobsen and Höfel 2003; Jacobsen 2014). In an early processing stage "early impression formation" occurs, as indicated by an ERP response around 300 to 400 ms after stimulus onset for stimuli that are rated as "not-beautiful" (Jacobsen and Höfel 2003, 297, 289; Jacobsen 2014, 472; Leder and Nadal 2014, 448). The late processing stage involves "evaluative categorization" and is detectable as an ERP response at "around 600 ms after" stimulus onset (Jacobsen and Höfel 2003, 289, 297; Jacobsen 2014, 472).[25] Aesthetic evaluations of visual stimuli are formed only when perceivers are asked to do so (Höfel and Jacobsen 2007, 20, 30).

This means that the mere sensory perception of an object is not sufficient for the engagement with it as an object of art. Rather, the perceiver is also required to engage with the object by drawing on existing knowledge and context. These two aspects of processing, the sensory perception and the contextualisation, are spread out over an early and a late stage. Moreover, the perceiver has to engage with the object intentionally, that is, the perceiver must be aware *that* the object he is engaging with is an object of art, or at least treat it as such. These are very general processes and may apply to aesthetic engagement with objects other than visual patterns as in the above studies (Jacobsen 2014). Indeed, as I will outline in greater detail later on, the early and late stages of stimulus processing of these ERP studies correlate with the temporal sequence of early and late stages in a neurocognitive sentence processing model, the eADM (Bornkessel-Schlesewsky and Schlesewsky 2009a). While I have now shed some light on the general time course of processing stimuli, I argue that the potential source of aesthetic pleasure is not this temporal sequence. In the following section, I will outline potential sources for aesthetic pleasure in the early and late processing stage respectively during literary reading.

[25] The first ERP response is "an early frontocentral phasic negativity" (Jacobsen and Höfel 2003, 296), whereas the second ERP signal is a "late positive potential" (Jacobsen 2014, 472; Jacobsen and Höfel 2003, 289, 297).

Processing fluency is the source of aesthetic pleasure

In this thesis, I follow the interactionist perspective on aesthetic experience, as proposed by Reber et al., (2004). Based on the model of literary sentence processing, I postulate that the process of resolving early processing difficulties, associated with disfluency, leads to cognitive fluency and hence to aesthetic pleasure. This assumption is based on the concept of processing fluency, which advocates the notion that "*aesthetic pleasure is a function of the perceiver's processing dynamics*" (Reber, Schwarz et al. 2004, 364, italics in orig.; Armstrong and Detweiler-Bedell 2008, 309). In this view, the process of perceiving objects is partly characterised by "parameters" such as "speed and accuracy", which are unrelated to the semantic meaning of that object (Reber, Schwarz et al. 2004, 366). This holds for visual, auditory and linguistic stimuli within the context of art and non-art perception (Kinder, Shanks et al. 2003; Reber, Schwarz et al. 2004, 366; Volz, Schooler et al. 2010; Winkielman, Halberstadt et al. 2006).[26]

Although processing fluency is difficult to "measure" empirically (Leder 2013, 32; Belke, Carbon et al. 2010, 220; Volz, Schooler et al. 2010), one may plausibly assume that fluency occurs both in the early and late stage of processing. Early physical stimulus processing is associated with perceptual fluency, whereas later semantic interpretation relates to cognitive fluency (Belke, Carbon et al. 2010, 214; Leder 2013, 32; Menninghaus, Bohrn et al. 2015, 48; Obermeier, Kotz et al. 2016, 363; Reber, Schwarz et al. 2004, 366; Schrott and Jacobs 2011b, 495). In both stages, high fluency occurs when a stimulus can be processed fast, easily and correctly. Conversely, disfluency, or non-fluency, occurs when a stimulus causes a disruption in processing, is difficult to process or has been processed incorrectly (Leder 2013, 32).

Processing fluency is particularly interesting for this thesis because it is thought to have an effect on affect and aesthetic response: The basic tenet is that "*[t]he more fluently perceivers can process an object, the more positive their aesthetic response*" (Reber, Schwarz et al. 2004, 364, 365, 367, italics in orig.). Because processing fluency in itself is not consciously perceived *as* fluency, perceivers tend to attribute their "positive affect elicited by processing fluency" to the object itself (Reber, Schwarz et al. 2004, 367). The

[26] The role of fluency in general decision making and judgment formation has been examined experimentally (Bullot and Reber 2013; Kinder, Shanks et al. 2003; Reber, Schwarz et al. 2004, 366; Volz, Schooler et al. 2010; Winkielman, Halberstadt et al. 2006), and there is both theoretical and experimental work on the role of fluency in the context of poetry (Menninghaus, Bohrn et al. 2015; Obermeier, Menninghaus et al. 2013; Obermeier, Kotz et al. 2016) and visual art (Belke, Carbon et al. 2010; Bullot and Reber 2013; Jakesch, Leder et al. 2013; Leder, Belke et al. 2004; Leder and Nadal 2014).

affect, or "feelings", involved in any processing experience are therefore used "as a source of information in their own right" (Reber, Schwarz et al. 2004, 367). In this view, "[h]igh fluency" is an indicator of "a positive state of affairs" and signals "successful recognition of the stimulus, error-free processing, or the availability of appropriate knowledge structures to interpret the stimulus" (Reber, Schwarz et al. 2004, 366). Conversely, the less fluently an object can be processed, the less positive are the attributions of aesthetic qualities to the object that has been perceived. The central notion here is that perceivers misattribute any aesthetic pleasure which arises from processing fluency to the object of art, not to the processing mechanism itself.

The relation between processing fluency and aesthetic pleasure can be mediated by characteristics of the individual perceiver and by features of the perceived object. On the one hand, repeated engagement of a perceiver with a stimulus may elicit "implicit learning of stimulus structure" (Reber, Schwarz et al. 2004, 370), thereby enhancing processing fluency and aesthetic pleasure. In part, aesthetic pleasure depends on the reader's individual motivation, goals, knowledge and expectations, as well as the willingness to engage with difficulty in perceptual and interpretative processes (Armstrong and Detweiler-Bedell 2008; Belke, Carbon et al. 2010). On the other hand, processing fluency can be enhanced by object features such as prototypicality, goodness of form, symmetry and figure-ground contrast, and this holds irrespective of content (Reber, Schwarz et al. 2004, 365, 368-370).

Sentence structures which are difficult to process are of particular interest for me, both in their syntactic form and in their semantics. I have suggested that processing these sentences elicits disfluency in early processing and only elicits aesthetic pleasure if the reader achieves cognitive fluency in late processing. This assumption is corroborated by the fluency account as proposed by Reber et al. (2004): While simpler stimuli are generally thought to be easier to process, and therefore more likely to elicit processing ease and aesthetic pleasure, Reber et al. (2004, 373) postulate that complex stimuli which are difficult to process may sometimes be more appealing than simpler ones. For example, ambiguity in the structure or content of a stimulus is a form of complexity, rendering processing difficult and disfluent. Even though processing fluency is initially reduced during reception, ambiguous works of visual art have been experimentally shown to be more interesting and more aesthetically appealing than simpler ones (Jakesch, Leder et al. 2013). Experimental studies therefore support the hypothesis that a reduction in early processing fluency "due to complexity" may be compensated for in late cognitive fluency

which is related "to meaningfulness" (Reber, Schwarz et al. 2004, 373-374).[27] Especially within the context of the visual arts, disfluency may serve to disrupt the process of physical stimulus perception, yet enhance the perceiver's conceptual, semantic engagement with a work of art (Bullot and Reber 2013, 135). In such a case, disfluency serves as a pointer towards a "problem" and may trigger "analytical thinking" (Bullot and Reber 2013, 136). Because complex stimuli may be open for more than one interpretation, they may engage the perceiver more actively in the process of assigning meaning to an object. While this may seem to contradict the processing fluency account, this process of active engagement may be aesthetically pleasurable once the perceiver is either familiar with an artist's practice or has acquired sufficient knowledge about the artistic tradition within which the work of art has been produced and is perceived (Bullot and Reber 2013, 135-136). By drawing on structures that are difficult to process, artists may therefore "deliberately" seek out to induce "states of nonfluency" (Leder 2013, 32; Belke, Carbon et al. 2010, 214; Bullot and Reber 2013, 135-136; Reber, Schwarz et al. 2004, 365), thereby modulating the ease with which perceivers perceive a work of art and derive aesthetic pleasure from it. While Bullot and Reber suggest that "transitions between fluent processing and disfluency, and vice versa, could … serve as a cue or guide to inferences" (2013, 135), I propose that the alternation from early disfluency to late fluency is the source of aesthetic pleasure during the processing of individual sentences in literary texts.

To summarise, the alternation between early disfluency and late cognitive fluency is a central notion in this thesis. I suggest that aesthetic pleasure during literary reading depends in part on the linguistic structures and content of Bowen's language and in part on the universal and individual processing mechanisms of her readers; I therefore propose an interactionist rather than a subjectivist or objectivist perspective. This means that aesthetic pleasure is elicited through the alternation from early disfluency to late fluency in the processing of difficult structures during reading. In the next paragraph, I turn to the concept of contrastive valence and research on opioid neurotransmitters for an

[27] This argument seemingly contradicts the assumption of a linear relation between processing fluency and aesthetic pleasure. To address this issue, Reber et al. (2004, 372) draw on Berlyne (1971, reference below) and argue that stimulus complexity is one "moderating" factor: "With low levels of complexity, the source of fluency is very salient. As complexity increases, the salience of the source of perceptual fluency decreases, enhancing the misattribution of fluency to beauty. However, further increases in complexity will eventually reduce processing fluency, leading to a decrease in perceived beauty. These mechanisms would combine to form a U-shaped relation between complexity and beauty, as predicted and found by Berlyne (1971)" (Reber, Schwarz et al. 2004, 373). However, Martindale et al. did not find experimental evidence for such "a U-shaped" relation (1990, 53). These articles refer to: Berlyne, Daniel E. *Aesthetics and psychobiology*. New York: Appleton-Century-Crofts, 1971.

explanation of how a supposedly "lazy" (Leder 2013, 32) brain can find aesthetic pleasure in difficult tasks (Biederman and Vessel 2006; Leder 2013, 32).

Contrastive valence and opioid neurotransmitters

My claims that initial disfluency in sentence processing may elicit aesthetic pleasure if cognitive fluency can be achieved in late processing and that early and late processing contribute differently to aesthetic pleasure are grounded in the concept of contrastive valence and experimental studies on opioid neurotransmitters.

I begin with the concept of contrastive valence, which has been applied to the reception of music (Huron 2007) and literary reading (Miall 1995). During the perception of visual artworks, the perceiver anticipates and predicts upcoming new information (Leder, Belke et al. 2004). If we assume that the processing of input such as artworks in different perceptual modalities is partly based on shared processes and assume that this may also hold for literary reading (Di Dio and Gallese 2009, 686; Jacobsen 2014, 471; Leder, Belke et al. 2004, 504), we may further hypothesise that literary reading too involves prediction and anticipation (Miall 1995). Even though difficulties may not always be predicted or anticipated, research suggests that the reader or perceiver may be generally equipped with a mechanism which enables a fast resolution of difficulties (Huron 2007). Because aesthetic pleasure may be causally connected to the resolution of such difficulties, it may be oriented towards an expected resolution of difficulty (Biederman and Vessel 2006; Huron 2007). This prospective orientation of aesthetic pleasure during the reception of art or literary reading may be rooted in a basic universal mechanism: The human brain is equipped with a mechanism which supports anticipation and prediction, a process which serves the prevention of harm in unexpected and potentially dangerous situations (Huron 2007, 19-25; Miall 1995). A direct neural pathway from sensory input, such as visual or auditory stimuli, to the amygdala is responsible for eliciting fast emotional responses such as fear. This fast response is then re-assessed by later input from a second, indirect neural pathway which runs via the cerebral cortex before reaching the amygdala (Huron 2007, 19). When stimuli are unexpected and surprising, the fast initial affective response is likely to elicit a fear response, which may then be cognitively appraised as not harmful. The difference between initial fear and subsequent assessment of the situation as not dangerous is a difference in arousal. This means that the two different appraisals of the same stimulus are caused by differences in the release of specific neurotransmitters. This is called

"limbic contrast", and this contrast in itself is pleasurable (Huron 2007, 21-25). Reber et al. define aesthetic pleasure and beauty as denoting the same experience (2004, 365). Aesthetic pleasure can thus be characterised, similar to beauty, as "the felt prospect of cognitively representing and achieving processing mastery over a challenging object or experience" (Armstrong and Detweiler-Bedell 2008, 305). The decisive factor in aesthetic pleasure is therefore not whether a perceiver does indeed solve a problem, but whether he comes to appraise the initial problem as one that can be solved (Juslin 2013, 253; Leder, Belke et al. 2004).

There is further support for the assumption that problem solving during the perception of visual objects may induce pleasure. Biederman and Vessel propose that looking at and interpreting photographic and painted landscapes may trigger a release of opioid neurotransmitters which are involved in pleasure (2006, 251). The visual cortex includes different areas, each of which processes specific aspects of a stimulus before passing the signal on into the next area. First, there are specific cortical areas in which physical aspects of the stimulus are processed. Later on in other cortical areas, these physical aspects of the stimulus are integrated with knowledge of the perceiver. Endomorphins (opioid neurotransmitters) are processed differently in the diverse areas of the visual cortex. Cortical areas which process the physical aspects of a stimulus early on in processing have fewer receptors for neurotransmitters than areas which process semantic knowledge about the stimulus later on in processing (Biederman and Vessel 2006, 248, 249).[28] The higher number of receptors for opioid neurotransmitters in those cortical areas involved in later, semantic processing makes processing pleasurable (Biederman and Vessel 2006, 247-248, 249, 251; Averill, Stanat et al. 1998; Oatley 2003, 289). This mechanism might be evolutionarily determined. Pleasure functions as a reward for the engagement with novel and interesting stimuli which expand the perceiver's knowledge about important environmental factors. This expansion of knowledge does not occur with familiar and less interesting stimuli, and these are not likely to trigger aesthetic pleasure (Biederman and Vessel 2006, 247, 250, 252; Averill, Stanat et al. 1998; Oatley 2003, 488). The source of pleasure may therefore be "the click of comprehension, however difficult the path to that point" (Biederman and Vessel 2006, 252).[29]

[28] It is important to note that the terms "early" and "late" in this specific context do not correspond to the early and late processing stage of the model I propose. Here, they simply denote the fact that signals in visual processing are passed on through the visual cortex over time.

[29] As I will outline later on in more detail, this late cognitive stage of processing relates to the late sentence processing stages of the eADM (Bornkessel-Schlesewsky and Schlesewsky 2009a).

The concept of contrastive valence and the experimental study on opioid neurotransmitters inspire my assumption that the difference between early disfluency and acquired cognitive fluency during literary reading produces aesthetic pleasure. My approach here specifically addresses an observation about potential effects of Bowen's language on the reader: According to Osborn, readers "respond intensely, even in ways viscerally, to the press of something not always made manifest in the language of her stories" (2006, 187). I propose that readers of Bowen's novels react "viscerally", that is, involuntarily, to specific sentence structures. I hold that this reaction involves a reduction of processing fluency and elicits a fast negative affective response, akin to the fear response for which the direct neural pathway to the amygdala is responsible. In the later processing stage, a re-evaluation of the stimulus as harmless occurs, as supported by the indirect neural pathway through the cortex. The acquisition of new knowledge in the wake of solving difficult sentence structures may potentially involve the release of opioid neurotransmitters (if such a mechanism applies for language processing in a similar way as for visual processing), elicits cognitive fluency, leading to aesthetic pleasure.

Using neuroaesthetic research for a model of literary sentence processing

My approach to literary reading as a mode of art reception shows that the causal relation between processing difficulty and aesthetic pleasure can be accounted for within the framework of neuroaesthetic research. If readers do indeed treat each sentence within Bowen's novels as a work of art, aesthetic experience in literary reading may be said to be elicited and supported by those cognitive processes which also support aesthetic responses to paintings, sculptures or music. The fluency account, which may explain aesthetic pleasure in the reception of visual art, may then also explain how aesthetic pleasure may come about during literary reading. Especially the discrepancy between early processing disfluency and late cognitive fluency may then be the key to aesthetic pleasure during literary sentence processing. I therefore propose that early disfluency and late cognitive fluency may then be understood as constitutive elements of the process which readers of literary texts experience as aesthetic in the first place, rather than considering disfluency in processing the sentence "Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter" (*Heat* 98) as an expression *of* something.

Returning to the above-mentioned example from *The Heat of the Day*, discussed in the Introduction, I suggest that both the syntactic form and the meaning appear to be

ambiguous and complex and hence difficult to process. Because complex forms, visual and linguistic, are more difficult to process than simple ones, this difficulty is of a general nature but is specifically triggered for language processing. The independence of aesthetic experience and aesthetic judgments (Leder, Belke et al. 2004) may explain why literary scholars have described distinct aesthetic reading responses to Bowen's novels, and yet her novels have not always been judged as good examples of modernist literature (Osborn 2006; Osborn 2009b; Belke, Carbon et al. 2010, 220). Viewing Bowen's language as modern art may help to understand that difficulty, initial displeasure, interpretive effort and eventual pleasure are central components of her poetic practice. In order to identify specific linguistic forms which may trigger disfluency, I take language-specific processing mechanisms into account, and I therefore discuss a neurocognitive model of sentence processing and experimental neurolinguistics research in the following section.

2.3 Neurolinguistics: Sentence processing

Although neuroaesthetic studies have examined the aesthetic effects of linguistic stimuli such as poetry, some of the concepts I have introduced earlier have so far been mostly concerned with visual stimuli such as paintings. Since there is as yet neither a neuroaesthetics nor a neurolinguistics model of literary sentence processing that accounts for the aesthetic effects of real-time processing of individual sentences in literary texts, I draw on the field of neurolinguistics, where researchers examine the neurocognitive underpinnings of language comprehension and production. In particular, I focus on a neurocognitive model of sentence processing and on the role which linguistic forms such as ambiguity, negation, parallelism, alliteration and rhyme may play. Moreover, I take into account the role of complexity, ungrammaticality and of narrative processing.

Experimental neurolinguistics studies typically record the spatial or temporal dimension of sentence processing for a test sentence which is then manipulated in one aspect of syntax, semantics or pragmatics. Differences in spatial or temporal processing for differing versions of a stimulus indicate where and when syntactic, semantic and pragmatic aspects of a sentence are processed. Generally, language processing can be traced to areas in the left hemisphere of the brain (Broca's and Wernicke's area). Within the left hemisphere, distinct cortical and subcortical areas are involved in syntax and semantic processing and more specific subprocesses (Amunts 2008, 36, 39; Friederici, Rüschemeyer et al. 2003, 170; Frisch, Schlesewsky et al. 2002; McDonald 2008). On the one hand, syntactic, semantic and pragmatic aspects of language are thought to be

processed in a network of spatially and functionally distinct anatomical areas of the brain. On the other hand, the time course of syntactic, semantic and pragmatic aspects of language can be traced by ERP during real time processing (See section 2.1). Three distinct ERP components are relevant in neurocognitive models of sentence processing: The ELAN (early left anterior negativity) occurs at around 150-400 ms after stimulus onset. This ERP component is thought to reflect difficulties in early syntactic processing. The N400 occurs at 400 ms after stimulus onset. The standard view interprets this component as indicative of semantic and even syntactic anomalies within sentence context. The P600 at 600 ms after stimulus onset is generally interpreted as reflecting problems in later syntactic processing. The latest ERP response is the late POS, a component which potentially reflects processing difficulties in the overall mapping process during which the comprehender matches the syntax and semantics of a sentence. These ERP components are temporally distinct and stem from spatially distinct "neural generators" (Friederici, Rüschemeyer et al. 2003, 170-171). ERP responses are therefore thought to indicate temporally and functionally distinct syntactic and semantic neurocognitive processes (Bornkessel-Schlesewsky and Schlesewsky 2009a, 285-286; Bornkessel-Schlesewsky and Schlesewsky 2009b, 42; Friederici and Weissenborn 2007, 55; Ingram 2007, 61, 62). However, not every theoretical linguistic process is necessarily "neurobiologically 'real'" (Schlesewsky and Bornkessel-Schlesewsky 2012, 80).

Neurolinguistic models of sentence processing attempt to unify spatial and temporal aspects of language processing into predictive and explanatory models. The field is dominated by two major traditions of modelling language comprehension. Modular and interactive models assume that the same information types are central in "[m]apping sentence form onto meaning" but conceptualise these processes differently (Friederici and Weissenborn 2007, 50; Ingram 2007, 266). While modular models postulate the functional separation of syntax and semantics in sentence processing, interactive models assume that syntax, semantics and pragmatics interact throughout processing (Bornkessel-Schlesewsky and Schlesewsky 2009a, 98-100).

With the aid of the neurocognitive model of sentence processing, the eADM, which I introduce in the subsequent section, I seek to conceptualise how readers potentially process syntactic and semantic aspects of Bowen's language.[30] I argue that readers of novels process the text as a linguistic input string consisting of individual words, phrases,

[30] The physical qualities of a literary text might play a role in particular literary traditions. I argue that this is not the case in reading Bowen's novels.

clauses, sentences and narrative episodes, and readers form linguistic representations of this input. Readers strive to interpret these as parts of a coherent and meaningful "whole" (Perfetti and Frishkoff 2008, 165). Such an interpretation is always reliant on the immediate discourse context and a wider real-world and socio-historical context (Bornkessel-Schlesewsky and Schlesewsky 2009b, 42; Bullot and Reber 2013; Ferstl, Neumann et al. 2008, 581; Mar 2004, 1416; Perfetti and Frishkoff 2008, 165).

The eADM

In order to model this process, I use an existing neurocognitive model of sentence processing, the "extended Argument Dependency Model" (eADM) (Bornkessel-Schlesewsky and Schlesewsky 2009a). Sentence processing mainly involves matching syntactic forms to semantic roles and the subsequent interpretation of a sentence's meaning within discourse and real-world context. Sentence processing can therefore be defined as "[m]apping sentence form onto meaning" (Friederici and Weissenborn 2007, 50). Form here means syntactic form, and meaning is defined as semantic and pragmatic.

The eADM conceptualises this process on the basis of ERP components, meaning that each of these components indicates a temporally distinct processing stage in which either syntactic or semantic processing occurs. The eADM is a modular model because it postulates the functional separation of syntax and semantics in sentence processing (Bornkessel-Schlesewsky and Schlesewsky 2009a, 95-100; Ingram 2007, 66-89). The eADM is also a serial model because it holds that syntactic information is processed before and independently of lexical-semantic information in the early stages of processing (Friederici and Weissenborn 2007, 51). While such a "one-to-one-mapping" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 22-24) of ERP components to functionality in sentence processing may be appealing, it has been criticised as over-simplifying.[31] However, from the literary-linguistic perspective of this thesis, the eADM offers a useful framework for hypothetical approaches to sentence processing in reading literary texts, and I therefore accept the idea of such a "one-to-one-mapping" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 22-24).

According to the eADM, sentence structures hold information about arguments and their relation. The eADM operates with the syntactic forms of "predicating" and "non-predicating" items in a sentence (Bornkessel-Schlesewsky and Schlesewsky 2009b, 42).

[31] See for example a study on alternative interpretations of the N400 (Choudhary, Schlesewsky et al. 2009) and the P600 (Sassenhagen, Schlesewsky et al. 2014).

Predicating items are verbs. Non-predicating items are lexemes and phrases which may contain all other classes of words. The subject and object phrase are the most important parts of the sentence for the eADM. These two types of phrase may consist of a noun, noun phrase, or a more complex phrase. Predicating and non-predicating items form the three thematic roles or arguments in the eADM: The Actor argument, the Undergoer argument and the predicate which connects these two arguments (Bornkessel-Schlesewsky and Schlesewsky 2009a, 291). One argument, the Actor, typically denotes an active participant, carrying out some sort of activity. The Undergoer is a second participant, who is typically affected by the activity of the Actor (Bornkessel, Zysset et al. 2005, 221, cf. Van Valin and LaPolla 1997).[32] The Actor argument is typically mapped onto the subject phrase, and the Undergoer argument is typically mapped onto the object phrase. The verb links these two arguments. This process of argument assignment is central to the eADM (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289), occurs in all languages and depends on the specific syntactic forms of an individual language.

Assigning form to meaning is determined by the syntactic forms which are available in a language and by semantic "prominence information" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289). Prominence information is encoded in "The interface hypothesis of incremental argument interpretation" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289; 2009b, 28). Readers or listeners draw on prominence information in order to assess the likelihood of a grammatical subject or object being an Actor or Undergoer argument. In English, non-predicating arguments are preferably interpreted as Actor arguments if they come early on in the sentence, if they are animate or if they are definite. By contrast, non-predicating arguments which occur later on in a sentence and which are inanimate or indefinite are preferably interpreted as Undergoers. Undergoer arguments are always interpreted in reference to an Actor argument. The prototypicality of the potential Actor argument in a given sentence is therefore a central criterion for the assignment of Actor roles (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289). The more prototypical the argument, the easier the assignment of meaning.

Sentence processing occurs over real time and is incremental (Bornkessel-Schlesewsky and Schlesewsky 2009a, 89). This means that the listener or reader[33] can only assign meaning to syntactic structures based on previously attained information

[32] Van Valin, Robert D., and Randy J. LaPolla. Syntax: Structure, meaning and function. Cambridge: Cambridge University Press, 1997.

[33] While the eADM usually uses the term "comprehender" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 90), thereby including both listening and reading, I will use the term "reader".

about the syntactic forms and semantic meanings of a sentence. Sometimes, meanings have to be assigned even if not all information necessary to do so has been attained so far (Bornkessel-Schlesewsky and Schlesewsky 2009a, 89). In order to perform this assignment of meaning to structure as quickly and precisely as possible, the reader must be able to perform the following six tasks: The reader must structure the input string "quickly" (*structure building*). These individual elements must then be connected to achieve as precise a meaning as possible so far (*linking*). The reader then anticipates subsequent input based on previously processed input (*prediction*). If syntactic forms are ambiguous, one interpretation has to be established based on current information (*ambiguity processing*). Processing cannot continue unless the reader resolves ambiguity (*conflict resolution*). Finally, any "information that has not been fully interpreted" has to be retained until new information enables further processing (*storage*) (Bornkessel-Schlesewsky and Schlesewsky 2009a, 90, 90-94, italics in orig.).

The eADM conceptualises these six processes in three overlapping stages. All three processing stages are run for each lexeme in a sentence. Information is always fed forward into the subsequent processing stage, never backwards, because these stages are "hierarchically organized" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 288). The three processing stages have been postulated on the basis of ERP components. The details of the ERP components are not relevant for my thesis. It is significant to note that they indicate temporally and functionally distinct processes during sentence comprehension.

I discuss these three processing stages using an unproblematic example sentence. In stage 1, word category is assessed and basic constituent structuring occurs:

The author Elizabeth Bowen			wrote	novels.
art.	**noun**	**noun**	**verb**	**noun**
noun phrase			**verb phrase**	**noun phrase**

Difficulties in either word category identification or basic constituent structuring are by definition syntactic and are indicated by an ELAN (Bornkessel-Schlesewsky and Schlesewsky 2009a, 292; Friederici, Rüschemeyer et al. 2003, 170). In stage 2, each individual lexeme is categorised as either non-predicating or predicating.

The author Elizabeth Bowen	wrote	novels.
non-predicating	**predicating**	**non-predicating**

Further processing depends on this classification: For lexemes which have been categorised as non-predicating, the prominence of the argument is computed. This means that the reader assesses how likely it is that the non-predicating phrase "The author Elizabeth Bowen", which also happens to be the subject phrase of the sentence, is indeed the Actor argument of the sentence. If the reader interprets the phrase accordingly, the final non-predicating item "novels" is likely to be interpreted as the grammatical object of the sentence, qualifying as a likely candidate for an Undergoer interpretation.

The author Elizabeth Bowen	wrote	novels.
Actor argument		**Undergoer argument**

This computation of argument prominence is informed by context-independent "cross-linguistically motivated features" such as morphological case marking, argument order, animacy, definiteness/specificity and person (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289). Of these, argument order and animacy are significant for my thesis. Arguments which occur early on in a sentence or are animate and arguments which fulfil both criteria are likely to be preferably interpreted as Actors. Problems in determining Actor and Undergoer arguments elicit an N400 (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289). Further, lexemes which have been identified as verbs, i.e., as predicating arguments, are subject to the computation of argument linking.

The author Elizabeth Bowen	wrote	novels.
Actor argument	**animate/ transitive**	**Undergoer argument**

Semantic information types such as animacy and transitivity determine which and how many arguments a verb takes. These information types contribute to the resolution of syntactic and semantic complexity and ambiguity. Problems in assessing the link between a verb and its arguments elicit an N400 (Bornkessel-Schlesewsky and Schlesewsky 2009a, 288-293; Friederici and Weissenborn 2007, 50, 51, 53-54). Moreover, stage 2 sees lexical-associative and semantic processing, which are related to discourse context. Lexemes which are lexically or semantically implausible or are implausible within discourse context may elicit an N400, yet this occurs "in parallel but independently of the prominence/linking-related N400 effects in stage 2" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 292).

In stage 3, there is a general assessment of the match between all previously attained information types. Here, readers bring together the previously computed Actor and Undergoer arguments with the verbs in an overall match between sentence structure and meaning. For this purpose, readers draw on world knowledge, social cognition and emotional environment. Problems in this stage elicit a P600 (Bornkessel-Schlesewsky and Schlesewsky 2009a, 288-293). In a final step, the sentence is judged for its wellformedness. Difficulties here elicit the late POS component (Bornkessel-Schlesewsky and Schlesewsky 2009a, 288-293; Friederici and Weissenborn 2007, 51). These three processing stages of the eADM form the basis for any assumptions about linguistic processing mechanisms in the model developed in this thesis.

Let me now illustrate the significance of the eADM for the model of literary sentence processing by drawing attention to the compatibility of the eADM with previously discussed neuroaesthetic research. Unlike neuroaesthetic research, the eADM does not explicitly distinguish between early and late processing. While this may seemingly render the two fields of research incompatible, I suggest that they can be used jointly to account for aesthetic pleasure during literary reading. Neuroaesthetic research and the eADM assume that processing visual and linguistic stimuli is temporally sequenced. I lay the neuroaesthetic distinction of early and late processing on top of the eADM to create the model of literary sentence processing: Neuroaesthetic research suggests that early perceptual processing is automatised and independent of context, whereas late processing is deliberate and context-dependent. According to the eADM, word category identification and basic constituent structuring in stage 1 are independent of context. Likewise, the computation of argument linking and argument prominence in stage 2 is context independent. Plausibility processing in stage 2 does, however, rely in part on discourse context. This appears to include semantic rather than pragmatic knowledge. I therefore propose that stage 1 and 2 of the eADM form the early, automatised stage in literary sentence processing, and this stage is text-type independent. Late processing in literary reading includes stage 3 of the eADM, and this stage is text-type dependent.

In early processing, all sentences, whether non-literary or literary, are processed and evaluated in the same way. In late processing, sentences in non-literary and literary texts underlie the same neurocognitive mechanisms, yet readers may evaluate sentences differently depending on the text-type and individual expertise. This distinction between early and late processing therefore concerns the time course of processing and the type of

information readers draw on over that time course. This distinction between early and late processing is relevant for the identification of difficult sentence structures in Bowen's novels. In the following section, I discuss syntactic structures which are likely to elicit early, text-type independent processing difficulty and require text-type dependent solutions for a successful mapping process between form and meaning.

Forms of ordinary and literary language

In order to account for possible sources of processing difficulties and aesthetic pleasure in Bowen's literary language, I consider syntactic structures which are likely to elicit processing difficulties in stage 1 (signalled by an ELAN) or stage 2 (indicated by an N400) of sentence processing, as proposed by the eADM. In the model of literary sentence processing, this coincides with the early, text-type independent processing stage. For that purpose, I first characterise the difference between non-literary and literary language and then discuss ambiguity, negation, parallelism, alliteration and rhyme, all of which are forms in Bowen's literary language.

As I outlined in the Introduction, syntactic ambiguity, negation, parallelism, alliteration and rhyme are forms which frequently occur in what Bowen herself calls her descriptive pieces. All forms may occur in different types of texts and are therefore neither specific to non-literary language, literary language in general, nor to Bowen's language in particular. However, I consider the possibility that these forms and the processing difficulties they trigger may be evaluated differently, depending on whether the reader encounters them in a non-literary or literary text. For that purpose, some definitions are necessary: First, I henceforth call prose language in non-literary texts "ordinary" language, whereas I will refer to prose in literary texts as "literary" (Fabb 2010). Secondly, ordinary and literary prose language may be the same in syntactic form in many cases. Bowen's syntax may therefore not be formally different from prose found in non-literary texts. Especially syntactic forms, such as ambiguity and negation, which are the result of generative processes may fall into that category. Thirdly, forms such as parallelism, alliteration and rhyme can result from additional structures, from "superadded constraints" (Fabb 2010, 2010). Fabb calls these forms "communicated" (1999; 2015) or "added forms" (2010). Added forms are more likely to be found in literary language, such as in Bowen's, but are not exceptional.

I now outline the role of ambiguity, negation, and parallelism, alliteration and rhyme in (neuro)linguistic and literary-linguistic accounts of ordinary and literary

language respectively. As forms of ordinary language, ambiguity and negation are central to linguistic theory (Christensen 2009, 1-2; Kaup 2001, 960; Nahajec 2009, 112). Research on ambiguity investigates how syntactic ambiguity may be detected, processed and resolved, thereby addressing central theoretical and empirical arguments for and against modular and interactive models of language processing (Bornkessel-Schlesewsky and Schlesewsky 2009a, 92-100; Ingram 2007, 256-265). In modular accounts of language processing, such as the eADM, syntactic ambiguity exemplifies problems which can arise when comprehenders have to process "incomplete input" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 92), a central challenge of incremental processing.[34] The model which I propose in this thesis refers to modular accounts of language processing.

Likewise, explaining the processes involved in understanding negation is central to theoretical accounts of language comprehension (Christensen 2009, 1-2; Kaup 2001, 960; Nahajec 2009, 112). This pertains to determining the impact of syntactic, semantic and pragmatic influences on language processing (Bornkessel-Schlesewsky and Schlesewsky 2009a, 23-24). Research on negation has also focused on developing models which distinguish between linguistic and situational representations (Christensen 2009, 4; Kaup 2001, 969, 961; Kaup and Zwaan 2003, 439, 445; Kaup, Lüdtke et al. 2006, 1045). Other approaches postulate perceptual simulation or "embodied cognition" (Kaup and Zwaan 2003, 444, 445; Kaup, Lüdtke et al. 2006, 1046) as underlying processing mechanisms during language comprehension.

Parallelism, alliteration and rhyme are types of communicated (Fabb 1999; Fabb 2015) or added form (Fabb 2010). These forms are aspects of the theoretical distinction between ordinary and literary language (Fabb 2010; Kiparsky 1973). Parallelism is used as a means of examining mechanisms which underlie the resolution of anaphora in sentence processing (Poirier, Walenski et al. 2012). Parallelism, alliteration and rhyme are forms of repetition, both in ordinary and in literary language. They all facilitate processing in reading poetry and prose, and in language learning (Lea, Rapp et al. 2008; Lindstromberg and Boers 2008; Sturt, Keller et al. 2010). In the model I propose in this thesis, parallelism plays a role as a means of distinguishing between literary and ordinary language. Communicated or added forms, rather than ambiguity and negation, are a

[34] It is difficult to collect conclusive empirical evidence for a modular or connectionist model based on data about the respective role of syntactic, semantic and pragmatic information types in ambiguity resolution (Bornkessel-Schlesewsky and Schlesewsky 2009a, 97-100).

formal marker of literary language and may be expected to have a different effect on early and late processing.

I distinguish between ambiguity and negation as forms of ordinary and literary language on the one hand, and parallelism, alliteration and rhyme as forms of literary language on the other. All forms are likely to elicit text-type independent processing mechanisms in early processing, in ordinary and literary texts alike. Processing in the late processing stage will be different for ordinary and literary texts. This mostly pertains to semantic aspects and context, but also to late syntactic processes. I suggest that ambiguity and negation impede early processing, whereas parallelism, alliteration and rhyme facilitate it. All structures offer the potential for aesthetic pleasure in late processing.

Ambiguity, negation and parallelism are forms of complexity

Above, I have postulated that ambiguity and negation may elicit processing difficulties. This assumption is based on the following reasoning: Sentence structures can be syntactically simple, for example if their word order is canonical. Conversely, sentence structures can be syntactically complex if they have a non-canonical word order, show co-ordination, subordination or ellipses (Ingram 2007, 253-254; Friederici, Fiebach et al. 2006). Apart from syntax, complexity comprises semantic aspects such as thematic roles, for example, Actor and Undergoer arguments (Friederici, Fiebach et al. 2006, 1709). Empirical studies indicate that complex sentences which deviate from standard structures require more cognitive cost in "mapping from form to meaning" (Friederici, Fiebach et al. 2006, 1709). Complexity can be defined differently, depending on the grammatical theory, and explanations for the source of additional processing costs vary accordingly (Ingram 2007, 253-255, 275-280; Schlesewsky and Bornkessel-Schlesewsky 2012). Processing sentences with non-canonical or incomplete and hence complex surface structures may be more costly than processing simple sentences; complex sentences require the reader to retrace the syntax which underlies the surface structure (Friederici, Fiebach et al. 2006, 1716).[35]

[35] In theories in the Generative tradition, complexity and increased processing cost can be defined as stemming from "movement (transformation) operations" (Friederici, Fiebach et al. 2006, 1709). Other theories assume that increased processing cost stems from an "additional rule-based operation" or working memory (Friederici, Fiebach et al. 2006, 1709-1710; Gibson 1998). For example, increasing processing cost may be triggered by an object phrase which "precedes the subject in the surface form" even though the object is "lower ranking in conceptual terms" (Friederici, Fiebach et al. 2006, 1709). Yet other accounts hold that "object-initial sentences need not involve a higher degree of syntactic complexity" but "a non-canonical assignment of thematic roles (i.e., the 'Undergoer' of the event being described as the 'Actor')"

Ambiguity, negation and parallelism can be characterised as forms of syntactic complexity. To begin with, syntactically or semantically complex sentences may be ambiguous and hinder the easy match of linguistic form to meaning. Difficulties in processing ambiguous sentences may therefore stem from problems in word category recognition in stage 1 of processing (eADM), from problems in computing argument prominence and argument linking in stage 2 (eADM), or from a general problem in stage 3 (eADM) (Friederici, Fiebach et al. 2006, 1709, 1716; Bornkessel-Schlesewsky and Schlesewsky 2009a). Negation also involves "complexity" (Kaup and Zwaan 2003, 442-443; Christensen 2009, 6). The more negations a sentence shows, the more complex the structure and hence the more difficult and costly to process for the reader. Varying combinations of negating and affirmative structures in a sentence impact on processing ease and speed (Kaup and Zwaan 2003, 442-443). Depending on the position of a negation within a sentence, any of the three stages of processing may be affected. Parallelism is yet another form of complexity (Fabb 2010; Kiparsky 1973). Depending on the specific forms and semantics of a parallelism, processing may be affected in stage 1 and affect basic constituent structuring, or the identification of Actor and Undergoer arguments in stage 2. Alternatively, the overall mapping between the syntactic form of the sentence and its meaning may be affected in stage 3 of processing. In relation to my thesis, this means that ambiguity and negation may cause difficulty in the early, text-type independent stage. By contrast, parallelism may cause ease in early, text-type independent processing. All structures may also affect late, text-type dependent processing.

Ungrammaticality

Literary scholars have suggested that some of Bowen's sentences may be ungrammatical and therefore impede comprehension. Even though I could only find a few examples of ungrammaticality in Bowen's texts, I will review neurolinguistics research on ungrammaticality in sentence processing. To begin with, neurolinguistic research shows that grammatical sentences, i.e., sentences which are syntactically and semantically correct, require a baseline amount of cognitive load. In comparison, ungrammatical sentences, which are syntactically and semantically incorrect, require more processing effort (Friederici, Rüschemeyer et al. 2003). It is important to note that complex sentences which are grammatically correct receive the same low acceptability ratings by readers as

(Friederici, Fiebach et al. 2006, 1709). In such an account, thematic information types are used in mapping non-canoncial sentence structures onto meaning. This assumption is held in the eADM.

ungrammatical sentences (Friederici, Fiebach et al. 2006). However, processing grammatical and ungrammatical sentences shows different neurobiological correlates (Friederici, Fiebach et al. 2006). These distinct correlates must result from distinct processing mechanisms: While processing complexity requires the reader to retrace the syntactic structure underlying the surface structure, processing ungrammatical structures requires "more general operations" (Friederici, Fiebach et al. 2006, 1716). For the sake of descriptive clarity in my thesis, I further distinguish between syntactically and semantically ungrammatical sentences, which elicit different activation patterns. This indicates that syntactic and semantic processes are indeed functionally distinct, as proposed by the eADM. Higher activation for anomalous syntactic and semantic structures possibly reflects "processes of sentential integration" (Friederici, Rüschemeyer et al. 2003, 176).

Hence, the individual reader of Bowen's novels may evaluate processing difficulties associated with complex and ungrammatical sentences in a similar way. The text may formally feature complex and ungrammatical sentences, yet they might have similar neurocognitive processing correlates and may remain indistinguishable for the reader. This helps me address the notion of Bowen's presumably "deeply unconventional style" (Corcoran 2004, 3), a style characterised by "contorted syntax" (Mooney 2009, 16). While literary scholars have identified this form of ungrammaticality as the source for difficulty in reading and comprehending Bowen's novels, I show that her sentences are rarely ungrammatical but often syntactically complex (Ingram 2007, 253-255, 275-280). Because syntactic ungrammaticality and semantic anomaly are functionally distinct during incremental sentence processing, each may indeed trigger difficulty in reading individual sentences in Bowen's descriptive pieces. However, the distinction between syntactically and semantically ungrammatical versus complex sentences as such is not particularly important for my argument. For the reader, ungrammatical and complex sentences may both be difficult to process and may elicit similar aesthetic responses. Since the reader may not be consciously aware of the source of difficulty, I can discuss ungrammatical sentences alongside complex ones. Ambiguity, negation and communicated forms, such as parallelism, alliteration and rhyme, can be dealt with as eliciting conditions for changes in processing costs and processing fluency.

Narrative processing

The model brought to Elizabeth Bowen's literary language in this thesis is explicitly a model of sentence processing. This includes discourse context and real-world knowledge, as proposed by the eADM. Where necessary, I take into account the immediate and wider narrative context of individual sentences in Bowen's novels. For this purpose, I briefly outline basic characteristics of narrative texts and narrative processing.

From a general linguistic perspective, narratives consist of a sequence of sentences. These sentences have, to different degrees, "local and global coherence" (Mar 2004, 1416). From a semantic and pragmatic perspective, narrative can be defined as "the depiction of events driven by the intentional behaviour of one or more autonomous agents in a manner that manifests an imagined world which parallels the world of real experience" (Mar 2004, 1416). The assumption of "sequence" and "coherence" is related to the idea that those characters, objects and actions which are explicitly or implicitly part of a narrative are "relevant" for the story (Mar 2004, 1416). Narrative genres and traditions may have certain conventions in regard to sequence and coherence. In analogy to grammatical and ungrammatical sentences, a narrative may conform to these conventions or violate them. A narrative may therefore be perceived as either "well-" or "ill-formed" (Olson, Mack et al. 1981, 311). These formal elements are part of narrative processing. Literary reading is one mode of narrative processing.

This mode of reading affects processing. On the one hand, narrative comprehension involves the same linguistic operations and anatomical correlates as sentence processing (Ferstl, Neumann et al. 2008; Perfetti and Frishkoff 2008). While language processing involves the left hemisphere, narrative comprehension elicits distinct "pattern[s] of activation" in the right hemisphere (Mar 2004, 1429; McDonald 2008; Perfetti and Frishkoff 2008, 170-172). The term "pattern of activation" describes the spatially observable processing activity of the brain in response to an experimental task. Because narrative processing requires neurocognitive processes such as attention, memory and theory-of-mind processes in addition to the basic linguistic processing mechanisms (Perfetti and Frishkoff 2008; Mar 2004), neural activation here includes additional areas of the brain, resulting in different observable spatial activation.[36] On the other hand,

[36] Processing narrative discourse involves additional linguistic processes when computing references between adjacent sentences. This is of no further interest in my thesis, and my model does not account for these processes.

readers automatically distinguish between real, or factual, and fictional content. This distinction is realised on a neurocognitive level (Abraham, von Cramon et al. 2008; Abraham and von Cramon 2009; Altmann, Bohrn et al. 2014; Mar 2004). The reader's knowledge that a text is non-fictional or fictional and the socio-historical and artistic context within which a literary text is produced and read influence how the reader forms aesthetic emotion, aesthetic judgment and appreciation (Leder, Belke et al. 2004; Leder and Nadal 2014, 454). That is, the reader has a different "experience of" the text and a different "behaviour towards" it, depending on the reading situation (Leder and Nadal 2014, 454).

For the model of literary sentence processing, this means that readers are likely to process Bowen's novels in a genre- and text-specific way. Such a text-type dependent mode of processing relies on contextual knowledge about a specific work of literature, a particular author or a specific literary genre and tradition. These factors may impact on literary sentence processing in two ways: First, literary or narrative reading is "prospective", whereas non-literary "expository reading" is characterised as "retrospective" (Miall 1995, 279, cit. Olson et al., 1981). In a literary or narrative mode of reading, the reader will strive to anticipate upcoming elements of the story. In a non-literary or non-narrative mode, the reader will strive to refer new input back to the original topic or question of a text. In particular, the prospective orientation of literary reading relies on the individual's knowledge about particular types of text, such as genre conventions. This knowledge is the basis for forming "expectations" and for "generating predictions" during reading (Olson, Mack et al. 1981, 311; 283; Schumacher 2014, 156). However, this aspect of narrative processing does not cancel out the strictly feed-forward processing on the sentence level. Secondly, the reader's motivations, goals and rewards in literary reading may differ from those involved in reading expository and non-narrative texts and may depend on genre or literary tradition (Mar 2004, 1414, 1416, 1429; Schrott and Jacobs 2011b, 496-498).

These considerations about narrative processing inspire the assumptions for early and late processing that underpin the model of literary sentence processing. Early, text-type independent processing should be the same, regardless of the status of a text as a non-narrative or narrative, non-literary or literary text. Late, text-type dependent processing should differ in reading non-narrative and narrative texts, and non-literary and literary texts respectively. This difference in the late processing stage pertains to the reader's motivation and goal in reading, as well as the reader's knowledge about the

specific text-type and the specific text. In particular, difficulties which arise in early, text-type independent processing should be dealt with differently in late, text-type dependent processing.

Using neurolinguistics for a model of literary sentence processing

To summarise, drawing on the eADM helps me to distinguish between syntactic and semantic sources of processing difficulties and to determine when they are likely to occur during real time processing. This sentence processing-based approach effectively means that I reduce the term "literary interpretation" to a basic sentence comprehension process. This has the advantage that I can identify and distinguish between problems in processing which may stem from mismatches between sentence structure and default processing mechanisms in early processing on the one hand, or from mismatches between sentence structure, discourse context and world knowledge in late processing on the other. I can identify primarily linguistic reading difficulties which should be independent of text-type, genre and literary tradition, and I can identify problems that relate to specific novels, historic context and genre.

My discussions of sentences in Bowen's novels are hypothetical, yet the model I propose offers a practical tool for approaching her texts and texts similar to hers from a literary-linguistic perspective. It contains a set of assumptions which help explain why readers may rate particular sentences as unacceptable in a non-literary text, while they may find the same sentence acceptable or even appealing in a literary text. Moreover, the model may be useful as a guideline for analysing sentence structures and reader responses in different literary traditions; it can help distinguish between non-canonical sentences which may be rated as acceptable in a modernist but not in a realist literary text, for example. The model of literary sentence processing may be used to approach modernist texts: In particular, it may help with identifying and explaining sentence processing difficulties which stem from non-canonical argument order, or from non-prototypical subjects and objects which require unusual Actor and Undergoer interpretations. This last source of difficulty can be found in the previously discussed sentence "Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter" (*Heat* 98), as I will argue in more detail in Chapter 3.2.

2.4 Conceptual compatibility of neuroaesthetics and neurolinguistics

In the previous sections, I outlined the principles of neuroaesthetic research into aesthetic experience and of neurocognitive research into sentence processing.[37] In the following, I briefly return to these concepts and studies in order to underline their conceptual compatibility for the purposes of a model of literary sentence processing.

First, the time course of processing, as indicated by ERP responses in experimental studies, plays a role in neuroaesthetic and neurolinguistic research on processing alike. I do not equate the ERP responses in neuroaesthetic studies with those of the eADM. However, I argue that ERP responses in both fields might be seen as indicative of a general time course within which the brain processes stimuli and gives rise to evaluative judgments and aesthetic pleasure. Leder et al.'s (2004) neuroaesthetic model assumes that aesthetic appreciation, judgment and emotion arise from a sequence of five hierarchically organised feed-forward processing stages, and these fall into early and late processing (Leder 2013, 34). Each of these five stages involves distinct cognitive mechanisms (Leder, Belke et al. 2004; Leder and Nadal 2014). Experimental research has indicated that aesthetic engagement with a stimulus unfolds over time, with early descriptive responses occurring at 300-400 ms, and late evaluative responses occurring at roughly 600 ms after presentation of the stimulus begins (Jacobsen and Höfel 2003, 289, 296). By contrast, the eADM postulates three distinct feed-forward processing stages, but does not explicitly distinguish between early and late processing.

For my model, I lay the time course of aesthetic engagement, from early, automatised to late, deliberate processing, on top of the processing stages in the eADM. Early processing in the model I develop includes stage 1 and 2 of the eADM. Descriptive judgments about visual patterns occur in a similar time frame. I therefore postulate that difficulties in processing as indicated by an ELAN in stage 1 and an N400 in stage 2 may relate temporally, if not functionally, to difficulties in forming descriptive judgments.

[37] Despite the explanatory power of neuroaesthetics and neurolinguistics, there are limitations and challenges to these fields of research. Even though Leder and Nadal's (2004) model and the eADM are among the standard models within their respective fields, they are facing conceptual challenges. For example, Leder and Nadal concede that the hierarchical organisation of processing stages may not be adequate for capturing the interaction between temporally and functionally distinct neural networks which are part of aesthetic experience, appreciation and judgment (2014, 458). Other critics consider neuroaesthetics to be a non-adequate approach to aesthetics and art (Cela-Conde, Agnati et al. 2011, 46-47). Similarly, as Bornkessel-Schlesewsky and Schlesewsky concede, the "one-to-one mapping" (2009a, 79, 81) of syntactic sentence structure onto its meaning, and the modelling of such a mapping via ERP components which correspond to distinct processing stages during sentence processing, may be too simplistic.

Late processing in my model encompasses stage 3 of the eADM. Readers form interpretations of sentences within this time frame, and evaluative judgments about visual patterns are formed within a similar span of time. In the eADM, the P600 in stage 3 is understood as related to the process of judging the overall match between meaning and sentence structure. Difficulties in sentence processing as signalled by the P600 may therefore relate temporally, though not necessarily functionally, to difficulties in forming evaluative judgments. This postulate is hypothetical, and I have no references to experimental research which might underpin this assumption. Nevertheless, I take this potential temporal coincidence of processes to suggest that the reader may be engaging in evaluative processes regarding the sentence as an object of art at around 600 ms after stimulus onset. The processing mechanisms in the early and late stage apply to each individual lexeme in a sentence.

Secondly, I establish a link between the neuroaesthetic fluency account and language processing in the eADM. All ERP components in the eADM indicate an increased level of activation, i.e., an increased processing load. The ELAN in stage 1, the N400 in stage 2 and the P600 in stage 3 may therefore be related to a reduction in processing fluency. By contrast, sentence processing in which no ERP component is elicited at all should be associated with processing fluency. If only one ERP component is elicited, processing is only difficult and disfluent in that particular stage of processing. Generally, I associate grammatically correct or simple sentences with default levels of neural activation (Friederici, Rüschemeyer et al. 2003, 170) and therefore with a relatively high level of processing fluency. By contrast, grammatically incorrect or complex sentences are associated with processing disfluency. Because fluency can serve as a heuristic in different perceptual domains, I propose that artists should be able to exploit processing fluency by modulating the forms of their artistic objects, independent of the perceptual domain, i.e., visual, auditory and linguistic (in both spoken and written language).

Thirdly, the concepts of contrastive valence (Huron 2007) and of opioid neurotransmitters (Biederman and Vessel 2006) overlap with early and late processing stages on the one hand, and the concept of fluency on the other. The concept of contrastive valence suggests that encountering potentially harmful stimuli elicits a fast negative affective response. This response is then re-evaluated in a subsequent processing stage which involves higher cortical processing and elicits a positive affective appraisal of the stimulus. I suggest that this proposal can be connected with the concept of fluency:

Linguistic stimuli which elicit any of the ERP components in sentence processing are marked by disfluency. This disruption in processing may be an eliciting condition for a fast negative affective response in early processing. Solving linguistic problems may then lead to cognitive fluency, contributing to a re-appraisal of the stimulus and triggering a slow positive affective response in late processing. My proposal is further supported by research on the differential distribution of receptors for opioid neurotransmitters in individual areas in the visual cortex: The higher number of receptors for opioid neurotransmitters in cortical areas which are involved in the integration of the perceptual aspects of visual stimuli with knowledge rewards the perceiver's engagement with new stimuli, effectively rewarding learning in late processing.

Finally, the modularity and modality of object features and of stimulus processing is a topic in the eADM, the fluency account and Leder et al.'s (2004) model of aesthetic appreciation. That means, all accounts assume that processing is specialised for individual aspects of stimuli. Cross-modal types of information, such as prototypicality, have to be expressed and processed in domain-specific ways. For instance, prototypical Actor arguments in language and prototypical faces in paintings are expressed and processed in domain-specific mechanisms, yet underlie general cognitive principles. Prototypical subjects and Actor arguments are associated with easy and fluent processing.

Based on these overlaps between neuroaesthetic and neurolinguistics research, I hypothesise that the mechanisms underlying aesthetic pleasure in visual art processing and in sentence processing during literary reading rely on similar neurocognitive mechanisms. These mechanisms can be activated by specific object features which may be linguistic or non-linguistic. This assumption is supported by the finding that aesthetic experience does not rely on selected areas in the brain but recruits distinct neural networks which respond to the modality (auditory, visual) an artwork is presented in. Specific aspects of sentence processing during literary reading may trigger more general processing mechanisms, which in turn give rise to aesthetic pleasure.

2.5 Difficulty, ease and aesthetic pleasure in reading Bowen's narrative language

Based on the model of literary sentence processing which I have proposed in the previous sections, I hypothesise that the sentence structures which I see as characteristic of Bowen's narrative language have the following effects on the reader: Ambiguity and negation in Bowen's descriptive pieces impede early processing (stage 2 of the eADM) and produce sudden disfluency, whereas parallelism, alliteration and rhyme facilitate

early processing and elicit sudden fluency, each form for different reasons. These sentence structures all elicit a fast negative affective response which might be considered "visceral[…]" (Osborn 2006, 187). Early processing is strongly dependent on syntactic and semantic prototypicality, and this holds for ambiguity processing in particular (Chapter 3). This is related to a general preference of perceivers for prototypical forms in language and art (Bornkessel-Schlesewsky and Schlesewsky 2009a; Leder, Belke et al. 2004).[38]

In late sentence processing, the reader forms an overall interpretation of Bowen's sentences by matching previously attained syntactic and semantic information with world knowledge, social cognition and emotional environment (stage 3 of the eADM) (Bornkessel-Schlesewsky and Schlesewsky 2009b, 42).[39] I assume that late processing of ambiguity, negation, parallelism, alliteration and rhyme in Bowen's descriptive pieces require the reader to draw on genre knowledge and on knowledge about the literary tradition within which her novels have been produced and received. For instance, Bowen's ambiguous sentences may be rejected as implausible in a non-literary text, whereas the same sentences may be solved, accepted and appreciated within the novels as literary texts. All of these sentence structures may give rise to aesthetic pleasure, depending on the individual reader's ability to seek out and cope with difficulty and unexpected changes in processing fluency.

In the three following analytical chapters, I discuss ambiguity, negation, and the communicated forms of parallelism, alliteration and rhyme in isolation, yet they may all occur within one of Bowen's descriptive pieces, and more than one form may hold true for one sentence. Processing disfluency and fluency, and the subsequent attribution of negative and positive aesthetic qualities to the text may therefore alternate, though not systematically, within a short span of reading time. These changes are difficult to anticipate, and ambiguity, negation and parallelism, alliteration and rhyme therefore continually surprise the reader. Unexpected changes in processing fluency may enhance the intensity of the fast negative affective response because these changes indicate potential harm. Unexpected changes in early processing fluency are particularly salient

[38] This pertains to "implicit memory integration" (Leder, Belke et al. 2004; Leder and Nadal 2014; Schrott and Jacobs 2011b, 495, 504).

[39] Processing these information types involves higher cognitive processing (Leder, Belke et al. 2004; Leder and Nadal 2014; Schlesewsky 2013), such as judgment, past experience, memory and learning (Zeki 1999, 29, 43), episodic memory (Mar 2004; Miall and Kuiken 1999), and shows an overall differential activation across the brain than language processing (Mar 2004).

in the descriptive pieces and form part of Bowen's aesthetic practice. The level of unexpected difficulty or ease in processing depends on the individual sentence. Processing ease and aesthetic pleasure are relative rather than absolute measures. Texts which are too difficult to understand can cause "annoyance" (Hildebidle 1989, 121 cit. in Hinrichs 1998, 174) just as too easy texts can (Fabb 2015, 64-72; cf. Berlyne 1966; cit. in Reber, Schwarz et al. 2004). Ultimately, fluency in early and late processing may be used as a heuristic in forming aesthetic judgments about the text as an object of art, and the level of fluency may serve as a heuristic in identifying the descriptive pieces as significant for the novel. The descriptive pieces – mostly descriptions of landscapes or houses – are passages which Bowen herself considers as more important than others and into which she has invested more compositional effort. Bowen strives to make the reader "*perceive*" (Bowen and Jones (1950) 2010f, 272, italics in orig.) the language of these passages rather than comprehend the text and the fictional world it represents. Interpreting the significance of that perception may therefore remain problematic, both on the sentence and narrative level.

3. "Reading is eventful": Ambiguous sentence structures

I argue that the experience of reading Bowen's prose language can be described as "eventful" (1962a, 9), as Bowen herself calls it. I define eventfulness as encountering and resolving difficulty. Eventfulness may be caused by ambiguous syntactic structures which impede sentence processing and in doing so provide the potential for aesthetic pleasure. Each individual ambiguous sentence signifies the special status of the sentence in Bowen's poetic practice and should engage the reader as an artwork in its own right. In the first part of this chapter, I review Bowen's own critical writings and literary responses to ambiguity in her texts, and define ambiguity within a neuroaesthetic and a neurolinguistic context. Finally, I model the process of encountering and resolving difficulty stemming from ambiguity. In sections 3.1, 3.2 and 3.3, I discuss ambiguity in reduced relative clauses, in syntactic dependency relations in complex clauses, and in similes. I present a selection of ambiguous sentences in narrative episodes in *The Last September*, *To the North* and *The Heat of the Day*.[40]

Syntactic ambiguity in Bowen's descriptive pieces does not occur randomly, as she frequently reduces the distinction between the grammatical subject and object, rendering processing difficult. These examples represent different ways of creating such ambiguity:

> Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter; (*Heat* 98)

> About six o'clock the sound of a motor, collected out of the wide country and narrowed under the trees of the avenue, brought the household out in excitement on to the steps. (*LS* 7)

Here and elsewhere, Bowen uses inanimate objects – cars, farmhouses, mills, plants or animals – as the grammatical subjects and agents of actions. Bowen preferentially uses transitive verbs for grammatical subjects, even if they are inanimate objects as "the sound of the motor". By contrast, Bowen's fictional characters usually occur in the grammatical object position, are mentioned as pars pro toto or do not occur at all, and she usually uses intransitive verbs for them (Kind 2013). This "diminishment of human agency" (O'Faolain 1956, 173-174 cit. in Ellmann 2003, 60) in the above opening passage from

[40] I found 19 ambiguous relative clauses: Seven occur in *The Last September*, and six in *To the North* and *The Heat of the Day* each. See 3.1 for a list of the episodes. I found ambiguous syntactic dependency relations in *The Last September*, *To the North* and in *The Heat of the Day*. See 3.2 for a list of episodes.

The Last September has been seen as an example of Bowen's "syntax of volition" (Ellmann 2003, 60). In Ellmann's view, "forces are gathering within this landscape to erase such moments, just as the syntax conspires to erase the human will" (2003, 60). The syntax is attributed the status of a character or entity within the narrative, and its form is seen as symbolic for narrative content. While I do not criticise such naturalised approaches, I do not assume any symbolic relationship between sentence structure and narrative. Nonetheless, I agree with Ellmann that content-related reading impressions must have their roots partly in the objective form of the text (2003, 60, 66, 67). For instance, the relevance of passive verbs and animacy for reading and interpreting Bowen's novels has been discussed by several scholars (e.g., Inglesby 2007; Kind 2013; Miller, Elward et al. 2009). However, I am more interested in how sentence structure may affect the process of reading itself than in literary interpretations.

The syntactic structures in the above passage from *The Last September* may produce a non-realist or even surrealist narrative world. Bowen herself describes the non-realistic character of the descriptive pieces as a poetic choice, driven by plot and story. For example, in *The Heat of the* Day the "love story" is "coupled with fear" and therefore produces "a Caligari-like, subjective, exaggerated, highly-defined, perhaps slightly-out-of-the-true world" (Bowen and Brooke (1950) 2010e, 283). I suggest that the landscapes of the descriptive pieces in *The Last September*, *To the North* and *The Heat of the Day* are all, to some degree, "Caligari-like" and "slightly-out-of-the-true". The eventfulness of reading such passages may be the result of syntactic structures: Choosing inanimate over animate agents, semantically unusual verbs and verbs with unusual argument structures may produce ambiguity and impact on sentence processing.

Literary scholars have commented on syntactic structures in Bowen's novels as a source of difficulty in reading and interpretation, though the issue of ambiguity has not yet been addressed explicitly. However, Bowen and literary scholars have described qualities of her prose which are related to ambiguity, and I take the following three observations as indicative of ambiguity: First, the sense of eventfulness of reading Bowen may be related to syntactic and prosodic structures. The theme of a novel may directly translate into its syntactic structures, and hence "*The Heat of the Day*" may be seen as "a kind of vortex which has sucked the outer wartime atmosphere into itself and vertiginously whirls it around, even in its syntactical structures" (Corcoran 2004, 172). Similarly, Daniel George, Bowen's reader at her publisher Cape, notes the unusual syntax in the manuscript of *The Heat of the Day*:

> She writes so colloquially, so much in the rhythm of speech, that unless the reader is lucky enough to coincide with her in placing a stress on the key word of a sentence, he may be baffled completely. It is a style of writing which I like, but can be abused – to a reader's discomfort. (George, cit. in Howard 1971, 181)

While George does not explicitly say so, the "colloquial" style he describes refers to canonical inversions and non-canonical sentence structures in Bowen's prose language. George and literary scholars propose that the temporarily incorrect identification of prosodic phrases may be one source of misreadings and therefore of difficulty (Hinrichs 1998, 182; Teekell 2011, 61). Such problems in establishing prosodic and syntactic phrases during reading can give rise to "discomfort", that is, to displeasure.

Secondly, ambiguity may not merely have the purpose of impeding the reading experience. Rather, I consider ambiguity as a strategy for fulfilling Bowen's aim of expressing "the not-yet-thought-of but always possible" ((31 August 1958) 2008, 327). George lends support to this proclaimed aim, stating that her language "succeeds time and again in expressing what has hitherto been inexpressible" (cit. in Howard 1971, 182). Neither Bowen herself nor George explicitly refer to ambiguity, go into any detail or give examples to illustrate this claim. However, in my view, this expression of the as yet inexpressible may entail the creation of unanticipated neologisms, collocations, metaphors and similes, all of which may be ambiguous. Through these new forms, literary language should elicit in the reader "a pure image – as in poetry" (Bowen and Jones (1950) 2010f, 270). Reading a literary text ideally results in an understanding of the text and "crystallise[s] in and for the reader" (Bowen and Jones (1950) 2010f, 272). However, in Bowen's view, this sense of new meaning and understanding should be achieved through perception rather than intellect (Bowen and Jones (1950) 2010f, 272).

Thirdly, George expressly values Bowen's style: He is a self-declared "admirer" who is not "insensitive to the miracles Elizabeth Bowen has worked with the language" in *The Heat of the Day* (cit. in Howard 1971, 182).

> To read her novel is to be uplifted; it is to realize again that the novel can be a work of art; it is to become aware that there are standards both of creation and actual writing. (George, cit. in Howard 1971, 182)

I take this statement as indirect support for my assumption that ambiguous sentences may elicit a pleasurable reading experience and lead to positive evaluations of the novel as a work of art in skilled readers, while less skilful readers may not be able to do so.

In order to tie together Bowen's poetic practice, literary scholarship and my own assumptions in a set of predictions about ambiguity processing during reading, I now review ambiguity from the perspective of neuroaesthetics and neurolinguistics. Ambiguity is a phenomenon which occurs in different perceptual modalities (Zeki 1999, 61-64), has been examined in neuroaesthetic studies of visual perception and the visual arts (Fairhall and Ishai 2008; Ishizu and Zeki 2014; Jakesch, Leder et al. 2013; Zeki 1999; Zeki 2004) and is the topic of extensive research in neurolinguistics. Auditory and visual stimuli are ambiguous if they are physically stable yet open to more than one valid interpretation at a time. Ambiguity processing represents a type of processing task associated with such stimuli (Zeki 1999, 62), and it enables the brain to function appropriately within different contexts, even if different interpretations of this context are possible.

Ambiguity can also occur in language. In ordinary language, ambiguity may relate to generated syntactic forms and describes "the (temporary) possibility of more than one syntactic interpretation for an element" in a sentence (Frisch, Schlesewsky et al. 2002, B89; Slattery, Sturt et al. 2013, 104; Spivey-Knowlton, Trueswell et al. 1993, 276). If the morphosyntactic form of a word, or the syntactic form of a phrase, clause or sentence can be interpreted in differing ways, it is ambiguous. Let us return to the basic principles of sentence processing in which readers map the relation between the syntactic structure of a sentence and a corresponding meaning. Usually, English sentences consist of a grammatical subject, a predicate and some kind of complement, or (if transitive) a grammatical object. In the sentence "*Amanda lied to Steve*" (Bornkessel, Zysset et al. 2005, 221, italics in orig.), the intransitive verb is followed by a recipient adjunct. Moreover, each sentence can be thought of as involving two thematic roles, or participants, which are related to each other – in this case two persons, namely Amanda and Steve. One participant, the Actor, is the active part, carrying out some sort of activity, and in this sentence this would be Amanda, who is lying to Steve. The other participant, the Undergoer, is affected by that activity, in this case, Steve (Bornkessel, Zysset et al. 2005, 221, cf. Van Valin and LaPolla 1997).[41] However, sentence processing is not

[41] Van Valin, Robert D., and Randy J. LaPolla. *Syntax: structure, meaning and function*. Cambridge: Cambridge University Press, 1997.

always straightforward. Sometimes, the form of a lexeme or phrase can be processed in competing ways, and its grammatical role as the subject, verb, object, complement or adjunct of a sentence cannot be determined and is therefore ambiguous. In other cases, the subject and the object cannot be identified as an Actor and Undergoer argument, and the relation between grammatical and thematic roles is ambiguous. In yet other cases, the relation between syntactic phrases and clauses is open to more than one interpretation and therefore ambiguous.

As such, syntactic ambiguity is an inevitable feature of language systems and contributes to their efficiency (Piantadosi, Tily et al. 2012). In incremental sentence processing, readers regularly have to process syntactic forms and assign meanings before "complete and certain information" can be obtained (Bornkessel-Schlesewsky and Schlesewsky 2009a, 89), and this contributes to temporary ambiguity. Ambiguity resolution requires syntactic information before semantic, contextual or pragmatic information types play a role (Bornkessel-Schlesewsky and Schlesewsky 2009a, 92-93, 98; Schumacher 2014). Ambiguity detection and resolution slow down the reading process, the reader discontinues parsing and re-reads the crucial passage (Frisch, Schlesewsky et al. 2002; Slattery, Sturt et al. 2013).

In ordinary language, readers and listeners are commonly very efficient at resolving and interpreting ambiguous language appropriately within context (Bornkessel-Schlesewsky and Schlesewsky 2009a, 92-93; Ingram 2007, 256-265; Piantadosi, Tily et al. 2012). Even though ambiguity in ordinary language may not be desirable from a communicator's perspective (Piantadosi, Tily et al. 2012), in literary language it may be used to produce predictable and desirable aesthetic effects during reading. Ambiguity may be part of the poetic practice of artists, depending on literary tradition (Zeki 1999).

I now model ambiguity detection and resolution as part of Bowen's poetic practice and as a way of eliciting pleasure in the reader: Ambiguity may be encountered and resolved in any lexeme in a sentence because the reader has to map form onto meaning continually during incremental processing. Syntactic ambiguity may elicit difficulty in early processing. For instance, the reader encounters ambiguity if the word category identification in stage 1, or the computation of argument prominence for Actor and Undergoer arguments and argument linking for verbs in stage 2 allows for more than one valid interpretation. This is text-type-independent and would occur for any reader of any text. At this stage in processing, the reader cannot yet draw on additional information outside the text which might aid ambiguity resolution. The difficulty of being unable to

map form onto meaning quickly is associated with disfluency and potentially triggers a fast negative affective response, perceived as displeasure by the reader. In the late processing stage, the reader may resolve ambiguity, but this requires more cognitive effort than processing unambiguous sentences. Difficulties in stage 3 stem from the generalised mapping of form onto a corresponding meaning. Solving difficulties here requires "reanalysis and repair" (Frisch, Schlesewsky et al. 2002, B83). Semantic, contextual and pragmatic information feed into disambiguation, and this stage is text-type dependent. If readers are successful at resolving and entertaining a representation of a sentence, this should lead to cognitive fluency and a late positive affective response, which produces pleasure. This ability to detect and resolve syntactic ambiguity depends on the reader's proficiency and motivation to cope with syntactic, semantic and narrative difficulties in the text.

Ambiguity resolution encompasses the representation of alternative interpretations (Twose 2008; Zeki 1999, 63). Because the syntactic form of ambiguous sentences is open for competing representations, readers may form and perceive alternating and non-stable, oscillating representations, a sort of linguistic illusion, akin to optical illusions (Richardson 2010; Slattery, Sturt et al. 2013). Trying to resolve syntactic ambiguity may contribute to an increased awareness of the process of meaning making (Richardson 2010; Zeki 1999, 61-62), yet the reading experience does not afford a conscious insight into cognitive processing.

Although different syntactic structures may require the reader to resolve ambiguity in different ways, the experience of pleasure in reading should be the same. This assumption is rooted in my notion that the source of reduced processing difficulty remains inaccessible for the individual reader, and that the discrepancy between early disfluency and late cognitive fluency is the source of pleasure. Even though the reader cannot consciously identify the source of displeasure and pleasure, he can still experience the pleasure. The elicitation of displeasure and pleasure may trigger the reader into considering the descriptive pieces as significant within the novels.

While Bowen's poetic ambition of creating difficulty yet providing new and accessible meanings at the same time seems to be contradictory, I suggest that ambiguity, and the processing difficulty associated with it, contribute to the eventfulness of reading on the one hand, and meaningfulness on the other. Ambiguity creates difficulty but not for its own sake, as demanded by Bowen herself ((ca. 1950) 2010b, 161). While I have no direct experimental evidence that individual readers notice syntactic ambiguity in

Bowen's novels, I propose that the sense of eventfulness is a consequence of the reader's attempts to resolve ambiguity.

Throughout Chapter 3, I present individual sentences to discuss ambiguity. In many sentences, punctuation may initially suggest that my analyses are not appropriate. However, it will become clear that Bowen uses punctuation relatively freely, and this has been a subject of literary scholarship. In addition, editions of her novels differ in how punctuation is used, such as in: "In their heart(,) like a dropped pin(,) the grey glazed roof reflecting the sky lightly glinted" (*LS* 66, my parentheses). While the commas are included in the edition of *The Last September* I use (Bowen (1929) 1998), an earlier one does not (Bowen (1929) 1985). Whenever punctuation seemingly contradicts my analyses, I will address this issue.

In this chapter, I aim to find out why individual sentences in Bowen's descriptive pieces may be difficult to read and suggest that they are ambiguous in three respects: First, in 3.1, I analyse sentences in which the reader may have problems in identifying and assigning agency, i.e., the Actor role, to the grammatical subject. This may occur in sentences where the syntax is ambiguous between an active main clause and a reduced relative clause. Secondly, the reader may find it hard to establish sensible argument relations between the Actor, verb and Undergoer in complex sentences with non-canonical constituent orders, which I discuss in 3.2. Finally, I consider ambiguities which may stem from non-canonical constituent orders in similes in 3.3, and summarise my findings in 3.4.

3.1 Ambiguous Actor arguments and verbs in reduced relative clauses

In the following, I discuss 13 ambiguous reduced relative clauses which impede the mapping of grammatical structures onto thematic roles during incremental sentence processing.[42] Generally, there are two types of relative clauses: Restrictive relative clauses contain essential information about the subject (or object) of the main clause, as in example a). Non-restrictive relative clauses offer additional information about the subject (or complement) of the main clause, as in b).

a) Authors who write novels may earn more money than playwrights.

[42] I found 19 ambiguous relative clauses in the three novels. Of these, seven occur in *The Last September*. Two sentences each stem from narrative episodes on pages 7, 66-67 and 123, and one from pages 205-206. In *The Heat of the Day*, there are six sentences, one each on pages 4, 57-59, 98, 117-120 and two on pages 138-139. In *To the North*, I found six sentences, one each on pages 1, 4, 146, 260, 230 and 284.

b) Elizabeth Bowen, who wrote one play, is best known for her novels.

If the relative pronoun of non-restrictive relative clauses is the subject of the relative clause, it cannot be dropped from the surface structure.

Bowen, however, often *does* drop the subject and the auxiliary verb from the surface structure, thereby omitting important information about the subject (the potential Actor) and the argument structure of the verb in the relative clause, as is the case here:

> About six o'clock the sound of a motor, collected out of the wide country and narrowed under the trees of the avenue, brought the household out in excitement on to the steps. (*LS* 7)

In incremental sentence processing, the reader matches the grammatical structure with the thematic roles of Actor and Undergoer as follows: Non-predicating lexemes are identified in stage 1 of processing. Their argument prominence is computed in stage 2, where the reader draws on prominence information such as argument order and animacy (Bornkessel-Schlesewsky and Schlesewsky 2009a, 289). In English sentences in which the subject precedes the verb and the object, the reader is likely to interpret the grammatical subject as the Actor argument and the grammatical object as the Undergoer argument. Subjects which are animate are preferably interpreted as Actors, whereas inanimate subjects are more difficult to process as Actors. Remember that stage 1 and 2 of incremental sentence processing constitute the early processing stage in the model of literary sentence processing. This is the stage in which processing difficulty can elicit a fast negative affective response. In stage 3 of processing, the reader then interprets the sentence structure and finalises the match between the grammatical structure and the thematic role assignments by drawing on semantic, contextual and pragmatic knowledge. This forms part of the late processing stage in the model offered in this thesis. Here, cognitive fluency can be achieved. The difference between early disfluency and late cognitive fluency yields aesthetic pleasure.

The ambiguous sentence structures which I consider in this section share two major characteristics. First, cars, houses and plants occur in the grammatical subject position of many sentences, whereas fictional characters occur as the grammatical object. The transitivity information of the verbs in these sentences often suggests that the cars, houses and plants are active and animate agents, whereas the fictional characters are portrayed as passive and even inanimate receivers. The grammatical structure of these sentences

therefore treats inanimate entities and animate characters in a way which contradicts the reader's semantic and pragmatic knowledge. These sentences require an unusual and costly mapping of Actor and Undergoer roles onto semantically non-prototypical subjects and objects. Secondly, the lexico-semantic associations of the subject, verb and the object often do not fully match. Even though Bowen's sentences do not undermine the basic syntactic structure of canonical English sentences, they challenge the easy mapping between syntactic structure and semantic interpretation in early processing. Achieving a coherent interpretation is possible within the fictional context of the novels but remains difficult and requires effort on behalf of the reader in the late processing stage.

I begin my discussion of ambiguous main and relative clauses with the excerpt below because it may be seen as a blueprint for all other clauses which I discuss in the remainder of this chapter. This sentence is less ambiguous than the following examples, yet raises the same issues. In sentence (1), ambiguity resolution is possible and allows a stable representation of meaning. The second sentence works along similar lines, and I therefore do not discuss it.

(1) About six o'clock the sound of a motor, collected out of the wide country and narrowed under the trees of the avenue, brought the household out in excitement on to the steps. . . . In those days, girls wore crisp white skirts and transparent blouses clotted with flowers; ribbons, threaded through with a view to appearance, appeared over their shoulders. (*LS* 7)

In sentence (1), syntactic ambiguity arises from two sources. On the one hand, the subject argument in the main clause is non-prototypical because it is not an animate Actor. On the other hand, the surface structure of the subordinate clause is reduced, producing ambiguity by the "systematic ellipsis of argument structure" (Ingram 2007, 257, 661; Bornkessel-Schlesewsky and Schlesewsky 2009a, 98-99; Clifton Jr. and Ferreira 1989, SI78-SI81; Spivey-Knowlton, Trueswell et al. 1993, 277-279). For the reader, who processes the sentence word by word and incrementally, the first problem arises from the subject "the sound of a motor".

> About six o'clock **the sound of a motor**, **collected** out of the wide country and **narrowed** under the trees of the avenue, **brought the household** out in excitement on to the steps.

This noun phrase is the grammatical subject, but it is semantically non-prototypical because it is inanimate. Nevertheless, the sentence requires an Actor interpretation. This leads to disfluency and a fast negative affective response. By contrast, the object noun phrase "the household" represents the fictional characters, is animate and a non-prototypical Undergoer.

The second problem lies in finding a verb for this subject. The first verb the reader parses is that of the relative clause, not the main verb of the main clause. Even though it may seem unlikely, the reader may understand the verb "collected" as a preterite verb of the subject "the sound of a motor". While this means that the reader has to disregard the comma, such a strategy may seem less unusual once we consider further examples where this is the only way of arriving at a sensible representation of a sentence. Reading the verb "collected" as the preterite main verb of the subject "the sound of a motor" also requires reading it as an intransitive verb. This too may seem unusual but is a recurring demand placed on the reader by Bowen's use of verbs. The collocation of "collected" is strange in the context of the concept of a motor and space. The verb might rather be expected in connection with water. The same sentence structure with a different noun in the subject phrase might not be perceived as ambiguous but as metaphorical: "The sound of the water, collected".[43] So far, the reader thus represents the sentence as follows:

a) About six o'clock the sound of a motor [ ] collected out of the wide country

The second verb of the relative clause, "narrowed", is then likely to be read as a conjoined preterite verb which also takes "the sound of a motor" as its subject.

> About six o'clock the sound of a motor [ ] collected out of the wide country and narrowed under the trees of the avenue [ ]

The reader may continue this reading of the sentence but needs to make further adjustments. The verb of the main clause," brought", can be integrated into an active main clause reading if a conjunction such as "and" is added:

> About six o'clock the sound of a motor [ ] collected out of the wide country and narrowed under the trees of the avenue [ ] [and] brought the household out in excitement on to the steps.

[43] In this respect, this sentence is similar to sentence (4) from *The Heat of the Day* ("blades of sunset").

Again, this discrepancy between the text and the reader's representation may seem unusual, but many of Bowen's sentences require this degree of representational divergence for a sensible interpretation.

The above relaxations of the reading process are not random. They are promoted by reading the grammatical subject as an animate Actor, contrary to the reader's semantic and pragmatic knowledge. Here, the syntax of the sentence can be seen to interact with the semantic prototypicality of the subject. If the reader interprets "the sound of a motor" as an active animate entity which is capable of moving on its own and even affect the fictional characters, "the household", the reader needs to make the above adjustments for a coherent representation of the sentence. Early processing difficulties which elicit a fast negative affective response are text-type independent but can be solved by drawing on text-type dependent semantic and pragmatic knowledge in late processing. The successful interpretation is then likely to elicit cognitive fluency and yield aesthetic pleasure.

Because the sentence is ambiguous, it is also possible to consider a second interpretation. If the reader represents the verbs "collected" and "narrowed" as preterite verbs of a main clause, the absence of the conjunction "and" before the verb "brought" may trigger a re-analysis of the sentence structure. The reader may now represent the verbs "collected" and "narrowed" as past participles in a reduced relative clause in which the relative pronoun and the auxiliary have been dropped:

b) About six o'clock the sound of a motor, [which was] collected out of the wide country and [which was] narrowed under the trees of the avenue, brought the household out in excitement on to the steps.

Such a passive clause reading means that the reader re-assigns the thematic roles of Actor and Undergoer. In this case, "the sound of the motor" remains an animate Actor, but the number of processes assigned to it is reduced to just one verb, "brought". The other two processes, "collected" and "narrowed", need to be assigned to another, unstated Actor.

The initial active main clause reading may thus turn out to be a misreading in which a complex structure has been represented as a simpler structure. This is not uncommon and is called the preference for "minimal attachment" (Ingram 2007, 262; Bornkessel-Schlesewsky and Schlesewsky 2009a, 98-99). Why, then, would a reader prefer a passive relative clause reading over a possible active version?

c) About six o'clock the sound of a motor, [which] collected out of the wide country and [which] narrowed under the trees of the avenue, brought the household out in excitement on to the steps.

I suggest that the motivation to represent a relative clause rather than a main clause reading originates from the need to assign the two verbs "collected" and "narrowed" to an animate subject, a subject other than "the sound of the motor". A passive relative clause reading allows this, whereas an active relative clause reading maintains "the sound of the motor" as the Actor. If semantic and pragmatic aspects favour the assignation of the verbs to a more fitting Actor argument, a reader may invest more cognitive effort into representing a complex syntactic structure rather than compromise on the interpretation of the thematic relations in a sentence.

Reduced relative clauses such as that of sentence (1) therefore create ambiguity by "fail[ing] to constrain" (Ingram 2007, 257) the meaning of the relative clause, and the surface structures of these sentences can be interpreted as having "more than one underlying structure" (Ingram 2007, 257). Sentences containing a reduced relative clause are garden path sentences if they are locally ambiguous between a main clause and a reduced relative clause. The reader is initially mislead into "a *wrong* reading of a locally ambiguous structure, and subsequently experiences some difficulty recovering from the initial mis-parse" (Ingram 2007, 261, italics in orig.; Slattery, Sturt et al. 2013). Here and in the remainder of this chapter, I suggest that the process of misrepresenting and correcting the representation of a sentence, while costly, may elicit pleasure for the reader. However, Bowen's syntax often does not allow for a final and stable correction of initial misparses. Instead, alternative representations are likely to oscillate, with neither the original active main clause reading, nor the later passive relative clause reading fully taking over. That is, neither version fully eradicates the other, and both may remain accessible for the reader (Slattery, Sturt et al. 2013).

As mentioned earlier, sentence (1) may be considered as the blueprint for all other reduced relative clauses in *The Last September* and possibly the later novels *To the North* and *The Heat of the Day*. Variations of its syntax-semantic structure repeatedly challenge the reader throughout all three novels. Even if the reader has successfully resolved one of these ambiguous sentences, this does not mean that the next can be resolved in the same way. Ambiguous sentences in the novels remain challenging and unpredictable for the reader, yet offer the potential for an eventful and aesthetically pleasurable reading

experience. While the three novels differ in how they use these sentence structures to create ambiguity, all ambiguous sentences describe landscapes, houses or emotional states of fictional characters.

In the following, I discuss four sentences each from *The Last September* and *To the North*, and five sentences from *The Heat of the Day*. I indicate syntactic ellipses and possibilities of filling them, creating sentences with complete surface structures to illustrate my argument. I show the sentences within context where more than one is ambiguous. However, I discuss one sentence only because the others often work along similar lines and a discussion of both would not add new insights.

The Last September

Sentence (2) is taken from Chapter 8, part 1 of *The Last September*, an episode describing the Irish landscape surrounding the Big House, Danielstown. This sentence is the odd one out in this discussion as the ambiguity here does not entail a switch between a main and a relative clause reading. However, it supports my previous argument that a passive relative clause reading may be preferred over a main clause reading in order to assign agency to a second, even if unstated, Actor argument.

In the excerpt below, all grammatical subjects are inanimate and therefore non-prototypical. Processing sentence (2) may require an overall greater cognitive effort than sentence (1), and resolving ambiguity may therefore also yield greater pleasure. The greater the early linguistic difficulty and late interpretive ease, the more rewarding a successful interpretation becomes. This assumption is rooted in the model of literary sentence processing, in which I argue that the discrepancy between early and late processing fluency is the source of aesthetic pleasure.

The two underlined sentences are ambiguous and difficult to resolve:

(2) The cabins lifting their pointed white ends, the pink and yellow farms were but half opaque; cast doubtfully on their fields the shadow of living. Square cattle moved in the fields like saints, with a mindless certainty. Single trees, on a rath, at the turn of a road, drew up light at their roots. Only the massed trees – spread like a rug to dull some keenness, break some contact between self and senses perilous to the routine of living – only the trees of the demesne were dark, exhaling darkness. (*LS* 67, my emphases)

In sentence (2), two clauses are conjoined with a semi-colon.

The cabins lifting their pointed white ends,
the pink and yellow farms were but half opaque;
cast doubtfully on their fields the shadow of living.

Ambiguity arises from two sources. First, the subjects "The cabins" and "the pink and yellow farms" are non-prototypical because they are inanimate. Second, the clause after the semi-colon omits the subject and therefore has a reduced surface structure. These two factors influence how the reader comprehends the sentence word by word in incremental processing.

The syntactic structures of the clauses preceding the semi-colon are grammatical. However, both subjects, "The cabins" and "the pink and yellow farms", are inanimate and hence non-prototypical. However, the present participle "lifting" usually takes an animate subject, and so the reader may initially misparse the participle in the subordinate clause as the verb of a reduced relative clause:

a) The cabins[,] [which were] **lifting** their pointed white ends[,]
b) The cabins [were] lifting their pointed white ends

In representation a), the reader prefers a complex over a simple syntactic structure, which contradicts the general preference for minimal attachment. However, a main clause reading as in b) is likewise costly. If the reader does indeed consider the relative clause reading, this option must be rejected on parsing the subject "the pink and yellow farms" in the main clause. A relative clause reading would now require the verb of the main clause. The reader is therefore forced to re-consider the syntactic representation of the sentence, which is now likely to be a subordinate participle clause, and this is usually followed by a main clause.

How can the reader integrate the subordinate and the main clause into a coherent representation? While the syntactic structure of the subordinate participle clause and the main clause may be grammatical, the semantic connection is not clear. Consider the following representation which relies on pragmatic knowledge rather than syntactic or semantic information:

a) *As/While/Because* the cabins [were] lifting their pointed white ends, the pink and yellow farms were but half opaque;
b) The cabins [were] lifting their pointed white ends, *while* the pink and yellow farms were but half opaque;

The reader may attempt to establish a causal or temporal relation between the two Actors and the events described in the two clauses, one of which must be represented as a fully formed adverbial clause. Such a representation demands further relaxations of the reading process, and this is costly. The two versions above may seem rather unlikely. Another, perhaps less costly, representation treats both clauses as main clauses which are conjoined by a comma but drop the conjunction, effectively an instance of a comma splice:

c) The cabins lifting their pointed white ends, [and] the pink and yellow farms were but half opaque;

This interpretation demands no relaxation of the early reading process because the syntax of the sentence is represented as a complete surface structure. Despite the semantic and pragmatic oddities of each clause, the strain of integrating them into a semantically and pragmatically coherent whole is reduced in this version. Depending on the reader's ability and willingness to invest effort into late processing, more or less complex representations can be considered and yield aesthetic pleasure if cognitive fluency is achieved.

I now turn to the clause following the semi-colon. The subject, and hence a potential Actor argument, is dropped from the surface structure.

> The cabins lifting their pointed white ends, the pink and yellow farms were but half opaque; cast doubtfully on their fields the shadow of living.

The reader parses the verb and adverb "cast doubtfully" first and may attempt to reconstruct the missing subject and Actor argument. In order to compute the argument structure of the verb "cast", the reader may substitute the semi-colon with an "and". This would make "cast" a main verb referring back to the subjects of the previous clauses.

> The cabins lifting their pointed white ends, the pink and yellow farms were but half opaque[, and] cast doubtfully on their fields the shadow of living.

However, this is difficult for three reasons: In one reading, the sentence preceding the semi-colon consists of a subordinate clause and main clause with different subjects. The reduced surface structure does not make this explicit. It is therefore syntactically unclear which of the previous arguments qualifies as a subject for this final clause. In the other reading, in which the first two clauses are conjoined main clauses, the reader may treat both subjects as a conjoined subject for the final clause. Filling the Actor argument slot in the final clause is therefore difficult because the preceding syntactic structure of

sentence (2) is ambiguous. Moreover, the object of this fragment, which can be interpreted as the Undergoer argument, has an inverted constituent structure; the indirect object precedes the direct object, making the identification of dependency relations difficult. Here too, the semantics contribute to difficulty: While the semantic relation between the verb "cast" and the noun "shadow" is comprehensible, it is difficult to interpret the phrase "the shadow of living", even as a metaphor.

While the reader has to take an active role in representing meaningful content, he will probably not consider each possible representation of the sentence. Alternative interpretations will only be formed until a satisfactory interpretation is achieved. Satisfactory here means a representation which produces sufficient cognitive fluency to elicit aesthetic pleasure. The most likely interpretation is one which is in keeping with the immediate context in the paragraph and narrative episode. This may be driven by the relative ease of accessing lexical, semantic and pragmatic structures which have previously been activated. According to the proposed model, late processing in which semantic, contextual and pragmatic factors play a role is text-type dependent. Therefore, it is plausible to postulate that cognitive fluency may be easier to achieve if a sentence does not contradict the overall interpretation of a narrative episode.

Recursive corrections are necessary while reading sentence (2) because syntactic, semantic and pragmatic factors prevent a stable representation. Competing representations cannot be stored as a coherent and stable proposition and have to be reproduced repeatedly. This also means that early processing disfluency cannot be easily complemented with cognitive fluency associated with stable interpretations. Instead, the reader may repeatedly go through a process of disfluency and momentary cognitive fluency. Not coming up with stable interpretations therefore contains potential for aesthetic pleasure.

To summarise, ambiguity in sentence (2) is caused by inanimate and hence non-prototypical subjects. Yet the verbs usually take animate subjects and force the reader to interpret the subjects as Actor arguments. In the final clause, the surface structure is reduced by dropping the subject which the reader needs to identify. Sentence (2) is syntactically open to a range of interpretations. Reconciling the constituents into an unambiguous whole is difficult.

Sentence (3) is taken from a narrative episode in Chapter 15, part 2 of *The Last September*. Some of the novel's characters explore the grounds of a derelict mill near the Big House. The protagonist Lois is frightened but enjoys this thrill. The episode begins

with her view of the scenery. Despite the presence of the characters, inanimate entities play a major role, and the characters are hardly mentioned throughout this episode.

(3) Those dead mills – the country was full of them, never quite stripped and whitened to skeletons' decency: like corpses at their most horrible. . . . Mounting the tree-crowded, steep slope some roofless cottages nestled under the flank of the mill with sinister pathos. (*LS* 123, my emphases and omission)

In the underlined sentence, the head noun of the subject phrase "those dead mills" is inanimate, though the adjective "dead" implies that the mill once possessed animacy. The subject is thus inanimate and non-prototypical. The inserted clause "the country was full of them" describes how the larger scene, "the country", relates to the subject. The insertion is separated from the main clause by what seems to be a random use of a dash and a comma. This is one instance of Bowen's free use of punctuation marks. In this case, it seems to be less significant whether it is a dash or a comma, and both serve to separate the inserted clause from the main clause. As in earlier examples, the verbs "stripped and whitened" may be treated as active preterite verbs, yielding an active main clause reading:

a) Those dead mills [ ] never quite stripped and [never quite] whitened to skeletons' decency:

Such a reading assumes a complete surface structure (with the exception of the licensed ellipsis in the conjoined verb phrase), even if this means that the non-prototypical subject "Those dead mills" is treated as an Actor argument. Such a reading requires the reader to accept that "dead mills" are capable of actively carrying out the processes described. However, the reader may also consider the sentence structure as incomplete, with the auxiliaries of the two verbs "stripped and whitened" dropped, rendering the sentence a passive construction:

b) Those dead mills [were] never quite stripped and [were never quite] whitened to skeletons' decency:

This representation does not treat the subject "Those dead mills" as the Actor but as the Undergoer of an unstated Actor, or else of a process which does not require an active agent. While the reader must invest more effort into reconstructing the underlying structure of this sentence, the late interpretive stage may be easier because no non-prototypical subject needs to be integrated into a semantically and pragmatically coherent

representation. Since the overall syntax of the sentence is unclear, the form of the verbs does not allow for a definite representation. Here, semantic and pragmatic clues in late processing might be more relevant in ambiguity resolution than syntactic considerations in early processing.

As in the previous example (2), sentence (3) ends with a conjoined sentence fragment, here a simile:

like corpses at their most horrible.

The colon may just as well be replaced with a comma, and this is another instance of Bowen's punctuation. The integration of the simile into an overall representation of the sentence seems fairly straightforward. The alternating active and passive representations of the sentence affect the simile insofar as the reader then either interprets "corpses" as actively "stripping" and "whitening", or as the receiver of that activity. In my understanding, the mills are "dead" and undergo a process of incomplete decay in the same way as human corpses may.

I briefly return to the issue of punctuation which I have already touched upon. For the two potential sentence representations, I have assumed that the dash and the comma fulfil the same function and together separate the inserted clause from the main clause:

c) [Those dead mills [– the country was full of them,] never quite stripped and whitened to skeletons' decency: like corpses at their most horrible].[44]

Consider also the possibility that the dash and the comma have different functions. Perhaps, the dash separates a sentence-initial phrase from the main clause, such as a thought which can be misread as a subject:

d) [[Those dead mills] – [the country was full of **them**, [they] never quite stripped and whitened to skeletons' decency: like corpses at their most horrible]].

The phrase "the country" would then be the subject of a main clause, followed by a conjoined main clause in which the subject has been dropped and could be substituted as indicated above. This sentence illustrates that Bowen's punctuation is not random. Rather,

[44] The text following the dash could also be a list of one complete and two incomplete clauses, each referring back to the initial phrase "Those dead mills". It could just be a list of thoughts or clause fragments.

assigning meaning to individual punctuation marks in combination with syntactically ambiguous sentence structures contributes to processing difficulties.

To summarise, skilled readers may be able to represent both the active and the passive version alternatingly. Due to the fragmented syntax, neither the structure nor the meaning of this sentence can be easily predicted. Early linguistic processing should yield a fast negative affective response given that processing fluency should be relatively low. Late processing should yield better results, particularly when readers can successfully draw on pragmatic knowledge. If cognitive fluency can be achieved, successful literary interpretation should result in pleasure in the later stage of processing.

The last ambiguous sentence from *The Last September* is taken from the closing episode in Chapter 23, part 3 of the novel. Like previous episodes, it focuses on processes in the landscape. Ambiguity arises from inanimate and thus non-prototypical subjects and from their verbs which promote a different reading.

(4) The roads in unnatural dusk ran dark with movement, secretive or terrified; not a tree, brushed pale by wind from the flames, not a cabin pressed in despair to the bosom of night, not a gate too starkly visible but had its place in the design of order and panic. (*LS* 206)

The subjects in this sentence are all inanimate: “The roads”, “a tree”, “a cabin”, “a gate”, and yet the verbs “ran”, “brushed” and “pressed” usually take animate subjects. The adjectives “secretive” and “terrified”, and the nouns “despair” and “panic” are also usually associated with animate and human agents. Despite the inanimate and non-prototypical subjects, the lexical structure of the sentence promotes a reading of the subjects as animate Actors. I now discuss the sentence word by word, as occurs in incremental sentence processing.

The part of the sentence preceding the semi-colon has a complete surface structure and is, at first glance, syntactically unambiguous. The subject “The roads” is inanimate and should not immediately be interpreted as an Actor. The verb “ran” is unambiguously active and fully realised in the surface structure. The two adjectives in the afterthought, “secretive or terrified”, reassert the active status of the verb. However, by using the adjectives “secretive” and “terrified”, Bowen implies two differing views on the Actor status of “The roads”. The adjective “secretive” implies the agency of the Actor argument. The lexeme “terrified” suggests that the Actor argument is also the Undergoer argument of an unstated process. The link between the Actor argument and the adjectives is

therefore ambiguous. Alternatively, the phrase "dark with movement" could be interpreted as being "secretive or terrified". The phrase "ran dark with movement" is difficult to interpret semantically and pragmatically, and Bowen associates the idea of movement with a colour, creating a synaesthetic expression.

While word category identification and basic constituent structuring is unproblematic in this part of the sentence, it is difficult to establish the relation between "secretive or terrified" and either the previous grammatical subject or the complement. This difficulty gives rise to processing disfluency and a fast negative affective response. The ambiguity of this clause yields two alternating literary interpretations, and the process of building and maintaining them produces cognitive fluency. Readers are able to re-run linguistic and literary analyses of this sentence part and derive pleasure from repeated analyses. The discrepancy between early linguistic disfluency and late cognitive fluency can be repeated, which means that the elicitation of aesthetic pleasure can be reproduced.

Let us now consider the second coordinate sentence in (4). The ambiguity and the associated aesthetic pleasure of reading the sentence initial clause potentially influence how the reader treats this part of the sentence.

> not a tree, brushed pale by wind from the flames,
> not a cabin pressed in despair to the bosom of night,
> not a gate too starkly visible

At first, these concatenated clauses seem to have similar syntactic surface structures, yet subtle syntactic differences emerge for the reader during incremental processing.

Two of these aspects present problems for the reader: All three clauses begin with an inanimate subject and are therefore non-prototypical. An Actor interpretation is not the most likely choice. All three clauses have a verb which usually takes an animate subject. These verbs can be read as an active preterite verb of the subject, or as a past participle in a reduced passive relative clause, as in previous examples. The first clause contains an inanimate subject and a reduced relative clause:

> not a tree, [which was] **brushed pale** by wind from the flames,

A misrepresentation of the verb phrase "brushed pale" is only possible if the reader disregards the comma, and even then it is only possible to maintain this representation until the by-agent (rare in Bowen's texts) is parsed. Recognition of the passive relative

clause is therefore relatively easy. Based on this structure, the reader forms predictions about the second clause:

not a cabin [which was] **pressed** in despair to the bosom of night,

The subject is inanimate, while the verb usually takes an animate one. The verb may be read as a past participle or a preterite. The interpretation of "not a cabin" as an animate Actor is possible and in line with the preference for minimal attachment. Once the reader has finished parsing the sentence, he may nevertheless attempt to represent a more complex structure, that of a reduced relative clause, as shown above. Why would a reader override the preference for simpler structures in order to create a more complex one in this case? I suggest that such an additional effort might be motivated by the desire to represent a semantically and pragmatically more plausible interpretation. A passive relative clause reading may also be primed by the previous sentence; switching to an active main clause reading would involve a divergence from the previous interpretation of the processes in this episode. We can imagine the "tree" of the previous clause as the receiver of an activity, and the same holds for the "cabin" of the second clause. It is more difficult to represent the cabin as an active and animate Actor if we do not represent the tree in the same way. Here, too, the overall semantic and pragmatic coherence of a narrative episode contributes to late, text-type dependent processing.

The third clause then offers some more orientation for the reader, potentially stabilising an unstable representation of the second clause. The third clause diverges from the previous syntactic pattern. While the subject "not a gate" is similar to the previous ones, this clause has an adjective structure instead of a main verb:

not a gate [was] **too starkly visible**

The adjective "too starkly visible" is quite likely part of a passive clause. The subject "not a gate" is inanimate, and it is not an Actor argument in this case. The Actor argument is omitted, as in the second clause. The reader has to switch back and forth between complete and reduced surface structures. The three subjects are all equally inanimate and non-prototypical, yet they have to be interpreted alternatingly as animate Actor or (in)animate Undergoer. The syntactic underspecification of this sentence makes the processing of argument relations difficult and gives rise to early processing disfluency. The semantic inconsistency within this sentence adds to this early difficulty, which makes

late processing and interpretation even more difficult. I now conclude this discussion with an analysis of the final clause in sentence (4):

> but had its place in the design of order and panic.

It is not entirely clear how the third clause can be integrated into a coherent representation. Consider the possibility that the verbs in the first and second clause and the adjective in the third clause function as adjectival phrases referring back to the three noun phrases.

> The roads in unnatural dusk ran dark with movement, secretive or terrified;
> [[[not a tree, [**brushed pale** by wind from the flames]],
> [not a cabin [**pressed** in despair to the bosom of night]],
> [not a gate [**too starkly visible**]]]
> [but had its place in the design of order and panic]

If this is the case, all three clauses are extended subjects sharing the phrase "but had its place in the design of order and panic" as a main clause. The sentence initial clause I discussed earlier stands on its own, as a conjoined sentence which is semantically independent from the clauses after the semi-colon. The syntactic inconsistencies in the sentence after the semi-colon make it hard for the reader to come to a full interpretation.

In sentence (4), early processing on the phrase and clause level is possible, yet their integration into a coherent representation is difficult. Some syntactic structures seem to be mutually exclusive and cannot be brought together in a fully resolved structure. In order to achieve cognitive fluency, the reader will have to decide which part of the sentence is most important and disregard the rest. However, no stable interpretation of the sentence as a whole is possible, and the reader will have to be satisfied with a best approximation. I propose that a reader is satisfied when the difference between late cognitive fluency and the early disfluency is sufficient to elicit aesthetic pleasure. For readers with a relatively low proficiency in reading, this may be the easiest to process interpretation, or the interpretation which meets least cognitive resistance. More experienced readers may seek out greater pleasure in interpretations which are more difficult to achieve and which also elicit higher pleasure. Here and in previous sentences, the syntactic structure does not allow for predictions of meaning. Rather, the syntactic structure allows for the prediction that the process of matching the sentence structure with a corresponding meaning will be difficult.

To summarise, some but not all ambiguous sentences in *The Last September* can be resolved into a stable representation and yield a coherent interpretation. A repeated reading of ambiguous sentences which lead to a stable representation should elicit little pleasure. While the initial misinterpretation is still accessible, re-reading does not produce cognitive fluency, offering no impetus to reconsider that representation. By contrast, re-reading sentences with unstable representations can be pleasurable because the discrepancy between early disfluency and late cognitive fluency can be repeatedly induced. I therefore assume that cognitive fluency and pleasure may have a signalling function: Achieving a satisfactory level of cognitive fluency and pleasure should serve as a heuristic, indicating when a successful interpretation has been represented. In *The Last September*, syntactic and semantic ambiguity are therefore a poetic choice and a means of engaging the reader with the text.

To the North

I now discuss two types of syntactic ambiguity in *To the North*. The descriptive pieces in this novel focus on the feelings, mental states and perceptions of fictional characters. Bowen often describes these in novel, unusual and difficult metaphorical terms. These ambiguous sentences are formally similar to those in the other two novels. The first type of ambiguity originates in the temporary possibility to interpret verbs as part of an active main clause or as part of a reduced relative clause. This relates to subjects which are inanimate and hence non-prototypical but may nevertheless be interpreted as Actor arguments. The second type of ambiguity stems from unclear transitivity information of verbs in combination with syntactic complexity. While I formally distinguish types of syntactic ambiguity for the sake of analysis, I do not equate them with different types of experience for the reader. Even though each type of syntactic ambiguity requires different linguistic sentence processing operations for their resolution, the pleasure of reading should be the same. The source of pleasure in processing fluency is not consciously accessible, yet this does not mean that fluency cannot be experienced as pleasure.

Sentences (1) and (2) are examples of the first category of ambiguity in *To the North*. Both involve syntactically prototypical Actor arguments. However, their verbs are ambiguous between a preterite of an active main clause and either an active or a passive reduced relative clause. Again, I consider each sentence word by word, as happens in incremental processing. Below, Bowen describes the travel agency which the protagonist Emmeline Summers runs and from where she dispatches travellers.

(1) Her roll-top in its solemn surround of silence was a monument to the pretence of industry: in vain her stenographer's pointed tapping, in vain the clock: place and time, shivered to radiant atoms, were in disorder. (*TN* 146)

At first glance, the final conjoined sentence seems to be similar to the reduced relative clauses in *The Last September*.

place and time, shivered to radiant atoms, were in disorder.

The subject "place and time" is inanimate and therefore non-prototypical. The verb "were" does not necessarily take an animate agent. An Actor interpretation of "place and time" is not forced on the reader, as often happens in the sentences discussed for *The Last September*. While the commas should indicate that "shivered to radiant atoms" is an inserted clause, subordinate to the main clause "place and time were in disorder", the verb "shivered" may nevertheless be interpreted as the preterite main verb of "place and time":

a) place and time[ ] shivered to radiant atoms

This representation requires the reader to relax the reading process by disregarding punctuation and treating "place and time" as an Actor after all. Neither the described relaxation nor the non-prototypical role assignment would be unusual for reading Bowen.

The difficulty in this sentence lies with the inserted clause, particularly with the verb "shivered", which is difficult to process due to its ambiguous transitivity structure. "Shiver" can be used as a transitive and as an intransitive verb (2015i; 2015j; 2015k). The intransitive version means "To fly in pieces; to split," (2015k), and the transitive means "to break or split into small fragments or splinters" (2015j). Both meanings may be considered plausible in this sentence. Once the reader parses the phrase "to radiant atoms", he is likely to interpret it as the complement of the sentence. If so, the verb "shiver" is represented as transitive. Such an interpretation is supported by syntactic information in early processing and also affords a plausible and stable interpretation in late processing.

However, once the reader processes the second verb "were" and the complement phrase "in disorder", the previous representation of the sentence has to be revised. Instead of interpreting "shivered" as the preterite verb of a main clause, representing this lexeme as the verb of a subordinate clause is more likely. I suggest that there is an active and a passive subordinate clause alternative:

b) place and time, [which [were]] shivered to radiant atoms, were in disorder.

Both interpretations are syntactically and semantically possible. In the active version, the relative pronoun refers to the Actor phrase of the main clause and indicates that the Actor argument in the main and the subordinate clause are the same. In the passive version, the relative pronoun in the subordinate clause must be interpreted as the Undergoer argument of an unstated Actor argument.

I propose that the surface structure of the subordinate clause gives rise to an early disfluency and a fast negative affective response on re-parsing the verb "shivered". Late interpretive processing should allow the reader to disambiguate the sentence in respect of the active/passive reading. The initial representation of the main and the subordinate clause as active, rather than passive, may "linger on" (Slattery, Sturt et al. 2013). By selecting a verb which is open for usage in transitive and intransitive argument structures, the syntactic structure of this sentence remains underspecified and open for interpretation. In this case, an active reading for the main and subordinate clause is perhaps more likely because it yields a simpler syntactic structure than a passive reading for the subordinate clause would. For the sentences in *The Last September,* I have argued that the passive relative clause interpretations are more likely, even if more costly, because the verbs describe processes which the reader seeks to attribute to an Actor other than that of the main clause. By contrast, this sentence in *To the North* describes a process which is semantically hard to grasp, leading to a preference for the simpler syntactic representation. Nevertheless, both the active and the passive reading are semantically plausible within the context of the novel. Semantic, discourse contextual and pragmatic knowledge about literary genre may contribute towards disambiguation in late processing. Skilled readers may as well represent the passive clause structure if they are able to derive cognitive fluency from syntactically and semantically complex sentences.

Sentence (2) is taken from an episode in which Bowen describes the end of a weekend in the countryside. I focus on the phrase "flicked off sharply as electricity":

(2) This morning Emmeline said she *was* going back; nervousness made her assertive; she could not have put things worse. Upon this, the dead stop of his tenderness, flicked off sharply as electricity, his incomprehension and ice-cold anger had given that bright hot Sunday – downs bald in sunshine, heat quivering in through the cottage doors – the lucidity of a nightmare. (*TN* 260; italics in orig., my emphasis)

The subject “the dead stop of his tenderness” is inanimate, even though the head noun of the phrase is semantically associated with animate beings. As in sentence (3) of *The Last September* (“those dead mills”), the adjective “dead” implies that the subject has previously been animate. Despite the non-prototypicality of the subject, the reader may consider an Actor interpretation. This view may lead to a main clause reading, again ignoring the comma:

a) Upon this, the dead stop of his tenderness[ ] flicked off sharply as electricity

While such a reading may be possible in early syntactic processing, it is likely to be rejected in late semantic and pragmatic processing. This rejection is based on the implausible combination of the semantics of the Actor argument and the verb: The “dead stop of his tenderness” implies the termination of a process, and the verb “flicked off” carries a similar meaning. The noun “tenderness” is the head of the phrase, and therefore the syntactic and semantic relation between “tenderness” and the verb “flicked off” is stronger than that between “the dead stop” and “flicked off”. The verb “flicked off” is thus more likely to be part of a subordinate relative clause which further describes the head noun of the Actor argument. Here, too, the reader may treat the inserted clause as a reduced relative clause, which may be either active or passive.

b) the dead stop of his tenderness, [which [was]] flicked off sharply as electricity,

The active interpretation may be syntactically easier to achieve, yet is semantically as implausible as the active main clause reading, and hence requires more effort in late semantic and pragmatic processing. The passive interpretation is syntactically more complex, yet demands less semantic and pragmatic processing effort because the semantic incongruity of the subject and the verb “flicked off” is minimised. The process of “flicking off” is now attributed to an unknown Actor, whereas “the dead stop of his tenderness” is now the Undergoer argument of that process.

The sentence poses three further processing challenges. First, the initially proposed main clause reading now becomes even less plausible because the phrase “his incomprehension and ice-cold anger” is difficult to integrate into such a structure:

> the dead stop of his tenderness[ ] flicked off sharply as electricity, his incomprehension and ice-cold anger

The phrase "his incomprehension and ice-cold anger" might be interpreted as a concatenated subject, or else as the subject of a concatenated sentence which Bowen has not marked with a conjunction, colon or semi-colon as would be grammatical:

c) Upon this, the dead stop of his tenderness, flicked off sharply as electricity, [and] his incomprehension and ice-cold anger had given that bright hot Sunday – downs bald in sunshine, heat quivering in through the cottage doors – the lucidity of a nightmare.

Secondly, the reader needs to retain the subject phrase "his incomprehension and ice-cold anger" for further processing until the two inserted phrases have been parsed.

> – downs bald in sunshine, heat quivering in through the cottage doors –

For the reader, this means additional cognitive load as the phrases need to be retained for further processing. Thirdly, the inverted constituent structure in the final part of the sentence requires additional storage efforts of the reader:

> his incomprehension and ice-cold anger **had given** *that bright hot Sunday* – downs bald in sunshine, heat quivering in through the cottage doors – *the lucidity of a nightmare*.

The inversion of the indirect and direct object (in italics) is grammatical but complex and costly. The reader can only finalise the process of matching the sentence structure with a corresponding meaning once the last item of a sentence has been processed.

In this sentence, additional information precedes central information, making processing more costly – particularly because the reader needs to store much information before mapping can be completed. This sentence seems to be irresolvable at some point, requiring the reader to disregard structural oddities in order to establish one or two competing representations. Detecting ambiguity in in early processing, both in examples (1) and (2) should lead to disfluency, thereby eliciting a fast negative affective response. The decision for or against one representation may be based on late semantic and pragmatic rather than early syntactic considerations.

To conclude my discussion of *To the North*, I consider two sentences which describe events in the narrative world. Note, however, that I do not assume any symbolic relationship between syntactic structure and narrative content. Ambiguity here stems from reversals in constituent order in combination with unclear transitivity information

of verbs. The surface structures of the main and subordinate clauses are complete in both cases. In the episode containing sentence (3), the protagonist Cecilia Summers returns from Italy to London by train.

(3) She [Cecilia] looked sideways; torn darkening mist streamed past her eyes; above, on the toppling rocks where the hotels were still empty showed a few faint lights. (*TN* 4, my emphasis)

Cecilia is mentioned explicitly in the episode, and so the pronoun "She" in the subject position and the pronoun "her" in the object position in the first clauses are easy to process. The focus gradually shifts away from Cecilia towards the view outside the window. The concatenation of three syntactically independent clauses is characteristic of *To the North*, but this feature in itself is not related to ambiguity.

She looked sideways;
torn darkening mist streamed past her eyes;
above, on the toppling rocks where the hotels were still empty showed a few faint lights.

The first two clauses have a canonical constituent structure, are unambiguous and should be easy to process. The reader's expectation that this pattern will continue is then subverted in the third clause.

[[above, [on the toppling rocks where the hotels were still empty]] [showed] [a few faint lights]]

The complex adverbial of place "above, on the toppling rocks where the hotels were still empty" is syntactically unambiguous and should not cause difficulty. However, the reader is likely to predict a subject and a potential Actor argument following the adverbial but instead parses the verb "showed". Even though "showed" is an unambiguous preterite, it is not yet clear whether it is used as a transitive or an intransitive verb. In absence of a subject and a suitable Actor argument, the reader cannot successfully compute the argument structure of the main verb. Processing becomes more costly due to increased storage demands when the reader lacks essential information, impeding a fast match between form and meaning. Once the reader parses the noun phrase "a few faint lights", its grammatical and thematic role must be assessed. The position after the verb suggests that it is a grammatical object. In absence of an unambiguous subject, the reader may treat

"a few faint lights" as a subject, consider it as an Actor argument and thus treat "showed" as an intransitive verb:

a) a few faint lights showed

Or else, the reader may treat "a few faint lights" as the object of an unstated subject, ultimately considering it as an Undergoer argument of the transitive verb "showed":

b) [subject] showed a few faint lights

Early syntactic processing in this sentence should be difficult because the inverted constituent structure renders the potential subject syntactically non-prototypical. In this respect, this sentence differs from all previous examples. Processing should be more difficult in comparison to sentences where subjects and hence potential Actor arguments are in a syntactically canonical position. Early processing difficulties here probably stem from basic structure building and increased memory load rather than from semantic aspects of subject and Actor prototypicality. Because the argument structure of the verb "showed" is unusual, readers may represent two oscillating versions while not being able to finalise either of them.

Example (4) from *To the North* consists of two concatenated adverbial phrases and a main clause.

(4) Looking into her wardrobe, crossing her bare arms up which the first chill of evening began to shiver, Emmeline found only two dresses pretty enough for Cecilia's party to-night: the yellow in which she had dined with Markie, the silver in which she had first met Julian. (*TN* 284, my emphasis)

To begin with, the constituent structure of the participle phrases "Looking" and "crossing" is canonical, and the implied subjects of these clauses agree with the subject of the main clause, "Emmeline". The subordinate clauses and the final sentence should not be difficult to process. Difficulties arise from the relative clause in the second clause, even though it has a complete surface structure.

crossing her bare arms *up which the first chill of evening began to shiver*

The subject "the first chill of evening" is inanimate and hence non-prototypical. Nevertheless, the verb "began to shiver" with the directional preposition "up" (in a non-

canonical position) suggests that it is animate and promotes an Actor interpretation. The head noun "chill" of the subject phrase is used in an unusual way. "Chill" can mean "[c]oldness seizing upon or pervading the body; an unnaturally lowered bodily temperature marked by shivering" (2015e). The collocation of "chill" and "shiver" as such is therefore not unusual. However, it is more conventional to think of the shiver as the visible and perceptible symptom of the chill than to consider "shiver" as an activity carried out by a "chill" as an animate agent. Moreover, the infinitive "to shiver" is used as a transitive verb. As an intransitive verb "to shiver" means "to tremble, shake, quiver; esp. to tremble with cold or fear" (2015k). As a transitive verb, "shiver" can be used as a causative, now obsolete, meaning "to give a sensation of chill to, to cause (a person or object) to shiver" (2015k). Difficulty in this sentence therefore has syntactic sources in early processing, and semantic and pragmatic sources in late processing.

For the main clause, early processing should be easy and fluent and should not elicit a fast negative affective response. Achieving cognitive fluency in late processing should therefore be easy as well. The low discrepancy between early and late processing fluency in the main clause should not entice strong affective responses if read in isolation. The specific combination of a difficult sentence initial subordinate clause with an easy main clause nevertheless allows for a discrepancy between early processing disfluency in one part of the sentence and an overall cognitive fluency in mapping sentence structures onto meaning for the whole sentence. A successful integration and representation of the clause complex may therefore give rise to aesthetic pleasure.

To summarise, ambiguity in *To the North* involves the temporary possibility of reading past participle verbs of passive reduced relative clauses as preterite verbs of active main clauses. In contrast to sentences in *The Last September*, these active clause readings cease to be plausible once the semantic and pragmatic aspects of the argument relation between the subject and the verb have been assessed. An active relative clause reading usually does not reduce this semantic implausibility, and therefore a passive relative clause reading is the more likely solution. Nevertheless, the initial misrepresentation may not be entirely erased, further affecting the reader's interpretation of the text. Punctuation as well as canonical and non-canonical inversions in constituent orders further complicate processing in *To the North*.

The Heat of the Day

In Bowen's 1948 novel about London during the Second World War, syntactic ambiguity relates to the issue of animacy and agency, as in the other two novels. *The Heat of the Day* has been characterised as "a novel in which the panic of possibly losing identity, and of others deceiving you about their identities, operates not only as the agency of plot but as the very texture of style" (Corcoran 2004, 169). Bowen's language arguably consists of "syntactical distortions and dislocations" which are "sometimes so arrestingly peculiar, because the pitch of the potential panic is so acute" (Corcoran 2004, 169). Even though the fictional characters within the novel may face problems such as the loss of identity and deceptions about identities, I do not assume that the reader experiences the same.

However, the text may indeed impede the identification of characters or entities as Actor arguments. In this section, I take a closer look at what Corcoran, cited above, calls "syntactical distortions and dislocations". However, I do not assume a naturalised relation between the theme of the novel and its syntax – mostly long and complex clauses, many concatenations and a free treatment of punctuation, perhaps even more so than in the two earlier novels. I analyse five sentences in which inanimate subjects may be read as Actors, and in which verbs are ambiguous between a preterite in an active main clause and a participle in an active or passive reduced relative clause. In addition, *The Heat of the Day* features ambiguous morphosyntax.

In the first excerpt, the protagonist Stella returns to London after a day out in the country visiting the family of her lover. In sentences (1) and (2) the verbs "troubled" and "blotted" create ambiguities between main and subordinate clause readings.

(1) She [Stella] was walking west, towards the torn pale late light – this troubled lingering of a day that had been troubling oppressed her, as did the long perspective of the extinct street that so few people frequented and none crossed. . . . Muteness was falling on London with the uneasy dark; here and there stood a figure watchfully in a doorway; (2) or lovers, blotted together, drained up into their kisses all there was left of this Saturday's end. (*Heat* 138-139; my emphases and omission)

In example (1), the clause preceding the dash has a canonical constituent order, and mapping form onto meaning is straightforward, allowing for a stable representation. However, the concatenated clause after the dash makes processing difficult:

this troubled lingering of a day that had been troubling oppressed her

The subject phrase “this troubled lingering of a day” is inanimate and hence non-prototypical. Yet the adjective “troubled” implies that the head noun “day” is capable of perceptions and may be an Actor argument after all. The relative clause “that had been troubling” further supports such an Actor interpretation. Based on this representation, the reader is likely to predict an object and a potential Undergoer argument for the relative clause.

this troubled lingering of a day [that had been troubling [object]]

The reader may predict such an object because the adjective “troubling” is more likely to be used in a transitive than in an intransitive construction. The participle in the subject phrase should refer to a different object than the main verb of the sentence. Based on the immediate and wider context of the sentence, the reader is likely to predict an object and an Undergoer other than Stella. Since London plays a central role in the novel, “Londoners” might be a plausible option:

this troubled lingering of a day [that had been troubling [Londoners]]

However, this prediction is not confirmed, and the reader parses the verb “oppressed” of the main clause instead. The main clause concludes with the pronoun “her”, Stella, as the object.

this troubled lingering of a day that had been troubling oppressed her

Stella may be the implied object and Undergoer in the relative clause, but this remains unclear. The subversion of a syntactic and semantic prediction in this sentence should lead to early processing disfluency and a fast negative affective response. A stable representation in late processing is possible if the reader fills in the omitted object and Undergoer argument in the relative clause. Cognitive fluency should then be relatively high and elicit a positive affective response, which the reader experiences as aesthetic pleasure. Depending on the individual reader’s ability and willingness to entertain more than one representation, early disfluency and late cognitive fluency should be reproducible.

The second sentence in this episode is preceded by one with a canonical constituent order and which is therefore easy to process. The word order inversion in the second sentence should be relatively easy to solve. Sentence (2) begins with the subject “lovers” which is animate, hence prototypical and therefore easy to process as an Actor argument.

(2) or lovers, blotted together, drained up into their kisses all there was left of this Saturday's end.

Despite the commas, the verb phrase "blotted together" is ambiguous between a preterite main clause verb and a reduced relative clause, resembling those discussed for *The Last September*. The subject and the verb phrase can be represented as follows:

a) lovers[ ] blotted[ ] together,
b) lovers, [who [were]] blotted together,

The main clause reading in a) may be promoted by the preference for minimal attachment and the semantics of the verb. The OED lists "to blot" as a transitive verb meaning "[t]o spot or stain with ink or other discolouring liquid or matter; to blur" (2015a). It also has a figurative meaning, which might make more sense in Bowen's novel: "To efface, wipe out of existence, sight, or memory; to annihilate, destroy. (Usually with *out*.)" (2015a, italics in orig.). However, Bowen uses the preposition "together" instead of "out". Until the reader parses this preposition, the active main clause reading may be more likely. On reading the preposition, the representation has to be corrected, now assuming a reduced relative clause with a more plausible metaphorical meaning. The syntactic form of the verb "blotted" is therefore ambiguous, and the semantic interpretation of this verb phrase requires semantic and pragmatic reasoning by the reader.

If the reader treats the verb phrase as the active verb of a main clause, the second verb "drained up" is likely to be treated as a conjoined verb:

a) or lovers[ ] blotted together[ ] [and] drained up into their kisses all there was left of this Saturday's end.

If the reader disregards punctuation, this representation is stable and unambiguous. If "blotted together" is treated as a reduced relative clause, either active or passive, the reader is likely to predict a main verb for the subsequent main clause.

b) or lovers, [who/who were] blotted together, drained up into their kisses all there was left of this Saturday's end.

As in earlier examples, I assume that the preference for either the syntactically simpler version a) or the syntactically more complex version b) depends on the reader's ability to cope with difficulty. While version a) requires more syntactic processing effort and the

ability to relax the reading process, the semantic interpretation is straightforward in that only one Actor argument, "lovers", is carrying out two activities. Even if the semantics of the verb "to blot" may not entirely support this representation, the reader may override this inconsistency. The relaxation of the reading process should then allow for cognitive fluency, resulting in aesthetic pleasure. Version b) requires a more complex syntactic representation which is more faithful to the original text, yet is more costly in early and late processing. In early processing, the reader needs to identify the Actor of the main clause and cope with an unstated Actor and Undergoer argument in the relative clause. Late processing then involves the interpretation of two diverging activities. Proficient readers may enjoy this kind of challenge, and cognitive fluency after successful interpretation should trigger aesthetic pleasure.

In sentence (3), I turn to an ambiguity between a main and a relative clause in combination with unclear syntactic boundaries between independent clauses within a clause complex. The reader is again confronted with the task of relaxing the reading process by overriding punctuation.

(3) Parks suddenly closed because of time-bombs – drifts of leaves in the empty deckchairs, birds afloat on the dazzlingly silent lakes – presented, between the railings which still girt them, mirages of repose. (*Heat* 98)

The part of the sentence preceding the dash can be read as an active main clause:

Parks suddenly closed because of time-bombs

The subject "Parks" is interpreted as the Actor argument, even though it is inanimate. This active main clause reading is in line with the preference for minimal attachment. Only once the reader has continued parsing the sentence, this representation is called into question. Before that happens, the two inserted phrases can be represented as sentence fragments, which should not give rise to processing difficulty. However, on reading the verb "presented", the reader should find the rest of the sentence difficult to reconcile with the previous structure.

– presented, between the railings which still girt them, mirages of repose.

The major challenge for the reader is to identify a sensible subject and Actor argument for the verb "presented". This search is difficult for the following reasons. If the reader

seeks to maintain the previous representation of a main clause and two sentence fragments, the final clause will be treated as another concatenated structure:

a) Parks suddenly closed because of time-bombs … [and parks] presented, [ ], mirages of repose

Alternatively, the reader may correct the initial representation of the first clause as an active main clause into a relative clause construction:

b) Parks [which/which were] suddenly closed because of time bombs … presented [ ] mirages of repose.

The subject "Parks" now takes "presented" as the verb of the main clause, whereas the phrase "suddenly closed because of time bombs" is treated as a relative clause which may be either active or passive. In this reading, massive corrections of an initial misparse are necessary, and the reader needs to represent a more complex sentence structure than in the initial active main clause reading.

So why would a reader reconsider the initial representation at all if this process is so costly? I suggest that the first reading, i.e., a main clause and several fragmented clauses, may be easier to achieve in the early processing stages in which basic constituent structures, argument prominence and their relations are established. Yet this misreading puts a greater cognitive load on late interpretive processing because the relation between Actors and Undergoers remains difficult to understand. Skilled readers may engage in this process successfully and may be able to experience aesthetic pleasure as a result. However, while the second representation may require more early processing effort to establish a more complex sentence structure, late processing is easier because the Actor-Undergoer relationship is simpler to understand. Less skilled readers may opt for this representation and be able to derive aesthetic pleasure in this way.

Let us now turn to three verbs whose word category is ambiguous in the opening episode of *The Heat of the Day*. In sentence (4), the nonce verb "firing" can be interpreted as an adverbial or as a reduced relative clause.

(4) It [this tarnished bosky theatre] was not completely in shadow – here and there blades of sunset crossed it, firing branches through which they travelled, and lay along ranks of chairs and faces and hands. (*Heat* 4)

The clause "It was not completely in shadow" is unambiguous, as is "here and there blades of sunset crossed it". The subject "blades of sunset" is inanimate and semantically unusual because the head noun "sunset" is more likely to take "rays" as a collocated noun. This unusual collocation may point towards metaphorical meaning.[45] Despite its inanimacy, "blades of sunset" may be interpreted as an Actor because the verb "crossed" is likely to take an animate Actor argument. In addition, the reader may find parsing the pronoun "it" in the object position difficult because the referent "this tarnished bosky theatre" must be recovered from the previous sentence.

The Actor ambiguity of the first clause also affects the remainder of the sentence. The second clause is an adverbial (participle) without a subject, and the third clause omits the subject but has an unambiguous preterite verb.

	blades of sunset	crossed it,	
	[subject]	firing	branches through which they travelled,
and	[subject]	lay	along ranks of chairs and faces and hands.

Because the subject, and hence the potential Actor argument, is not repeated in the second and third clause, it is difficult to connect "firing" and "lay" to the correct subject. The first difficulty is that "firing" is not actually a verb, but listed as a noun in the OED (2015h). This is an instance of Bowen using nonce words. "To fire" exists as a verb, meaning "setting fire to sth.", also figurative "to inspire" (2015g). The four verbs "crossed", "firing", "travelled" and "lay" are used as transitive verbs, and they all refer to a specific object or adverbial. All verbs support the initial Actor interpretation of "blades of sunset". However, the argument structures of the verbs differ from each other and establish a syntactically and semantically unusual sequence of events, which affects the interpretation of the objects and adverbials as Undergoer arguments.

The sequence of the initial clause followed by an adverbial can be read as establishing a plausible causal and temporal sequence of events:

> here and there blades of sunset crossed it,
> *thus/thereby* firing branches through which they travelled,

Such an interpretation requires pragmatic reasoning and may yield the connectors "thus" or "thereby" as causal links. However, the final clause with its preterite verb "lay" and

[45] In this respect, this sentence is similar to example (1) from *The Last September*, in which "the sound of the motor, collected" is an unusual collocation.

the adverbial phrase “along ranks of chairs and faces and hands” do not fit into that sequence.

Even though the individual clauses are syntactically correct, it is difficult to compute the overall structure of these clauses as parts of a clause complex. Readers should therefore encounter early processing difficulty and a fast negative affective response, especially when parsing the last part of the sentence beginning with “and lay”. Despite the unusual syntactic structure, a stable representation can be achieved. Computing the meaning of individual phrases, clauses and the sentence as a whole occurs in late processing, and cognitive fluency in doing so elicits aesthetic pleasure.

In the last example, sentence (5), it is unclear whether the surface structure is complete or reduced. The highlighted phrase is formally ambiguous between noun and verb. Problems in assigning word category to a lexeme elicit increased cognitive load in early processing, triggering a fast negative affective response.

(5) Outside the curtain-masked windows, down there in the street running into streets, the silence was <u>black-out registered</u> by the hearing. (*Heat* 58-59, my emphasis)

The ambiguous lexeme is part of the verb of the main clause. The question is whether “was black-out registered” is a verb phrase, or whether “black-out” is a noun. The absence of an article before “black-out registered” is part of the ambiguity.

a) the silence was [a] black-out [which was] registered by the hearing]

An initial categorisation as a noun is likely because the reader may predict a noun phrase in the complement position after the main verb. However, the phrase can also be read as part of a verb or adverb preceding the main verb “registered”. Compare my substitution of “black-out” with the more conventional adverb “blindly”:

b) the silence was black-out registered by the hearing
the silence was blindly registered by the hearing

The adverbial reading of “black-out” may demand higher processing effort yet seems to yield a sensible semantic interpretation. While a black out is usually perceived visually, the “silence” in Bowen’s sentence describes a similar auditory experience. This sentence plays with semantic distinctions of the visual and the auditory. While this seems to be supported by the sentence, closer inspection leads to a breakdown of this structure. As in

previous sentences, the syntactic structure is underspecified, and interpretation relies on semantic and contextual processing for a resolution.

During incremental processing, the reader may trade syntactic for semantic congruity and vice versa: The first representation of "black-out registered" as a reduced relative clause yields a complex yet coherent syntactic reading of the sentence, but the semantic interpretation it allows may not be particularly enticing for skilled readers. For less skilled readers, this representation may nevertheless elicit cognitive fluency and aesthetic pleasure. For skilled readers, the representation of a "black-out registered" as a verb phrase may be more interesting; while both early and late processing would then be more costly, the reward would still result from the difference between early disfluency and late cognitive fluency. The aesthetic pleasure perceived might be even greater.

To summarise, in section 3.1 I have suggested that syntactic ambiguity may impede processing ease in early and late processing. Whether these claims could indeed hold true for sentence processing in real readers requires experimental validation, which I cannot offer here. Early processing difficulty has two sources in Bowen's texts: First, contrary to claims by literary scholars, I have illustrated that Bowen creates ambiguity by exploiting grammatical rather than ungrammatical forms. In Bowen's reduced relative clauses, for instance, the grammatical subjects in the main clauses ("the sound of a motor", "The cabins", "Only the massed trees", "Those dead mills", "some roofless cottages", "the roads in unnatural dusk") are usually in a canonical position. However, they are inanimate and hence semantically non-prototypical. Processing these subjects as Actor arguments increases cognitive load in early processing. This reduces fluency and triggers a fast negative affective response. Secondly, Bowen uses participles in active or passive reduced relative clauses which can be temporarily misrepresented as preterite verbs of active main clauses. These verbs require the reader to re-read the verb, to re-compute its argument structure and its links with Actor and Undergoer arguments in the main and the subordinate clause (Frisch, Schlesewsky et al. 2002; Slattery, Sturt et al. 2013). This increases difficulty in early processing, leads to processing disfluency and a fast negative affective response. I have argued that the difficulty involved in resolving ambiguities of subjects and verbs is not a fault in Bowen's writing but, as part of her poetic practice, entails the potential for aesthetic pleasure. In late processing, interpretations of non-prototypical Actor arguments and ambiguous verbs may be successful if the reader draws on semantic and pragmatic context, such as generic literary knowledge. Achieved cognitive processing fluency then contributes to aesthetic pleasure.

Initial (mis)readings of garden path sentences can remain accessible even after resolving ambiguity, and reading Bowen's ambiguous sentences may lead to an oscillating perception of different interpretations of the same sentence, ultimately increasing the richness of the narrative for the reader (Twose 2008; Zeki 1999, 63).

While I have discussed isolated sentences, the reader processes these within the context of Bowen's novels as a whole. The overt repetition of similar ambiguous sentence structures might produce repetitive patterns and predictive changes in processing fluency. Therefore, Bowen takes care to use ambiguous sentences which only resemble one another in their syntactic surface, yet differ in their underlying structure. This means that one and the same strategy for disambiguation can never be applied twice. While varying syntactic ellipses may be regarded as a strategic way of producing textual ambiguity, there is no way of predicting the syntax of ambiguous sentences. On the one hand, the effect of ambiguity on fluency and a fast negative affective response in early processing remains relatively comparable from sentence to sentence. On the other hand, the strategies for achieving cognitive fluency in late processing differ and elicit varying intensities of aesthetic pleasure. Generally, the more difficult the way to cognitive fluency, the greater the aesthetic pleasure.

As Corcoran argues, Bowen's writing is characterised by "a reflexive turning back in upon itself rather than a committed motion forward" (2004, 3). In my estimation, this "reflexive turning back" does not merely mean the narrative as an abstract and immaterial entity but describes a cognitively real process which is triggered by the syntax of Bowen's ambiguous sentences. Reduced relative clauses function as adjectives further describing the subject or object of the main clause. In this way, Bowen's sentence structures do indeed refer to themselves. They slow down early linguistic and late interpretive aspects of literary reading rather than allowing a rapid reading process. Given that similar sentence structures occur throughout all three novels, readers may re-think and re-evaluate previously represented and interpreted sentence structures. Retrospection may therefore be part of literary interpretations which relate to the novel as a whole. This pertains to narrative processing beyond the sentence level and is thus not accounted for by the model of literary sentence processing.

3.2 Ambiguous syntactic dependency relations in complex clauses

In the following, I look at a selection of complex clauses[46] and illustrate how Bowen uses syntactic ambiguity in sentences with complete surface structures to challenge sentence processing. In English, word and constituent order are restricted, and sentences are mostly organised in the SVO order (subject – verb – object). This prototypically corresponds to an Actor – verb – Undergoer interpretation, as in "*Amanda lied to Steve*" (Bornkessel, Zysset et al. 2005, 221, italics in orig.). English does not have case markers which could indicate syntactic status regardless of linear position, as German does for example. In sentences with a complete surface structure, such as "*John told the girl that Bill liked the story*", readers can sometimes represent the syntactic constituents as parts of different structures:

(1) '*John told the girl something – namely, that Bill liked the story*.'
(2) '*John told the story to the girl Bill liked*.' (Ingram 2007, 259, italics in orig.)

This sentence may be represented as consisting of a main clause and a sentential complement (1), or as containing a main and a relative clause (2). This possibility to interpret one surface structure as having more than one underlying structure is an instance of "attachment ambiguity" which occurs if the "constituents" of a sentence "are bracketed" in differing ways (Ingram, 259). Attachment ambiguities are usually resolved in view of obtaining the least complex structure. The reader may strive to "minimiz[e] the number of levels of embedding" in a given sentence (Ingram 2007, 259, 260-261) by seeking to process "obligatory" over "non-obligatory" types of information (Bornkessel-Schlesewsky and Schlesewsky 2009a, 103). For instance, a phrase which is ambiguous between an argument (Actor, verb or Undergoer) and an adjunct (complement, adverbial) is preferentially processed as an argument, as in:

> John gave a letter *to his son* to a friend a month ago. (Bornkessel-Schlesewsky and Schlesewsky 2009a, 103, italics in orig.)

First, the noun phrase "a letter" is interpreted as the direct object, that is "as an argument of the verb" (Bornkessel-Schlesewsky and Schlesewsky 2009a, 103): The preposition phrase "to his son" is processed as the indirect object (Bornkessel-Schlesewsky and

[46] I found ambiguous syntactic dependency relations in *The Last September* on page 24, in *To the North* on pages 190, 220, 214, 288, and in *The Heat of the Day* on pages 4, 98-100 (two sentences), and 138-139.

Schlesewsky 2009a, 103). This interpretation assumes the least complex structure possible up until that point. On reading the preposition phrase "to his friend", the reader realises that this interpretation is wrong. Instead, the phrase "a letter to his son" must now be represented as the only object, i.e., the Undergoer argument, of the sentence (Boland and Boehm-Jernigan 1998, cit. in Bornkessel-Schlesewsky and Schlesewsky 2009a, 103).[47] The less complex structure must be corrected into a more complex one. In the above examples, the syntactic surface structures are not only complete but also canonical.

However, sentences with complete syntactic surface structures may also contain inversions in constituent order (these are the result of transformations). For example, the canonical constituent structure in English is subject – verb – object. The direct object usually precedes the indirect object. Subject, verb and object are obligatory information types. By contrast, complements and adjuncts are non-obligatory information types, and these usually follow obligatory information. If the SVO order, or the order of direct and indirect object is inverted, or if complements and adjuncts occur in unusual positions in the sentence, these inversions produce linguistic complexity, which may produce ambiguity (Friederici, Fiebach et al. 2006; Gibson 1998). If the constituent order of a sentence is non-canonical, identifying arguments and matching sentence form and meaning is more difficult than in sentences with a canonical constituent order (Friederici, Fiebach et al. 2006, 1706)[48] and "require[s] additional operations" (Friederici, Fiebach et al. 2006, 1709). According to Friederici et al., in non-canonical sentences, the "reconstruction of a sentence's underlying interpretation is not always straightforward, in particular in those cases where the correspondence between the form of a sentence and its meaning cannot be mapped directly" (2006, 1709). Such a reconstruction is especially difficult for inversions in the SVO order, so that "the object linearly precedes the subject in the surface form, despite the fact that it is lower ranking in conceptual terms" (Friederici, Fiebach et al. 2006, 1709). This means that sentences with a canonical SVO order, which map onto an Actor – verb – Undergoer structure, are easier to process than

[47] Boland, Julie E., and Heather Boehm-Jernigan. "Lexical constraints and prepositional phrase attachment." *Journal of Memory and Language* 39 (1998): 684-719.

[48] Linguistic theories offer differing accounts for the sources of complexity and for the increased processing cost involved. A common assumption is "that a movement (transformation) operation derives the more complex (permuted or noncanonical) form from the base form (nonpermuted or canonical) (e.g., Haider and Rosengren 2003), thereby providing a direct link between the surface sentence form and the underlying interpretation" (Friederici, Fiebach et al. 2006, 1709). This article refers to: Haider, Hubert, and Inger Rosengren. "Scrambling: Nontriggered chain formation in OV languages." *Journal of Germanic Linguistics* 15 (2003): 203-267.

non-canonical sentences with an OVS order, which map onto an Undergoer – verb – Actor structure.

In order to revise incorrect or implausible representations, the reader has to store as yet unclassified or unclassifiable information during reading. The reader has to perform "language-internal operations" in order "to reconstruct the basic word order" (Friederici, Fiebach et al. 2006, 1710) until sufficient information is available which allows the conclusive identification of a given item. For the reader, difficulty increases with the number of inversions and insertions, especially when insertions are long (Friederici, Fiebach et al. 2006, 1710). The more permutations in a sentence, the more "language-internal operations" (Friederici, Fiebach et al. 2006, 1710) the reader has to perform in order to work out the underlying syntactic structure, and the more information has to be stored for completing representations of the syntactic structure.

In *To the North* and *The Heat of the Day* Bowen uses complex clauses in which inversions and non-canonical constituent orders produce ambiguous dependency relations, and these make it difficult to map subject, verb and object onto the thematic Actor and Undergoer roles. In both novels, these ambiguous sentences describe landscapes, houses or emotional states of fictional characters. I model processing difficulty as follows: Inversions and non-canonical sentence structures can give rise to ambiguity when more than one representation can be mapped onto the form of the sentence. In particular, subjects may be semantically non-prototypical and occur in non-canonical positions in Bowen's sentences, rendering the identification of the Actor argument difficult in early, text-type independent processing. This reduces processing fluency and elicits a fast negative affective response. This type of ambiguity has to be resolved in late processing. If readers are able to entertain one or more plausible representations of a sentence, they can achieve cognitive fluency and experience aesthetic pleasure as a result. Bowen requires the reader to actively work out the meaning of each single difficult sentence in late processing. Because her texts are works of literary fiction, readers will be more inclined to accept even unlikely representations and interpretations which are formed in late, text-type dependent processing (Schlesewsky 2013). This draws the reader's attention towards that very process, and the experience of reading itself is shifted into the foreground. I argue that this is part of what is usually termed as defamiliarisation and de-automatisation (Miall and Kuiken 1994). Naturalised readings by literary scholars who consider syntactic form as symbolic of literary meaning are a predictable result of the reading process which Bowen's novels afford.

To the North

Example (1) from *To the North* is part of a landscape description. The adverbial of the subordinate clause can be initially misread as part of the canonical main clause:

(1) Light slipped through the clouds impalpably parting to touch the bronzed hayfields and distant silvery trees for one of those moments, disturbing and gracious, with which wet June weather is interspersed. . . . (*TN* 190-191, omission in orig.)

The constituent order of the clause "Light slipped through the clouds" is canonical, enabling an easy Actor – verb – Undergoer mapping. However, the phrase "impalpably parting" is temporarily ambiguous and may initially be represented as the adverbial of the verb "slipped" in a simple complete main clause:

Light slipped through the clouds impalpably

Once the reader parses the phrase "parting to touch", this representation must be corrected into a more complex reduced relative clause reading. The infinitive verb "to touch" clarifies that "impalpably parting" is indeed a reduced relative clause referring to the object phrase of the main clause.

Light slipped through [the clouds [which were] impalpably parting] to touch the bronzed hayfields

The initial misrepresentation of "impalpably" as an adverbial is therefore congruent with the preference for less complex over more complex syntactic structures.

The syntactic structure of sentence (1) is ambiguous, and the semantic structure supports the initial misreading. During processing, the reader has to assign syntactic form and semantic meaning to the lexeme "impalpably". Within sentence context, it is semantically plausible to assume that "Light" can indeed "slip impalpably". The syntactic and semantic structure of this part of the sentence are hence congruent with each other. Likewise, the semantic interpretation of "clouds" as parting "impalpably" is plausible. While the syntactic structure is temporarily underspecified and allows for two competing interpretations, it constrains possible interpretations once the whole sentence has been parsed. Further, the reader should have difficulty processing the phrase "parting" because it is incongruous with the previous representation. The initial misparse may lead to disfluency in early processing and elicit a fast negative affective response. The reader can

resolve this difficulty in late processing by drawing on semantic information and sentence context. Cognitive fluency can be achieved, leading to aesthetic pleasure.

Sentence (2) from *To the North* describes the upcoming summer holiday season. The fictional characters are absent from the text, and the only reference to animate human beings is the noun "imagination". By contrast, the verbs "approached" and "began to possess" render inanimate subjects animate, contributing to the ambiguity of the sentence. Two structures are ambiguous in the adverbial subordinate clause and the main clause, leading the reader to represent a wrong constituent structure:

(2) As the holiday season approached glittering peaks and hot coasts, an idea of vineyards and lakes began to possess the imagination. (*TN* 220)

First, the clause "As the holiday season approached" may be read as a complete adverbial clause. Due to its sentence initial position, the phrase "the holiday season" is likely to be represented as the subject of such a clause. Because "the holiday season" is inanimate, it may be considered unlikely to take an animate verb. The verb "approached" may be initially computed as intransitive, taking only an Actor argument. This would confirm the interpretation of the clause as an adverbial subordinate clause preceding a main clause. Interpreting this structure as an Actor and an intransitive verb is in keeping with the ideas of maximising interpretation in the absence of complete information, and with representing a simpler rather than a complex structure.

The noun phrase "glittering peaks and hot coasts" may then be interpreted as the Actor argument of the anticipated main clause:

As the holiday season approached[,] glittering peaks and hot coasts

Such a representation would require the reader to insert a comma after the verb "approached", not an unusual demand in Bowen's novels, as I have pointed out earlier.

However, this reading turns out to be wrong. The noun phrase "an idea of vineyards and lakes" is followed by another main verb, and the reader needs to correct the initial interpretation of "glittering peaks and hot coasts" into the object of the adverbial clause:

As the holiday season approached glittering peaks and hot coasts,
an idea of vineyards and lakes began to possess the imagination.

The phrase “an idea of vineyards and lakes” must now be interpreted as the subject and potential Actor argument of the main clause. This adverbial and main clause representation is supported by the comma.

In example (2), the constituent structure is canonical. However, the noun phrases in the grammatical subject and object roles (“glittering peaks and hot coasts” and “an idea of vineyards and lakes”) are both complex and inanimate. The initially wrong assignment of the Actor role is caused by the preference for simple syntactic structures and by the non-prototypical semantic prominence information of both phrases. Early processing is impeded, which leads to disfluency and a fast negative affective response. In late processing, it remains difficult to identify the two phrases as Undergoer and Actor argument respectively. Nevertheless, the sentence can be interpreted, and a stable representation can be achieved. If the reader represents this sentence successfully, cognitive fluency elicits aesthetic pleasure.

In the next excerpt, the inversion of animacy continues. Here, Cecilia Summers, the protagonist of *To the North*, is explicitly mentioned, though the ambiguous sentences focus on “clouds” and other elements. The ambiguous examples (3) and (4) occur within a paragraph in which the sentences become gradually more complex.

(3) Clouds hid from the earth at this bridal moment her lovely neighbour, while to the clouds alone was communicated her ecstasy. . . . Clouds closed in; the moon did not appear; darkness spread over the skies again; only the lime and a wet path silver for less than a moment had known of the moon’s rising. (4) The tree and path faded; cloudbound while that tide of light swept the heavens earth less than suspected the moon’s perfection and ardour. (*TN* 214, my emphases)

In the first clause “Clouds hid from the earth at this bridal moment her lovely neighbour” the basic constituent order is canonical, even though the adverbial adjunct stands in between the indirect and the direct object. Adjuncts such as adverbials of time are relatively flexible and can be shifted into different positions within a sentence. Bowen frequently places the adjunct into unusual positions, perhaps for emphasis. Processing is made more difficult insofar as the reader has to retain the indirect object for further processing until the direct object phrase is parsed. The following clauses are all canonical in their constituent structure and should be easy to understand. In the final clause, however, it is unclear whether the phrase “silver for less than a moment” is part of a reduced relative clause, or whether it is an adverbial of the main clause.

a) only the lime and a wet path [which had been] silver for less than a moment

If the phrase is read as part of a reduced relative clause, it forms part of the subject phrase "only the lime and a wet path", and hence of the Actor argument, describing the duration for which the lime and path were silver. This is syntactically and semantically plausible.

However, when the reader continues parsing, another option occurs. The phrase "silver for less than a moment" might refer to the verb "had known" of the main clause. If this interpretation were syntactically correct, a movement test would support this:

b) silver for less than a moment, only the lime and a wet path had known of the moon's rising

c) only the lime and a wet path had known of the moon's rising silver for less than a moment

The movement test shows that the phrase "silver for less than a moment" can be shifted. Only b) retains the original semantic interpretation while c) alters it. This confirms the initial representation of the phrase as part of a reduced relative clause.

In this sentence, a semantic interpretation can be achieved even if the syntactic structure only partly supports it. The syntactic structure is therefore open for more than one representation. This may elicit disfluency in early processing and a fast negative affective response. Only semantic interpretation and drawing on sentence context and pragmatic knowledge in late processing can resolve the syntactic structure. A successful interpretation leads to cognitive fluency and aesthetic pleasure.

Sentence (4) is a complex clause. A simple main clause precedes the semi-colon, and then a subordinate clause and a main clause follow.

(4) The tree and path faded; cloudbound while that tide of light swept the heavens earth less than suspected the moon's perfection and ardour.

As in previous examples, the first clause "The tree and path faded" has a canonical constituent structure and should be easy to process. By contrast, the clause after the semi-colon is problematic for the reader.

cloudbound *while that tide of light swept the heavens* **earth** less than suspected the moon's perfection and ardour.

The adverbial clause "while that tide of light swept the heavens" is syntactically unambiguous, as is the main clause "earth less than suspected the moon's perfection and ardour". The problem here is to compute the syntactic and semantic relation of the adjective "cloudbound" to either the subordinate or the main clause. The lexeme "cloudbound" is recognisable as an adjective, and the reader is likely to search for the noun to which it relates. Because the adjective is separated from its noun, the reader must retain it until further processing is possible, requiring additional processing load.

The difficulty of establishing "cloudbound" as part of a syntactic phrase is not alleviated by semantic clarity. While the lexeme "cloud" is unambiguous, the lexeme "bound" is syntactically and semantically ambiguous, rendering the whole lexeme "cloudbound" ambiguous. As an adjective, "bound" has a directional meaning (2015b). As a verb, "bound" can be intransitive, meaning "To spring upwards, leap; to advance with leaps or springs" and can be used for "inanimate and animate objects" (2015d). Moreover, the verb "bound" can be transitive, meaning "To form the boundary of" (2015c).[49] Here, "cloudbound" may therefore be more likely to have the latter meaning.

Syntactic inversions, such as an adverbial in between the indirect and direct object of a sentence, should elicit processing disfluency and a fast negative affective response. Since this difficulty is primarily related to increased storage cost, the match between form and meaning should be relatively easy to achieve and elicit rather mild aesthetic pleasure. By contrast, assessing the reference and meaning of "cloudbound" is demanding. This elicits processing disfluency for early syntax processing and also requires increased interpretive efforts in late processing. Successful syntactic and semantic interpretation leads to cognitive fluency. Since the required level of cognitive effort is at an overall higher level in this task, aesthetic pleasure is greater too. This means that different types of ambiguity require different levels of processing effort for a resolution. The greater the effort invested into disambiguation, the greater the potential aesthetic pleasure. Aesthetic pleasure is therefore not a result of specific types of ambiguity and instead results from the difference between the level of early disfluency and late cognitive fluency, i.e., the cognitive effort involved in disambiguation. Aesthetic pleasure is then also dependent on the individual ability of a reader to cope with and resolve ambiguity.

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[49] Bowen does not hyphenate the lexeme cloudbound, unlike the examples listed by the OED:
"d. **Instrumental and locative. cloud-bound adj.**
1898 J. G. Whittier *Poet. Wks.* 474/2 Or saw the tabernacle pause, Cloud-bound.
1945 E. Waugh *Brideshead Revisited* 174 Like a gull..out of sight, cloud-bound" (2015f, emphases in orig.).

To summarise, ambiguous syntactic dependency relations in *To the North* stem from inversions in constituent order and from semantically non-prototypical subjects. Misreadings of ambiguous structures usually involve an assumed simpler syntactic representation, which then has to be corrected into a more complex one. Unlike the previously discussed ambiguous relative clauses, ambiguous dependency relations usually do not give rise to unstable and competing representations. Nevertheless, on re-reading, the reader may be able to reproduce the cycle of misreading and correction, thereby reproducing disfluency and a fast negative affective response in early processing, and cognitive fluency and aesthetic pleasure in late processing. I suggest that this possibility for repetition is rooted in the fact that early sentence processing is automatic and can therefore be exploited again and again, even by re-reading the same text.

The Heat of the Day

To conclude this section on ambiguous dependency relations, I discuss two sentences from *The Heat of the Day* in which reversals in constituent order promote initial misrepresentations of syntactic structures. To begin with, I revisit the sentence I have discussed in the Introduction and in Chapter 2: Example (1) contains two coordinated sentences, each consisting of a main and a subordinate clause. In the first sentence, it is difficult to identify the phrase "each day" as the subject of the main clause. I will now explain why, again discussing the sentence word by word, as in incremental sentence processing.

(1) Out of mists of morning charred by the smoke from ruins each day rose to a height of unmisty glitter; between the last of sunset and first note of the siren the darkening glassy tenseness of evening was drawn fine. (*Heat* 98, my emphasis)

The sentence begins with a subordinate clause consisting of the anticipatory adverbial "Out of mists of morning" and the reduced relative clause "charred by the smoke from ruins". The reduced relative clause is unambiguously passive, as indicated by the by-agent, and should not elicit processing difficulties. On parsing the phrase "each day", the reader may treat it as an adverbial of the relative clause.

a) [Out of mists of morning, charred by the smoke from ruins each day],

This representation is promoted by the linear order of the phrases, and it is syntactically and semantically plausible. Such a representation is congruent with the aim of

maximising the efficiency of incremental processing by quickly packaging input into phrases and clauses, even while the main clause constituents have not yet been parsed. Early syntactic processing is supported by late semantic processing in this case: The lexemes "mist", "charred" and "smoke" in the subordinate clause are semantically related, allowing for a plausible interpretation of the sentence so far. Nevertheless, some readers may expect the lexeme "charred" to co-occur with a noun phrase other than "mists of morning". If this is the case, the reader may reconsider the syntactic representation of the sentence in late processing.

Based on this reading, the reader may be likely to predict a phrase which qualifies as the subject phrase of a main clause. This expectation is subverted because the next lexeme in the sentence is the verb "rose", requiring the reader to correct the initial misparse of "each day" from an adverbial of the subordinate clause into the subject of the main clause:

b) [Out of mists of morning, charred by the smoke from ruins], [<u>each day</u> <u>rose</u> to a height of unmisty glitter];

The absence of punctuation may contribute to the initial misrepresentation of "each day" as an adverbial. The subject "each day" is inanimate and hence a non-prototypical Actor argument, further contributing to the initial misrepresentation. Nevertheless, the sentence now does promote an Actor interpretation, which is supported by the verb "rose" which may usually take an animate subject. In this representation, all constituents before the phrase "each day" form a subordinate clause. The phrase "Out of mists of morning" is modified by its reduced relative clause "charred by the smoke from ruins". This is a syntactically plausible reading. In order to correct the initial misparse, the reader has to invest cognitive effort. The phrases "mists of morning", "the smoke from ruins" and "each day" are all semantically abstract, inanimate and none is a prototypical subject. It is therefore difficult to assign Actor and Undergoer roles in the subordinate and the main clause respectively, even though "the smoke from ruins" is used as a by-agent.

During incremental processing, the discovery of the initial misrepresentation of "each day" on reading the verb "rose" should elicit a fast negative affective response, disfluency and displeasure. Correcting the representation into a subject reading of "each day" should lead to cognitive fluency and aesthetic pleasure. The initial misrepresentation may linger on, yet this sentence does not offer two competing representations of the whole sentence. Perhaps the reader may entertain two competing representations of the first half

of the sentence, in which "each day" oscillates from an adverbial of the subordinate clause to the subject of the main clause.

In excerpt (2), all but one sentence show lexico-syntactic repetitions (see Chapter 5 for a detailed discussion) and build up towards an ambiguous sentence.

(2) She [Stella] began to feel it was not the country but occupied Europe that was occupying London – . . . . The very tension overhead of the clouds nervously connected London with Paris – even, as at this same moment might a woman in that other city, she found some sort of comfort in asking herself how one could have expected to be happy? (*Heat* 139, my emphasis and omission)

The underlined sentence is difficult to process. The first problem is the separation of the adverb "even" and the subject "she" of the main clause through the inserted subordinate clause:

> [[even,] [as at this same moment might a woman in that other city,] [she found some sort of comfort in asking herself how one could have expected to be happy]]

If main and subordinate clause are inverted, it becomes clear that the adverbial "even" neither belongs to the subordinate clause nor functions as a sentence adverbial. Instead, "even" may refer to the subject "she" of the main clause, as indicated by a reversal of the clauses:

> even she found some sort of comfort in asking herself how one could have expected to be happy, as at this same moment might a woman in that other city

The constituent order of the subordinate clause itself is problematic. After the comma, Bowen uses a fronted adverbial phrase, and an inversion of the subject "a woman in that other city" and the auxiliary "might". The main verb is dropped.

as	at this same moment	might	a woman in that other city,
conj.	**adverbial**	**auxiliary**	**subject**

Here, non-obligatory information linearly precedes obligatory information, while the main verb is dropped, increasing cognitive load in early processing. If the subordinate clause followed the main clause, this sentence would not be difficult to process despite its syntactic structure. Semantically, this sentence states a comparison for which the clause "she found some sort of comfort in asking herself how one could have expected to

be happy" forms the basis, while the clause "as at this same moment might a woman in that other city" explicates it. Because the semantic structure of this comparison is inverted, the reader is required to process additional before essential information, which is cognitively more costly. The semantic interpretation in itself is demanding yet helps to resolve syntactic problems. Achieving cognitive fluency therefore also demands increased cognitive effort.

This sentence from *The Heat of the Day* does not show attachment ambiguities but unclear syntactic dependency relations which are not open for competing representations. In this respect, this sentence differs from the others discussed so far. Nevertheless, this sentence too elicits syntactic processing difficulties in early processing, disfluency and a fast negative affective response. Only late semantic interpretive processing can solve these problems, elicit cognitive fluency and aesthetic pleasure. The comparison is not unlike the similes in *The Last September* and *To the North*, which I discuss in the following.

To summarise, in 3.2 I have suggested that difficulties in processing Bowen's ambiguous sentences may stem from attachment ambiguities. These are the result of canonical and non-canonical inversions of syntactic phrases. Punctuation, or the lack of it, may support misrepresentations of syntactic structures in early processing. Syntactic attachment ambiguities and unclear dependency relations may give rise to temporary misrepresentions, yielding meanings not communicated in sentences with a canonical syntactic structure. In order to verify my observations, experimental studies are necessary.

3.3 Ambiguous similes

In the final section of Chapter 3, I consider seven syntactically ambiguous similes in *The Last September* and *To the North*. I account for the potential of these similes to elicit difficulty and disfluency in early processing while offering the potential to elicit cognitive fluency and aesthetic pleasure in late processing. The interpretation of subjects and objects as Actors and Undergoers is of less interest here than in the previous sections, yet I will use the terms in the discussion of individual sentences when it is helpful to do so. I begin this section with an introduction to similes, using an unambiguous example from *The Last September*:

> To the south, below them, the demesne trees of Danielstown made a dark formal square like a rug on the green country. (*LS* 66)

A simile is "a figure of speech" which expresses "an explicit comparison using *like* or *as*" (Brogan and Smith Richmond 2012, 1306, italics in orig.). Similes may also be implied, without explicit markers in the surface structure of a sentence (Bredin 1998, 76). In the above example, Bowen uses the "comparison marker" (Bredin 1998, 69) "like" to compare the "dark formal square", perhaps the shadow or the dark foliage of "the demesne trees of Danielstown", to "a rug". It is not entirely clear whether the final phrase "on the green country" belongs to the square or the rug, but more on this later.

Simile may be considered a "semantic figure" (Bredin 1998, 77). In the tradition of conceptual metaphor theory, it is assumed that the reader maps lexical and semantic properties or attributes of a source domain onto a target domain (Lakoff and Johnson 1980; Shen 1997a, 36). In the example from *The Last September*, Bowen characterises the target domain as "a dark formal square" by drawing on the source domain "a rug", producing a metaphorical meaning, as is the case for all similes (Bredin 1998, 77; Shibata, Toyomura et al. 2012, 254). The purpose of similes is to describe a particular physical object, person or idea in terms of a different yet in some respect similar physical object, person or idea. The aim of such a comparison may be to highlight or to explain a particular aspect of the target. The source should therefore be neither too similar, nor too different from the target.[50]

Apart from the semantic concepts involved, the syntactic structure of similes plays a central role for ambiguity. Similes constitute a specific type of comparison and have syntactic structures, such as "A is like B", comparing two things or objects, or "A is like B in respect of p", comparing two things in respect of a particular property (Bredin 1998, 73). Every simile involves a "proposition", and each proposition "has a subject and a predicate" (Bredin 1998, 72), such as in "*Michael* is like Anne" (Bredin 1998, 73, my emphases). The *subject* here means the grammatical subject of the sentence, whereas the predicate means all other elements in the sentence which further describe the grammatical subject. In similes, "the word or phrase which constitutes the syntactic subject refers to an object, and the remainder of the proposition … then enlarges and enriches our knowledge of that object" (Bredin 1998, 74).[51] In similes such as Bowen's, the subject

[50] If target and source are very similar, speakers may revert to using metaphors rather than similes; conversely, if the target and source are too unlike each other, speakers may prefer using simile over metaphor (Shibata, Toyomura et al. 2012, 254).

[51] Similes are therefore "*predicative comparisons*" (Bredin 1998, 74, italics in orig.).

and the predicate cannot be interchanged without affecting the meaning of the sentence, in contrast to other types of comparison:[52]

(1) the demesne trees of Danielstown made *a dark formal square* like a rug on the green country.
(2) the demesne trees of Danielstown made *a rug* like a dark formal square on the green country.

Bredin offers the following explanation for the impossibility of reversing the target (subject) and source (predicate): On the one hand, "The role of the subject of a proposition … is to say what the proposition is about" (Bredin 1998, 74), and hence a reversal of subjects (targets) also entails a change in what the proposition is about. On the other hand, "the change of the predicate entails that there is also a change in what it is that is said about the subject" (Bredin 1998, 74).

However, as in the above example from *The Last September*, the physical entity which is described in a simile may not always occupy the subject phrase of a sentence: In the following, I therefore use the terminology of conceptual metaphor theory introduced above: A simile characterises a target (previously described as "subject") such as a physical object, a person or an idea by using a source (previously described as "predicate") such as another physical object, person or idea. From a syntax perspective, the target of a simile may be any grammatical part of a sentence, i.e. the grammatical subject, the verb, the grammatical object, a complement, adverb or adjective. The source of the simile may also take any grammatical role which describes the target. Because the target of the simile may be contained in the sentence, even without the source, I assume that the target usually pertains to a grammatical structure which is more relevant (grammatically speaking) for the sentence than the grammatical structure which carries the source.

Let me illustrate this using the example from *The Last September*: The target of the simile is the phrase "a dark formal square". The grammatical role of this phrase is the

[52] In comparisons which are not similes, the entities described as A and B are the subject and the predicate respectively, and these "refer independently to two different things" (Bredin 1998, 74), are hence interchangeable, rendering these comparisons "*symmetrical*" (Bredin 1998, 74, italics in orig.). For instance, the meaning of the following sentences is not altered by exchanging the order of subject *A* and the predicate B: "*Michael* is like Anne – *Anne* is like Michael. *Michael and Anne* look alike – *Anne and Michael* look alike" (Bredin 1998, 73, my emphases).

direct object phrase of a main clause. The main clause is syntactically complete and meaningful, even if we omit the predicate of the simile, namely the phrase "like a rug":

a) To the south, below them, the demesne trees of Danielstown made a dark formal square.

Whether the final phrase "on the green country" belongs to the target or the source of the simile is perhaps ambiguous. The sentence is syntactically complete and meaningful if we accept the phrase "on the green country" as the indirect object of a main clause:

b) To the south, below them, the demesne trees of Danielstown made a dark formal square on the green country.

The important point here is that the target of the simile has a more central grammatical role in the sentence than the source. The target occupies an obligatory constituent, whereas the source occupies a non-obligatory constituent. This has implications for incremental sentence processing: Obligatory information is preferentially processed over non-obligatory information (Bornkessel-Schlesewsky and Schlesewsky 2009a, 103). This means that similes in which the source linearly precedes the target are syntactically and semantically more complex than similes in which the target precedes the source. This notion pertains to the definition of syntactic complexity which I have used previously: Sentences in which the grammatical object precedes the grammatical subject, even though the subject has semantic precedence over the object, are complex and more difficult to process than sentences with a linear subject-object order (Friederici, Fiebach et al. 2006, 1709). I therefore suggest that similes in which the source linearly precedes the target may impede sentence processing.

Bowen's ambiguous similes may impact incremental sentence processing as follows: In early processing, the linear precedence of syntactic phrases carrying source domains over phrases carrying target domains means that non-obligatory information has to be processed before obligatory information. This requires increased processing cost. What is more, the dependency relations between the source and target domain phrases may be difficult to establish and may even remain elusive. These difficulties in early processing may elicit disfluency and a fast negative affective response. In late processing, the semantic structure of Bowen's similes contributes to difficulties. On the one hand, the reader may find it hard to identify the target lexeme. (The source lexeme is easy to recognise due to the explicit comparison marker). On the other hand, the reader may have

to invest interpretive effort into mapping appropriate semantic properties of the source domain onto the target domain. If successful, the reader may achieve cognitive fluency and experience aesthetic pleasure.

I assume that processing difficulties in Bowen's ambiguous similes stem from early syntactic aspects rather than from late semantic factors. In the following, I examine six similes, all of which challenge the reader in early and to some degree in late processing. I examine each sentence word by word, as happens in incremental sentence processing.

The Last September

I begin my discussion with a simile from a passage in which Bowen describes a drive in a pony cab through the landscape surrounding the Big House at Danielstown. I have already considered the first simile and will now focus on the second.

(1) To the south, below them, the demesne trees of Danielstown made a dark formal square like a rug on the green country. In their heart, like a dropped pin, the grey glazed roof reflecting the sky lightly glinted. (*LS* 66)

Here, as in previous sections, I will take punctuation into account while sometimes considering the reader disregarding it in incremental processing. For instance, the commas in the second sentence above are included in the edition of *The Last September* I use (Bowen (1929) 1998) but not in an earlier one (Bowen (1929) 1985). This indicates that editions of Bowen's novels may not necessarily reflect her own use of punctuation.

The constituent structure of the second sentence is inverted, and the adverbial phrase "In their heart" precedes the simile phrase "like a dropped pin". Only then the subject and verb phrase follow. While the source of the simile is easy to identify, namely "like a dropped pin", it is less easy to identify the target, its extent and the dependency relation between the target and the source. I assume that parsing the explicit comparison marker alerts the reader to a comparison or simile. The reader may attempt to integrate the two phrases parsed so far:

In their heart [which was like a dropped pin]

This representation requires ignoring the comma, yet it agrees with the preference for immediate integration of lexemes into coherent syntactic phrases in real time processing. In such a reading, the reader may sacrifice semantic coherence in late processing in favour of syntactic coherence, both in early and late syntax processing. However, if the comma

alerts the reader to recognising the phrase “like a dropped pin” as an insertion which does not directly relate to the previous phrase, this means that the reader has to retain both phrases for further processing until more information is available. This strategy may be more costly at this time in sentence processing. If, on the other hand, the reader treats the clause as a coherent subordinate clause so far, he may process all phrases immediately and then anticipate a subject and verb phrase for the upcoming main clause, and this expectation is fulfilled:

> In their heart [which was like a dropped pin] the grey glazed roof reflecting the sky lightly glinted.

On parsing the subject phrase and the verb phrase, the reader may then find the previous interpretation of the simile to be no longer semantically valid and reconsider, perhaps building the following structure:

> The grey glazed roof reflecting the sky lightly glinted in their heart, like a dropped pin.

In this representation, the reader interprets the subject, verb and adverbial phrase as part of the target, and the phrase “like a dropped pin” as the source which further describes all previous phrases. If the reader represents the sentence in such a way, this requires more effort in early and late processing – the linear order of the sentence in the text is traded for a coherent semantic interpretation. The major challenge is to finalise a plausible representation of the syntactic role of the source phrase “like a dropped pin” in relation to the subject and the verb phrase which constitute the target of the simile. It follows that ambiguities in early processing are likely to stem from the linear precedence of non-obligatory over obligatory information.

This simile can be syntactically unambiguous if the adverbial and the source phrase are shifted around, resulting in a canonical constituent order, for example:

a) [the grey glazed roof reflecting the sky] [lightly glinted] [In their heart] [like a dropped pin]
b) [the grey glazed roof reflecting the sky] [lightly glinted] [like a dropped pin] [In their heart]

In these more conventional constituent orders, the obligatory subject and the verb precede the non-obligatory adverbials. These sentences are therefore less syntactically complex than the original. The syntactic relation between the subject, the verb and the adverbial phrase can be represented more easily because the linear order facilitates the identification

of the constituents in early processing. This should reduce the overall cognitive load of sentence processing. Alternatively, the adverbial "In their heart" can be separated from the source phrase "like a dropped pin". This possibility suggests they are indeed two syntactic phrases, as indicated by the commas in the more recent edition of the novel (Bowen (1929) 1998).

The unambiguous versions also indicate that the second source of processing difficulty in the original sentence is semantic and pragmatic. Despite the easier linear order, the relation between target and vehicle is still not easy to access: There is no apparent semantic relation between "the grey glazed roof" and "a dropped pin". The reader must draw on lexical and semantic information of the verb "glinted" to understand that the shared feature between these two items must be a reflecting surface. Even though the lexical and semantic relation between the target and source may be relatively easy to determine, the meaning of this sentence as a whole may remain obscure: For instance, the syntactic relation between the pronoun "their" and the singular noun "heart" in the adverbial phrase "in their heart" can be only be established if the reader accepts the discrepancy in numbers as part of Bowen's poetic practice.

In the original sentence from *The Last September*, early processing is made difficult through the reversal of obligatory and non-obligatory information in a non-canonical constituent structure. This should lead to processing disfluency and a fast negative affective response. However, late interpretative processing is semantically difficult too, and plausible interpretations are difficult to derive. Yet, if readers are capable of investing some effort into interpretation, cognitive fluency and aesthetic pleasure can be achieved. In the canonical versions which I have presented, the conventional constituent structure facilitates the computation of syntactic relations between the source and target phrase in early processing, while semantic information is not sufficiently given in the sentence to conclusively disambiguate and interpret the simile in late processing.

To the North

In the remainder of this chapter, I examine five similes from *To the North*, the novel in which Bowen seems to use more similes than in *The Last September* and *The Heat of the Day*. The majority of similes in *To the North* describe what appears to be the narrator capturing the characters' attempts to define their emotions. The narrative perspective is occasionally difficult to assign to either character or narrator. These similes are not only syntactically demanding but are mostly novel and semantically unusual. The first

sentence, example (1), is taken from the novel's opening episode. The non-canonical constituent order gives rise to difficulty in retrieving the dependency relations between the target and source of the simile.

(1) Getting up steam, the express clanked out through the bleached and echoing Milan suburbs that with washing strung over the streets sustained like an affliction the sunless afternoon glare. . . . (*TN* 1, omission in orig.)

This sentence consists of the adverbial subordinate clause "Getting up steam" and the canonical main clause "the express clanked out through the bleached and echoing Milan suburbs". The adverbial is complex and contains an object relative clause, "that … sustained … the sunless afternoon glare". The source of the simile is contained in the phrase "like an affliction", and the remainder of the main and relative clause is the target of the simile. The source of the simile linearly precedes some parts of the target. The interpretation that the "Milan suburbs sustain the sunless afternoon glare as if it were an affliction", or "the Milan suburbs would sustain an affliction", is not easy.

Let us consider the impact of these structures on the reader during incremental sentence processing. Remember that early processing depends on identifying the syntactic status of target and source of the simile, a process which may be inhibited by constituent structures in which non-obligatory information linearly precedes obligatory information. Consider this first: The reader parses the subordinate clause "Getting up steam" and the subject, the verb and even parts of the adverbial without problems. Once the reader begins to read the relative clause, processing becomes more demanding. Even though the relative pronoun "that" precedes the verb and the object, the reader now needs to process two inversions in constituent order. Both inversions require the reader to store phrases until final processing is possible.

through the bleached and echoing Milan suburbs that [with washing strung over the streets] sustained [like an affliction] the sunless afternoon glare

The insertion of the phrase "with washing strung over the streets" further defines the "Milan suburbs". Yet processing is more costly because non-obligatory information precedes obligatory information. Without these insertions, processing would be less demanding:

through the bleached and echoing Milan suburbs that [ ] sustained the sunless afternoon glare like an affliction

While it is relatively easy to shift "like an affliction" into a more canonical position within this clause, this is less straightforward for "with washing strung over the streets". However, the impact of the latter phrase on comprehension is less interesting: Its main effect is quite likely an increase of storage cost for retaining the phrase until further processing is possible.

By contrast, the inversion of the source phrase of the simile has effects not only on syntax processing cost but also on late semantic processing and interpretation. While the verb "sustained" is a simple active, transitive preterite verb, allowing the reader to predict an object or a complement, the reader has to compute the role of the source of the simile before the object and target "the sunless afternoon glare" can be processed.

sustained [like an affliction] the sunless afternoon glare

The object "the sunless afternoon glare" is a direct object and therefore obligatory information, whereas the phrase "like an affliction" is non-obligatory information, thereby rendering processing more costly for the reader. As my alternative syntactic structure of this sentence indicates, syntactic complexity in the original sentence and the increased processing cost this entails are the major sources of difficulty in early processing. This is likely to elicit a fast negative affective response.

Late processing relies on semantic and pragmatic rather than syntactic information. The narrative scenario can be represented. However, the parts of this sentence do not yield a semantically or pragmatically plausible whole: While there is a semantic relation between the adjective "bleached", the noun "washing" and the noun phrase "the sunless afternoon glare", establishing such a semantic connection between "the bleached and echoing Milan suburbs", the target phrase "the sunless afternoon glare" and the source phrase "an affliction" is not easy. Triggered by the semantic inconsistencies which override the syntactic structure of the sentence, readers may attempt to represent a metaphorical meaning. For example, semantically contradictory phrases such as "the sunless afternoon glare" produce this discrepancy between syntax and semantics, contributing to the unpredictability of meaning in Bowen's writing. The match between syntactic structure and semantic meaning occurs in late processing. If successful, this match may lead to cognitive fluency and aesthetic pleasure.

I now continue with two similes in sentence (2) from *To the North*. Bowen describes the encounter of Markie, a friend of the two protagonists Emmeline and Cecilia Summers, with his sister. Like many other similes in this novel, this one too refers to Markie's feelings. The sentence is complex, with several inversions rendering processing difficult.

(2) This tête-à-tête with his [Markie's] sister, this mournful association with her in gloom and impotence, as though before birth, by some unkind twist in heredity, they had both been shanghaied together, drove home like a stake through his heart the idea of solitude. (*TN* 139)

The first simile refers to the subject "This tête-à-tête with his sister", whereas the second relates to the main verb "drove home". I examine the sentence word by word, as happens in incremental sentence processing.

First, I consider how the reader may treat the subject in early processing: The subject is long and syntactically complex. Yet it precedes the verb and object in a canonical constituent order. The subject consists of a subject phrase, an appositive and of an adverbial clause which refers back to the appositive and to the subject:

> [This tête-à-tête with his sister, [[this mournful association with her in gloom and impotence], [as though before birth, by some unkind twist in heredity, they had both been shanghaied together]]

The target of the first simile is the subject "This tête-à-tête with his sister". This subject phrase is unproblematic for processing, and the subsequent appositive is a metaphor describing the subject phrase in different terms. This too is syntactically unproblematic, if perhaps semantically odd. The adverbial clause following the appositive is the source of the first simile.

> [as though before birth, by some unkind twist in heredity, they had both been shanghaied together]

This clause has an inverted and therefore complex yet canonical constituent order, with the by-agent preceding the subject and the verb of the sentence. This reversal makes forming predictions more difficult for the reader, demanding higher processing cost in early processing. This may elicit disfluency and a fast negative affective response.

In late processing, the semantic structure of the simile comes into play. Late processing is facilitated by the semantic relation between the lexemes in this sentence,

such as “sister”, “birth” and “heredity”, as well as “association” and “shanghaied together”, and lastly, the negatively valenced lexemes “gloom”, “impotence” and “unkind”. Given the semantic congruity of this part of the sentence, the reader should be able to interpret it and achieve cognitive fluency and aesthetic pleasure.

Once the reader has processed this first simile, it has to be integrated with the second simile in the verb and object of the sentence. The inversion of constituent order following the verb means that non-obligatory information (an indirect object phrase carrying the source) has to be processed before obligatory information (the direct object phrase carrying the target):

[drove home] [like a stake through his heart] [the idea of solitude]

In this case, as in previous sentences, the first problem is syntactic complexity. The indirect object precedes the direct object. The second problem stems from the inverted linear sequence of source and target of the simile. Early syntactic processing should therefore be inhibited, elicit processing disfluency and a fast negative affective response. The reader has to retain the phrase “like a stake through his heart” for further processing until the final phrase “the idea of solitude” has been parsed. The comparison marker “like” should alert the reader to pay additional attention in relating the two phrases correctly for a coherent interpretation. Unlike in previous examples, the semantic connection between the target and source is relatively easy to access. Despite the syntactic complexity of the object phrases and the simile, the reader should be able to interpret the second part of sentence (2). Therefore, processing should give way to cognitive fluency and aesthetic pleasure in late processing. In sentence (2), the reader is likely to experience two fast alternations of early processing difficulty and late processing ease.

The following sentence contains another simile characterising Markie’s emotions.

(3) Still on the crest of his impatient resolution to be alone with her, Markie jammed down his hat and leaned back, enjoying the air: the warm lampy evening blew like dust from his brain. (*TN* 295)

The sentence containing the simile “the warm lampy evening blew *like dust* from his brain” has a canonical constituent structure and should not elicit early syntactic processing difficulties. While the adjective “lampy” is not listed in the OED online and may be a nonce word, its morphosyntactic form renders it easy to identify as an adjective. The target of the simile, “the warm lampy evening”, is the grammatical subject,

constituting obligatory information. The target linearly precedes the source phrase "like dust", which is a complement and therefore non-obligatory. This canonical constituent structure and the preferential linear structure of the simile should facilitate processing.

As in previous examples, the source of the simile is shifted to the left, in between the verb and the adverbial phrase "from his brain". The verb "blew" is used as an active verb, and as it is usually transitive, the reader is likely to predict an object. Instead, the sentence continues with a complement and an adverbial. The transitivity of the verb "blew" does not fully match with all nouns in the sentence: The target "the warm lampy evening" is difficult to reconcile semantically with an active transitive verb such as "blew". Even though the verb "blew" refers back to the previous sentence, in which "air" is mentioned, the active transitive use here is semantically incoherent. The reconciliation of "dust" with an active verb is even more difficult. A passive version would be semantically and pragmatically more plausible:

[the warm lampy evening] [was blown] [like dust] [from his brain]

The absence of a verb in the source of the simile contributes to the syntactic and semantic ambiguity, and the reader may shift the source phrase around in the sentence in order to derive a sensible representation. The exact relation cannot be finally established in early processing but relies on late semantic and pragmatic processing. The unusual semantic choice of subject, verb and object makes it difficult to establish a satisfying representation and interpretation in late processing.

It seems that sentences such as this can be processed best when accepting their semantic and pragmatic incongruities. The closer one inspects this sentence, the harder it becomes to develop a satisfactory representation. Again, the syntactic structure does not fully match with or predict the meaning of the sentence. On re-reading, the reader may reproduce early processing disfluency and the fast negative affective response, and as a result momentary cognitive fluency and aesthetic pleasure may be repeatedly induced.

In the next excerpt from *To the North*, Bowen depicts a flight from England to France, focusing on the view out from the plane. The two similes are semantically related and potentially ambiguous.

(4) Very white cumulus clouds afloat like unperilous ice-bergs along a line of blue ether were their companions: over France more glittered, aerial dazzling cliffs. Like islands, each indented and charactered by their crumbling shadows, the clouds

> round the plane invited the mounting foot, and though the plane still held among these distracting companions her forward course, one had the sensation less of direct and purposeful transit than of a pleasure-cruise through this archipelago of the cloud-line, over shadowless depths. (*TN* 170)

The first sentence contains a main clause and a sentence fragment after the colon.

> Very white cumulus clouds afloat like unperilous ice-bergs along a line of blue ether were their companions; over France more glittered, aerial dazzling cliffs.

The main clause is the target of the simile, and the reduced relative clause "afloat like unperilous ice-bergs" is the source. The adverbial phrase "along a blue line of ether" may either be treated as part of the main clause, belonging to the target of the simile, or it may be part of the reduced relative clause and form part of the source. The first simile is based on what might be considered a similarity in shape, colour and perhaps movement: Clouds are afloat in the air, and ice-bergs are afloat on water. However, this semantic proximity between the clouds and the ice-berg leads to a semantic ambiguity regarding the adverbial phrase in this sentence. This ambiguity also relates to the ambiguous syntactic dependency relation of the adverbial phrase "along a blue line of ether", which may be represented as part of the reduced relative clause a), or as part of the main clause b):

a) [Very white cumulus clouds] [afloat like unperilous ice-bergs along a line of blue ether] [were] [their companions]
b) [Very white cumulus clouds] [afloat like unperilous ice-bergs] [along a line of blue ether] [were] [their companions]

The movement test indicates that the phrase "along a blue line of ether" may indeed be shifted into another position, such as the sentence initial position, preceding the subject.

c) [along a line of blue ether] [Very white cumulus clouds] [afloat like unperilous ice-bergs] [were] [their companions]

In version c), the adverbial is more likely to refer to the subject phrase. Yet I suggest that it is syntactically more likely that readers will represent the sentence as in a) in early processing. A semantic re-analysis in late processing may be more likely to draw on the semantic proximity between "clouds" and "a line of blue ether" and yield the representation as shown in b). In the original sentence, early processing should be

disfluent and elicit a fast negative affective response. Late processing should be fluent and yield aesthetic pleasure. Readers may represent versions a) and b) alternatingly.

The first sentence establishes "Very white cumulus clouds" as the unambiguous subject, a phrase which is dropped in the fragment after the colon:

> over France more [clouds] glittered, aerial dazzling cliffs.

This ellipsis in itself is not problematic but adds to the difficulty of recovering the subject in the subsequent sentence. The idea of clouds as mountains is slightly rephrased into the coastal side of a mountain or landmass, "cliffs".

The first sentence in (4) offers relevant semantic context for the next, and the simile in the second sentence refers back to the subject of the preceding one.

> Like islands, each indented and charactered by their crumbling shadows, the clouds round the plane invited the mounting foot,

The first part of this sentence begins with the source phrase of a simile, which refers back to the subject phrase "Very white cumulus clouds" from the previous sentence. The source of the simile linearly precedes the target, and the reader must therefore process additional information first. Moreover, the semantic distinction between the target, "clouds", and the source, "islands", is relatively low. This lack in semantic distinction between target and source in itself might not be difficult to process, yet the non-canonical sentence structure renders early processing problematic: The lexeme "each" in the reduced relative clause does not have an explicit referent. It may refer to "islands" in the preceding phrase or "clouds" in the main clause. The reader has to process the lexeme "each" in absence of full information. The process of building a syntactic representation is based on an assumed structure and requires increased processing cost. In a canonical structure, the sentence would be easier to process, both syntactically and semantically:

> the clouds round the plane, each indented and charactered by their crumbling shadows, invited the mounting foot like islands.

In early processing, the non-canonical structure of the original sentence elicits disfluency and a fast negative affective response. The semantic meaning of the second simile likening clouds to islands repeats that of the first, rendering late processing relatively easy. Hence, readers should be able to achieve cognitive fluency and aesthetic pleasure.

The last excerpt of this section (5) is taken from the final pages of *To the North*, where Bowen depicts a car drive from London to the eponymous North. The focus is on the perceptions of the protagonist Emmeline and on the emotions of Markie. There are two problematic passages in these conjoined complex clauses, one of which involves a simile, and one involves an attachment ambiguity as those discussed in 3.2.

(5) Still she [Emmeline] heard nothing, or heard some singing silence inside her brain: as the wild swing of their lights scythed the dark ahead his agonised apprehension, a thousand vibrations of impact drew a sharp line, like fog around a lamp, round the circle of mindless serenity where she sat merciless, ignorant of their two lives. (*TN* 305)

The sentence after the colon shifts the focus from Emmeline to Markie; it consists of an adverbial clause and a main clause which includes the simile. Readers are likely to experience processing difficulty due to the syntactic attachment ambiguity and the simile.

The metaphorical adverbial clause has a canonical constituent structure. The subject and the verb should be easy to process, but the object is problematic.

as [the wild swing of their lights] [scythed] [the dark ahead his agonised apprehension]

It is not clear whether the phrase "his agonised apprehension" is part of the object within the adverbial clause (the comma indicates that it is), or whether it is the subject of the subsequent main clause.

the dark ahead [of] his agonised apprehension

Treating the phrase "his agonised apprehension" as part of the previous object phrase simplifies the packaging of information for the reader, in absence of conclusive information. Additionally, the low semantic prototypicality of this phrase in the subject position of a sentence may contribute to difficulties in identifying it as a subject and a potential Actor argument in the first place. Note that the meaning of the adverbial clause is metaphorical if the phrase "his agonised apprehension" is part of the object but not if it is considered a part of the main clause. If "his agonised apprehension" is represented as part of the main clause nevertheless, it must be considered part of the subject:

his agonised apprehension, a thousand vibrations of impact drew a sharp line

In such a representation, the subject "his agonised apprehension" is followed by an appositive, the phrase "a thousand vibrations of impact". However, the two subjects and potential Actor arguments do not seem to be semantically related. Accessing the meaning of these arguments is therefore difficult. Neither semantic knowledge nor direct discourse context seem to offer conclusive information.

The constituent structure of the main clause of this sentence contains a subject, a verb and an object – "a thousand vibrations of impact drew a sharp line" – before the source of the simile is introduced – "like fog around a lamp". Readers may therefore erroneously consider the sentence complete at this stage during reading. The target of the simile comprises obligatory information, whereas the source of the simile is contained in a phrase offering non-obligatory information. As in previous examples, the source phrase of the simile is shifted to the left, with parts of the target following it.

In this simile, the semantics of the subject, verb and direct object – "a thousand vibrations of impact drew a sharp line" – and of the adverbial – "round the circle of mindless serenity where she sat merciless, ignorant of their two lives" – render a sensible interpretation very difficult, despite the obvious metaphorical nature of the sentence. I suggest that the simile enables the reader to access the meaning of the sentence: The constituents which pertain to the target of the simile are all metaphorical, whereas the source phrase evokes a literal meaning. This distinction between the literal and the metaphorical should be processed in late semantic processing. This should hold true for indirect meanings in general. In early processing, lexicalised meanings are processed, whereas more complex meanings beyond the individual lexeme are established in late processing. In order to enable such a processing, it is important that the source phrase "like fog around a lamp" precedes the adverbial of the metaphorical target of the simile. Otherwise, the adverbial phrase "round the circle of mindless serenity…" would be even more difficult to access.

In this sentence, the problem is semantic rather than syntactic and therefore pertains to late rather than early processing. In early processing, readers may struggle to interpret the subject phrase as an Actor argument and the object phrase as an Undergoer argument, and the temporary retention of the simile source phrase may require increased processing cost, triggering disfluency and a fast negative affective response. However, on parsing the source phrase "like fog around a lamp", the reader may find the remainder of the sentence semantically easy to access, producing cognitive fluency and aesthetic pleasure.

To summarise, in the discussion of syntactically ambiguous similes in *The Last September* and *To the North*, I have illustrated that while "simile" is not a syntactic category, these sentences clearly rely on retrievable syntactic dependency relations for fluency in early and late processing. Bowen's similes usually contain elements of the target in obligatory syntactic phrases, whereas the source is contained in non-obligatory phrases. Matching sentence form with semantic meaning is difficult whenever the syntactic dependency relation between target and source, i.e., between obligatory and non-obligatory phrases, cannot be easily represented. The temporary misrepresentation of syntactic dependency relations in similes allows for temporary semantic misinterpretations. These misinterpretations should not oscillate once the correct representation has been established. Detecting syntactic ambiguity in sentences with similes may elicit disfluency and a fast negative affective response, and achieving cognitive fluency in late processing may produce aesthetic pleasure. As in all other sections of this chapter, my hypothetical claims about how readers are likely to process individual sentences in Bowen's novels require experimental testing for validation.

3.4 Conclusion: Ambiguity

In this chapter, I have argued that syntactic ambiguity in Bowen's literary language has the purpose of providing eventfulness for the reader. Research suggests that syntactically ambiguous sentences may indeed be more difficult to process than unambiguous ones, yet they may also potentially elicit pleasure, precisely by being difficult to understand. I have illustrated that Bowen exploits different syntactic and semantic variables to produce ambiguous sentences, each of which results in a disruption in early processing. The reader strives to resolve ambiguity towards a coherent interpretation of the sentences within the narrative by drawing on the immediate context of the descriptive piece and on the wider context of the novel. Syntactic ambiguity resolution relies on late processing in which the reader draws on semantic, contextual and pragmatic knowledge for disambiguation. Late processing is text-type dependent, and readers are likely to process similar sentences differently in texts other than Bowen's novels. Even though late processing may not be easy either, successful disambiguation may yield pleasure. My analyses demonstrate the explanatory potential of the model of literary sentence processing. Empirical validation is necessary to offer proof for my hypothetical claims.

In section 3.1, I have discussed local syntactic ambiguities in incomplete surface structures, such as reduced relative clauses and adverbial clauses which use participle

constructions. Readers may represent these sentences as having alternative underlying structures. In Bowen's novels, neither the syntactic and semantic prominence information of subjects and objects, i.e., of potential Actor and Undergoer arguments, nor the argument information of the verbs help to easily disambiguate arguments and their linking. This may impede early processing and is hence text-type independent. Some ambiguities can be resolved into a stable and unambiguous representation in late processing, whereas this is not possible in sentences with more than one ambiguity. Unstable representations are potentially more cognitively demanding yet also provide the potential for greater aesthetic pleasure. Resolving these Actor-Undergoer ambiguities relies on the reader's pragmatic, text-type dependent interpretation of inanimate objects, such as trees, as animate Actors. A successful disambiguation may elicit cognitive fluency and aesthetic pleasure.

In sections 3.2 and 3.3, I have analysed attachment ambiguities which stem from different structures, such as complex and non-canonical sentences, semantically non-prototypical subjects and objects, from verbs, and from the relation between source and target in similes. When the reader misrepresents attachments between sentence constituents, this leads to processing difficulty and disfluency in early, text-type-independent processing. Resolving such misrepresentations in late, text-type dependent processing may yield cognitive fluency and aesthetic pleasure.

Let me expand briefly on the aspect of late, text-type dependent processing. Throughout Chapter 3, I have reiterated the notion that readers may relax the reading process whenever the syntactic structure does not seem to yield a sensible interpretation of a sentence. "Sensible" here means plausible within the context of the novel or in reference to pragmatic and world knowledge. Relaxations of the reading process can only occur in late processing, as they are non-automatised choices which draw on semantic and pragmatic knowledge, such as about literary genre. For example, syntactic ambiguity resolution in *The Last September* partly depends on the reader's pragmatic knowledge about Ireland. Explicit references to the historical conflict and Anglo-Irish society in the text are sparse. Readers who do not know much about the specific socio-historical context of *The Last September* might consider syntactic ambiguity, especially in metaphors and similes, an aesthetic choice rather than as carrying specific meanings. Bowen therefore offered explanations in a preface to this novel, targeted at an American readership of the 1950s (Bowen (1952) 1999). A reader with some literary knowledge may draw on similarities between sentence structures in *The Last September* and other novels, reading

this text as a surrealist (Walsh 2007) or gothic novel: The ontological relations between inanimate objects and human characters as described in Bowen's novels (Kind 2013) resemble those of other literary texts, such as Anne Radcliffe's *The Mysteries of Udolpho* and Jane Austen's *Northanger Abbey*, a Gothic and a mock-Gothic text respectively (MacMahon 2009a; MacMahon 2009b). While the syntactically ambiguous structures of *The Last September* may carry more specific meanings for informed readers, the syntactic structures in themselves offer all readers sufficient room for plausible interpretations and an eventful reading experience.[53]

These considerations may be accounted for by the model of literary sentence processing as follows: Knowledgeable readers may achieve a higher overall level of cognitive fluency in ambiguity resolution, and this high level may be achieved relatively easily. However, I suggest that pleasure during reading springs from the difference between early disfluency and late cognitive fluency, not from the level of cognitive fluency. This means that both expert and non-expert readers may achieve a relatively high degree of cognitive fluency and aesthetic pleasure. For the non-expert, the initial level of disfluency may be relatively high, whereas the achieved level of cognitive fluency may be relatively low but sufficient to elicit aesthetic pleasure. For the expert, initial disfluency may be comparatively low, but the level of cognitive fluency which can be achieved may be relatively high. The expert may effectively achieve a higher difference between early disfluency and late fluency, and experience greater aesthetic pleasure. Nevertheless, expert readers may judge Bowen's novels as bad examples of a text-type. Knowledge which individual readers acquire over the course of the novel may support more accurate predictions about sentence structures and meaning over time. This should enable individual readers to derive an overall increase of pleasure from sentence processing.

[53] Syntactically ambiguous sentences offer fruitful material for naturalised interpretations, as in literary scholarship on Bowen's novels (Corcoran 2004, 169, 172; Ellmann 2003, 60, 66, 67). Naturalised interpretations may be brought about by the text and the reading process it affords.

4. "You have to precise": Negation in sentence structures and morphology

The experience of reading Bowen's prose language is characterised by eventfulness, following Bowen's own claim that "[r]eading is eventful" (1962a, 9). I define eventfulness as the process of encountering and resolving difficulty during literary reading. In this chapter, I show how negation in sentence structures and in morphology may trigger such a sense of eventfulness. Negation in Bowen's sentences supports the notion of the special status of the sentence in her poetic practice, and each negated sentence requires the reader to engage with it as a work of art. Negation plays a role in almost all narrative episodes I have selected for analysis in this thesis.[54] Bowen uses grammatical negations on the word and sentence level such as these (my emphases):

(1) **Without + noun**: "Though this particular sofa backed on a wall and stood on a carpet, it was **without environment**;" (*Heat* 57)

(2) **No + noun**: "Here, there were **no more autumns**, except for the trees." (*LS* 206)
Suffix -less/ No longer: "Those rendered **homeless** sat where they had been sent; or, worse, with the obstinacy of animals retraced their steps to look for what was **no longer** there." (*Heat* 99)

(3) **Not + verb**: "Sir Richard and Lady Naylor, **not saying** anything, did not look at each other, for in the light from the sky they saw too distinctly." (*LS* 206)
Prefix un-/ Not + quantifier + noun: "Through this **not-quite oblivion** – that **not** a car, while they waited, came by to disturb – their headlights sent **unmoving** arrows that died ahead." (*TN* 301)

(4) **Nothing, as noun**: "She laid hold on **nothing**." (*TN* 67)

(5) **None, as noun**: "She was walking west, towards the torn pale late light – this troubled lingering of a day that had been troubling oppressed her, as did the long perspective of the extinct street that so few people frequented and **none** crossed." (*Heat* 138)

(6) **Never**: "**Never** had any season been more felt; one bought the poetic sense of it with a sense of death." (*Heat* 98)

[54] Episodes containing negation in *The Last September* include pages 7, 20, 22-23, 24, 28, 33-34, 61-62, 66-67, 122-124, 205-206, in *To the North* pages 1, 23, 42-43, 46, 60, 67-68, 82, 86-87, 165-166, 170, 178-179, 301-303, 304-306, and in *The Heat of the Day* pages 57-59, 98-100, 100-105, 107-109, 117-120, 124-126, 138-139, 251-253, 282.

Moreover, Bowen uses these and other prefixes and suffixes for negation (my emphases):

(1) **Adjectival negation: marked**

Prefix un-: "The diversion of traffic out of blocked main thoroughfares into bye-ways, the **unstopping** phantasmagoric streaming of lorries. . . ." (*Heat* 98)

Prefix im-: "Last November, he said, he spent a week-end in the country, **impure** country where London's genteelest finger-tip touches the beechwoods." (*TN* 67)

Suffix -less: "That autumn, she was living in lodgings in a house in a square: raising the sash of her bedroom window – which, **glassless** since two or three nights ago, ran up with a phantom absence of weight –" (*Heat* 101)

Suffix -lessly: "The brows, the nose, the lips could **not** have been more **relentlessly** delicate, more **shadowlessly** distinct." (*Heat* 119)

(2) **Noun phrase negation: marked, prefix un-**: "There was a diffused gallantry in the atmosphere, an **unmarriedness**." (*Heat* 102)

In the first section of this chapter, I refer to Bowen's own ideas on negation and to the views of literary scholars on negation in her novels. I then review research on negation in psycholinguistics and neurolinguistics before accounting for negation using the model of literary sentence processing. Negation on the sentence and word level is discussed in sections 4.1 and 4.2 respectively, followed by a summary of my findings in section 4.3.

I argue that negation in Bowen's novels plays a role in what she herself calls being linguistically "precise" (Bowen, Beales et al. (1941) 2010d, 248). Bowen uses "precise" as a verb in a 1941 discussion, immediately asking "is there such a word" (Bowen, Beales et al. (1941) 2010d, 248). The notion of linguistic precision is a central aspect of her language use, and she holds that "a blend of *hurry* and lazy-*mindedness*" in contemporaneous usage may be due to a general misconception of "*precise* thought" as "'affected', pompous or priggish" ((ca. 1950s/1960s) 2010c, 176, italics in orig.).

I interpret the term "precise" as follows: Bowen seeks to combine syntactic, lexical, semantic and pragmatic layers of language in a way which makes reading difficult while enabling aesthetic pleasure (I do not suppose that Bowen would have had the same notion of a model of literary sentence processing as I do). I hypothesise that negation in Bowen's novels always works in combination with affirmative structures. The major objective of these syntactic structures is the creation of precise meanings, that is, more and different meanings than affirmatives alone could produce. Processing negation in itself and within the context of affirmation makes reading eventful.

Bowen's negations such as those below have been studied by literary scholars:

> These **unknown** dead reproached those left living **not** by their death, which might any night be shared, but by their **unknownness**, which could **not** be mended now. (*Heat* 99, my emphases)

Literary scholars of Bowen's novels have postulated a direct relation between the linguistic form of negation and the reader's aesthetic engagement with the text, the theme of the novel and the reader's ensuing interpretation of the narrative world. Scholars have followed three lines of argumentation: First, Bowen's frequent use of single, double and multiple negations has been commented on as a source of difficulty during reading (Hinrichs 1998, 174; Mooney 2009, 16; Teekell 2011, 62), whereas affirmation is not considered as a source of the same degree of difficulty in comprehension (Hinrichs 1998, 179). However, I find that in *The Last September*, *The Heat of the Day* and *To the North*, single, sequential or multiple negations, as in the example above, are more frequent than double negations. Moreover, episodes with many negations supposedly convey rather little information (Hinrichs 1998, 180). In this view, negation is indicative of the "limitations" of Bowen's language and what Hinrichs calls "proximate character" (1998, 181, my translation);[55] this phrase presumably expresses the notion that Bowen's negated sentences require more inferential effort in order to establish their full meaning. In a similar way, Teekell suggests that Bowen's use of negation produces "ambiguity" (2011, 62) and "holds resolution in suspense" (2011, 63). Likewise, other scholars suggest that processing negations results in "holes" and "moments of aporia" (Mooney 2009, 15; Corcoran 2004, 39), reducing the reader's understanding of the narrative.

Secondly, as a consequence of that difficulty in understanding, the reader's attention arguably focuses on the linguistic form of the text itself, and negation therefore qualifies as a "*foregrounding*" device (Hinrichs 1998, 178, 180, italics in orig.). As such, negation is said to unsettle the subject position of the reader, causing defamiliarisation and a "reduction of aesthetic illusion" (Hinrichs 1998, 175, my translation).[56] Others have described their own responses to negation in Bowen's texts as a sense of "annoyance" (Hildebidle 1989, 121 cit. in Hinrichs 1998, 174) and a feeling of "unease" (Hoogland, 1994, 20 cit. in Hinrichs 1998, 174).

[55] "Insbesondere durch den Gebrauch der Verneinungen kommt der approximative Charakter bzw. die Begrenztheit der Sprache bei Bowen zum Ausdruck" (Hinrichs 1998, 181).
[56] "Abbau ästhetischer Illusion" (Hinrichs 1998, 175).

Thirdly, Hinrichs states that the fictional world dictates the linguistic form and style of the narrative text: "The high number of negations in *A World of Love* results from the fact that in this world there are only a few circumstances which can be identified precisely" (1998, 180, my translation).[57] Negations are supposedly predisposed to fostering interpretations of the narrative world as ontologically unstable (Hildebidle 1989, 121 cit. in Hinrichs 1998, 174; Ellmann 2003, 60, 66-67). In this view, the text is seen as describing only what is not the case, what does not exist (Hinrichs 1998, 180).

In these three strands of argumentation, literary scholars implicitly assume a special status of negation as opposed to affirmation, while never systematically analysing the two forms in relation. I view these argumentations as a good and valid starting point for further and new analyses of the form and processing effects of word and sentence level negation.

I approach negation from an angle which is new in scholarship on Bowen's novels, by treating it as a consciously selected part of her poetic practice. Bowen's negations take specific linguistic forms because they are meant to be precise and render reading eventful by producing difficulty in early, automatised processing and aesthetic pleasure in late processing. Before outlining my account of negation and its role in the model of literary sentence processing, I review research on negation in psycholinguistics and neurolinguistics. I first characterise negation in relation to affirmation, taking into account syntax and form, before turning to processing mechanisms and finally to meaning.

Generally, negation can "reverse the truth value of a sentence or a sentence constituent" (Bahlmann, Mueller et al. 2011, 1; Maciuszek 2008, 17; Tettamanti, Cappa et al. 2008, 358). Negation has been characterised as unique in regard to its form, meaning and the underlying processing mechanism.[58] From a formal linguistic view, negation can be expressed implicitly, as in *The dead were absent*, or explicitly, as in *The dead were not present*.[59] I restrict my analysis to explicit negation because I assume that only explicit

[57] "Die Vielzahl der Negationen in *A World of Love* resultiert aus der Tatsache, daß es in dieser erzählten Welt nur wenige Sachverhalte gibt, die eindeutig bestimmt werden können" (Hinrichs 1998, 180, 182).

[58] Negation is traditionally thought of as distinct from linguistic affirmation and even as "unique" in form, meaning and processing (Christensen 2009, 1; Schrott and Jacobs 2011a, 429). Negation is arguably restricted to the domain of language. However, Giora et al. (2009) illustrate that negation can be expressed symbolically, on road signs and in visual art, and that visual and linguistic negation may work similarly.

[59] Implicit negations express meaning encoded in lexico-semantic information. Prefixes and suffixes such as "un-" and "-less" negate lexemes. "[L]exical morphemes" (Tettamanti, Cappa et al. 2008, 358) such as "*no, not, never, nobody, nothing*" (Hinrichs 1998, 179, italics in orig.) negate phrases, clauses and sentences. The scope of explicit negations may contain lexemes, phrases, clauses and extend across the boundaries of clauses (Bahlmann, Mueller et al. 2011, 1; Sherman 1976, 143). Semantically, negation may involve bipolar concepts which "have a ready-made antonym" such as "[not] *tidy*/*messy*", or unipolar

linguistic negation requires additional processing operations, whereas this is not the case for lexemes which semantically denote absence and similar meanings. Where implicit negation is relevant for the discussion of individual sentences, I refer to it

There is extensive work on negation processing in psycholinguistics (Tettamanti, Cappa et al. 2008, 358) and a smaller body of work in neurolinguistics (Bahlmann, Mueller et al. 2011, 1; Christensen 2009, 1). Research in both fields concentrates on three main hypotheses: The first postulates that negation is more difficult to process than affirmation. The second holds that this difficulty requires more and different processing mechanisms than affirmation processing. The timecourse of negation processing is a third aspect in research. I now outline the main findings for these three approaches to negation:

First, in psycholinguistic and neurolinguistics research, there is "converg[ing]" evidence that negation is indeed more difficult to process than affirmation (Christensen 2009, 13). Processing negation becomes gradually more difficult from the word to the sentence level. The more negations are contained within one sentence, the more difficult processing becomes (Kaup and Zwaan 2003, 442-443; Sherman 1973; Sherman 1976, 143). Indicators of this difficulty are "higher error rates" (Tettamanti, Cappa et al. 2008, 358; Maciuszek 2008, 19) and the fact that readers take longer to access negated lexical items than they do for affirmative items (Tettamanti, Cappa et al. 2008, 358). This may mean that readers require a longer time to complete the necessary computations for negation (Bahlmann, Mueller et al. 2011, 1, 2, 9; Christensen 2009, 13; Maciuszek 2008, 18; Nahajec 2009, 115). Insofar, experimental research appears to support the arguments of scholars on the role of negation in Bowen's language.

Secondly, processing negation may be more difficult than affirmation because the two structures require different underlying mechanisms. Processing negation shows different neural activation patterns than processing affirmation (Bahlmann, Mueller et al. 2011; Christensen 2009), perhaps indicating that the two structures do indeed require different mechanisms. The prevalent view is that accessing the meaning of negation requires two processing stages: A negated lexeme, phrase or clause is first represented as the corresponding affirmative and then as a negation. For instance, the negated concept in *The dead were not present* is first accessed as *present* and only later as *not present*, or as *absent*. The second processing stage involves the suppression of the affirmative *present*, and this suppression does not occur in affirmation processing (Kaup 2001; Kaup

concepts such as "*adventurous*/*not adventurous*" which do not offer such a readily available antonym (Giora, Fein et al. 2007, 157, italics in orig.; Giora 2007, 132; Mayo, Schul et al. 2004).

and Zwaan 2003; Kaup, Lüdtke et al. 2006; Hinrichs 1998, 179). In this approach, negation is defined "as an instruction … to eliminate the negated concept from the mental representation and replace it with an alternative opposite" (Giora, Fein et al. 2007, 156). This perspective has not yet been considered for the role of negation in Bowen's language.

Thirdly, the timecourse of these two proposed stages of negation processing has been tested experimentally.[60] The results suggest that there is an early and a late processing stage: The affirmative meaning of a negated lexeme, such as [*not*] *present*, is accessible around 400 ms (Giora 2006a, 1002, cf. Fischler, Bloom et al. 1983, and cf. Hald, Kutas et al. 2005)[61] or around 500 ms after stimulus offset (Giora, Heruti et al. 2009, 2222; Kaup and Zwaan 2003, 442).[62] This might be classified as early processing. Experimental studies suggest that this early processing stage does not specifically respond to negation itself (Giora, Fein et al. 2007, 155). Instead, semantically incongruous elements play a more important role in impeding processing in this stage (Giora 2006a, 1003, cf. Fischler, Bloom et al. 1983, and cf. Hald, Kutas et al. 2005).[63] For the late processing stage, experimental results and theoretical explanations are less clear cut (Giora, Heruti et al. 2009, 2222): The negated meaning of structures such as in the above example, *not present*, is accessible at around 500-1000 ms (Giora 2006a, 1002; Giora, Fein et al. 2007, 155) or 1500 ms after stimulus presentation (Kaup and Zwaan 2003, 442). This stage encompasses processes of "interpretation" (Giora 2006a, 1002). If the reader suppresses the affirmative meaning of a negated sentence in late processing, this

[60] These results stem from visual probe tasks and ERP studies and are not fully comparable with each other, and results vary due to differences in experimental designs.

[61] Fischler, Ira, Paul Bloom, et al., "Brain potentials related to stages of sentence verification." *Psychophysiology* 20 (1983): 400-409.; Hald, Lea, Marta Kutas, et al. "The N400 is not a brainwave. Negation and N400 effects for true and false sentences." *Cognitive Neuroscience Society Abstracts* (April) 12 (2005).

[62] Visual probe tasks have yielded delayed responses to negated lexical items, indicating delayed access to negated concepts (Ferguson, Sanford et al. 2008; Kaup 2001; Kaup and Zwaan 2003; Kaup, Lüdtke et al. 2006). At around 500 ms after stimulus presentation, participants responded "significantly faster" to affirmative than to negated test sentences, and this is interpreted as relating to the syntactic structure of the sentence (Kaup and Zwaan 2003, 442). By contrast, at 1500 ms after stimulus presentation, the "accessibility" of a probe may not be determined by sentence structure but "by the content of the described situation" (Kaup and Zwaan 2003, 442). This is considered as indicative of a "multilevel" processing mechanism in which negated sentences are first processed as propositions and then as situational representations (Kaup and Zwaan 2003, 445; Kaup, Lüdtke et al. 2006).

[63] An N400 response to negated sentences is traditionally considered as signifiying difficulty in negation processing. Giora disputes this: Referring to Fischler et al. (1983) and to Hald et al. (2005) (see footnote 61), she summarises their results, arguing that "contextually incompatible concepts" may elicit semantic N400 responses: The probe sentence "*A robin is/is not a* ***tree***" gives rise to an N400, whereas the sentence "*A robin is/is not a* ***bird***" does not (Giora 2006a, 1003, emphases in orig.).

stage does indeed differ from processing affirmative sentences (Giora 2006a, 1003).[64] In the standard approach to negation this "suppression of negated concepts is mandatory" (Giora, Heruti et al. 2009, 2222; Giora, Fein et al. 2007, 155).

However, I will not follow this view, and instead I adopt "the suppression/retention hypothesis" as proposed by Giora et al. (2009, 2222-2223; Giora 2006a; Giora 2007; Giora, Fein et al. 2007). In this view, both the suppression and the retention of negated meanings depend on "discourse goals and speakers' intentions" (Giora, Heruti et al. 2009, 2222-2223). According to Giora, negation is not routinely processed differently than affirmation (2006a, 1009). Instead, negation and affirmation may share many features in "their use", and negation may only display "unique effects" when it lacks supportive and "explicit context" (Giora 2006a, 982; Nieuwland and Kuperberg 2008, 1217). This means that negation processing depends on pragmatic processes, an approach to negation also taken by others (Nahajec 2009; Tian, Breheny et al. 2010).

Giora suggests that discourse context which precedes and follows a negation may induce the reader to retain its corresponding affirmative meaning in late processing (2006a, 1003-1005): Context "which is perceived as coherent" may then be "retained for purposes of maintaining this relevance relation so that it may be mappable on that context or integrate with it" (Giora 2006a, 1005). If the reader retains the affirmative meaning of a negated concept in late processing, negation processing does not differ from processing affirmative sentences (Giora 2006a, 1004). In specific contexts such as literary reading and even the visual arts (Giora, Heruti et al. 2009, 2227-2228, 2237), the retention of affirmative meanings in the late processing stage may be more desirable than the "mitigation" of negated concepts (Giora 2006a, 982). Even though the eADM does not explicitly account for negation processing, I suggest that these two processing stages for

[64] The two processing stages of negation can be explained differently in different theoretical frameworks. Research is not yet clear on the nature of the underlying cognitive mechanisms (Bahlmann, Mueller et al. 2011, 1; Ferguson, Sanford et al. 2008, 114-116; Giora 2006a, 982, 1006-1007, 1009; Maciuszek 2008, 18-19). Negation can be understood as a linguistic phenomenon requiring linguistic processing, assuming that language comprehension involves a "text base" (Kaup 2001, 961; Kaup and Zwaan 2003, 445) and relies on "propositional representation[s]" (Kaup and Zwaan 2003, 439). In propositional representations, "negation is an explicitly represented operator" and "takes a whole proposition in its scope" (Kaup and Zwaan 2003, 439; Kaup, Lüdtke et al. 2006, 1045; Christensen 2009, 4). Difficulties in accessing a negated item arise because it is included within the scope of the negation (Kaup 2001, 960; Kaup and Zwaan 2003, 439). Alternatively, situation models, or multilevel accounts, see negation as part of "situational content" (Kaup and Zwaan 2003, 439); negated items are more difficult to access if they are not part of the "described state of affairs" (Kaup and Zwaan 2003, 439). Yet others assume a "perceptual simulation"(Kaup and Zwaan 2003, 444, 445) or "embodied cognition" (Kaup, Lüdtke et al. 2006, 1046) of negation.

negation can be aligned with the eADM. The model of literary sentence processing is therefore fit to account for negation, as I will illustrate towards the end of this section.

However, one difference between negation and affirmation may lie in the potential of negation to elicit a higher "density of meaning" (Nahajec 2009, 116) and metaphorical meaning in a way not possible for affirmation (Giora 2006a, 1007-1008). In Nahajec's view, negation is a "pragmatic phenomenon" and as such "operates to activate implied rather than explicit meaning" (2009, 109). This implied meaning is produced "through the process of triggering and defeating expectations" (Nahajec 2009, 110).[65] I suggest that negation may therefore be desirable for authors of literary texts, both because negation impacts on processing ease and influences the kinds of meaning a text can produce.

For the purposes of aligning research on negation with the eADM (which does not explicitly account for negation) and the model of literary sentence processing, I propose the following:[66] In early, text-type independent processing, the lexical negator alerts the processing mechanism to an upcoming processing task. The subsequent lexical item is potentially negated, and therefore the negated semantic concepts may either be subject to suppression or retention in late processing. In early processing, the negation is relevant in basic constituent structuring (stage 1 of the eADM), in prominence computation and argument linking (stage 2 of the eADM), and in lexical-semantic associative processing in which the reader draws on discourse context (also stage 2 of the eADM). The reader accesses the affirmative meaning of the negated concept in lexical-semantic processing. If inferences cannot be drawn immediately, the reader has to retain this constituent and its meaning for further processing later on. The negator itself may function as an alert, triggering a fast negative affective response, while the retention of the affirmative concept for further processing increases processing cost and reduces processing fluency.

In late, text-type dependent processing, which includes stage 3 of the eADM, the reader maps the previously processed form with meaning. This involves drawing on real-world knowledge and emotional environment, culminating in an overall wellformedness judgment about the sentence. In negation processing, the reader retains the affirmative concept of the negated item until final processing is possible in stage 3. Here, the reader

[65] The idea of two step-negation processing may be better explained as "a by-product of the pragmatics of discourse interpretation" (Tian, Breheny et al. 2010, 15). Additional representations, as found by Kaup et al. (2006), can be reinterpreted as the result of readers "representing how" the "content" of individual sentences "might be related to a broader purpose", rather than as the result of "representing an interpretation" (Tian, Breheny et al. 2010, 5).

[66] For a discussion of how the notion of a two-stage processing of negation can be reconciled with the notion of incremental processing see (Nieuwland and Kuperberg 2008).

finally decides whether to retain the affirmative or the negated meaning. Text-type dependent knowledge and world knowledge may either support the retention of the initially represented affirmative, or it may support the suppression of the affirmative in favour of the negated concept. Giora et al. (2007) found that comprehenders can retain affirmative concepts up until 1000 ms after stimulus offset. This extends beyond the timeframe for the final stage of sentence processing in the eADM, suggesting that negated concepts and their affirmative counterparts may still be accessible even after the final processing stage has been finished for a given lexeme, holding negation available for further processing if sentence or discourse context require such a step.

I propose that negation effectively requires the reader to access and retain two meanings instead of one for further processing. This demands greater cognitive cost, thus reducing processing fluency. At the same time, the availability of more semantic concepts in late processing also involves the potential for new insights and the acquisition of new knowledge. If negated concepts are indeed suppressed, their initially represented affirmative version may remain partly accessible and "leave residual meanings" (Mayo, Schul et al. 2004, 434), just as revised misrepresentations of ambiguous sentence structures may "linger" (Slattery, Sturt et al. 2013). Successfully accessing, maintaining and processing new semantic concepts can lead to successful sentence interpretations, and these may lead to cognitive fluency and aesthetic pleasure.

In contrast to the literary scholars mentioned above, I suggest that negation in Bowen's novels does not have the uniform effect of producing an impression of absence, aporia or a lack of understanding in the reader. Instead, Bowen's negations in combination with affirmations convey more and different meanings than affirmatives alone could. Depending on context, negations in Bowen's novels draw attention towards the negation, supporting the retention of negated concepts rather than their suppression. The juxtaposition of negation and affirmation in individual sentences effectively means that processing effort varies unpredictably for the reader. Unpredicted stimuli and processing challenges may elicit stronger fast negative affective responses because they may indicate greater potential danger than predicted stimuli. This also means that unpredicted stimuli have the potential to elicit greater aesthetic pleasure than predicted stimuli: If a stimulus is not predicted, the contrast between the fast negative affective response and the subsequent cognitive re-appraisal is greater, producing greater aesthetic pleasure.

Negation can indeed be considered as catering to central tenets of Bowen's poetic practice: The two processing stages of accessing the affirmative and negated meaning of

a lexeme qualify negation as an eliciting condition for "eventful" (Bowen (1961) 1962d, 9) reading. Because negation may initially elicit early processing difficulty yet allows for aesthetic pleasure in late processing, each negation contributes to an overall aesthetic pleasure which the reader attributes to the sentence and the narrative episode. In this way, negation contributes to Bowen's aim that the descriptive pieces should be "*perceive[d]*" by the reader (Bowen and Jones (1950) 2010f, 272, italics in orig.). The effects of negation on difficulty and aesthetic pleasure hold true for each sentence, allowing the reader "to experience a series of reactions, of which the effect shall be cumulative" (Bowen and Jones (1950) 2010f, 271). My claims about the processing effects of negation in the following section are hypothetical, yet may offer a basis for experimental testing and may inspire new ways of thinking about Bowen's language for literary scholars.

4.1 Negation in sentence structures: *The Heat of the Day*

I propose that Bowen does not use negation as a trigger to suppress the negated concepts but as a trigger to retain them. Only the combination of negation and affirmation gives rise to an eventful processing experience and a specific meaning. As such, negation is an important part of Bowen's poetic practice.

In the descriptive pieces, Bowen uses negation more frequently than ambiguous sentences. Since these negations are usually contained within a semantically related context, I present my findings using the opening episode of *The Heat of the Day* rather than sentences from different episodes. This passage is one of many containing negation in this novel. I have selected this episode for analysis because especially *The Heat of the Day* has been said to show an "excessive use of negations" (Hinrichs 1998, 181, my translation),[67] and there are many examples for *The Last September* and *To the North*.

> From here, from where it was being played at the base of this muffled hollow, the music could **not travel far** through the park – but hints of it that did escape were disturbing: from the mound, from the rose gardens, from the walks round the lakes, people were being slowly drawn to the theatre by the sensation that they were missing something. . . . And, at the start of the concert, this tarnished bosky theatre, in which **no** plays had been acted for some time, held a feeling of sequestration, of emptiness the music had **not had** time to fill. It was **not** completely in shadow –

[67] "In *The Heat of the Day* erweist sich der übermäßige Gebrauch von Negationen als … illusionsgefährdend" (Hinrichs 1998, 181).

here and there blades of sunset crossed it, firing branches through which they travelled, and lay along ranks of chairs and faces and hands. . . .

The Sunday had been brilliant, **without** a stain of cloud. Now, the burning turquoise sky of the afternoon began to gain in transparency as it lost colour: from above the trees round the theatre there stole away **not only** colour but time. Music – the waltzes, the marches, the gay overtures – now began to command this **hourless** place. The people lost their look of **uncertainty**. The heroic marches made them lift up their heads; recollections of opera moulded their faces into **unconscious** smiles, and during the waltzes women's eyes glittered with delicious tears about **nothing**. (*Heat* 3-4, my emphases and omissions)

In this episode, Bowen introduces the setting of the novel. The protagonists are absent, and Bowen refers to them only indirectly, as in "it was a Viennese orchestra that played". This absence of fictional characters is not systematically tied to negation.

Eight sentences contain negation (the underlined sentence is syntactically ambiguous). In this episode, Bowen employs some of the negations, though not all, she uses throughout the novel. Negation is used in combination with preceding or subsequent affirmative context to give a detailed description of the landscape scenery in the park, with music, light, colour, space and time as central semantic concepts which are constituted by lexico-semantic items in antonymic pairs. Sentence and discourse context which precedes and follows negation influences processing. Utterances in discourse can be semantically coherent or incoherent, as these examples from Giora and Fein's 2007 study illustrate:

(1) The train to Boston was no *rocket*. The trip to the city was fast though. (coherent string) (Giora, Fein et al. 2007, 162, italics in orig.)

(2) The train to Boston was no *rocket*. The old man in the film spoke fast. (incoherent string) (Giora, Fein et al. 2007, 162, italics in orig.)

In this experimental study, the influence of semantically coherent and incoherent context following a negation was tested, that is the influence of negation on "forward coherence" (Giora, Fein et al. 2007, 160). The study showed that the "suppression" of the negated concept occurred when the subsequent context rendered the negated concept "useless for future use" (Giora, Fein et al. 2007, 164), as in example (2). By contrast, the negated concept "was retained for future use" if the "information just processed was deemed useful for further purposes" (Giora, Fein et al. 2007, 164). Thus, "in the presence of a

global cue … suppression is not triggered, despite local cues such as negation that might prompt it" (Giora, Fein et al. 2007, 165). If readers are "anticipating forward coherence", that means, "coherence of currently processed information with an oncoming segment", this "affects retention of information within the scope of negation for at least as long as 1,000 ms following the negated concept" (Giora, Fein et al. 2007, 165). In addition, the role of context preceding negation was tested using sentences such as these:

(3) I live in the neighborhood of millionaires who like only their own kind. Nonetheless on Saturday night, I also invited to the party at my place a woman who is not *wealthy*. (Giora, Fein et al. 2007, 166, italics in orig.)

The negated concept "not wealthy" remained accessible, even at 750 ms after stimulus presentation, suggesting that supportive prior context may not suffice to induce the suppression of a negated item (Giora, Fein et al. 2007, 168). According to this study, readers "retained information within the scope of negation when the task of comprehending a discourse segment was ongoing and incomplete and when they suspected that this information might become instrumental in completing the task" (Giora, Fein et al. 2007, 170). In this study, it is assumed that "general discourse operations such as a change of topic or schema" influence discourse processing and override the influence of "local cues such as negation" (Giora, Fein et al. 2007, 159).[68]

Based on my observations about negation in Bowen's novel and based on the above-discussed influence of context on processing, I suggest that Bowen's sentence negations do not "unconditionally induce" (Giora, Fein et al. 2007, 153) the suppression of negated concepts but initial their activation and retention for further processing. Bowen's negations impede both access to the meaning of negated concepts and the mapping of this meaning onto sentence structures. The activation and retention of negated concepts structures narrative episodes formally, lexically, semantically and in terms of processing experience: While negations do not form a systematic or predictable pattern, they may give rise to emerging form. Each sentence containing a negation triggers particular processing mechanisms. The combination of negation with affirmation means that processing ease and difficulty vary within each sentence but also across the episode. The text therefore engages the reader differently in different passages of the text, ensuring

[68] Discourse comprehension is modelled on Gernsbacher, M.A. *Language comprehension as structure building*. Hillsdale NJ: Lawrence Erlbaum, 1990.

that the text is not flat. An affirmative alternative version of the same text would give rise to a different, less eventful, processing experience.

Further, different forms of negation may challenge the reader to different degrees: The more negations occur in a sentence, the more complex the structure and hence the more difficult and costly to process for the reader (Christensen 2009, 6; Kaup and Zwaan 2003, 442-443). Differing combinations of negation and affirmation impact on processing ease and speed (Kaup and Zwaan 2003, 442-443). The negations in the opening episode of *The Heat of the Day* are all single negations, and the level of difficulty should therefore be relatively low. Having said that, I do not equate these formal differences with distinct processing experiences: While multiple or double negations may be formally more complex and more difficult to process than single negations, the reader does not experience the process of encountering and resolving difficulty differently. That means, different degrees of difficulty may require different degrees of cognitive cost and processing disfluency, but these do not produce a qualitatively different experience. As with ambiguity, I maintain that the source of aesthetic pleasure lies in the difference between the initial processing disfluency and the subsequent cognitive fluency, not in the absolute level of difficulty or fluency. The sentence level negations are part of Bowen's objective to be "precise" ((1941) 2010d, 248), and the alternation of affirmative and negating structures produce an "eventful" reading experience (Bowen 1962a, 9). In what follows, I discuss these eight sentence in order of appearance, and word by word as would happen in incremental sentence processing.

Sentence (1) contains the negated verb phrases "could not travel" and "did escape" which are semantically related:

(1) From here, from where it was being played at the base of this muffled hollow, the music **could not travel far** through the park – but hints of it that **did escape** were disturbing: from the mound, from the rose gardens, from the walks round the lakes, people were being slowly drawn to the theatre by the sensation that they were missing something.

The affirmative anticipatory constituent "it was being played" and the subject noun "music" in the main clause are likely to trigger a representation of an orchestra performing music. The negator "not" alerts the reader that the subsequent verb "travel" must be represented as negated. The reader first accesses the affirmative meaning of the verb phrase "could not travel far" before the negated meaning is accessible. The reader will

first form a representation of the sound of music spreading through the park in early processing before rejecting and modifying it as negated in late processing. However, the stressed affirmation of the semantically related verb phrase "did escape" induces the reader to partially maintain the previous representation of music spreading through the park. The negated concept of "travel" is not fully suppressed in late processing.

On the one hand, this sentence elicits disfluency and a fast negative response when the negator alerts the reader to upcoming processing cost. And indeed, the sentence is temporarily difficult when the reader infers the meaning of the negated phrase in late processing: As long as no affirmative description is explicitly available, readers must draw their own inferences about what the music does if it "could not travel far". On the other hand, the semantic and discourse congruence of the sentence contributes to easy lexical-semantic access in early processing for "not travel" and "did escape". Here, processing ease therefore varies from fluent to difficult and back to fluent processing.

If we compare the original sentence with a possible affirmative version, it becomes clear that the negation is not coincidental but serves an aesthetic purpose:

> the music **travelled a short distance** through the park – hints of it that **escaped** were disturbing

The two affirmative verbs in this version allow the reader to access both in early processing, without a negator to alert the reader to an upcoming difficulty. The two verbs are semantically congruent, and there is no necessity for increased inferential effort in late processing. However, this means that reading is not disrupted in either early or late processing, the absence of inferences and corrections of previously built representations also means that there is less potential for aesthetic pleasure than in the original sentence. Rather than producing an ill-defined narrative world, a sense of aporia or lack of understanding, the negation in the original sentence influences processing fluency, provides a higher density of meaning and thereby offers a greater potential for aesthetic pleasure than an affirmation could in this specific context.

In sentence (2), the negations are built around two semantic concepts, encoded by the lexemes theatre/play/acting and emptiness/music/fill.

(2) And, at the start of the concert, this tarnished bosky theatre, in which **no plays** had been acted for some time, held a feeling of sequestration, of emptiness the music had **not had time to fill**.

The two negations occur in a subordinate clause each, yet they are syntactically different and refer to a noun and verb respectively. This avoids overt formal similarity, creating processing variety.

The reader first accesses two affirmative semantic concepts, the concert and the theatre. The negator in "no plays" alerts the reader that the affirmative lexical-semantic meaning of "plays", which is accessed in early processing, may have to be suppressed in late processing. In this case, the reader is enticed to suppress the concept of "plays" rather than to retain it. The subsequent affirmative "held a feeling of sequestration, of emptiness" facilitates inferring the implications of the previous negation. While the negator elicits disfluency and a fast negative response, the search for inferences in late processing is now facilitated, leading to cognitive fluency and aesthetic pleasure.

The affirmative phrase "of sequestration, of emptiness" also prepares the reader for processing the final negation "had not had time to fill": Again, the negator alerts the reader to an impending suppression of the subsequent lexeme, eliciting disfluency and a fast negative affective response in early processing. However, the semantic congruence with the previous sentence context facilitates the suppression of "had time to fill" into its negated counterpart. Drawing inferences in late processing is therefore facilitated, leading to cognitive fluency and aesthetic pleasure. The fact that more than one representation has to be built and rejected within the same sentence suggests that it is relatively difficult to process. However, the alternating presence of negation and affirmation allows for the alternation of decreasing and increasing processing fluency while reading this sentence.

In comparison to sentence (1), it is difficult to find adequate affirmative versions of these negations:

> this tarnished bosky theatre, in which **plays/acting had been absent** for some time, held a feeling of sequestration, of emptiness the **music had yet to fill/ in which the music was absent**

The affirmative versions above are only affirmative in that they do not encode negation in the form of the lexeme but semantically through adjectives such as "absent". The reader accesses the meaning of these lexemes in early processing, and inferential efforts in late processing are less costly than for explicit negations. Therefore, processing effort and fluency do not vary as much from early to late processing, offering less potential for aesthetic pleasure than the original sentence. Comparing the original sentence with a possible affirmative version also illustrates that using explicit negations enables Bowen

to create a semantically more varied sentence: Since the adjective "absent" is semantically more similar to "emptiness" than the negated verb "not fill", the negated version enables Bowen to introduce a semantically juxtaposed concept. This has the effect of making processing both more complex yet aesthetically more rewarding.

As in sentence (1), the negations in example (2) do not seem to reduce but instead increase the richness of its meaning, offering more precise rather than less information. Moreover, the process of accessing and representing the meaning of this sentence involves more processing effort than an affirmative sentence would, thereby offering a greater potential for aesthetic pleasure for the reader.

In examples (3) - (6), two new semantic concepts are introduced in sentences containing negations. In sentence (3), the negation refers to a verb and introduces a new semantic context which diverges from the previous one: "shadow" and "blades of sunset". This semantic concept also re-appears in sentences (4) and (5). Sentence (5) then further shifts the semantic focus from "colour" to "time", a concept which also re-occurs in the subsequent sentence (6).

Sentence (3) begins with a negation, and in this case suppression of the affirmative is supported by subsequent sentence context.

(3) It [this tarnished bosky theatre] was **not** completely in shadow – here and there blades of sunset crossed it, firing branches through which they travelled, and lay along ranks of chairs and faces and hands.

The negator "not" alerts the reader that the semantic concept of the lexemes "completely in shadow" may have to be suppressed in late processing. This alert triggers a decrease in fluency and a fast negative affective response. The inferential interpretation of "not completely in shadow" is quite likely that parts of the theatre are "in sunlight". This inference and the suppression of the initially represented affirmative require increased processing cost. However, the remainder of the sentence supports this inference, rendering processing easier, producing cognitive fluency and aesthetic pleasure.

At the same time, processing is made difficult by another structure in the remainder of the sentence: The use of the phrase "blades of sunset" is semantically unusual. A phrase such as "rays of sunlight" might be anticipated. Due to semantic unexpectedness, this unusual phrase should also elicit a fast negative affective response and disfluency in early processing. Yet integration into sentence context in late processing is possible, leading to cognitive fluency and aesthetic pleasure.

This sentence further illustrates that several layers of syntactic and semantic structure may hold true for one and the same sentence. While one structure may impede processing, another may facilitate it. These contrary influences on processing can exist because they occur independently of each other and influence incremental processing at different points in time.

An affirmative version of this sentence is possible yet gives rise to a less differentiated meaning than the original:

It was partly in shadow – here and there blades of sunset crossed it

In this affirmative version, the reader's attention focuses solely on the affirmative concept of "shadow". No inferential effort is required to interpret the implications of this phrase, and there is little to entice the reader into anticipating an elaboration of that description in the subsequent part of the sentence. The affirmative description of the "blades of sunset" can be integrated into the representation without great processing cost. However, that also means that there should be no disruption in early or late processing, thus reducing the potential for aesthetic pleasure. As in the original sentence, the phrase "blades of sunset" should be semantically unexpected and elicit a fast negative response, so that this phrase retains its potential to elicit aesthetic pleasure in late processing. Using negation where affirmatives are available is therefore poetically motivated by the aim of influencing the reading process: Representing negation triggers the activation of concepts that would otherwise not be part of neither linguistic nor situational representation. Using negation can therefore be a mode of being poetically "precise" (Bowen, Beales et al. (1941) 2010d, 248) and create richer meanings.

In example (4), the negation is part of an additional phrase following an ellipsis:

(4) The Sunday had been brilliant, **without** a stain of cloud.

In this sentence, the affirmative could stand on its own. The negated phrase adds new information about the previously described affirmative clause. In the first part of the sentence, the reader may infer that the adjective "brilliant" refers to the weather and the colour of the sky, or else may understand this as referring to the mood of the perceiver. Given the context of this sentence, the former interpretation is more likely. The negated phrase "without a stain of cloud" modifies the previous adjective "brilliant". The negator "without" alerts the processing mechanism that the subsequent lexemes may have to be suppressed if context requires it. This occurs in early, automatised processing and is no

conscious response. The negated phrase requires the reader to first represent "stain" and "cloud" in the affirmative. Further, the reader then rejects the representation of the "stain of cloud" in order to represent a blue sky. The phrase "without a stain of cloud" retrospectively defines "brilliant" as referring to the sky – a linguistic item that is not present at all in the sentence, and an implication that is not made explicit in the first sentence half. Processing the negation in the additional phrase thus supports maintaining the representation formed before, rewarding previous processing effort through eliciting pleasure. In addition, the collocation of "stain" and "cloud" is perhaps semantically unusual and may elicit a fast negative affective response in early processing. Yet successfully processing this unusual phrase may elicit cognitive fluency and aesthetic pleasure in late processing.

Bowen could have simply written an affirmative sentence, making explicit what needs to be inferred in the original version:

a) The Sunday had been brilliant, with blue skies.
b) The Sunday sky had been brilliant and blue.

While these sentences are easier to process because the increased inferential processing effort associated with negation does not apply here, they nevertheless evoke similar interpretations. However, I argue that the original sentence allows a more aesthetically rewarding reading experience precisely because it requires the reader to invest more cognitive effort into processing. The negated version allows the reader to form a more complex and denser representation of meaning (Nahajec 2009, 116), which rewards preceding processing efforts. In this sentence, the representation of the rejected "stain of cloud" remains accessible, that is, it "leave[s] residual meanings" (Mayo, Schul et al. 2004, 434), similar to the "lingering effects" (Slattery, Sturt et al. 2013, 104) of rejected and corrected misinterpretations of garden path sentences. Processing the subsequent sentences should therefore be influenced by their predecessors.

Sentence (5) immediately follows (4) in the descriptive piece. The full interpretation of "brilliant" and "without a stain of cloud" as implicitly referring to "sky" in sentence (4) is confirmed by the explicit affirmative description of "the burning turquoise sky":

(5) Now, the burning turquoise sky of the afternoon began to gain in transparency as it lost colour: from above the trees round the theatre **stole away not only colour but time**.

The first and second sentence quoted above contain the antonymic semantic structures "gain in transparency as it lost colour" and "stole away not only colour but time". While in sentence (1), the not-but structure "could not travel far … but hints of it that did escape" produces a negation and an affirmation, in (5) this leads to an affirmative meaning.

As in the previous examples, the negator "not" alerts the reader that the subsequent lexemes, which are accessed in the affirmative first, may have to be suppressed in late processing. However, the verb phrase "stole away" is affirmative, and the lexeme "only" after the negator suggests that the negation here does not require suppression but retention as the appropriate processing mechanism. Instead of producing a reduced meaning, the negator effectively draws attention to both lexemes and semantic concepts within its scope. Early disfluency in processing the negator, and late processing cost in accessing and maintaining both concepts, colour and time, can yield cognitive fluency and aesthetic pleasure. By rewriting the sentence in the affirmative, I can illustrate that this alternation from early to late cognitive fluency is indeed linked to the sentence structure:

from above the trees round the theatre **stole away colour and time**

This affirmative version does not change the meaning of the sentence, yet renders processing easier. There is thus no communicative necessity for the negative. It is a stylistic choice, deliberately making processing more difficult. The negated structure foregrounds this part of the sentence and emphasises what it describes, and this would not be conveyed though the affirmative structure.

In sentences (6), (7) and (8), the negations work on the word and not the sentence level. Moreover, the adjective "unconscious", and the noun "uncertainty" all have an antonym which is easy to access, thereby facilitating access to the affirmative in early processing. This means that processing these three negations is relatively easier than the previous sentence negations, increasing processing ease towards the end of the episode.

Sentence (6) is the only one in this episode where the verbs and nouns are affirmative, and the negation is restricted to the suffix "-less" in an adjective.

(6) Music – the waltzes, the marches, the gay overtures – now began to command this **hourless** place.

The negated adjective "hourless" refers back to the description of time in the previous sentence (5), "there stole away not only colour but time". Because the suffix "-less" only pertains to the adjective itself, basic constituent structuring, prominence computation and argument linking should be unaffected by it. Accessing the affirmative meaning of the adjective quite possibly involves accessing the concepts of "time" and "hour". This lexical-semantic access should be relatively easy given that these had been accessed in the previous sentence. In this case, however, the affirmative concepts have to be suppressed in late processing. The conceptual semantic connection of time and place in a noun phrase may involve increased interpretive effort in late processing, which, if successful, is rewarded and elicits aesthetic pleasure.

Finally, examples (7) and (8) are the last sentences containing negation in this episode, and these are the first negations to refer to fictional characters rather than to setting and abstract concepts such as "music" and "plays".

(7) The people lost their look of **uncertainty**.

(8) The heroic marches made them lift up their heads; recollections of opera moulded their faces into **unconscious** smiles, and during the waltzes women's eyes glittered with delicious tears about **nothing**.

Sentence (7) immediately precedes (8). The reader accesses the affirmative of "uncertainty" first, that is, "certainty". The next sentence offers more context for the previous one, enabling the reader to interpret "uncertainty" within a more informative context. Instead of further defining "uncertainty", sentence (8) elaborates on what the loss of that uncertainty, and therefore by inference gaining certainty, involves. By offering informative context for the affirmative concept, the reader is invited to retain the affirmative "certainty", rather than to suppress it in favour of the negated "uncertainty". The negatory prefix "un-", which may alert the reader to retain this lexeme for further processing and a potential suppression, elicits a fast negative affective response. Successfully interpreting these sentences in late processing induces cognitive fluency and aesthetic pleasure.

To summarise, the negations in the opening episode in *The Heat of the Day* are a mode of being poetically "precise" (Bowen, Beales et al. (1941) 2010d, 248), and the alternation of affirmative and negating structures produces an "eventful" reading experience (Bowen 1962a, 9). Processing difficulty is one objective of negation in sentence structures. Negation requires accessing the affirmative lexeme first in early

processing. The additional processing effort required by accessing and modifying the lexical-semantic meaning of a lexeme decreases fluency, leading to a fast negative affective response in early processing. This increased cost may persist in late processing, where sentential integration of form and meaning may be impeded by negation in the sentence structure. However, this increased processing cost is rewarded: As I have illustrated, negation in itself has a poetic potential because it can be used to introduce additional concepts and new layers of meaning. The initially activated affirmative meaning of a negated lexeme may either be suppressed in favour of the negated meaning or remain accessible for the reader. Even though affirmative and negated meanings may not be simultaneously accessible for the reader, it follows that negation can add meaning to the text rather than create "holes" (Mooney 2009, 15). The affirmative context of negation has two effects. On the one hand, affirmative structures are easier to process in early and late processing, increasing processing fluency with positive effects on aesthetic pleasure. On the other hand, semantically congruent affirmative sentences support previously accessed negated lexemes and representations. The additional effort readers have previously invested into accessing the meaning of negated lexemes and into building and rejecting representations of those lexemes is rewarded.

The opening episode of *The Heat of the Day* is relatively uniform in that Bowen primarily uses sentence level negation. Nevertheless, different types of negation and affirmation motivate and depend on each other. Negation and affirmation encode lexically and semantically related concepts which are developed throughout the episode. This includes lexical antonyms and semantically related lexemes. Negations are motivated by semantic concepts in the episode structure beyond the individual sentence, and most negations fulfil an aesthetic function which could not be served by an affirmative structure. However, this does not mean that there is a systematic relation between episode structure and negation in individual sentences. That is, negation is an emerging form, and there is no way of predicting negation throughout the episode. Again, the individual sentence is treated as an object of art by Bowen, and the reader is rewarded through aesthetic pleasure if sentences are processed as objects of art.

Some negations could be substituted with corresponding affirmatives quite easily, without altering the semantic meaning, whereas this is more difficult in other cases. This suggests that one group of negations is indeed without any real structural affirmative alternative, while a second could be rewritten in the affirmative, sometimes requiring implied negation. This in turn suggests that the choice of negation over affirmation, where

possible, is in keeping with the poetic practice of rendering processing difficult while also offering aesthetic rewards if processing is successful.

4.2 Negation in morphology: Lexical pairs

I now illustrate how Bowen uses negation in morphosyntax to structure individual sentences and to challenge the reading process. Bowen especially uses the prefix "un-" which attaches to nouns, verbs or adjectives (Sherman 1973, 77). However, there is no apparent structural reason for this, and she could just as well have used other suffixes to produce comparable structures. I examine one sentence from *To the North* and four from *The Heat of the Day* in which Bowen uses lexical pairs such as here:

> The **reality** of the fancy was better than the **unreality** of the room. (*Heat* 57)

In all examples, the affirmative precedes the negated antonym. This is part of a larger poetic strategy of structuring sentences in narrative episodes, especially in *The Heat of the Day*. I have previously stated that negations in the morphosyntax of individual words pose a lower level of processing difficulty than sentence level negations. From this point of view, the sentences I examine here should be easier to process than those discussed in 4.1. However, Bowen combines morphosyntactic negation, ambiguity, parallelism, alliteration and rhyme. These structures are all independent of each other, and they may influence processing fluency of one and the same sentence independently. Because they rely on the same mechanism to elicit aesthetic pleasure, using different sentence structures maintains processing variety and ensures that reading is "eventful" (Bowen 1962a, 9).

Before I begin the analyses of Bowen's sentences, I introduce the concepts of lexical antonymy and "dialogic resonance" (Du Bois, 1998, 2001 cit. in Giora 2007, 142)[69] in relation to negation. Lexical antonyms can be characterised "as one of the most important semantic relations" (Maciuszek 2008, 19). According to Maciuszek, "[t]hey are lexical units in a conceptual field characterized by opposition of meaning" (2008, 19). The term "opposition" here "means that negation of the meaning of one unit leads indirectly or directly to that of the other unit" (Maciuszek 2008, 19-20, cit. Cruse and Togia 1995). [70] Dialogic resonance describes "the activation of affinities across

[69] Du Bois, John W., *Dialogic syntax*. Paper presented at the Cognitive Theories of Intertextuality Meeting. Tel Aviv University, 1998.; Du Bois, John W., *Towards a dialogic syntax*. Unpublished ms. University of California Santa Barbara, 2001.

[70] Cruse, D.A., and P. Togia. "Towards a cognitive model of antonymy." *Lexicology* 1 (1995): 113-141.

utterances" (Du Bois 2001 cit. in Giora 2007, 142). In this view, negation is not used randomly in discourse: Where affirmative lexemes are available, negations may be selected in order to maintain resonance across utterances, that is, these negations "resonate with other concepts mentioned in the discourse" (Giora 2007, 142). I interpret this as describing the activation of similar and related semantic concepts through lexically related items, either within the same sentence or across sentences in a text. According to Giora, negated concepts can trigger these affinities, effectively facilitating processing, because the underlying affirmative and the negated meaning are both accessible and retrievable for the comprehender, and this effectively "renders negated and nonnegated concepts alike" (2007, 142).[71] In Giora's argumentation, "the choice of a given concept marked by negation … is sensitive to the occurrence of that concept in prior context" (2007, 143), as in these two examples:

(1) 'In my mind there was always a question: Is he **alive**? Is he **not alive**?' she recalled. (Burns 2005)

(2) Is she **dead**? Is she **not dead**? (Weich 2003)
(Giora 2007, 143, emphases in orig.)[72]

The point Giora makes here is the following: Resonance can only occur for negated concepts if the reader can access the affirmative meaning of "alive" and "dead" for both the affirmative version of the lexeme and the negated versions "not alive" and "not dead": "If concepts within the scope of negation resonate with information mentioned previously in the discourse, this suggests that speakers assume their accessibility and hence their affinity with previously mentioned information" (Giora 2007, 143). While these two examples show how resonance may be evoked across the boundaries of sentences, and hence utterances, the examples in Bowen's novels only include lexical pairs within one and the same sentence. This is relevant because my model of literary reading accounts for sentence processing and is valid only for structures which hold true for one sentence.

[71] However, "dialogic resonance, whether backward or forward, should not be confounded with coherence (which, for one, requires that the newly added sentence will discuss the same discourse topic or be signalled as digressing from it [Giora, 1985])" (Giora 2007, 146).

[72] Giora cites these examples from online sources:
Burns, Robert. http://72.14.221.104/search?q=cache:FkXvZ0vhLusJ:www.air-america.org/newspaper_articles/herrick.shtml+%22Is+he+not+alive%22&hl=en&ct=clnk&cd=1. 26 March. 2005. [I could not retrieve the online source, nor find the article on the website indicated.]
Weich, Dave. Dennis Lehane Meets the Bronte [sic] Sisters. http://www.powells.com/post/interviews/dennis-lehane-meets-the-bronte-sisters. 28 May. 2003, published on 10 October 2006.

The use of morphosyntactic negation in Bowen's sentences is the result of a careful composition process. Negation is not part of an agenda to create "holes" in the text's meaning or "moments of aporia" (Mooney 2009, 15) in the reading experience. In congruence with existing research, I maintain that processing negation involves two steps. First, the reader accesses the affirmative meaning of the negated concept in early processing. If context supports the retention of that concept, the reader can access the affirmative meaning even in late processing. If the reader is initially induced to retain the affirmative meaning of a negated concept and then subsequently invited to suppress that concept after all, the initially represented affirmative meaning may "leave residual meanings" (Mayo, Schul et al. 2004, 434), similar to the revised misrepresentations of ambiguous sentence structures which may "linger" (Slattery, Sturt et al. 2013). Lexical pairs such as "reality" and "unreality" ensure the reader activates their meaning in early processing and retains the affirmative and the negated concepts in late processing, producing resonance. The negatory prefix "un-" may alert the reader to an upcoming processing task and trigger a fast negative affective response in early processing, as sentence negators may do. By contrast, facilitating semantic access in early processing and enabling cognitive fluency in maintaining semantic concepts for negated lexemes in late processing may lead to aesthetic pleasure.

I discuss five sentences in detail, considering each of them word by word, as would happen in incremental processing. I illustrate my argument with possible alternative sentence structures where this is helpful.

The Heat of the Day

Sentence (1) is structured syntactically, lexically and semantically. I describe the form first and then focus on processing.

(1) The **reality** of the fancy was better than the **unreality** of the room. In a boat you were happy to be suspended in nothing but light, air, water, opposite another face. On a sofa you could be surrounded by what was lacking. (*Heat* 57, my emphases)

The lexico-syntactic structure of the subject noun phrase "The reality of the fancy" is reflected in the parallel structure of the complement noun phrase "the unreality of the room". The verb phrase "was better than" establishes an explicit syntactic and semantic comparison between the two parallel syntactic structures and their semantic concepts. Both phrases have the same number and types of lexemes and a similar syllable structure.

The **reality** of the fancy
(art. + noun (preposition + (art. + noun)))
the **unreality** of the room
(art. + noun (preposition + (art. + noun)))

The almost parallel syllabic structure coincides with the prosodic and syntactic structure of the phrases (1, **4**, 1, 1, **2** / 1, **5**, 1, 1, **1**). (See Chapter 5.1 for a discussion of parallelism in this sentence and the episode.) The affirmative and the negated lexeme are contained in two distinct but parallel syntactic phrases which refer to distinct narrative entities. The pair is based on antonymy produced by word level negation. The two syntactic phrases contrast semantic concepts: First, the lexical antonyms "reality" and "unreality" are juxtaposed. Secondly, the nouns "fancy" and "room" are compared. However, Bowen's sentence does not have a predictable structure, and this alternative would be semantically more coherent and easier to process, yet alters the meaning:

a) The reality of the room was better than the unreality of the fancy.

While "reality" and "room", and "unreality" and "fancy" would be more likely collocates, Bowen inverts these, subverting semantic expectations. The two syntactic phrases therefore do not only juxtapose reality/unreality and room/fancy but establish a connection between reality/fancy and unreality/room. On top of this semantic juxtaposition, Bowen also plays with concrete and abstract concepts. In this version, the first phrase "reality of the room" produces alliteration, an effect not achieved for the second phrase. Avoiding unnecessary alliteration, which would facilitate processing and draw unwanted attention towards specific structures, is part of Bowen's poetic practice, as I will illustrate in Chapter 5. While the two phrases may appear to be very similar at first, they reveal differences on closer inspection.

The linear sequence of affirmation before negation is significant for the form of the sentence. Consider this possible alternative:

b) The unreality of the room was worse than the reality of the fancy.

For one, this version does not allow for the prosodic structure to be maintained (see section 5.1). Moreover, accessing the meaning of "the unreality of the room" does seem to be more difficult than accessing that of "the reality of the fancy". Subsequent sentence content reflects the sequence of "fancy" – "room" in that the "boat" refers to a

metaphorical description of an encounter between mother and son (Stella and Roderick), whereas "room" and "sofa" refer to entities which are physically present in the scene.

These prosodic and syntactic phrase structures, semantic concepts and situational presence influence sentence processing. When processed in isolation, "reality" may be processed and represented more easily than "unreality". Processing "unreality" involves accessing and representing the underlying affirmative "reality", which then has to be rejected as negated. According to a traditional view, the prefix "un-" induces the suppression of the affirmative concept of "reality", lending prominence to the negated "unreality" instead. Such a suppression would then result in a perceived absence of meaning, or a focus on absent concepts rather than those present in the narrative. However, I suggest that the specific sentence structure contributes to the activation of more rather than fewer semantic concepts, triggering a rich semantic representation.

In sentences with lexical pairs consisting of an affirmative lexeme and a derived negation, processing may be construed to be facilitated: The lexemes in the sentence occur and are processed in linear order. The affirmative root lexeme "reality" immediately precedes the negated derived lexeme "unreality" in the sentence. As the eADM holds, each lexeme in a sentence is processed on its own, with no backward recursions. Once processing a lexeme is completed, it cannot be influenced by subsequent input. Processing the affirmative root form of a lexeme activates access to it in the mental lexicon. It is then represented linguistically, and this representation is maintained while reading the remainder of the sentence. Once the negated word form is processed, the underlying affirmative is represented first and may then be rejected if context induces this. Since the affirmative root form has been activated and represented previously, the second activation and representation should be relatively easy and take place more quickly.

Therefore, when the reader processes the second lexeme of the pair "reality" – "unreality", he can draw on the previously activated concept of "reality", which underlies the derived form "unreality". Given the proximity of the two lexemes within the sentence, the representation of "reality" is still active and accessible when the reader encounters the lexical antonym. Processing the second lexeme "unreality" resembles that of processing the underlying lexeme "reality", up until the rejection of the affirmative version as negated, producing resonance. Therefore, the subsequent processing of "unreality" is facilitated by making the linguistic representation of the form underlying "unreality" more readily available. In the second lexeme of a pair, the first step in processing negation is therefore easier than usual, facilitating negation processing. The initial activation of the

affirmative lexeme reduces lexical and semantic selection space for the second lexeme in each pair. This also holds for other lexical pairs which do not involve negation, and this implies that processing lexical pairs eases processing, irrespective of negation, but might have stronger effects where negation is present.

Facilitation of processing is to be understood as relative to processing effort in other sentence environments. If "unreality" were used in the sentence without the lexical root, the negation would impede processing to a larger degree than in Bowen's text. Re-activating and maintaining linguistic representations from one lexeme to the next is made even easier as both belong to the same word class (noun), and the reader need not invest additional effort in identifying and processing the antonyms in relation. Moreover, the two lexemes stand in direct syntactic relation to two other nouns, "fancy" and "room", and the reader might be inclined to establish a similar connection between these two nouns, which, however, are neither semantically nor lexically related – but the reader is asked to establish a semantic connection in any case. (This resembles sentences in Bowen's texts which superficially appear to have the same structure but have a different underlying syntax, see Chapter 5.) The negated lexical pairs may influence processing fluency and affect aesthetic pleasure locally. Lexical pairs which do not involve negation presumably facilitate processing for the second lexeme as well. However, only negated concepts hold the potential for the late suppression of their affirmative meaning.

The mere syntactic juxtaposition of lexically and semantically related lexemes, and the prosodic resemblance of phrases may influence the process of mapping sentence form onto meaning: In stage 2 (eADM) in the early processing stage of the model of literary sentence processing I propose, discourse context plays a particular role, and previously activated concepts inform the computation of argument prominence and argument linking. In stage 3 (eADM) in late processing of the model I propose, the reader matches knowledge about syntactic structures with semantic meaning: The resemblance between syntactic structures, the semantic relations between items and the prosodic structure of the sentence may all contribute to the sense that this sentence is particularly meaningful. The reader may be induced to search for additional meanings, and this search may be induced by the prospect of acquiring new and rewarding knowledge. The reader can identify the dense sentence structure as part of Bowen's poetic practice and may treat it as an object of art. If the sentence is indeed treated in this way, the reader is more likely to consider the sentence structure in itself as meaningful. Moreover, negation, ambiguity, parallelism, alliteration and rhyme all require specific processing mechanisms and

contribute to the reading experience independently of each other. The reader cannot consciously discriminate these mechanisms nor trace fluency to individual aspects of the sentence. The source of fluency remains elusive, and the reader attributes the resulting aesthetic pleasure to the sentence.

While syntactic, lexical and semantic repetition make processing easier because similar representations have to be built within a short space of time, negation is easier to process because the processing mechanism itself is performed by the text: The underlying affirmative form is activated explicitly by stating it in the surface of the text rather than requiring the reader to access it independently. Processing ease therefore increases locally, towards the later part of the sentence where the negation is located. Semantically and pragmatically higher "densit[ies] of meaning" (Nahajec 2009, 116) are based on the local negation, but the aesthetic effects of this are probably attributed to the entire sentence rather than to the negation itself. The negation in itself requires increased processing effort, reduces fluency and thus results in reduced aesthetic pleasure. Nevertheless, the structures discussed above counterbalance the difficulty inherent in negation, thus creating an even greater aesthetic pleasure than a sentence without these lexical antonyms would.

In example (2), the sentence adverbials "heard" and "unheard" belong to the same word category. In contrast to the other sentences I discuss here, these paired lexemes neither belong to different phrases nor to different narrative entities. Here, retention of the affirmative and the negated meaning is supported by subsequent sentence context.

(2) **Heard** or **unheard**, the city at war ticked over – if from this quarter, from these immediate streets, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an **unintermittent** pumping of vital traffic through arterial streets into arterial roads. (*Heat* 59, my emphases)

The reader first accesses the meaning of "heard", anticipating a main clause which usually follows sentence adverbials. The prefix "un-" alerts the reader to an impending processing task, triggering a fast negative affective response. The affirmative meaning of "unheard" is relatively easy to access due to the previous activation of the concept in the immediate sentence context. The two sentence adverbials suggest that there may be a solution to them later on. The reader is likely to maintain both the affirmative and the negated meaning, accessible throughout the remainder of the sentence. While this means increased processing effort, maintaining both concepts means that mapping form onto

meaning is facilitated throughout the remainder of the sentence, yielding cognitive fluency and aesthetic pleasure. If the reader recognises and understands the phrase "Heard or unheard" as a reference to Keats's line "Heard melodies are sweet, but those unheard are sweeter", in his "Ode on a Grecian Urn", such knowledge might influence the late processing stage, rendering it easier and therefore more pleasurable.[73]

Sentence (3) is structured syntactically, lexically and semantically, all influencing processing independently. The affirmative noun "mist" is followed by the negated adjective "unmisty", a neologism. In addition, syntactic ambiguity in the first sentence half may give rise to processing difficulty, as I have discussed in Chapter 3. Here, ambiguity and the phrase structure of the sentence initial adverbial phrase are linked. I discuss the role of negation processing first and then turn to a discussion of additional structures.

(3) Out of **mists** of morning charred by the smoke from ruins each day rose to a height of **unmisty** glitter; between the last of sunset and first note of the siren the darkening glassy tenseness of evening was drawn fine. (*Heat* 98, my emphases)

This clause complex is structured into two halves – syntactically, semantically and in terms of processing fluency: The first sentence is structured by a lexical pair consisting of negation and a neologism. The lexemes of the lexical pair "mists" and "unmisty" are contained in two adverbial phrases which begin and end the sentence respectively. The negation and the neologism are each potentially difficult to process. However, the sentence context offers formal clues for each of these problems, facilitating processing.

The negated lexeme "unmisty" is a neologism and therefore poses two processing challenges for the reader, which are resolved as follows: The reader first processes the negatory prefix, preparing for accessing the semantic concept contained within the scope of the negation. The negatory prefix "un-" alerts the reader to an upcoming processing task, to accessing and perhaps suppressing the negated concept within the scope of the negation. This alert triggers a fast negative affective response. Accessing the affirmative meaning of "unmisty" should be relatively easy because the previously activated affirmative meaning of the concept "mist" is still available for the reader. The noun "glitter" following the adjective "misty" invites the suppression of the affirmative

[73] In *To the North*, incidentally, Bowen uses the following landscape description: **"No** birds sang: it had been worse than that day in Keats" (*TN* 67-68, my emphasis).

meaning of "misty", even though the reader retains the affirmative "mists" available for a final sentence interpretation. So how does the reader cope with the neologism itself?

Generally, processing neologisms typically involves longer reading times, which is indicative of greater cognitive cost in processing because readers have to draw on contextual clues to establish the meaning of the word. Especially context following the neologism is used for inferring the meaning of a new word (Chaffin, Morris et al. 2001, 223). The meanings of neologisms are constructed in reference to existing semantic concepts (Chaffin, Morris et al. 2001, 234). Initial neologism processing probably involves word form recognition, both of the root form and of affixes. In the above sentence, neologism processing is facilitated in two ways: First, Bowen uses a recognisable morphosyntactic negation, the prefix "un-" and a recognisable root lexeme, the noun "mist". The reader may therefore easily detect lexical similarity between existing negated lexemes generally and the previously mentioned affirmative in particular. Secondly, as in the other examples, the root form "mists" is stated first, and thus the lexeme and its semantic concept are already activated. Lexical and semantic selection space is therefore reduced by the time the reader reaches the neologism, and processing the neologism is thus facilitated. For Bowen's readers, this may mean that the order of the lexemes should lead to a relatively easy inference of meaning for the neologism.

In all other sentences with negation in lexical pairs, there is no shift in word category from the affirmative to the negation. So why does Bowen use the preposition phrase "out of mists of morning", rather than "out of misty morning"? This may have syntactic reasons which Bowen recognises and uses for her purposes: In addition to the negation and the neologism, this sentence is ambiguous. However, the ambiguity and negation occur in different syntactic phrases and do not directly interfere with each other. This means that processing difficulty from two different sources are distributed within the sentence. The ambiguity presents the reader with the first challenge, and the negation offers a second. This second difficulty in negation processing requires the reader to refer back to the sentence's initial phrase, tying the whole sentence together. The preference for "mists" rather than "misty" allows Bowen to create syntactic ambiguity in a way not otherwise possible. Compare the original sentence to these two hypothetical alternatives:

> Out of **mists of morning** charred by the smoke from ruins each day rose to a height of **unmisty** glitter;

a) Out of **misty mornings** charred by the smoke from ruins each day rose to a height of **unmisty** glitter;

b) Out of **the misty morning** charred by the smoke from ruins each day rose to a height of **unmisty** glitter;

In the original, the phrase "out of mists of morning" is underspecified, and the subject phrase "each day" refers to generic "mists of morning" rather than a specific one. By contrast, in alternative a), the adjective "misty" requires a different structure and turns the underspecified "morning" into the specified plural noun "mornings". In alternative b), the definite article makes the subsequent use of "each day" less likely.

Therefore, in the original sentence, the subject phrase "each day" refers to "mists" rather than "morning", rendering the sentence structurally and semantically ambiguous and hence difficult to process. This ambiguity is eliminated in the alternative versions, where "morning" is the only possible noun the subject phrase can refer to. Both alternatives a) and b), with an adjective instead of a noun, lose the indefiniteness of "morning" which keeps the general meaning of the original sentence underspecified and maintains structural ambiguity.

Each of the two proposed alternatives offers a lexical pair "misty"/"unmisty", yet arranging the sentence around this pair requires syntactic changes in the sentence initial adverbial phrase. This in turn eliminates the syntactic ambiguity, the garden path effect, of the main clause subject phrase "each day". While the proposed alternatives are easier to process, the original has a greater aesthetic and poetic potential by virtue of the trade-off between increased processing effort on the one hand, and higher "density of meaning" (Nahajec 2009, 116) and more unstable representations on the other, as is the case with ambiguous sentence structures.

In addition to more complex syntax, versions a) and b) contain an alliteration, unlike the original sentence. This is another instance where Bowen avoids rather than promotes overt resemblance of structures, and this variety is potentially more aesthetically rewarding than a pattern that is too easy to recognise and process. I will discuss this notion in more depth in Chapter 5.

To summarise, in sentence (3), Bowen challenges the reader by using negation, neologism and ambiguity, all of which impact processing in different and specific ways. The reader quite probably requires two different and independent strategies for processing the negation and the neologism in the lexeme "unmisty". Increased processing cost may

therefore have two different sources in this case, and resolving these two problems may likewise rely on different processing mechanisms. However, the reader is likely to be unaware of this distinction. For the reader, the source of processing disfluency on encountering difficulty and the source of processing fluency on solving the problem remain inaccessible. The fast negative affective response of disfluency and the eventual aesthetic pleasure elicited by cognitive fluency are therefore attributed to the sentence itself, not to the processing experience. Likewise, encountering and resolving ambiguity, while structurally related to the affirmative-negative lexical pair, poses an independent processing problem. Each structure may operate individually but contributes to "a series of reactions, of which the effect shall be cumulative" (Bowen and Jones (1950) 2010f, 271). Processing ease achieved in regard to either negation, neologism or ambiguity should affect overall attributions of characteristics to the text, and hence a general positive aesthetic impression can be produced. While negation and neologism processing is obligatory in this sentence, the reader may not notice the ambiguity. The pleasure derived from processing the negation and the neologism can then be the sole source of aesthetic pleasure. The presence of two potential sources for processing difficulty and pleasure within one sentence have the potential of making reading "eventful" (Bowen 1962a, 9).

In sentence (4), two of the four negations form a lexical pair, which, however, is not antonymic, and neither of these lexemes is preceded by a lexically related affirmative.

(4) These **unknown** *dead* reproached those left living **not** by their *death*, which might any night be shared, but by their **unknownness**, which could **not** be mended now. (*Heat* 99, my emphases)

Processing this sentence may be more difficult than for other examples, given that Bowen combines sentence and morphological negation holding of all but one clause. The syntactic, lexical and semantic structure of this sentence once more highlights that the sentence has a special status in Bowen's poetic practice. The lexemes and semantic concepts of the phrase "These unknown dead" require the reader to access and activate two concepts to which the rest of the sentence refers back lexically and semantically.

The first negation functions as a lexical and semantic activator and selector, just as the affirmative lexemes do in the other pairs. The negation in "these unknown dead" alerts the reader to the possibility that the concept within its scope may be subject to suppression later on, but the affirmative "known" remains accessible for the time being. The alert triggers a fast negative affective response, in anticipation of an upcoming processing task.

However, later on in the sentence, the activation of the semantic concept of "dead" may facilitate access to the antonymically related concept of the "living", contributing to processing fluency and aesthetic pleasure. Until parsing the second negation, "not by their death", the reader is likely to build an active representation of the clause "These unknown dead reproached those left living". The reader will therefore access the affirmative meaning for the verb "reproached". The second negation in "not by their death" therefore also contains "death" within its scope. An alternative version of the sentence might have enclosed the verb in its scope instead:

> These unknown dead **did not reproach** those left living by their death, which might any night be shared, but by their **unknownness**, which could **not** be mended now.

However, in this version the reader is enticed to access and retain the concept of "reproach", keeping it available for further processing. In the original sentence, the focus is on the previously mentioned concept of "dead", and therefore negating the noun "death" contributes to discourse resonance in this sentence.

While the first two clauses focus on the concept of "death", the final two concentrate on "unknownness". On reading the third negation, "unknownness", the initial activation of both the affirmative and negated concept of "unknown" is still available for the reader. Even though the negator triggers a fast negative affective response, repeated semantic access is easier than at the beginning of the sentence. Matching the sentence's syntactic form with lexical and semantic meaning is therefore relatively easy and yields cognitive fluency, resulting in aesthetic pleasure. The final negation works in the same way as the previous ones, eliciting a fast negative affective response. Here, however, a new semantic concept is introduced in the scope of the negation, rendering lexical-semantic access less fluent than before. The reader now needs to integrate all previously attained information of the sentence with this final clause. To conclude, both the concept of "death" and of "unknownness" must have been accessed in their affirmative first and then suppressed subsequently. The negated concept must be available for the reader, rather than the underlying affirmative concepts.

To the North

In the following sentence from *To the North*, Bowen uses the lexical pair "blind" and "not blind", the only instance I could find where a lexical pair is used with a sentence negator.

Incidentally, this example may also be an instance of an unsuccessful attempt to create a poetically precise sentence and an aesthetically eventful reading experience:

> Blind with new light she was like somebody suddenly **not** blind, or, after a miracle, somebody moving perplexed by the absence of pain. (*TN* 304, my emphasis)

To begin with, the reader parses the phrase "Blind with new light", a semantically contradictory structure. The semantic concept of "blind" might initially rather facilitate semantic associations with the absence of light or the presence of darkness. Bowen undermines this semantic expectation by using the phrase "blind with new light". Only inferential effort enables the reader to comprehend this phrase as describing a situation in which a sudden and bright light temporarily renders a person blind.

Bowen then further complicates this concept by using the phrase "she was like somebody suddenly not blind". Here, the reader has to infer that a person who is indeed blind may only see light when seeing for the first time: For the first moments, the eyes are unable to fixate or discriminate shapes and shades of light. Even though the affirmative adjective precedes the negated instance, this does not fully contribute to a processing facilitation in this case. An alternative affirmative version of the sentence may reduce the inferential effort:

> Blind with new light she was like somebody suddenly **able to see**, or, after a miracle, somebody moving perplexed by the absence of pain.

In this version, the reader is relieved of inferring that a person who is suddenly "not blind" must be able to see. Even though this may not seem to require too much processing effort, I suggest that the previously accessed affirmative concept "blind" is supported by subsequent context; this context renders it difficult to suppress the negated concept, even though the negator in "not blind" requires it. While the original sentence shows higher lexical resonance, the suggested alternative is semantically easier to process. In either case, the metaphor supports a previously formed interpretation, rewarding earlier processing cost invested in understanding the sentence.

As in all other sentences, late interpretation is nevertheless possible. Overcoming initial difficulties here leads to the acquisition of an understanding of a novel and unconventional simile and metaphor. While I hypothesise that this acquisition of new knowledge may be rewarded because cognitive fluency in late processing yields aesthetic pleasure, neither the meaning of the sentence nor the reading experience may be a truly

successful example of Bowen's poetic practice: The processing effort involved in achieving the above interpretation may not be perceived by the reader as worth the effort.

4.3 Conclusion: Negation

In this chapter, I have suggested that processing word and sentence level negation in Bowen's descriptive pieces is more costly than processing affirmative structures. In early, text-type independent processing, readers may have to represent the affirmative meaning of any lexeme within the scope of negation. The reader may then either reject the affirmative in favour of the negated meaning, or maintain the affirmative for further processing. Linguistic sentence negators such as "not" and negatory affixes such as "un- " may alert the reader to an upcoming processing task and elicit a fast negative response. If the reader is successful in accessing and either maintaining or rejecting the negated concept, this should lead to cognitive fluency and aesthetic pleasure. My claims are hypothetical and require experimental validation, but they may provide new impetus for considering the form and effects of negation in Bowen's novels.

Affirmation and negation alternate within individual and across sentences, both in the episode from *The Heat of the Day* in 4.1 and in the individual sentences from *To the North* and *The Heat of the Day* in 4.2. Processing fluency may therefore vary within sentences and throughout narrative episodes. Since the trade-off between ease and difficulty is consistently caused by affirmation and negation, these structures create linguistic similarity within the episode. The variation of processing disfluency and fluency remains unpredictable for the reader, and aesthetic pleasure likewise remains unpredictable. The contrast between the fast negative affective response and disfluency in early processing, and the subsequent cognitive fluency in late processing is greater for unpredicted than for predicted stimuli, producing greater aesthetic pleasure.

Bowen frequently uses negation as a stylistic choice rather than as a communicative necessity. Many negations, especially those discussed in 4.1, could alternatively be expressed as an affirmative. However, the formulation of affirmative versions of linguistically negated sentence structures always requires the encoding of negation in another way, i.e. semantically via word meaning. Other negations could even be dropped if they add additional information which has been encoded in affirmative terms elsewhere in the immediate sentence context. The point of negations is therefore to render literary reading "eventful" (Bowen 1962a, 9) and more pleasurable. Negations are part of Bowen's aesthetic principle to "precise" ((1941) 2010d, 248).

I have responded to three lines of argumentation in literary scholarship on negation in Bowen's writings: First, I have argued against seeing negation as indicative of the "limitations" (Hinrichs 1998, 181, my translation) of Bowen's language. Moreover, I have countered the idea of a permanent effect of negations to create "holes" and "moments of aporia" (Mooney 2009, 15): Focused analyses of sentence structures have shown that Bowen's negations require the reader to process additional elements which would not be activated by corresponding affirmative sentence versions, thus making the narrative semantically and pragmatically more meaningful. This is especially the case in the descriptive pieces. Secondly, I have argued against the idea that negations *per se* are a foregrounding device (Hinrichs 1998, 178, 180). While empirical evidence suggests that negated sentences are more difficult to process than affirmative ones, I claim that the frequency and the use of more than one negation per sentence, rather than the negation itself, turns negation into a challenge for the reader, a challenge which gives rise to difficulty in early, automatised sentence processing. Thirdly, in response to the notion that negations result from specific features of Bowen's narrative world (Hinrichs 1998, 180), I hold that language constructs the narrative world and not vice versa. The narrative world does not exist before it is put into words for the reader. The reader need not necessarily arrive at conclusions about the ontological state of a narrated world based on linguistic negations, nor does a narrative world necessarily convey ontological security through affirmative sentences: Ontological states, security or insecurity, stability or instability, may be encoded in negation but just as well in affirmation. Negations *per se* do not automatically encode ontological insecurity, nor is this the only and automatic inference or interpretation negation allows.

To conclude this chapter, some aspects of affirmation and negation processing are also relevant for ambiguity (Chapter 3): Both forms are syntactically complex and require more processing cost than affirmative and unambiguous sentences. Negation and ambiguity yield more than one representation of a sentence in late processing, thereby making the narrative and its possible interpretations more meaningful: Similar to the "lingering effects" (Slattery, Sturt et al. 2013, 104) for ambiguous structures, negation can create "residual meanings" (Mayo, Schul et al. 2004, 434). However, in contrast to ambiguity, negation need not be noticed by reader. The difficulty of negation is not one of misinterpreted linguistic form; instead, the process of accessing lexical-semantic associations and deriving propositional meanings of lexemes and sentences is more costly.

Negation and affirmation, like ambiguity, produce varying levels of linguistic complexity in individual sentences and in narrative episodes. Early disfluency and late cognitive fluency alternate, resulting in aesthetic pleasure. Aesthetic pleasure can be derived from cognitive fluency, irrespective of the source of fluency and irrespective of whether the reader can identify the source of fluency.

As I have already pointed out in reference to some sentences, negations are also part of parallelism, which I discuss in more depth in the following Chapter 5.

5. Sentences and paragraphs are "good in shape": Parallelism, alliteration and rhyme

In the previous chapters on ambiguity and negation, I have defined the "eventful[ness]" (1962a, 9) of reading, in Bowen's terms, as encountering and resolving difficulty, resulting in aesthetic pleasure. I now hold that prosody, parallelism, alliteration and rhyme in Bowen's novels may facilitate early and late processing, and cognitive fluency may produce aesthetic pleasure. As part of Bowen's poetic practice, prosody, parallelism, alliteration and rhyme in *The Last September* and *The Heat of the Day* neither occur randomly nor constitute what has been called "mannerisms" (Corcoran 2004, 3). Here too, the sentence has a special status in Bowen's poetic practice, both regarding the written form and the processing experience for the reader. By facilitating processing through these forms, Bowen distinguishes more significant sentences from less significant ones. Consider these examples:

(1) It was imperfect silence, mere resistance to sound – as though the inner tension of London **were being struck and struck on** without breaking. **Heard or unheard**, the city at war ticked over – if **from this quarter**, **from these immediate streets**, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic **through arterial streets into arterial roads**. (*Heat* 59, my emphases)

(2) Mrs Montmorency and Laurence were in the drawing-room. They looked anxious, nothing showed the trend of the conversation. The pale room rose to a height only mirrors followed above the level of occupation; this disproportionate zone of emptiness dwarfed at all times figures and furniture. The distant ceiling imposed on consciousness its blank white oblong, and a pellucid silence, distilled from a hundred and fifty years of conversation, waited beneath the ceiling. Into this silence, voices went up in stately attenuation. Now there were no voices; Mrs Montmorency and Laurence sat looking away from each other. (*LS* 20)

The four highlighted structures in excerpt (1) are instances of lexico-syntactic parallelism, and parallelism often produces alliteration. The patterning in excerpt (2) is less easy to see at a first glance. However, these six sentences form a symmetrical paragraph. This symmetry stems from numeric sentence length, syntactic parallelism between sentences, phonological similarity between words and lexico-semantic repetition. Repetition and

variation such as in these two examples occur frequently in Bowen's novels: I discuss parallelism on the sentence level in section 5.1 and the paragraph as form in section 5.2.

I have previously argued that ambiguity and negation render early processing difficult and that the successful resolution of such difficulty is the source of aesthetic pleasure. The concept of contrastive valence (Huron 2007), a basic universal mechanism of the brain, provides an explanation for this hypothesis: Sudden difficulties in decoding a stimulus are treated as a signal of potential danger, resulting in a fast negative affective response. A later re-evaluation may show the stimulus to be harmless, allowing for a positive affective response. A sudden and unexpected facilitation of early processing may therefore likewise be treated as a signal of a potentially harmful situation *because* it is sudden. This sudden ease in early processing may elicit a fast negative affective response, just as sudden difficulty may. This response is then re-evaluated in late processing, and achieving cognitive fluency as a consequence contributes to aesthetic pleasure.

If parallelism, alliteration and rhyme do indeed facilitate early processing, these structures have a different effect on processing than ambiguity and negation, yet they also render reading eventful. Prosody, parallelism, alliteration and rhyme in Bowen's language may operate in parallel but with a cumulative effect on incremental sentence processing. These forms of repetition and variation, then, may indeed fulfil Bowen's ideal of triggering "a series of reactions, of which the effect shall be cumulative" ((1950) 2010f, 271).

In the remainder of this introductory section, I refer to Bowen's own ideas on prosody, sentence structure and the role of the paragraph, and then consider views of literary scholars on prosody in her novels. I review research on prosody, parallelism, alliteration and rhyme in linguistic and neuroaesthetic research and finally sketch how I can account for the roles of these forms using the model of literary sentence processing.

To begin with, *The Heat of the Day* and *The Last September* may be considered examples of what Bowen calls "shapes". The abstract forms of individual sentences and paragraphs are relevant object features which influence the aesthetic perception of Bowen's novels as works of literature:

> At their best, my short stories seem to me good in shape: I am less happy as to the shapes of my novels. The most 'shapely' novel I have written is *The House in Paris*. (Bowen and Jones (1950) 2010f, 272)

While Bowen does not define the term "shape" any further in the conversation quoted above, she explains the exact nature of that form elsewhere, which holds of the sentence and the paragraph:

> Habitual turns of phrase, habitual words are literary counterparts of besetting sins – and they are certainly the enemies of expression: they restrict or wither the freshness of our way of seeing. And the same is true of those binding prose-rhythms into which (maybe in the pursuit of 'style') some writers tend to let themselves fall. Repetitive sentence-shapes and paragraph-patterns make for something worse than monotony: they become conventions. And conventions in writing are no less deadening for being conventions of one's own – it is perhaps these which are most insidious. (Bowen 1962b, 211-212)

Bowen here says that sentences and paragraphs are units of composition which influence processing and the aesthetic experience of reading. Bowen also recognises that sentence structure relates to the "prose rhythm", that is, the prosodic structure of sentences. "Habitual" and "repetitive" structures on the sentence and paragraph level reduce the scope of possible semantic expression and produce "monotony", presumably on all levels of form, be it prosodic, syntactic, semantic or phonologic. While forms must be found which produce the desired effect, these forms should not be overtly recognisable. Overt repetition produces monotony, and monotony does not contribute to the desired eventfulness of reading. Elsewhere, Bowen holds that variation in sentence length is a crucial aspect of avoiding monotony:

> Not only the literary but the psychic difference between the long and the short sentence is very marked: and we should make the most of the variation. (1962b, 214).

In addition, Bowen considers the role of phonologic aspects in preventing a monotonous and therefore predictable and easy reading experience:

> I'd rather keep the jars, 'jingles' and awkwardnesses – e.g. 'seemed unseemly,' 'felt to falter'. They do to my mind express something. In some cases I want the rhythm to jerk or jar – to an extent, even, which may displease the reader. (Bowen (1946) in Howard 1971, 181-182; as cited in Teekell 2011, 61-62; Ellmann 2003, 166)

As Teekell points out, "These 'jerks,' 'jars,' and 'jingles' are part of Bowen's project to create an experience of reading that is 'eventful'" (2011, 62). Bowen assumes a causal relation between the rhythm of prose texts and the experience of displeasure, and thus also pleasure, during reading. While Bowen asserts that the phonological resemblance within phrases such as "felt to falter" communicates "something", this is not to say that such phrases have a lexicalised meaning. Rather, they may communicate that they have a significance, and it is for the reader to assess and interpret it. This is an inferential process and must therefore occur in late processing. Thus, the sound structure too may elicit thinking about semantic and pragmatic content, and this means that not only the syntactic, lexical and semantic structure of a text produces meaning.

However, creating the desired eventfulness and avoiding monotony requires a careful use of language:

> There is a dramatic element in language, which is latent even while held in check. And there are … situations in writing when the check may be fearlessly removed. ... for the short-storyist and the novelist, all-out release of language must only come infrequently and, when it does, advisedly. Climax of drama in the story justifies fullness of drama in the language. Then is the time for arresting words – we may resort to vocabulary as a striking power. The discordant, the odd, the harsh, the cacophonous all assault, by shock tactics, the amazed but not less receptive reader. Need we stress that obvious shock tactics miss their mark? 'Strong' or purple passages, indecencies, the florid or hysterical piling up of adjectives, italics, exclamation marks, rows of dots and so on are likely merely to bore or numb, or to arouse resistance in a derisive form. What *is* effective is the affray of words, the vibrating force of their unforeseenness, their clash upon or contrast with one another. Why do we react more to 'the thin gate clanged' than to 'the iron gate shut noisily'? (Bowen 1962b, 213-214, italics in orig.)

Creating eventfulness in reading requires compositional arrangement, so that the relation between the content of the story and the reading experience is not random: This does not mean that a specific syntactic structure symbolises events in the narrative world, as has been hypothesised by literary scholars such as Ellmann (2003, 60, 66-67). Rather, when the story reaches an important point, the language invites a sudden, eventful, change in the reading experience. For example, the choice of words for their lexico-semantic structure, their meaning and their phonological structure is a central tool of initially

displeasing the reader: By selecting "[t]he discordant, the odd, the harsh, the cacophonous" rather than words which have the potential to trigger pleasure immediately, Bowen seeks to "assault, by shock tactics, the amazed but not less receptive reader". However, Bowen warns against shocking the reader just for the sake of shocking, and also warns against overstraining the reader's patience. Instead, her "assault" consists of the planned and carefully weighed "affray of words", which includes the semantic meaning as well as the lexical and the phonological structure of language.

Literary scholars have already observed that Bowen uses prosody, syntax, lexicon and phonology to create eventfulness for the reader. To begin with, Lee refers to Bowen's examples, cited above, concerning the desired "affray of words": Bowen assumes that a phrase such as "the thin gate clanged" is more effective than "the iron gate shut noisily". In Lee's view, these phrases demonstrate "the dangers as well as the effectiveness of" Bowen's "style" (1999a, 213). While Lee does not offer more detail, Osborn comments on the prosodic and phonological qualities of Bowen's prose:

> As with Woolf's, a great deal of the beauty of Bowen's 'good' prose springs from undulation. … the sense and sound of multiple periods rise together and both fall away in a mutual rhythmical cadence. The periodic rhythms control and direct the force of the sentences – a stage of thought finishes with a stage of rhythm, a thought member with a rhythmic member. By reducing the number of sounds, selecting them from a limited range, and restricting the rhythms of the periods, both Woolf and Bowen numb our analytic attention and allow us to move inattentively over the surface of many of their sentences, as the punctuation of sound patterns creates implications of meanings that appear and disappear as the sounds and rhythms change and we adjust to the changes. (Osborn 2006, 192)

In this passage, Osborn first speaks of "the sense and sound of multiple periods" in Bowen's language, by which I assume she means semantic, prosodic and phonological aspects of phrases. In saying that these "rise together and fall away in a mutual rhythmical cadence", I assume that Osborn describes the idea of a coordination of the length of syntactic and prosodic constituents. Secondly, Osborn states that "the periodic rhythms control and direct the force of the sentences – a stage of thought finishes with a stage of rhythm". I interpret this to mean that Bowen selects lexemes for sound structure and adapts syntactic structure accordingly. Similarly, Osborn observes Bowen "reducing the

number of sounds", which again points to her practice of selecting words for phonological structure, presumably creating, or avoiding to create, alliteration or syllable structures.

While these observations pertain to the compositional process, Osborn also discusses the potential effect of such structures on the reader. On the one hand, the constant alternation of "the sounds and rhythms" presumably requires the reader to "adjust to the changes". That is, I hypothesise, the rhythm and especially the alternation of rhythm produces variety in the form of the text, as opposed to monotony, allowing for the experience of eventfulness. On the other hand, the coordinated use of prosodic, semantic and phonological structures presumably "numb[s]" the reader's "analytic attention", interfering with comprehension. Nevertheless, this numbing of attention is not necessarily experienced as unpleasant. Quite to the contrary, Osborn points out that these properties are what renders Bowen's prose "mellifluous" (2006, 192), giving rise to "the beauty of Bowen's 'good' prose" (2006, 192). Similarly, Bowen's reader Daniel George holds that prosodic structures in her prose have an impact on the aesthetic experience of reading. While George concedes that Bowen's language may trigger "a reader's discomfort" (George cit. in Howard 1971, 181), Osborn focuses on positive effects. In the following, I take up these observations on prosody, syntax, semantic and phonology in Bowen's language.

In reference to the above examples from *The Heat of the Day* and *The Last September*, I suggest that Bowen coordinates parallelism, alliteration and rhyme so that they may coincide in the same prosodic sections, that is, two or more of these structures may hold true for a phrase, clause or sentence. Parallelism, alliteration and rhyme all require at least two lexemes, phrases, clauses or sentences. In this respect, these forms differ from ambiguous sentence structures and negation. In order to conceptualise the potential effects of parallelism, alliteration and rhyme on sentence processing and aesthetic pleasure, I draw on literary-linguistic arguments about form in literary language. In particular, I refer to Fabb's distinction between inherent and communicated form (1999, 224). While Fabb's account is primarily concerned with poetry, I apply it to the forms in prose language.[74] In Fabb's words, "there are only two kinds of form which exist for us when we read or listen to literary texts, because form can only exist for us as a result of two kinds of cognitive process: modularised processing, and inferencing" (1999, 225).

[74] Fabb (2010) draws on Kiparsky (1973) to discuss the "development hypothesis" which describes the relation between ordinary and literary language.

First, there are inherent constituents such as words, phrases and clauses. All elements in the sentence below, including the coordinated verb phrases which are highlighted, are inherent constituents. They are words and form phrases, clauses and a sentence.

> It was imperfect silence, mere resistance to sound – as though the inner tension of London **were being struck and struck on** without breaking. (*Heat* 59, my emphasis)

Words, phrases and clauses are generated forms, as conceptualised in generative linguistics (Fabb 1999, 225). Even literary forms such as parallelism, alliteration and rhyme "all have components which are generated forms" (Fabb 2015, 29). The reader does not need to recognise these forms explicitly because they are all subject to "modularised cognitive process[es]" (Fabb 1999, 224; Fabb 2015). This means that these forms are processed by special linguistic processing mechanisms, such as the syntax and semantic processing in stages 1, 2 and 3 in the eADM.

Secondly, there are communicated forms (Fabb 1999) (or "added forms" and "superadded modes of organization" (Fabb 2010, 1225)). Communicated forms are "a self-description for which a text provides evidence" (Fabb 1999, 224). Such forms are the result of an interpretation, that is, "the audience attributes that form to the text" (Fabb 2015, 29). A novel may provide evidence for its own communicated form by visually setting off headlines, paragraphs or chapters – or indeed by using any kind of visual or typographic means which the author considers suitable and which the audience can understand. In addition, Fabb classifies parallelism, alliteration and rhyme as communicated forms (1999, 224; Fabb 2010, 1226-1227). All these forms can be found in Bowen's novels, and the coordinated verb phrase in the example from *The Heat of the Day* above can be interpreted as a parallel structure.

In contrast to inherent linguistic forms, communicated constituents "must be recognised explicitly by the reader" and require "general knowledge" such as about genres or a specific literary text (Fabb 1999, 224). This does not require any kind of "specialized processes" (Fabb 2015, 31). In order to recognise the highlighted elements in Bowen's sentence as an instance of parallelism, the reader requires some knowledge about parallelism in literature. Remember that according to the eADM, the reader draws on such general types of knowledge in stage 3 of processing. Processing and interpreting communicated forms therefore depends on inferencing, as proposed by pragmatic

theories such as Relevance Theory. According to Fabb, pragmatic theory can be used "to account not just for our understanding of the meaning of a text but also for our understanding of the form of a text" (1999, 225, cf. Sperber and Wilson 1995).[75] However, as the above example from *The Heat of the Day* shows, parallelism in Bowen depends on linguistic form and is therefore partly generative; the same holds true for alliteration and rhyme (Fabb 2015, 29). This means that the reader processes all sentences as a linguistic input string first and then applies further processing mechanisms for any communicated form within a sentence, paragraph or chapter.

This theoretical distinction between inherent linguistic, or generative, form on the one hand and communicated form on the other is crucial when accounting for their influence on reading: Experimental research on prosody, parallelism, alliteration and rhyme offers relevant insights into their effects on processing. Prosody is a natural feature of language and influences early processing (Bornkessel-Schlesewsky and Schlesewsky 2009a). Parallelism occurs in ordinary (Sturt, Keller et al. 2010) and in literary language, both in poetry and in prose (Fabb 2015, 165-166). Processing may be facilitated in the second member of a parallel structure, due to syntactic priming (Sturt, Keller et al. 2010). Alliteration in poetry and in prose can intensify aesthetic effects and increase memory in readers (Lea, Rapp et al. 2008). Alliteration is a pervasive feature in idioms in ordinary English and may enhance memory for "lexical chunks" in language learning (Lindstromberg and Boers 2008). Rhyme in poetry may induce a sense of significance and truth (McGlone and Tofighbakhsh 2000; Obermeier, Menninghaus et al. 2013). Further, there is experimental evidence that metre and rhyme facilitate processing and may influence the reader's affect into a positive direction (McGlone and Tofighbakhsh 2000; Obermeier, Menninghaus et al. 2013; Rothermich, Schmidt-Kassow et al. 2012; Van Peer 1990). Structures such as rhythm, metre and rhyme, as they occur in poetry and music rather than in prose, increase short term memory for these "surface details", and this effect is stronger for poetry than for prose (Tillmann and Dowling 2007, 638).

Drawing on theoretical and experimental research, I suggest that prosody is a linguistic form; parallelism, alliteration and rhyme are communicated or added forms yet are based on linguistic forms (Fabb 1999, 223; Fabb 2015, 29). Whenever prosody, parallelism, alliteration and rhyme appear in the same sentence structure, they influence incremental processing at different points in time and for different reasons: First, I suggest

[75] Sperber, Dan, and Deirdre Wilson. *Relevance: Communication and cognition*. Second edition. Oxford: Blackwell, 1995.

that prosodic phrases as indicated by punctuation support sentence processing and specifically aid basic constituent structuring in early processing (stage 1 eADM). Remember that early, automatised processing is independent of the text-type and any knowledge the reader may have about a specific text or genre. Potential effects of prosody in early processing should therefore facilitate processing, regardless of whether the reader reads a newspaper or one of Bowen's novels.

Secondly, parallelism, alliteration and rhyme require two constituents, or members, and any effects of processing should be discernible on processing the second. The reader processes the first item as any other lexeme in any other sentence, as a linguistic form. The reader can recognise and process communicated or added forms only when the second constituent of a parallel, alliterating or rhyming structure has been processed. According to Fabb, "[t]he first sequence … must be remembered while composing or listening to the second sequence … in order for parallelism to be created or recognized between the two sequences" (30 April 2015, 1). This also means that aesthetic pleasure which has its source in processing communicated forms such as parallelism, alliteration and rhyme can also only arise on or after parsing the second constituent, or any other constituent which forms part of the communicated form. For example, aesthetic effects in the parallel structure in the example below are likely to arise on reading the second instance of "struck":

were being struck and struck on without breaking.

Parallelism, alliteration and rhyme, as communicated forms, are part of poetic traditions which the reader has to learn, either explicitly or implicitly (Fabb 1999). So how may communicated constituents elicit aesthetic pleasure? I suggest that communicated constituents do not influence fluency *because* they are communicated forms. Rather, parallelism, alliteration and rhyme involve repetition, and this repetition facilitates early processing. The reader does not need to recognise communicated forms *as* communicated forms in order to experience effects on fluency in early processing. However, if the reader does recognise a form as communicated form, this requires drawing on literary knowledge in late processing and involves increased cognitive effort. Parallelism, alliteration and rhyme may induce a sense of significance, thereby triggering the reader into spending more time and effort on interpreting those sequences. This may result in cognitive fluency if such an interpretation is perceived as successful, yielding cognitive fluency and aesthetic pleasure.

Hence, prosody, parallelism, alliteration and rhyme all impact on a different stage of processing and do so for different reasons. However, they may all contribute to an overall increase in cognitive load and disfluency, and likewise to cognitive fluency. The source of early disfluency and late cognitive fluency remains inaccessible for the reader, and therefore both difficulty and pleasure will be attributed to the text itself, not to the processing mechanism.

I now model the impact of parallelism on incremental sentence processing in detail because it is relevant for both sections of this chapter. I will say more about alliteration in section 5.1 and rhyme in section 5.2. On reading the second member of a parallelism, syntactic processing and lexical access may be facilitated (stage 1 and 2 of the eADM). However, Bowen often uses ellipses, which means that additional elements in the underlying syntactic structure have to be processed as well. In the early processing stage, the reader is able to detect lexico-syntactic repetitions by drawing on immediate sentence context and wider discourse context (stage 2 of the eADM). This is text-type independent and happens before parallelism can be recognised as a communicated form. The facilitation of early processing through parallelism does not elicit disfluency in the same way as ambiguity and negation do. Instead, the sudden early processing fluency in the second member of a parallel structure alerts the reader to a potentially harmful situation or an upcoming task. This alert functions by eliciting a fast negative affective response. In that sense, the reading mechanism does not distinguish between processing disfluency and fluency. Rather, the mechanism detects sudden and unexpected changes in the fluency with which a stimulus can be processed. The second member of a parallelism elicits a sudden decrease in processing cost, triggering a fast negative affective response.

Even though parallelism is likely to elicit early processing fluency, this does not necessarily yield an easier interpretation. The regular match between form and meaning (stage 3 of the eADM), which occurs for every sentence structure, is not made easier but more difficult. In late processing, the reader can recognise syntactic, lexical and phonological parallelism as a communicated form. The explicit detection of parallelism also includes an interpretation of its significance, a meaning which extends beyond the lexicalised meaning of either of the two parallel members. Interpreting the semantic and pragmatic meaning of parallelism requires additional cognitive cost in late processing. Detecting parallelism as a communicated form and interpreting its significance is a text-type dependent process. Generally, parallelism which holds of one sentence may impact on sentence processing, whereas this cannot be the case for parallelism holding of distinct

sentences. In both cases, parallelism may make early sentence processing easier, elicit cognitive fluency and produce aesthetic pleasure in late processing.

In section 5.1, I use the above excerpt (1) from *The Heat of the Day* and the full narrative episode within which it is contained to illustrate my argument: I now argue that prosody, parallelism, alliteration and rhyme may indeed signify the special status of the sentence in Bowen's poetic practice. More specifically, the written sentence as indicated by a full stop appears to have such a special status.

They looked anxious, nothing showed the trend of the conversation. (*LS* 20)

This sentence contains two syntactic sentences, conjoined by a comma. Even though this constitutes a comma splice, Bowen treats the two syntactic sentences as one written sentence. Any written sentence may contain one or more syntactic sentences. A syntactic sentence consists of at least one syntactic clause. The syntactic sentence is relevant for online processing; the written sentence is relevant for compositional concerns. The written sentence may be more important for Bowen, and the syntactic sentence may be subjected to these considerations.

In 5.2, I illustrate that the paragraph has a special status too, using excerpt (2) from *The Last September*.[76] The paragraph functions as a central organisational unit in Bowen's poetic practice. Parallel structures hold true for phrases within sentences, yet they also relate to the paragraph as one domain. By facilitating processing through parallelism and rhyme at specific points in the paragraph, Bowen distinguishes between more and less significant paragraphs.

In the two sections of this chapter, I outline my argument by examining individual written sentences, as indicated by a full stop, within the context of paragraphs and narrative episodes. I measure the length of phrases, clauses and sentences which are relevant for my analyses by counting the number of syllables and words (for syllable count as a measure for constituent length see Miall and Kuiken (1999, 129)). Syntactic sentences within complex clauses all count towards the length of the written sentence. Those parts of sentences which are relevant for my analyses do not always correspond to syntactic constituents, and in these cases I measure the size of segments as demarcated by sentence internal punctuation. I count words as demarcated by a space to the left- and rightmost characters. Hyphenated and compound words count as one word.

[76] In *The Heat of the Day*, narrative episodes on pages 1, 98-100, 100-105, 138-139 show a similar patterning, and so does the opening episode of *The Last September* on page 7.

5.1 The written sentence: Parallelism and alliteration in *The Heat of the Day*

In this section, I offer further support for my claim that the written, orthographic, sentence has a special status in Bowen's poetic practice. This special status has consequences for both the sentence form and the processing experience. Bowen invests the written prose sentence, or parts of it, with parallelism on the basis of prosodic, syntactic, lexical and phonological resemblance. Those phrases which carry the parallelisms resemble each other fully or partly in syntax and lexicon, but also in their prosodic structure, their length as measured via number of syllables, and in phonology, that is, alliteration. To my knowledge, Bowen's prose narratives are not part of a poetic tradition which uses parallel structures as a rule. However, I argue that these resemblances are not random, even though they are not systematic either. Rather, Bowen's aim of creating resemblance on the lexical and phonological level requires syntactic ellipses and therefore syntactic variation rather than repetition. The variation of syntactic phrases and lexemes in Bowen's descriptive pieces underdetermines the narrative world which her novels create. Neither of the parallel phrases on their own would fully describe the narrative world, nor does the combination of phrases yield a more coherent description.

I have chosen one episode from *The Heat of the Day* for discussion. While the paragraphs are indented in the text and qualify as what Fabb calls "communicated form" (1999),[77] there is no discernible numeric, syntax, rhyme or syllable schema. This episode is characterised by a continuing localised form on the sentence level, as the highlighted elements in the quote below illustrate. These repetitions fall into five types of lexico-syntactic repetition, which I will subsequently refer to as parallelism:

> **The reality of the fancy** was better than **the unreality of the room**. . . . His [Roderick's] return to his mother [Stella] cried out for something better – as a meeting, **this had to struggle for nature**, **the nature it should have had**; no benevolence came to it from surrounding things. It is the music of the familiar that is awaited, on such an occasion, with most hope; **love dreads being isolated**, **being left to speak in a void** – at the beginning it would often rather listen than speak. . . . They **could have wished to live it as it could have been lived**.
>
> Both felt **the greatness inherent in being human and in their being mother and son**. His homecoming should have been one more chapter added to **an august**

[77] The six paragraphs have 10, 7, 7, 3, 4, 4 sentences respectively with 242, 129, 167, 91, 73, 76 words per paragraph. The number of words per paragraph becomes smaller, though not in an ordered pattern.

book, **a book on a subject greater than themselves**: nothing failed, to make it so, but their vision. . . . **By every day**, **every night**, existence was being further drained – **you**, **yourself**, made conscious of what was happening only **by some moment**, **some meeting such as tonight's**.

Stella and Roderick were too **intimate** not each to extend to the other that sense of instinctive loss, and their **intimacy** made them too honest to play a scene. Their trouble, had it been theirs only, could have been written off as minor – the **romantic** dismay of two natures **romantically** akin. . . . There was *not* much left for **either** of them to say, and in this room in which they sat nothing spoke, **either** – a mysterious flutter, like that of a fire burning, which used to emanate from the minutes seemed to be at a stop. . . . Outside the curtain-masked windows, **down there in the street running into streets**, the silence was black-out registered by the hearing.

It was imperfect silence, mere resistance to sound – as though the inner tension of London **were being struck and struck on** without breaking. **Heard or unheard**, the city at war ticked over – if **from this quarter**, **from these immediate streets**, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic **through arterial streets into arterial roads**. . . .

The day had gone from the moment Stella **had drawn down the fitted blinds and drawn across them the deadening curtains**: now nothing took its place. . . .

Roderick **watched** them [rose petals]; she turned her head to see what he was looking at and **watched** also. (*Heat* 57-59, italics in orig., my emphases and omissions)

Each sentence and clause complex contains at least one repeated phrase or clause. There are 20 pairs in total, and 6 out of 35 sentences contain one or more repetition. Almost every second sentence contains at least one repetition. Two sentences contain three each.

Looking at the distribution of these pairs across the passages, it becomes clear that they do not occur in random positions: In paragraph 1 and 2, the pairings frame the paragraphs and foreground the first and final sentence respectively. Moreover, in paragraph 1, two pairings occur in the middle of the paragraph (sentences (5) and (6) out of ten sentences in total). Therefore, four sentences precede and follow the two pairings respectively. In addition to this evenly distributed number of sentences, the number of

words preceding the phrase "this had to struggle for nature" and following the phrase "being left to speak in a void" is almost identical, with 86 and 83 words respectively. Thus, in paragraph 1, these four pairings demarcate selected passages of the paragraph. In paragraph 2, five sets of pairs foreground the first, second and the final sentence. In the remaining paragraphs, the distribution of the pairings is less clearly patterned. The effects of this pattern on the reader will be discussed later on in this chapter, following the formal analysis of the pairings.

All these repetitions include some kind of lexico-syntactic variation, and yet they retain sufficient similarity within the sentences to create what I will subsequently call parallelism. Except for one type of repetition, all pairs follow each other immediately within the text. Most of the pairs occupy distinct phrases which are each internally coherent and intact but feature a variety of different ellipses. The syntactic status and the syntactic surface form of these phrases vary from pair to pair, and, where there is an ellipsis, even within the pairing itself. In the following, I discuss the four different types of pairings used in this episode from *The Heat of the Day*.

These repetitions are types of parallelism, which can be characterised as "a kind of added form which involves the systematic pairing of two stretches of text" and "is a type of repetition" (Fabb 2015, 137). Further, "[p]arallelism is a relation between sections of a text such that each resembles the other in linguistic form, or in meaning, or in both form and meaning" (Fabb 30 April 2015, 1). This resemblance in meaning may include "forms which have the same meaning or which have related meanings within a broader semantic field", and this may also involve "synonyms and antonyms" (Fabb 2015, 137). In particular, lexico-syntactic parallelism consists of the repetition of lexical items such as individual words, and the repetition of syntactic phrases or clauses; it may combine semantic, lexical and syntactic structures (Fabb 30 April 2015; Fabb 2015). On the level of semantics, it has been argued that parallelistic structures can give rise to "a meaning which cannot be predicted from the terms in isolation" (Fabb 2010, 1227; Fabb 30 April 2015, 13), as does "the device of hendiadys" that "involves a syntactic conjunction which is not interpreted as a conjunction; instead the two conjoined elements may be interpreted as communicating a single concept" (Fabb 2010, 1229).[78]

[78] Drawing on Blakemore (2008), Fabb proposes that "hendiadys might be thought of as the building of a hybrid representation developed from two distinct concepts, which produces a wider array of implicatures than can be recovered from each of the two original parts. It may be that hendiadys and the construction of hybrid concepts is also a factor in parallelism, and the interpretation of pairs of words" (2010, 1229; Fabb 2015, 162).

These formal characteristics of parallelism have consequences for processing. In particular, I focus on Fabb's arguments about how parallelism may influence contrastive valence and fluency. First, Fabb (30 April 2015, 12) sketches the potential influence of parallelism on contrastive valence, that is, the fast negative affective response to potentially harmful situations and the subsequent slow cognitive appraisal of that situation as not harmful (Huron 2007): Parallelism as a communicated or added form may have an effect on contrastive valence because the reader's or hearer's individual experience with parallelistic texts produces expectations about the linguistic and communicated forms of texts. If these expectations are not met, or not exactly met, this may constitute "a failure of expectation" (Fabb 30 April 2015, 12), and this failure may then elicit a fast negative affective response. Secondly, in ordinary and literary language alike, predictable, anticipated and unanticipated parallel structures can facilitate processing for the second member, thereby increasing processing fluency (Fabb 30 April 2015, 13).

The above episode from *The Heat of the Day* illustrates Bowen's parallelism – both that and how she uses it: It is a means of lending the individual written sentence a specific status as a unit of composition and comprehension. In Bowen's text, the members of the parallelisms consist of syntactic and prosodic phrases contained within written sentences. Each phrase resembles its counterpart in syllable length, if not in syllable structure. Each pair includes at least one lexical repetition, and therefore at least one alliteration (see (Fabb 1999, 231) for alliteration as a side effect of parallelism). Each pair works independently of the others and is structurally different from every other pair. Despite the frequent occurrence of these pairs, and despite the possibility to group them into five types, no two pairs are ever the same. Many parallelisms include syntactic ellipses. These partly pose a processing challenge for the reader, yet they are part of a selection process for the surface structure: Some ellipses are quite probably there to avoid overt and unnecessary repetition of linguistic elements which can be inferred relatively easily from the surface structure. Only selected elements are repeated in order to avoid a cluttering of the sound structure. In using parallelism, Bowen creates lexico-syntactic, phonological, syllabic and semantic similarity and balance while also creating variety and difference at the same time – both within each pair and across the narrative episode.

The formal textual qualities impact on the reading process and on aesthetic pleasure. Similarity and difference in respect of syntactic and lexical form, and in respect of phonological and syllabic structure have to be processed by the reader all at the same

time. On the one hand, the linguistic surface similarity within the pairs should facilitate processing by controlling the amount of information (Reber, Schwarz et al. 2004; Obermeier, Menninghaus et al. 2013). On the other hand, the lexico-syntactic, phonological, syllabic and semantic variation in each pairing introduces new information which the reader has to process. For instance, the ellipses require the reader to fill in a variety of information and to understand the difference of meaning created by this variation. This should produce a late processing challenge, yet offer the potential for aesthetic pleasure if the reader is successful in late processing.

Parallel phrases with different syntactic functions and referents

In the first category of pairings in this episode, Bowen establishes parallel lexico-syntactic structures which have different syntactic functions within the sentence and pertain to two distinct narrative entities. I will discuss each example in detail, considering the sentences word by word in the relevant phrases, as would happen in incremental processing. Sentence (1) opens the episode and establishes the narrative principle that runs throughout the passage: a structure of comparing that what is and that what could be or could have been.

(1) **The reality of the fancy** was better than **the unreality of the room**.

The lexico-syntactic structure of the subject noun phrase "The reality of the fancy" is repeated in the parallel structure of the complement noun phrase "the unreality of the room", as I have already mentioned in the discussion of negation in this sentence in 4.2. The verb phrase "was better than" explicitly compares the parallel structures. This involves the syntactic surface structure and the underlying syntactic structure.

The **reality** of the fancy
(art. + noun (preposition + (art. + noun)))
the **unreality** of the room
(art. + noun (preposition + (art. + noun)))

This syntactic parallelism is combined with lexical and semantic variety. On the one hand, the antonyms "reality" and "unreality" create a semantic contrast. On the other hand, the combination of nouns in the two phrases creates an unusual meaning. The lexeme "reality" is perhaps more likely to be paired with "room", whereas "unreality" would rather pair with "fancy", resulting in the following sentence:

The reality of the room was better than the unreality of the fancy.

In this version, the first phrase "reality of the room" produces alliteration, an effect which is not achieved for the second phrase, as I have already pointed out in 4.2. Avoiding alliteration where it would facilitate processing and draw unwanted attention towards specific structures is part of Bowen's poetic practice. While there is no alliteration in the original sentence, the parallel phrases carry the same number and types of lexemes. Each of these two noun phrases has nine syllables.

The	reality	of	the	fancy	the	unreality	of	the	room
1	**4**	1	1	**2**	1	**5**	1	1	**1**

Table 1: syllable balance (9: 9)

The almost parallel syllabic structure coincides with the syntactic structure of the phrases. The syllabic structure therefore reflects the lexico-syntactic and semantic parallelism. Note that the two nouns in phrase one are marked via syllabic difference from the monosyllabic function words – a pattern which is repeated in the second phrase. Despite the structural similarity, the two phrases differ in syllabic structure (four syllables for "reality" and five for "unreality"; two syllables for "fancy" and one for "room"). Of course, this variation in syllable structure is a consequence of lexical variation. Nevertheless, this prosodic and phonological variation supports the lexical change in that it helps the reader focus on these foregrounded elements in the sentence.

The parallel phrases in example (1) are subject to incremental processing, as in every other sentence. However, the reader may find the second member of a parallelism easier to process than the first. For instance, basic constituent structuring and the computation of argument prominence and argument linking (stage 1 and 2 of the eADM) may be easier in the second phrase than in the first. This facilitation is due to syntactic priming, an effect which is intensified by the lexical relations between parallel phrases (Sturt, Keller et al. 2010) and occurs in early processing, where the reader can draw on immediate sentence context and general lexical and semantic knowledge. If the second member of a parallel structure resembles the first in syntax, lexicon and semantics, the relevant concepts are already activated and easier to access on reading the second member.

The two parallel phrases are also subject to the late phase of incremental processing (stage 3 of the eADM). The final matching of structure with meaning in this stage would

be straightforward for both phrases if they were processed independently. However, in Bowen's sentence, this processing stage may also involve the recognition of parallelism *as* parallelism. Expert readers may recognise parallelism more easily or more reliably than non-experts. While the explicit recognition of parallelism as communicated form is not necessary for fluency effects in early processing, knowledge about parallelism in literary texts may increase the reader's ease of interpretation in late processing.

The structural similarity of the parallel phrases will ease processing, while their syllabic and lexical variety ensure that reading is "eventful" (Bowen 1962a, 9). The parallelism in example (1) is therefore an instance of Bowen avoiding "[r]epetitive sentence-shapes" which, according to her, "make for something worse than monotony" (1962b, 211-212). The parallel phrases in the above sentence avoid alliteration and in this respect are an example of "the jars, 'jingles' and awkwardnesses" (Bowen (1946) in Howard 1971, 181-182) Bowen strives for. Nevertheless, all other features of the parallel phrases guarantee that "the sense and sound" do indeed "rise together and … fall away in a mutual rhythmical cadence" (Osborn 2006, 190).

In the following, I demonstrate that syllable balance and variation are at work in all sentences which I analyse in this passage. Particularly, the syllable structure of the final words in each phrase stand out: The first member of the parallel structures almost always ends on a monosyllabic word, whereas the second member almost always ends on a bisyllabic one, perhaps constituting what Osborn calls "rhythmical cadence" (2006, 190).

Example (2) in this first category uses two adverbial preposition phrases for creating parallelism (I consider the other pairs in this sentence later on in this section):

(2) Heard or unheard, the city at war ticked over – if from this quarter, from these immediate streets, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic **through arterial streets into arterial roads.**

As in the previous example, the syntactic surface structure of the two phrases is identical, and only the prepositions and nouns differ.

through arterial streets		into arterial roads
(prep. + (adj. + noun))	+	(prep. + (adj. + noun))

However, both prepositions are prepositions of direction and movement, and they appear in a logical sequence. The nouns “streets” and “roads” are semantically related, and both share an equally unusual semantic relation to their adjectives, “arterial”.

through	arterial	streets	into	arterial	roads
1	4	1	2	4	1

Table 2: syllable balance (6: 7)

The only syllabic difference occurs in the prepositions: “into” is bisyllabic and “through” is monosyllabic. Therefore, the second phrase is slightly longer than the first, with the differential syllable falling on the onset of the second phrase. Syllabic variation ensures that the phrases are not fully repetitive, making reading “eventful” (1962a, 9), as Bowen calls it.

The recognition of this parallelism occurs in the late stage of incremental sentence processing. Syntax processing is facilitated for the second constituent, especially in the early stage, that is, for basic constituent structuring (stage 1 of the eADM). Furthermore, lexical access (stage 2 of the eADM) is facilitated, given that the lexemes in the two phrases are identical (arterial) and semantically related (streets and roads). The fact that the prosodic structure of the two phrases does not contradict the syntax contributes to early processing ease.

The prosodic, syntactic and lexical structure of the second member facilitates processing, giving rise to fluency in early processing. While this would typically result in pleasure, I suggest that the recognition of syntactic and lexical repetition may also alert the reader to an upcoming processing task. Early processing is discourse sensitive yet text-type independent, as I have proposed in this thesis. This means that the reader is able to detect a repetition within the immediate and wider context. Yet this recognition is restricted to early, automatised processing and would occur in reading any text type.

Further, the parallel members of the phrases “through arterial streets into arterial roads” could both stand on their own and would constitute syntactically and semantically complete adverbials of the sentence:

a) an unintermittent pumping of vital traffic **through arterial streets**
b) an unintermittent pumping of vital traffic **into arterial roads**

Both versions would convey a semantically similar meaning, not unlike that of the original sentence. However, neither of these two sentences provides the same processing experience. Only the parallelism affords an increase in early processing fluency through syntactic and lexical similarity. And only the parallelism induces an alert to an upcoming processing task in late processing, not in spite of but because of the repetition which is detectable in early processing.

Here, the two parallel preposition phrases add meaning not otherwise conveyed in the two alternative versions above. The explicit metaphor of streets and roads as arteries is expanded into an implied notion of streets and roads as part of a connected network of arteries. Establishing this meaning is only possible in the original sentence. The recognition of the parallel structure as a communicated form and the interpretation of the additional meanings afforded by this structure require increased processing cost. The successful resolution of this difficulty results in cognitive fluency and aesthetic pleasure.

In contrast to this first category of parallelism, the others I will discuss in the following pertain to phrases which refer to the same narrative entity or referent, thus adding more information about that entity.

Apposition: Parallel members with the same narrative referent

The following instances of parallelism do not retain the same lexico-syntactic surface structure but refer to the same narrative referent while adding meaning such as here:

a) *He felt depressed, flattened.* (Blakemore 2008, 37, italics in orig.)

b) His return to his mother cried out for something better – as a meeting, **this had to struggle for nature, the nature it should have had**; no benevolence came to it from surrounding things. (*Heat* 57)

I suggest that the parallelisms in these two sentences stem from apposition, which, in a narrow sense, can be characterised as "the juxtaposition of co-referential noun phrases", whereas a wider sense also encompasses "parenthetical glosses, elucidations, reformulations, and corrections of the first segment" (Blakemore 2008, 55). According to Blakemore, "[a]pposition is generally treated as a grammatical category, rather than a stylistic or functional one" (2008, 55). Drawing on Burton-Roberts (1993),[79] Blakemore highlights that apposition is therefore "a very loose type of relation, and arguably not a

[79] Burton-Roberts, N. "Apposition". R.E. Asher, and J.M.Y. Simpson (eds). *Encyclopedia of language and linguistics*. Oxford: Pergamon, 1993. 84-187.

syntactic relation at all" (2008, 55). Yet apposition may well be used as a "deliberate stylistic choice" (Blakemore 2008, 39). Following this argument, I suggest that apposition in Bowen's novels is a kind of parallelism, and therefore a communicated rather than a generated linguistic form.

In the episode from *The Heat of the Day*, Bowen repeats different parts of sentences. Apposition here is therefore a communicated form which emerges during reading, making the prediction of apposition very difficult, if not impossible. For instance, Bowen uses the following elements for apposition: the noun object phrase of the main clause in sentences (3) and (5), a verb in sentence (4), the subject phrase in sentence (6), and a preposition phrase in sentence (7). In contrast to the two previous examples, the parallel members which include apposition do not have the same syntactic surface structure, yet share the same underlying syntactic structure. In these examples, ellipses produce surface similarity. The ellipses are all grammatical and in most cases seem to be motivated by either lexical, semantic, syllabic or other phonological considerations. Ellipses are chosen in such a way that there is almost always only one lexeme in between the two repeated key words, as in "nature, the nature". Ellipses inside the appositive can be filled in by the reader since the preceding main clause offers all linguistic information necessary for inferring omitted information in the subsequent phrase. These ellipses are not primarily meant to make processing syntactically difficult.

In sentence (3), Bowen uses two ellipses to produce a parallelism:

(3) His return to his mother cried out for something better – as a meeting, **this had to struggle for nature, the nature it should have had**; no benevolence came to it from surrounding things.

The two ellipses hold true for the second member, thereby creating the parallelism:

a) this had to struggle for nature, [this had to struggle for] the nature [which] it should have had

Both ellipses are grammatical and can be processed by the reader quite easily. The syntactic surface structure of the two members differs in part, due to the ellipses. The underlying syntactic structure is similar yet not identical:

this had to struggle for nature,
subj. prep. + verb + to-inf. + (prep. + obj. noun),

[this had to struggle for] the nature [which] it should have had
[subj. prep. + verb + to-inf. + prep.] (art. + noun) + [el. relative pron.] + subj. prep. + modal verb + aux. verb + main verb

On the one hand, the two omissions here appear to be motivated by the aim of creating parallelism in a specific way. Bowen avoids repetition of more than one key lexeme. Instead of repeating both "struggle" and "nature", Bowen selects "nature" as the more significant term. Alternatively, she could have selected "struggle" as more important:

b) this had to struggle for nature, to struggle for warmth

Therefore, the ellipses, though grammatical, are not merely a way of reducing the surface structure. Instead, they reduce the overall sentence length, thereby enabling the reader to focus on those aspects of the parallelism which Bowen has singled out as most significant. The omission of selected lexemes ensures that there is only one word in between the repeated lexemes "nature". Moreover, the omissions create two roughly equivalent phrases, with only a slight difference in syllabic structure (8: 7), as in previous examples, but also make sure that the number of words remains identical for both phrases. Including the relative pronoun "which" in the surface structure would create a word-number asymmetry but a syllabic symmetry.

this	had	to	struggle	for	nature,	the	nature	it	should	have	had
1	1	1	**2**	1	**2**	1	**2**	1	1	1	1

Table 3: syllable balance (8: 7)

My explanation for the preference of syllabic asymmetry in this case is, so far, that the phonological structure of "which" is too different from the prevalent t, h, s and n sounds in his passage – a "wh" sound would interfere with this sound pattern. Since the relative pronoun can be inferred easily, it is not necessary to include it in the surface structure. Phonological considerations are more important than syntactic ones in this case and motivate the form of the syntactic surface structure.

When reading the second member of the parallelism, syntactic processing and lexical access in early processing should be facilitated. The previous phrase has already

primed the reader for processing the same syntactic and lexical structure a second time. Even though the second member of the parallel structure here does not have the same surface structure, the underlying syntactic structure is the same. Retrieving the omitted elements is therefore quite likely unproblematic and does not require a large amount of additional processing cost.

However, the unpredictable use of repetition and the increase in processing fluency may elicit a fast negative affective response. In this case, the increase of processing fluency signals a significant textual structure and processing task for the reader. The sudden change in processing ease may be interpreted as potentially harmful, eliciting a fast negative affective response. This may be the case if and because the reader has not been able to assess the significance of that repetition.

Assessing this significance can only occur in late processing, when the reader can recognise the parallelism as parallelism, that is, as communicated form. In this sentence, the underlying syntactic form of the two parallel members is more similar than the surface structures reveal at first sight. This may mean that the reader is less likely to explicitly recognise the parallelism as communicated form. By "explicit" I do not mean that the reader is able to identify and verbalise any knowledge about parallelism as communicated form. Rather, the reader is able to draw on previously acquired knowledge about the text at hand and the genre to which it belongs. Such knowledge may have been acquired through previous exposure to similar texts or during the process of reading Bowen's text. The absence of overt surface similarity between the two parallel members means that the recognition of parallelism and its subsequent interpretation require more processing effort. At the same time, this higher processing effort also contains the potential for greater pleasure than a parallelism with a complete surface structure in both members.

In sentence (4), Bowen creates parallelism by using almost a full sentence as the second member.

(4) It is the music of the familiar that is awaited, on such an occasion, with most hope; **love dreads being isolated, being left to speak in a void** – at the beginning it would often rather listen than speak.

The ellipsis of the subject noun and the main verb in the second member of the parallelism is grammatical and can be processed quite easily.

a) love dreads being isolated, [love dreads] being left to speak in a void

The syntactic surface structure of the two members differs, in part, due to the ellipsis. The underlying syntactic structure is similar, though not fully identical:

love dreads being isolated,
subj. noun + main verb + -ing + adj.

[love dreads] being left to speak in a void
[subj. noun + main verb] + -ing + past part. + to-inf. + main verb + (prep. + (art. + noun))

Here too, the two omissions seem to be motivated by the aim of creating parallelism in a specific way. Bowen avoids repetition of more than one key lexeme. Instead of repeating both the subject noun and verb "love dreads", Bowen selects "being" as the more significant lexeme. Alternatively, she could have selected "dreads" as more relevant:

b) love dreads being isolated, dreads being left to speak in a void

However, Bowen can produce a syllabic balance between the parallel members by omitting two lexemes and reducing the syntactic surface structure to its minimum:

love	dreads	being	isolated,	being	left	to	speak	in	a	void
1	1	2	4	2	1	1	1	1	1	1

Table 4: syllable balance (8: 8)

Here too, the omission of two lexemes ensures that "being" is the only word between the repeated items. Also, when taking the larger context of this sentence into account, it becomes clear that the omission in the second member is not only syntactically valid and relevant for the syllabic structure but also avoids overt repetition: After the dash, "love" is referred to for a third time using the pronoun "it": Using "love" or "it" in the surface structure of the second member would make the sentence heavily repetitive, thereby interrupting the otherwise nice phonological flow of the sentence:

c) love dreads being isolated, love dreads being left to speak in a void – at the beginning love would often rather listen than speak

In incremental sentence processing of example (4), the second member of the parallelism presents the following processing tasks: First, the syntactic ellipsis requires the reader to

recover the missing elements in the second member. While this may require additional processing cost, the retrieval of the omitted elements should not be particularly difficult. Given that a similar sentence structure has just been processed, the retrieval and subsequent processing of the following syntactic structure should be relatively easy. Moreover, the lexical and semantic similarity of the concepts in both members of the parallelism should contribute to relatively easy processing in the early stage.

Recognising the parallelism as a communicated form may be impeded by the reduced surface structure in the second member. This reduction in surface similarity may shift the clues for recognising parallelism towards lexicon and semantics. In sentence (4), the reduction in the surface structure is not a sign of reduced significance of the second member. By contrast, the elements which are retained in the surface structure of the second member are those which are relevant – in combination with the information in the first member – for processing the sentence after the dash. The reader has to retain both parallel members for further processing.

By omitting redundant information from the surface structure, Bowen achieves two aims: On the one hand, she creates a balanced syllable structure not otherwise possible. This prosodic structure should support early processing. By reducing the surface structure, Bowen minimises the amount of information that has to be read and retained for processing, further ensuring that early processing is easy. However, the reduced surface structure also increases the amount of information that has to be inferred, and this impedes the recognition of parallelism as communicated form in late processing. The juxtaposition of early fluency and late disfluency offers the potential for aesthetic pleasure if the reader is successful in resolving late difficulty.

Some of the following sentences diverge from the pattern of equal syllable proportions and instead show a tendency of increasing constituent length in regard to absolute phrase length (number of words) and number of syllables (roughly a proportion of 1:2). Thus these sentences also see increasing syntactic complexity of phrase structures. Whereas the sentences in all other categories tend to end on a monosyllabic word in the second phrase, the second phrases in this category tend to have a bisyllabic final word. These phrases differ in their final rhythmic element from the other categories.

The first example with an increasing constituent length, sentence (5), contains a preposition noun phrase in the object position of the main clause, followed by an appositive which expands on the object phrase:

(5) His homecoming should have been one more chapter added **to an august book, a book on a subject greater than themselves**: nothing failed, to make it so, but their vision.

This appositive is a syntactically complete noun phrase containing a preposition phrase:

an august book,
(art. + adj. + noun),
a book on a subject greater than themselves
((art. + noun) + (prep. + art. + noun + adj. + comp. + rel. pronoun))

The second member of the parallelism expands on the meaning of the adjective "august" of the first phrase, and hence there is no need to repeat the lexeme. However, dropping "august" in the second member also ensures that there is only one word in between the repeated lexemes "book" and "book". There is no other ellipsis in this sentence.

In contrast to the previous examples, the second member of the parallelism here is longer, restricting the parallelism, lexico-syntactically speaking, to the noun phrases "an august book" and "a book". However, the preposition phrase "on a subject greater than themselves" functions as an adjectival description and may therefore be treated as a semantic parallel to the preceding adjective "august".

an	august	book,	a	book	on	a	subject	greater	than	themselves
1	2	1	1	1	1	1	2	2	1	2

Table 5: syllable balance (4: 11)

The second member of the parallelism expands on the meaning of the first, and the first member alone cannot convey the same metaphorical meaning. Incidentally, it is possible to preserve a very similar meaning in a reduced version without parallelism.

His homecoming should have been one more chapter added to an august book on a subject greater than themselves

Apart from the meaning of the sentence with and without parallelism, the processing experience is definitely different in the alternative version. The parallelism is therefore likely to be Bowen's stylistic choice, made in order to achieve intended processing

effects. In the alternative version, the reader only needs to process inherent linguistic but no communicated forms.

Therefore, the parallelism in the original sentence produces an additional cognitive load, especially in late processing. However, to begin with, the reader should experience a momentary increase in processing ease on parsing the phrase "a book". This is due to the syntactic and lexical priming in the preceding phrase. The similar syntactic structure of the two phrases facilitates basic syntactic constituent building (stage 1 of the eADM). The repetition of "book" facilitates lexico-semantic access (stage 2 of the eADM). However, this facilitation only involves early processing. The second member of the parallelism is syntactically, lexically and semantically more complex than the first and requires more cognitive effort in matching the structure and the meaning of the phrase in late processing (stage 3 of the eADM). Moreover, in late processing of the phrase "a book", the reader may, but does not need to, recognise the parallelism as a communicated form. If he does, the reader may treat subsequent input as a potential part of this communicated form. This can affect how the reader then draws on discourse context in the early processing of subsequent input. Ideally, context then facilitates early syntactic, lexical and semantic processing. The recognition, comprehension and interpretation of the communicated form as communicated form is still restricted to late processing.

Sentence (6) contains three distinct parallelisms, each of which contains either syntactic or lexical variation, syllabic expansion and/or alliteration.

(6) **By every day, every night**, existence was being further drained – **you, yourself,** made conscious of what was happening only **by some moment, some meeting such as tonight's**.

The first pair contains two sentence initial adverbials. This parallelism is the only instance in this category where the second phrase has a shorter syllabic structure than its preceding counterpart. However, since this pair co-occurs with two pairs which do show increasing length, it makes sense to discuss this exception to the rule in context.

The first parallelism shows a syntactically licensed ellipsis at the beginning of the second member, as in previous examples.

By every day,	[by] every night
(prep. + quantifier + noun),	[prep.] (quantifier + noun)

The omitted element can be easily inferred because it is present in the surface structure of the preceding phrase. However, this omission avoids an overtly similar structure.

By	every	day,	every	night
1	2	2	2	2

Table 6: syllable balance (5: 4)

The quantifier "every" is identical in both phrases, and the lexical structure involves the antonyms "day" and "night" which also bear the same monosyllabic structure. A further identical feature would make the structure repetitive, rather than sufficiently similar while retaining variety. Omitting the preposition in the second phrase therefore requires the reader to infer the missing element while also offering a sound structure repetition (1, **2**, **2**/ **2**, **2**), thus foregrounding the selected elements within the parallelism.

The second parallelism "you, yourself" involves the bare minimum of two lexemes for a parallelism. In this case, a relative pronoun and a reflexive relative pronoun stand in the sentence initial position in what seems to be a fragmented sentence occurring as a sort of afterthought in the larger context of its clause complex. The syllabic structure of (1, 2) continues that of the previous parallelism.

The sentence concludes with another parallelism, another preposition phrase, and this pair also omits the preposition "by" in the second member:

by some moment,	[by] some meeting such as tonight's.
(preposition + numeral + noun),	[prep.] + (numeral + noun)

The syllabic structure is asymmetric, as in the sentence initial parallelism:

by	some	moment,	some	meeting	such	as	tonight's
1	1	2	1	2	1	1	2

Table 7: syllable balance (4: 7)

Formally, this sentence works both via reduction (ellipsis) and expansion (additional phrase "such as tonight's"). Despite the structural changes, the lexical variation ("moment" – "meeting") and the syllabic extension of the second member, the phrases are phonologically tied together through alliteration: **s**ome ***m***oment – **s**ome ***m***eeting.

Bowen reduces the syntactic surface structure to allow for alliteration and a specific syllable structure.

Despite the lexical and syllabic differences, the first and third parallelism in this sentence bear similarities: The first members are prepositional phrases beginning with the preposition “by”. Both phrases have the same number of words, the syntactic structure is the same (preposition + numeral + noun), and the syllabic structure is at least similar (1, 2, 2/ 1, 1, 2).

By	every	day,	every	night			
1	2	2	2	2			
		you,	yourself				
		1	2				
by	some	moment,	some	meeting	such	as	tonight’s
1	1	2	1	2	1	1	2

Table 8: syllable balance in comparison

Moreover, the second members also show similarities, even though the second member of the third parallelism is longer than the sentence initial counterpart: The first two lexemes of these two phrases have the same syntactic structure (numeral + noun) and a similar syllabic structure (2, 2/ 1, 2). The additional words and hence the additional syllables of the second member (“such as tonight’s”/ 1, 1, 2) reflect the structure of the first members of the first and third parallelism. In addition to that, most parallel members in this sentence resemble each other in their monosyllabic onset and their bisyllabic final element. If isolated from context, ignoring the text that comes in between, the six parallel members establish this syllabic pattern:

(1, 2, 2) (2, 2) (1) (2) (1, 1, 2) (1, 2, 1, 1, 2)

Moreover, the first and the final members feature a lexical variation (“night” – “tonight’s”). Therefore, syntactic, lexical and syllabic similarities tie the sentence together by offering the reader recurring patterns of linguistic input.

While these three pairs do not seem to have much in common at first sight, they share a range of linguistic features and are therefore likely to elicit early and late processing effects. The shared features within pairs may enhance early processing ease for the second member of each parallelism. Moreover, the repetition of syllabic structures in selected prosodic phrases may enhance the reader’s processing ease in these phrases, giving rise to greater fluency in early processing.

In this sentence, the three parallelisms have local effects for each of the second members, where processing becomes easier, that is, more fluent due to syntactic and lexical priming. As in previous sentences, omitting elements from the surface structure should serve to avoid unnecessary repetitions rather than to impede processing. Recognising parallelism as communicated form is again likely to occur on parsing the second member of a pair. All three parallelisms have to be considered in late processing when the reader matches form and meaning. Moreover, the reader may notice that there are three communicated forms in this sentence. The sense of significance which parallelism may convey may therefore be stronger than in sentences with one parallelism.

The last sentence in which apposition plays a role, sentence (7), contains three pairs, the third of which ("through arterial roads into arterial streets") has already been discussed above, and the first of which ("heard or unheard") will be discussed later on. Here, I focus on the second parallelism, the repetition of a preposition phrase structure:

(7) Heard or unheard, the city at war ticked over – if **from this quarter, from these immediate streets**, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic through arterial streets into arterial roads.

Only one of the three parallelisms includes an ellipsis: The "if" is omitted in "if from this quarter, (if) from these immediate streets", avoiding unnecessary repetition. The second parallelism moreover adds new elements to the surface structure of the second phrase.

from this quarter,	from these immediate streets
(prep. + demonstrative + noun),	(prep. + demonstrative + adj. + noun)

In contrast to earlier examples, the syllabic structures in this pair do not resemble each other, yet give rise to a recognisable rhythm during reading:

from	this	quarter,	from	these	immediate	streets
1	1	2	1	1	4	1

Table 9: syllable balance (4: 7)

However, the syllabic pattern becomes evident in context, similar to sentence (6), which also features three pairs:

Heard	or	unheard				
1	1	2				
from	this	quarter,	from	these	immediate	streets
1	1	2	1	1	4	1
through	arterial	streets	into	arterial	roads	
1	4	1	2	4	1	

Table 10: syllable balance in comparison

If isolated from context, the three pairs form a syllable pattern:

(1, 1, 2) (1, 1, 2) (1, 1, 4, 1) (1, 4, 1) (2, 4, 1)

Even though the three parallelisms do not follow each other immediately in the sentence, it is evident that the first pair ("heard or unheard") shares its syllabic structure (1, 1, 2) with the next phrase that occurs in the sentence ("from this quarter"), which also has the syllabic structure (1, 1, 2). While the second phrase of that pair ("from these immediate streets") features a distinct syllable structure, this is partially repeated in the first phrase of the third pair ("through arterial streets") with the syllable structure (1, 4, 1). The final phrase ("into arterial roads") combines features of both syllabic patterns.

In sentence (7), the second parallelism is syntactic and lexical rather than semantic. This means that early syntactic processing and lexical access for the preposition may be facilitated. Early semantic processing may be easier because "quarter" and "streets" are both related to an overarching concept of "city", which the reader has to infer. Despite the syntactic and semantic relation between the two members, each has an independent meaning. Either of them would be sufficient for the sentence to be comprehensible:

a) Heard or unheard, the city at war ticked over – if **from this quarter** the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic through arterial streets into arterial roads.
b) Heard or unheard, the city at war ticked over – if **from these immediate streets** the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic through arterial streets into arterial roads.

The parallelism is therefore not necessary for the meaning of the sentence in a strict sense. However, as with the previous parallelism "through arterial streets into arterial roads", the similarity between the two phrases conveys an additional meaning which has to be inferred and related to the communicated form of the parallelism: Processing the lexemes "quarter" and "streets" may additionally activate the unstated concept "city" in early processing, which may then affect late processing. The semantic relation between the two phrases may give rise to additional meanings neither of the two could express in isolation, perhaps intensifying the sense that this part of the sentence has a special significance.

Coordination

In examples (8) and (9), the meaning of the sentence depends on both members of the parallelism. Bowen conjoins sentences using "as" and "and" respectively. Sentence (8) has a complete surface structure, whereas there is an ellipsis in (9).

(8) They could have wished to live it as it could have been lived.
(9) Both felt the greatness inherent in being human and in their being mother and son.

In sentence (8), the syntactic structures of the two members differ:

They could have wished to live it
(modal verb + aux. verb + main verb + to inf. + prep.)
as it could have been lived
+ conjunction + (prep. + modal verb + aux. verb + aux. verb + past part.)

There is a switch from active to passive, and the modal verb "could" refers to the verb "wish" in the first clause but to the verb "lived" in the second. Despite this syntactic difference, the prosodic structure and the lexical similarity between the two clauses create parallelism.

They	could	have	wished	to	live	it	as	it	could	have	been	lived
1	1	1	1	1	1	1	1	1	1	1	1	1

Table 11: syllable balance (7: 6)

The prosodic structure of the two clauses should support early processing of both members. The sentence is grammatical and should not elicit difficulty in early syntax processing either. Because the two clauses are syntactically different, there should be no

syntactic priming and hence no specific facilitation of basic constituent structuring on reading the second member. However, lexical access should be facilitated in the second clause. Early processing is therefore partly facilitated in the second member. This sudden increase in processing fluency may elicit a fast negative response because it is unexpected. The switch from active to passive means that matching form and meaning in late processing is not repetitive or monotonous. If the reader detects similarities between the two clauses on reading the second, the first may be reconsidered as part of a parallelism. If the reader can interpret the two clauses and recognises them as constituting a parallelism, cognitive fluency can be achieved, yielding aesthetic pleasure.

In sentence (9), Bowen conjoins two sentences into a parallelism.

(9) Both felt the greatness inherent in being human and [both felt the greatness inherent] in their being mother and son.

The underlying syntactic structure of the two sentences is similar, yet the omission creates a difference in the surface structure.

Both felt the greatness inherent in being human
Noun + verb + (art. + noun + adj. + prep. + -ing. + adj.)

[both felt the greatness inherent] in their being mother and son.
[Noun + verb + (art. + noun + adj.] + prep. + art. + -ing. + (noun + coord. + noun))

The ellipsis is grammatical, and the omitted elements are easy to infer. Syntactic priming should facilitate basic constituent structuring in early syntactic processing for the second sentence. Even though the ellipsis avoids overt lexical similarity, the repetition of "being" and the semantic relation between the adjective "human" and the nouns "mother" and "son" may facilitate lexical access in early processing. The sudden and unexpected processing fluency in the second sentence may signal a potentially harmful situation and may elicit a fast negative affective response.

the	greatness	inherent	in	being	human	and	in	their	being	mother	and	son
1	2	3	1	2	2	1	1	1	2	2	1	1

Table 12: syllable balance (11: 9)

On parsing the second sentence, the similarities with the first may alert the reader to reconsider both as part of a parallelism. The difference between the clauses avoids monotony and ensures an eventful reading experience. A successful interpretation of each of the two members and of the sentence as a whole may give rise to cognitive fluency. The initial fast negative affective response may now be re-evaluated as harmless and give rise to aesthetic pleasure.

In sentences (10) and (11), Bowen coordinates two verbs and adjectives respectively.

(10) It was imperfect silence, mere resistance to sound – as though the inner tension of London **were being struck and struck on** without breaking.

(11) **Heard or unheard**, the city at war ticked over – if from this quarter, from these immediate streets, the suction of cars in private movement was gone, there was all the time a jarring at the periphery, an unintermittent pumping of vital traffic through arterial streets into arterial roads.

In sentence (10), the syllabic balance offers a prosodic structure which may support early processing.

were	being	struck	and	struck	on
1	2	1	1	1	1

Table 13: syllable balance (4: 3)

Although the syntactic structure is not identical, syntactic processing should be relatively easy in both phrases because the coordination only comprises a second verb and an additional preposition. The lexical similarity should immediately facilitate lexical access in early processing. These three aspects may contribute to a sudden increase in processing fluency for the second verb, eliciting a fast negative affective response. Matching form and meaning in late processing should be relatively easy, yielding cognitive fluency and aesthetic pleasure. The parallelism is contained in a relatively short sentence, and the reader may detect it quickly and easily. However, the meaning of the parallelism does not differ greatly from a structure with one verb only. Late interpretive processing may therefore be not particularly challenging, with a smaller potential for aesthetic pleasure than other sentences in Bowen's novels.

In example (11), the coordination of antonymic adjectives creates a symmetrical parallelism. Early syntactic processing should therefore be fast and fluent.

Heard or unheard
(past participle + conjunction + past participle)

The prosodic structure is unsymmetrical, which is an effect of the lexical variation.

heard	or	unheard
1	1	2

Table 14: syllable balance (1:3)

Given that this parallelism comprises the minimum of two lexemes, the prosodic structure should support processing while not necessarily facilitating it specifically. The lexical antonyms may facilitate lexical access for the negated adjective, yet the negation itself impedes processing, as discussed in 4.2. The cost for mapping form and meaning for both lexemes differs slightly, with the second being more difficult. However, the small size of this parallelism also means that it can be recognised as parallelism relatively fast and easily. Successful interpretation produces cognitive fluency and aesthetic pleasure.

The brevity of the parallelisms in sentences (10) and (11) probably influences processing fluency. The reader may spend a relatively short time considering them and their meaning, rendering reading eventful for short moments. The final example (12) contains a larger and hence more complex parallelism, which may therefore be both more challenging and more aesthetically pleasurable for the reader.

(12) The day had gone from the moment Stella **had drawn down the fitted blinds and drawn across them the deadening curtains**: now nothing took its place.

The syntactic structures of the two members of this parallelism are similar, except for an ellipsis, an additional conjunction and pronoun in the second.

had drawn down the fitted blinds
((aux. verb + main verb + prep. + (art. + adj. + noun)))
and [had] drawn across them the deadening curtains
+ conj. + ([aux. verb] + main verb + prep. + (art. + adj. + noun))

Syntactic priming should facilitate processing of the second member. The ellipsis omits an auxiliary which is easy to infer. The omission perhaps avoids overt lexical repetition and also means that the difference in syllabic size between the two members does not increase further.

had	drawn	down	the	fitted	blinds	
1	1	1	1	2	1	
and	drawn	across	them	the	deadening	curtains
1	1	2	1	1	3	2

Table 15: syllable balance (7: 11)

The lexical structure of this sentence makes reading interesting. The repetition of the verb "drawn" facilitates lexical access, whereas the variation of the prepositions "down" and "across" avoids repetition and monotony. The semantic relation between "blinds" and "curtains" further supports lexical access in early processing. So far, processing the second constituent should be facilitated, giving rise to a sudden increase in fluency and a fast negative affective response.

The variation of the adjectives, from "fitted" to "deadening", involves a change in lexical meaning, and, more interestingly, from the literal to the metaphorical. This change is unpredictable and should surprise the reader. Interpreting the second member and including the first into this process may be a challenge in late processing. If successful, the reader may achieve cognitive fluency and experience aesthetic pleasure.

Lexico-syntactic variation

In the fourth category, Bowen uses lexico-syntactic variation to create pairs. In a sequence of three sentences, she varies three pairs of lexemes without including larger phrase structures. Again, no structure is repeated twice: In sentence (14), Bowen varies an adjective-noun pair, an adjective-adverb pair in sentence (15), whereas she uses the same word twice in example (16) while still making sure that the two lexemes occur in different contexts, have distinct syntactic statuses and bear different meanings. These three pairs occur in paragraph 3, in the middle of the episode.

(13) Stella and Roderick were too **intimate** not each to extend to the other that sense of instinctive loss, and their **intimacy** made them too honest to play a scene.
Syllables: 3 - 4

(14) Their trouble, had it been theirs only, could have been written off as minor – the ***romantic*** dismay of two natures ***romantically*** akin.
Syllables: 3 - 5

(15) There was *not* much left for **either** of them to say, and in this room in which they sat nothing spoke, **either** – a mysterious flutter, like that of a fire burning, which used to emanate from the minutes seemed to be at a stop. (italics in orig.)
Syllables: 2 - 2

All repetitions occur in distinct syntactic sentences within a written sentence. The first lexeme is processed as usual in incremental sentence processing. The second lexeme of a pair should be easier to process than the first because the concept should still be activated or more easily accessible. On parsing the second lexeme of the three pairs, there should be a sudden and unexpected increase in early processing ease. Accessing lexical and semantic associations is facilitated. The morphological change in sentences (13) and (14) and the change in use of the lexeme "either" in sentence (15) mean that the reader needs to process a change in meaning. This pertains to early and late processing.

In late processing, the reader matches the sentence structure with meaning. In the three examples above, the second lexeme of each pair sees a slight change in meaning which is related to but not identical with that of the first. Therefore, the second lexeme of each pair adds meaning to the sentence, and the processing experience is varied, rendering reading eventful.

To summarise, in order to create parallelism in prose sentences, Bowen exploits the possibilities offered by the syntax of phrase and sentence structures. She uses concatenation and appositives, as well as coordination and ellipses to create lexico-syntactic, syllabic and prosodic parallelism and variation. These structures are all grammatical. Almost all of the first members in the parallelisms could stand on their own. The second members could be left out entirely in many cases, without compromising the syntactic integrity of the sentences. Only by adding a parallel phrase and by controlling for the syntactic, lexical and phonological form do these structures acquire the status of communicated form, with the potential to produce aesthetic pleasure in late processing. Therefore, Bowen's use of these parallel structures would not be remarkable if it were not for the lexical patterns and the syllabic balance that go with every one of them. These structures, then, are not mere artefacts of a writer using the English language for a prose text. Rather, they are motivated by Bowen's aim to create parallel lexico-syntactic

structures within the domain of individual sentences. In particular, the surface structures and their lexemes have been selected for their syllabic and phonological characteristics. The parallel members are always restricted to phrases and clauses within one sentence. Therefore, the paired lexemes and phrase structures are the poetic element in this episode, not the sentence as such. This finding nonetheless supports my initial claim that the written sentence has a special status in Bowen's poetic practice – because parallelism is bounded by the sentence.

In incremental sentence processing, the reader is only able to recognise and process parallelism as communicated form on reading the second member. Therefore, it can be expected that aesthetic effects will arise in the second part of each parallelism. While reading the second member, the reader must be able to recognise the similarities and the differences between both phrases. That is, the reader must perceive of each phrase as a prosodic and syntactic entity and must be able to process the lexico-syntactic and syllabic similarities and differences. However, the reader may then include and perhaps re-parse the first member with effects on early and late processing. Therefore, immediate aesthetic effects are only restricted to the second member of a parallelism in a first reading but then also include the first.

Parallelisms enhance early processing in different ways, all contributing to fluency and aesthetic effects. For one, syntactic similarities increase processing ease by offering the reader an easily recognisable syntactic structure. This processing fluency in turn triggers a pleasurable reading experience which is then attributed to the text as an aesthetic object. Moreover, the prosodic and syllabic resemblance between the parallel members further enhances processing fluency and the experience of pleasure. These two textual qualities are also supported by lexical resemblances within the pairings, which makes processing easier by reducing the amount of information the reader has to process. Lexical access is facilitated, further contributing to early processing ease and fluency. However, syntactic ellipses, as well as lexical and prosodic variety within the parallelisms offer the reader sufficiently different input which has to be resolved during early processing so that a degree of difficulty is retained, preventing the text from becoming too easy. Syntactic, lexical, semantic and phonological aspects affect sentence processing independently but contribute "cumulative[ly]" (Bowen and Jones (1950) 2010f, 271) to what appears to be one experience of aesthetic pleasure.

While reading, the reader notices that the aforementioned passage in *The Heat of the Day* contains repeated parallelisms. The recognition of the parallelism as

communicated form in late processing may not be obligatory for aesthetic effects but can contribute to comprehension of the form, trigger cognitive fluency and aesthetic pleasure. Parallelisms may continue to surprise the reader because they do not conform to a uniform or predictable pattern in the episode from *The Heat of the Day*. Each parallelism therefore retains the potential to surprise the reader, even if he is no longer surprised by encountering yet another parallelism in this passage or the novel. In the light of my proposed model of literary sentence processing, this means that unexpected parallelisms may indeed elicit a fast negative response in early processing, despite the grammaticality of the structures – this negativity arising purely from the surprise. I have proposed in this chapter that parallelism may elicit a sudden increase in early processing fluency, whereas I have argued the reverse in the chapters on ambiguity and negation. For ambiguity, negation and parallelism, the sudden change in processing fluency functions as a signal alerting the reader to a potentially harmful situation. It may not matter whether the sudden change stems from difficulty or ease.

Moreover, the intentional positioning of parallelism is crucial for processing and aesthetic reading effects. The observation that parallelisms occur at selected points in the paragraphs supports my claim that the paragraph is a central organisational unit in Bowen's poetic practice, and this holds of this multi-paragraph episode from *The Heat of the Day* as well: While the parallel structures only involve phrases contained within sentences, they relate to the paragraph as one domain. The intentional positioning of the pairings at specific points in the paragraphs means that Bowen intentionally influences the reader's processing ease and the aesthetic experience at selected points. Not only are certain paragraphs and episodes more relevant than others, but there is also a distinction between more and less relevant sentences and phrases within paragraphs.

5.2 The paragraph: Parallelism and rhyme in *The Last September*

The paragraph has a special status as a unit of composition and of processing in Bowen's poetic practice. This can be seen in the way she orchestrates numeric, syntactic, phonological and lexico-semantic schemas in order to produce a paragraph with a symmetrical arch structure and a final asymmetrical element. Even though the communicated form of the paragraph from *The Last September* quoted below is not signalled by any typographical means other than indenting, it is, as Bowen herself calls it, "good in shape" ((1950) 2010f, 272). The paragraph as a form may therefore have a similar status as the stanza in a poem. This paragraph perhaps approximates a "prose-

poem" (Mooney 2007) and may signify what has been described as Bowen's 'generic homelessness' (Mooney 2007). Taking this argument further, I suggest that each written sentence has a special status in Bowen's writing, similar to the status of the line in poetry. The conjoined syntactic sentences in examples (3) and (4) below may be seen as the prose-equivalent to the run-on-line.

> Mrs Montmorency and Laurence were in the drawing-room. They looked anxious, nothing showed the trend of the conversation. The pale room rose to a height only mirrors followed above the level of occupation; this disproportionate zone of emptiness dwarfed at all times figures and furniture. The distant ceiling imposed on consciousness its blank white oblong, and a pellucid silence, distilled from a hundred and fifty years of conversation, waited beneath the ceiling. Into this silence, voices went up in stately attenuation. Now there were no voices; Mrs Montmorency and Laurence sat looking away from each other. (*LS* 20)

This paragraph consists of six written sentences, with the numeric middle between sentences (3) and (4). This numeric middle functions as what might be called a mirror axis: Sentences (1) to (3) and sentences (4) to (6) each form one half of a symmetrical paragraph. The two halves are structured by numeric, syntactic, phonological and lexico-semantic schemas. Note that I use the term mirror axis to describe the communicated form of the paragraph only, not for its processing. Incidentally, using the term mirror axis may in itself be an interpretation. The text communicates that it has such a symmetrical form and, as formulated by Fabb, offers "evidence" for it (1999, 224). In order to create symmetry, Bowen employs three added forms, namely parallelism, chiasmus and rhyme. Chiasmus is the inversion of similar or identical elements, such as phrases, clauses or sentences, resulting in a symmetrical structure (Fabb 2015, 139; Prusse 2012, 366). Rhyme involves repetition on the basis of syllables of lexemes (Fabb 2015, 121).

(1) Mrs Montmorency and Laurence were in the drawing-room.
(2) They looked anxious, nothing showed the trend of the conversation.
(3) The pale room rose to a height only mirrors followed above the level of occupation;
    this disproportionate zone of emptiness dwarfed at all times figures and furniture.

(4) The distant ceiling imposed on consciousness its blank white oblong,
and a pellucid silence, distilled from a hundred and fifty years of conversation,
waited beneath the ceiling.

(5) Into this silence, voices went up in stately attenuation.

(6) Now there were no voices;
Mrs Montmorency and Laurence sat looking away from each other.

I hypothesise that the underlying structure of this paragraph is established by a numeric "*schema*" (Kiparsky 1973, 233, italics in orig.). This means that Bowen controls sentence length via the number of words, syllables and segment length. By segments I mean parts of sentences as demarcated by sentence internal punctuation. This non-linguistic "pattern" (Kiparsky 1973, 233) is then "filled by *linguistic* (syntactic and phonological) *elements*" (Kiparsky 1973, 233, italics in orig.). This superimposition of a relatively strict numeric patterning of sentence and segment length demands syntactic adjustments in almost every written sentence. These adjustments are realised through parallelism and chiasmus, which exist in phrases within and between sentences. This results in a syntax schema, whereas the use of rhyming words results in a rhyme scheme. All four schemas are illustrated in Table 1 below:

Example	**schemas**			
	word	**syllable**	**syntax**	**rhyme**
(1)	A	A	A	-
(2)	B	A	B	a
(3)	C	B	C D	a b
(4)	C	C	D C	b a
(5)	B	A	B	a/c
(6)	D	D	A/E	-

Table 1: schema overview

The abstract symmetrical shape of this paragraph depends on the four schemas which hold true for the paragraph of the whole, not for the individual sentence and therefore differs from the structures I have discussed in Chapter 3 on ambiguity, Chapter 4 on negation, and section 5.1 on parallelism in *The Heat of the Day*. The use of parallelism, chiasmus and rhyme in this paragraph suggests that Bowen intentionally influences processing ease and the reader's aesthetic experience. I hypothesise that these three forms

facilitate early sentence processing, which in turn triggers a fast negative affective response. This reaction can later be countered by a positive reassessment of the stimulus, resulting in aesthetic pleasure. Even though parallelism, chiasmus and rhyme all involve a form of repetition, Bowen avoids both "[r]epetitive sentence-shapes and paragraph-patterns" and "monotony" (1962b, 211-212). Instead, she offers the reader a non-random variety and what she herself characterises as an "eventful" (Bowen 1962a, 9) reading experience. The numeric, syntactic, phonological and lexico-syntactic structures each influence sentence processing individually and potentially contribute to what Bowen describes as "a series of reactions, of which the effect shall be cumulative" ((1950) 2010f, 271).

However, forms which are present in textual units larger than the sentence lie beyond what literary sentence processing can achieve. Recognising the above described arch-structure is part of an interpretation and may therefore occur in late processing. For such an interpretation, the reader quite likely draws on text-type and genre-specific knowledge about literary texts. Given that Bowen's novel does not otherwise explicitly signal that it is part of a prose-poetry tradition, this interpretation may only result from an intense study of this paragraph and may be easier to achieve for skilled readers. Nevertheless, an explicit recognition of the arch structure is not necessary for aesthetic effects.

In the following, I consider the form of the numeric, syntactic, phonological and lexico-semantic patterns separately before I discuss the potential consequences for sentence processing and aesthetic pleasure.

The numeric pattern: Sentence length and syllables

The six sentences become gradually longer and then shorter again, and this holds for the number of words and syllables. All sentences of the paragraph are arranged in a symmetrical schema with a paragraph-final asymmetric sentence.

Ex	**sentence length**			**syllables**		
	words	**words/segment**	**schema**	**sentence**	**syllables/segment**	**schema**
(1)	8	8	A	15	15	A
(2)	10	3, 7	B	15	4, 11	A
(3)	27	15; 12	C	44	23; 21	B
(4)	27	10, (4, 9, 4)	C	55	16, (7, 15, 7)	C
(5)	9	3, 6	B	16	5, 11	A
(6)	15	5; 10	D	24	6; 18	D

Table 2: sentence length and syllables

Sentences (2) and (5) form a pair because they resemble each other in numeric structure and in the size and arrangement of segments. Both sentences have a similar length, 10 and 9 words respectively, and they share a similar number of syllables per segment, with (4, 11) and (5, 11) syllables respectively. They show a similar arrangement of segments, with (3, 7) and (3, 6) words each. Sentences (3) and (4) form the core of the paragraph; they have the same number of words yet differ in the number of syllables and the arrangement of segments.

Further, I have counted syllables per sentence and per segment to corroborate the previous finding of a numeric pattern: The syllable structure of the paragraph shows less clear symmetry. Bowen mostly uses monosyllabic and bi-syllabic words. Words with more than two syllables occur in very specific positions only, as I discuss in the section on rhyme later on. While sentences (1), (2) and (5) have a similar number of syllables, sentence (6) is asymmetrical. Sentences (3) and (4) have considerably more syllables, and this is a function of their absolute length. However, while sentences (3) and (4) both have 27 words each, sentence (4) has an additional eleven syllables.

The number of syllables per sentence and per segment partly coincides with the pattern established by words per segment and per sentence. This is not surprising because the syllable schema is partly a function of the number of words per sentence. However, this is not the case in sentences (3) and (4). While the number of words is identical in both, sentence (3) has 44 syllables and sentence (4) has 55 syllables. In this respect, they do not establish a pair. Even though there does not seem to be a fully systematic syllable schema in the paragraph, it interacts with the rhyme scheme, as I will show later.

This symmetric arrangement of segment and sentence length holds irrespective of the syntactic status of the segments. This corroborates my assumption that the written sentence has a special status in Bowen's writing and may be considered as having a similar status as the line in poetry. The coordinated sentences (3) and (4) may then have a status similar to that of the poetic run-on-line. This finding is also corroborated by the rhyme scheme, as I will demonstrate later on.

The increasing and decreasing sentence length may suggest a relatively regular reading experience. However, I do not assume that absolute sentence length has a considerable effect on the reader, other than, perhaps, that longer sentences take longer to read and may mean a higher load on memory during reading. If anything, longer sentences are potentially more syntactically complex than shorter ones, and higher syntactic complexity requires more processing load than lower complexity. In absence of

empirical data on the effect of sentence length on processing, I do not pursue this line of argument but focus on the effects of parallelism and chiasmus.

The syntactic pattern: Parallelism and chiasmus

The syntactic pattern is characterised by parallelism and chiasmus. Each written sentence in this paragraph has an individual surface structure. Yet Bowen establishes syntactic parallelism between sentences (2) and (5), and (3) and (4) respectively. The mirror axis is situated between sentences (3) and (4). Sentences (1) and (6) are asymmetric elements. Each written sentence forms an element of the symmetric arch structure of the paragraph, yielding the syntax schema ABCDDCBA/E, a chiasmus.

Ex		**syntax schema**
(1)	Mrs Montmorency and Laurence were in the drawing-room.	A
(2)	They looked anxious, nothing showed the trend of the **conversation**.	B
(3)	The pale room rose to a height only mirrors followed above the level of **occupation**; this disproportionate zone of ***emptiness*** dwarfed at all times figures and furniture.	C, D
(4)	The distant ceiling imposed on ***consciousness*** its blank white oblong, and a pellucid silence, distilled from a hundred and fifty years of **conversation**, waited beneath the ceiling.	D, C
(5)	Into this silence, voices went up in stately **attenuation**.	B
(6)	Now there were no voices; Mrs Montmorency and Laurence sat looking away from each other.	A/E

Table 3: syntax schema

In the following, I take a closer look at parallelisms between sentence (2) and (5), and sentences (3) and (4) respectively. Unlike in 5.1, parallelism holds of distinct sentences but not of phrases within one sentence. This means that parallelism in this paragraph has different consequences for processing than in *The Heat of the Day*. I begin with a description of form before I turn to a discussion of processing. Remember that I treat each sentence as a prose equivalent to the poetic line.

Sentence (2) replicates (5) in the number of words, syllables and in segment structure, yet they differ syntactically.

(2)	They looked anxious,	nothing showed the trend of the conversation.
(5)	Into this silence,	voices went up in stately attenuation.

Sentences (2) and (5) share their position as second and penultimate sentence. Sentence (2) contains an ungrammatical comma splice, whereas sentence (5) has a grammatical anticipatory constituent. The second segments are both main clauses and are therefore syntactically parallel.

I specifically suggest that sentence (2) replicates (5), rather than the other way round, for the following reasons. Sentence (2) contains a main clause in the first segment. However, Bowen uses a comma splice instead of a grammatical form of conjoining two simple sentences (such as the coordinating conjunction "and"). In my view, this is a poetic choice motivated by at least two structures controlling the paragraph. Since sentences (2) and (5) form a numeric and structural pair, their surface forms need to match. Adding a coordinating conjunction to sentence (2) would disturb the numeric parallelism between sentences (2) and (5). Using another punctuation mark – such as a semi-colon, colon or dash – is not possible either. Neither would be replicable in sentence (5). Bowen frequently uses punctuation marks, including the comma splice here, as markers of prosodic rather than of syntactic boundaries.

Sentence (5) begins with an anticipatory constituent, a syntactic inversion of constituent structure. Nevertheless, Bowen could have used different surface structures:

a) Voices went up into this silence in stately attenuation.
b) In stately attenuation voices went up into this silence.

So why does Bowen choose (5) over the more conventional version a) or b)? This may have three reasons, all of which are likely to be motivated by the aim of creating a symmetrical arch structure for the paragraph. First, a numeric structure which mirrors that of sentence (2) can only be construed by shifting the phrase "Into this silence" into the sentence initial position. Secondly, in doing so, Bowen creates a smooth lexical and narrative transition from sentence (4) towards the two concluding sentences: silence – silence / voices – no voices:

(4) The distant ceiling imposed on consciousness its blank white oblong, and a pellucid **silence**, distilled from a hundred and fifty years of conversation, waited beneath the ceiling.
(5) Into **this silence**, ***voices*** went up in stately attenuation.
(6) Now there were ***no voices***; Mrs Montmorency and Laurence sat looking away from each other.

The third reason is phonological, pertains to the rhyme scheme, and I will discuss it later.

To summarise, the formal numeric, syntactic and narrative aspects of sentences (2) and (5) are interwoven into a complex net of dependencies. Numeric, syntactic and narrative aspects are all subjected to a higher abstract idea of parallelism which holds between these two sentences, and to the idea of symmetry that holds of the paragraph.

Sentences (3) and (4) show two parallels which establish a chiasmus, the symmetric schema CDDC, and I treat these sentences as run-on-lines. Both have the same number of words and are significantly longer than the four other sentences in this paragraph.

(3) The pale room rose to a height only mirrors followed above the level of occupation; this disproportionate zone of emptiness dwarfed at all times figures and furniture.
(4) The distant ceiling imposed on consciousness its blank white oblong, and a pellucid silence, distilled from a hundred and fifty years of conversation, waited beneath the ceiling.

At a first glance, neither the segment structure, nor the syllable structure establish a regular pattern. However, both consist of two coordinated sentences, with a semi-colon (3), and a comma and a coordinating conjunction (4) respectively. While the surface structures differ, the underlying syntactic structures are mirrored. Sentence (3) consists of an object relative clause (the relative pronoun is omitted), a semi-colon as the coordinating conjunction, and a simple sentence including an inversion of direct object phrase and adverbial of time. Sentence (4) contains a simple sentence including an inversion of direct and indirect object phrases, which mirrors the inversion in the second half of sentence (3). The subject relative clause mirrors the first half of sentence (3).

So, the first half of complex clause (3) and the second half of complex clause (4) are syntactically parallel. Both sentences contain a main clause and a relative clause, even though their surface structures differ. While (3) contains an object relative clause, and (4) contains a subject relative clause, both sentences omit the relative pronouns and instead only show their regular past tense *verbs* in the surface structure:

(3) The pale room rose to a height [which] only mirrors *followed* above the level of occupation;
(4) and a pellucid silence, [which was] *distilled* from a hundred and fifty years of conversation, waited beneath the ceiling.

This syntactic parallelism holds true for the surface structure, whereas the underlying structures differ. Sentence (3) is active, whereas (4) is quite possibly passive. The second half of sentence (3) and the first half of sentence (4) also show two syntactic parallels:

(3) this disproportionate zone of emptiness dwarfed *at all times* **figures and furniture**.
(4) The distant ceiling imposed *on consciousness* **its blank white oblong**,

On the one hand, both sentences are simple main clauses. On the other hand, they involve an inverted constituent order. In sentence (3), the adverbial *at all times* precedes the direct object **figures and furniture**. In sentence (4), the indirect object *on consciousness* precedes the direct object **its blank white oblong**. Since these inversions occur within a short space of text, the reader is likely to notice them.

These findings corroborate the notion that the individual written sentence is subjected to the paragraph structure. Sentence pairs are arranged around a central mirror axis, thus establishing symmetry across the paragraph. Inversions and loose treatment of sentence internal punctuation serve the end of creating numeric, syntactic, phonological and lexico-semantic schemas in the paragraph. Using different sentence structures creates syntactic variety. While the superimposition of a numeric pattern demands syntactic adjustments in almost every syntactic and written sentence, the paragraph and each sentence in it adhere to a schema. Thereby, Bowen creates variety which is patterned yet never merely repetitive.

I hypothesise that parallelism between independent syntactic and written sentences may facilitate processing for the second member of a parallelism, as happens for parallelism within sentences. To begin with, the reader does not have to recognise parallelism explicitly to experience a facilitation of early sentence processing: The syntactic structure of the first sentence may prime the reader for the second sentence, as happens for the adjacent parallelisms in section 5.1 (Sturt, Keller et al. 2010). However, the strength of such a hypothetical effect may depend on the length of the sentences which the reader has to process in between. If the distance between two parallel sentences is too long, the likelihood of syntactic priming of this kind may decrease considerably.

If syntactic priming occurs, a sudden and unexpected processing facilitation may elicit a fast negative affective response in early processing. However, I assume that the explicit recognition of parallelism between sentence (2) and (5), and (3) and (4) is relatively difficult to achieve. This is mainly due to the fact that the parallelism is non-adjacent, not signalled by the text itself and that Bowen's novels are not part of the

traditional use of parallelism in literature. If at all, the reader can only recognise parallelism or chiasmus as an abstract form on processing the second member. Such an explicit recognition during online processing requires genre-specific and text-specific knowledge, and this is only available in late processing. If the reader is able to draw on such knowledge and recognise parallelism here, this is quite likely to elicit cognitive fluency and a positive affective response, that is, aesthetic pleasure.

The phonological pattern: Rhyme scheme

In addition to the numeric and syntactic schemas, Bowen uses six rhyming words which form the symmetric rhyme scheme abbaa/c. Two forms hold true for these six nouns: first, it is rhyme, second, it is lexico-semantic repetition. Rhyme stems from the repetition of "parts of the syllable" (Fabb 2015, 121) but does not depend on lexico-semantic repetition. These two forms are therefore independent from each other and should have independent but parallel effects on sentence processing. According to Fabb (2015, 121), rhyme is a communicated or an added form and, in poetry, involves words which "are always located in a specific place relative to the line or other small section".[80] Bowen's use of rhyming words at specific points in this paragraph therefore supports my initial claim that the written sentence has a special status in her poetic practice and may even form the prose-equivalent to the poetic line.

Experimental studies suggesting that rhyme facilitates processing and increases aesthetic pleasure help understand the potential effects of Bowen's prose. On the one hand, rhyme in metrical poetry "highlights the overall metrical gestalt of *verse*" (Obermeier, Menninghaus et al. 2013, 2, italics in orig.). On the other hand, rhyme increases "the perceived 'beauty' of a poem and hence its aesthetic liking" (Obermeier, Menninghaus et al. 2013, 2). According to Obermeier et al.'s study, rhyme in poetry is a form of repetition and as such is partly responsible for "structuring perceptual input by drawing attention towards prosodic stimulus properties and facilitating cognitive processing" (2013, 2). In this study, it was found that "rhyming stanzas lea[d] to a more positive aesthetic and emotional evaluation" (Obermeier, Menninghaus et al. 2013, 6). Using the fluency account (Reber, Schwarz et al. 2004), the study concludes that rhyme facilitates "the cognitive processing of a poem and consequently the respective poem receives more positive aesthetic and emotional appraisal" (Obermeier, Menninghaus et

[80] "A syllable is in three parts: onset, nucleus and coda", and rhyme usually holds of "either the nucleus, or the coda, or both nucleus and coda" (Fabb 2015, 121).

al. 2013, 8; McGlone and Tofighbakhsh 2000, 425, 427). The lexico-semantic repetition should affect sentence processing by offering a lexico-semantic prime, similar to the effects of lexico-semantic repetition in negation (see section 4.2). The first lexeme activates lexico-semantic retrieval and associations, facilitating lexico-semantic access on reading the second or any further rhyming lexeme.

Even though some researchers argue that the concept of rhyme cannot be easily transferred from poetry to prose (Morgan 1986), I suggest that the rhyming words in the passage from *The Last September* have the formal function of structuring the paragraph and are likely to facilitate sentence processing, thereby increasing aesthetic pleasure for the reader. In the following, I describe the formal aspects of rhyme first and then consider the implications for processing.

To begin with, there are six rhyming nouns in this paragraph. These words are distributed non-randomly and produce a rhyme scheme which coincides with the symmetric numeric and syntactic schemas discussed above (see also words highlighted in bold in Table 2).

Example	**rhyming words**	**syllables**	**scheme**
(1)	-	-	-
(2)	conversation	4	a
(3)	occupation emptiness	4 3	a b
(4)	consciousness conversation	3 4	b a
(5)	attenuation	5	a/c
(6)	-	-	-

Table 4: rhyme scheme

These six rhyming words fall into an a-rhyme, ending on "-ion", and a b-rhyme, ending on "-ness". A-rhyme words have four syllables, with the exception of "attenuation" which has five syllables. B-rhyme words have three syllables. Each rhyming word is the longest in terms of syllables in its sentence, with the exception of "emptiness", where the word "disproportionate" with its five syllables is longer. The final rhyming word is part of the a-rhyme but is asymmetric because it has one more syllable than the other three words.

All six rhyming nouns are derived from either verbs or adjectives. The a-rhyme nouns ending in "-ion" are derived from verbs, whereas the b-rhyme nouns ending in "-ness" are derived from adjectives (-ness).

(2) conversation – to converse

(3) occupation – to occupy

(3) emptiness – empty

(4) consciousness – conscious

(4) conversation – to converse

(5) attenuation – to attenuate

All six nouns are placeholders for human agents and human agency. In using abstract nouns instead of more concrete verbs and adjectives for nouns which directly describe the human characters in this paragraph, Bowen rarifies the lexicon by making the sentences and the episode structurally more complex.

More importantly, the rhyming words do not occur in random positions throughout the paragraph but are evenly distributed across sentences (2) to (5).

Ex		**rhyme scheme**
(1)	Mrs Montmorency and Laurence were in the drawing-room.	-
(2)	They looked anxious, nothing showed the trend of the **conversation**.	a
(3)	The pale room rose to a height only mirrors followed above the level of **occupation**; this disproportionate zone of ***emptiness*** dwarfed at all times figures and furniture.	a b
(4)	The distant ceiling imposed on ***consciousness*** its blank white oblong, and a pellucid silence, distilled from a hundred and fifty years of **conversation**, waited beneath the ceiling.	b a
(5)	Into this silence, voices went up in stately **attenuation**.	a/d
(6)	Now there were no voices; Mrs Montmorency and Laurence sat looking away from each other.	-

Table 5: rhyme scheme in context

The position of a- and b-rhyme words is numerically and phonologically determined. The first and second a-rhyme word, and the third and fourth a-rhyme word all occur with 19 syllables in between, though the number of words differs. Moreover, the first a-rhyme word is preceded by 26 syllables, while the last a-rhyme word is followed by 24 syllables. The a-rhyme words “occupation” and “conversation” in sentences (3) and (4) have 55 syllables in between. The b-rhyme words “emptiness” and “consciousness” in sentences (3) and (4) do not show a particular syllable distance but also share a specific position

within their sentences; they are both preceded by eight syllables, as measured from the beginning of the sentence. This, too, supports my argument that the sentence in this paragraph has a special status and may be equivalent to the poetic line. More particularly, this finding also suggests that the syntactic sentences in the written sentences (3) and (4) have a special status and may be treated as equivalents to the run-on-line.

All a- and b-rhyme words are the final element in a preposition phrase containing a noun phrase, or a noun phrase containing a preposition and a noun. All phrases are object phrases, except for (3), which is a subject phrase, and (5), which is an adverbial phrase.

(2) the trend of the **conversation**
(3) above the level of **occupation**
(3) this disproportionate zone of **emptiness**
(4) on **consciousness**
(4) from a hundred and fifty years of **conversation**
(5) in stately **attenuation**

The two a-rhyme words in (2) and (3) fall into the sentence final position: "conversation" in sentence (2) occupies the final position in the object noun phrase ("the trend of the conversation") within a main clause, whereas its rhyming counterpart "occupation" occurs in a preposition phrase ("above the level of occupation") in the object position of a subordinate relative clause. Since sentences (2) and (3) do not show any other structural parallelism, the rhyme and the numeric position of the rhyming words tie them together.

The two a-rhyme words "conversation" and "attenuation" in (4) and (5) are anti-symmetric to the preceding a-rhyme pair in respect to their position within the sentences: "conversation" in sentence (4) is part of the preposition phrase "from a hundred and fifty years of conversation" in the object position in a subordinate relative clause, whereas "attenuation" in sentence (5) is part of the adverbial preposition phrase "up in stately attenuation" in a main clause. While "attenuation" in sentence (5) is in the sentence final position, just as the first two a-rhyme nouns, "conversation" in sentence (4) is clause final but not sentence final. This position is structurally deviant in relation to the other three nouns. However, the distance between "conversation" and "attenuation" also measures 19 syllables, as in the first a-rhyme pair. This asymmetric and atypical position of "conversation" hints at the significance of sentence internal punctuation as a prosodic marker, suggesting that this sentence too should be treated as a run-on-line.

Moreover, the inversion in sentence (5) is not only motivated by the structural parallelism with sentence (2) for the creation of a formal schema but is also required for maintaining the rhyme scheme. Shifting the rhyme word "attenuation" into the sentence final position creates the 19-syllables distance to its preceding counterpart "conversation" in sentence (4).

The two b-rhyme nouns "emptiness" and "consciousness" have three syllables each. Both nouns are mid-sentence or mid-line rhymes and occur with the onset of the ninth syllable as measured from the beginning of the sentence.

Ex		**s.**	**r.**
(3)	The pale room rose to a height only mirrors followed above the level of **occupation**;	C	a
	this disproportionate zone of ***emptiness*** dwarfed at all times figures and furniture.	D	b
(4)	The distant ceiling imposed on ***consciousness*** its blank white oblong,	D	b
	and a pellucid silence, distilled from a hundred and fifty years of **conversation**, waited	C	a
	beneath the ceiling.		

Table 6: syntax schema and rhyme scheme

The two b-rhyme nouns occur in the second and first half of the two complex sentences (3) and (4), which conform to the syntactic schema CDDC.

(3) this disproportionate zone of ***emptiness*** dwarfed at all times figures and furniture.
(4) The distant ceiling imposed on ***consciousness*** its blank white oblong,

It now becomes clear that the above-mentioned syntactic inversions which create syntactic similarities between sentences (4) and (5) are probably entirely motivated by requirements of the rhyme scheme. The phrase "on consciousness" can only occupy the same position as its rhyming counterpart in the preceding sentence when the constituent order of direct and indirect object phrase in sentence (4) is inverted.

It follows that the six rhyming nouns are more similar to each other in respect of their syllabic, phonological and lexico-semantic structure than they are to the remainder of the lexemes in this paragraph. Further, all rhyming nouns occupy non-random positions at the end of syntactic sentences (not written sentences), or at a non-random position in the middle of a sentence.

As in a poem, the rhyming nouns therefore establish a non-random pattern that is likely to affect sentence processing. The syllabic, phonological and lexico-semantic similarity between the six rhyming nouns should function as a prime for the upcoming

lexeme. The first lexeme activates lexico-semantic retrieval and associations, rendering lexical access easier on reading the second or any further rhyming lexeme. This sudden increase in processing fluency may elicit a fast negative affective response. In all likelihood, such an effect of rhyme takes place in early processing and must therefore be text-type independent. If this is indeed the case, rhyme can occur within any kind of text, irrespective of whether the text is classified as prose or poetry, or even as literary. Repetition on the syllabic, phonological and lexico-semantic level can therefore affect early processing and does not depend on the reader explicitly noticing it as a structure.

However, readers of poetry and prose alike may explicitly notice rhyme as rhyme. This may occur on reading the second or any subsequent member of the rhyming structure. The reader may then return to previous text and include the first member in any explicit reasoning about rhyme as an added form. Since Bowen's novel *The Last September* does not overtly communicate that the paragraph in question involves rhyme, such a discovery may be relatively costly for the reader. If, however, the reader does succeed in detecting rhyme explicitly, the sudden fluency in early processing and the negative affective response may be re-evaluated in late processing, leading to cognitive fluency and aesthetic pleasure.

The fact that Bowen's rhyming nouns all occur in non-random positions further supports my argument that the written sentence has a special status in her poetic practice. For the reader, this non-random position means that the sudden facilitation in lexical-semantic processing comes within relatively regular intervals. While the line final rhymes in metrical poetry may be predictable for the reader, this is not the case in the paragraph from *The Last September*. During a first online reading, there is no way of predicting any type of rhyme, nor its specific location within the text. This means that the rhyme remains unpredictable for the reader, and each rhyming word has the potential to elicit a fast negative affective response and a late positive re-appraisal, resulting in aesthetic pleasure.

The lexico-semantic pattern: Form and content

The paragraph contains a set of antonyms which creates a semantic chiasmus. The numeric, syntactic and phonological symmetry of the paragraph mirrors the shifting narrative focus from characters in sentences (1) and (2), towards the room (3) and (4), and back to the characters in sentences (5) and (6). The characters never entirely drop out of sentences (3) and (4) but are shifted into the object position. This also shifts the focus away from the two specific characters ("Mrs Montmorency and Laurence"; "They") onto

the six abstract rhyming words before returning to the two characters in the final sentence. For instance, in sentence (3) "mirrors" is the active agent, whereas in sentence (4) "silence" as an abstract noun represents the human characters. This is in keeping with Bowen's strategy of moving human characters into the object position or of burying them in passive constructions (see Chapter 3, and (Kind 2013)).

The rhyming words produce the narrative relation between the fictional characters and the space they are described in. They do so in a symmetric order (aabbaa/c), with an asymmetric final element.

conversation (characters)	occupation (space)
emptiness (space)	consciousness (characters)
conversation (characters)	attenuation (voices of characters)

Table 7: rhyming words and narrative reference

The shift from animate to inanimate agents in the grammatical subject position means that the computation of argument prominence and argument linking in stage 2 of processing (eADM) becomes more difficult. Remember here the non-prototypical subjects and hence non-prototypical Actor arguments of the syntactically ambiguous sentences in Chapter 2. Interpreting the grammatical subjects "The pale room", "mirrors", "The distant ceiling", "a pellucid silence" and "voices" as Actors is possible but requires increased processing cost. This early disfluency and the associated fast negative affective response are countered by a sudden processing fluency towards the end of the sentences, where the rhyming words occur. In this respect, each individual sentence in this paragraph renders reading "eventful" (Bowen 1962a, 9).

To summarise, the overall symmetric shape or form of this paragraph from *The Last September* is the superadded principle to which all non-linguistic and linguistic elements are subordinate. Bowen creates numeric, phonological and syntactic parallel pairs which are then arranged into an overall symmetric pattern. Sentence and clause structures can be re-organised, the phrase being the smallest syntactic entity affected. The phrase in Bowen's syntax always remains internally intact but can be moved around within the sentence to create a particular formal surface structure. The numeric, syntactic, phonological and narrative schemas establish a symmetrical paragraph. Recognising this symmetrical shape is the result of the reader's interpretive processes. These four schemas

partly coincide and involve the same linguistic elements. However, the schemas also partly overlap, thereby tying together different linguistic elements within the paragraph. For example, as has been shown above, the rhyming words occur in syntactically different structures, thereby creating phonological resemblance where there is syntactic diversity. This creates sentences and a paragraph which may be said to be "good in shape" (Bowen and Jones (1950) 2010f, 272) and renders reading "eventful" (Bowen 1962a, 9).

5.3 Conclusion: Parallelism, alliteration and rhyme

In this chapter, I have suggested that those sentences and paragraphs which are "good in shape" (Bowen and Jones (1950) 2010f, 272) are central to Bowen's poetic practice, yet my arguments about potential processing effects are hypothetical and require experimental validation.

While ambiguity and negation may impede early sentence processing, prosody, parallelism, alliteration and rhyme in Bowen's sentences and paragraphs may facilitate it. The sudden and surprising increase in processing fluency may alert the reader to a potentially harmful situation and elicit a fast negative affective response, just as sudden disfluency does for ambiguity and negation. This is a text-type independent process and is likely to hold true for Bowen's novels as well as any other literary and non-literary text. Nevertheless, these facilitating structures may give rise to aesthetic pleasure in late processing. A late re-appraisal of the input indicates that it is harmless and can be interpreted, allowing cognitive fluency and aesthetic pleasure. Recognising and interpreting communicated forms such as parallelism, alliteration and rhyme depends on text-type dependent processes and involves genre knowledge, for example. This late process is therefore likely to differ depending on the author, the genre, and on whether a text is read as literary or non-literary.

I have shown that narrative episodes in Bowen's novels are organised in paragraph and sentence structures, and the latter are the crucial and most interesting units of composition and of processing in Bowen's novels. I have analysed numeric, syntactic, lexical and semantic patterns and schemas which Bowen uses to create a sense of balance within sentences and paragraphs. *The Last September* is based on strict formal coherence, and the paragraph is the relevant structural entity to which sentences, clauses and phrases are subordinate. *The Heat of the Day* is freer in its treatment of the formal paragraph and narrative episode.

Using an example from *The Heat of the Day* in 5.1, I have argued that prosody as well as syntactic and lexical repetition may create parallelism and alliteration. As inherent linguistic forms, prosody, syntax and lexicon are subject to the early and the late stage of incremental sentence processing. Syntactic priming and previous lexical activation may facilitate early processing for the second member of parallel structures. In late processing, the reader may recognise that the current second member and the previous phrase constitute parallelism, a communicated form. This explicit recognition is not necessary to attain the early fluency effects. However, readers who do explicitly recognise parallelism as a communicated form may find late interpretive processing easier, resulting in a higher level of cognitive fluency and a more pronounced aesthetic pleasure. Because prosody, parallelism and alliteration affect processing independently of each other, they may contribute to an eventful reading experience and evoke "a series of reactions", as Bowen has it, "of which the effect shall be cumulative" ((1950) 2010f, 271).

In reference to a paragraph from *The Last September* in section 5.2, I have offered evidence for my assumption that Bowen uses the prose paragraph in a similar way as the stanza is used in a poem. The paragraph as a communicated form is signalled by setting it off through indenting. More importantly, Bowen uses four schemas to create this communicated form: First, she controls the number and length of sentences and segments (units of text as demarcated by punctuation within individual sentences) in order to create parallelism, symmetry and chiasmus in the paragraph. Secondly, Bowen establishes a syntactic schema by arranging syntactic elements into parallelism, chiasmus and symmetry, which can hold between adjacent sentences, or even between sentences which do not directly follow each other. The resulting patterns do not necessarily correspond to syntactic entities. Thirdly, Bowen arranges lexemes into parallel, symmetric (synonyms) or chiasmic (antonyms) patterns, thereby creating a lexical schema in the paragraph. These numeric, syntactic and lexical schemas do not formally depend on each other. For instance, there can be a numeric pattern without a corresponding syntactic pattern.

The communicated form of the paragraph is abstract, and it is quite likely that the reader may not notice it explicitly. However, Bowen creates the abstract form of the paragraph through selected linguistic and surface forms which the reader can notice during online sentence processing: The numeric, syntactic and lexical patterns should affect incremental sentence processing independently of each other and contribute to an eventful reading experience. Reading is less eventful where there is only a numeric pattern, it is more eventful where a numeric and syntactic pattern coincide, and it is most

eventful where a numeric, syntactic, lexical and semantic pattern coincide. The more of these features coincide in a sentence and in a paragraph, the more likely is the text to elicit an aesthetic response in the reader. As for prosody, parallelism and alliteration in *The Heat of the Day*, I have suggested that the forms of the paragraph in *The Last September* all affect sentence processing independently of each other, yet all contribute to aesthetic pleasure "cumulative[ly]" ((1950) 2010f, 271), as Bowen herself calls it.

Particularly, linguistic and non-linguistic forms are intertwined in the compositional arrangement of syntax into non-linguistic patterns. On closer inspection, it has become evident that segments and syntactic phrases more than syntactic sentences are the building blocks of communicated forms in Bowen's novels: Syntactic phrases are always internally intact but are frequently shifted around in written sentences in order to create those surface structures required by Bowen's use of what Fabb calls "superadded constraints" (2010, 1220). Clause and sentence structures are hence subject to appropriation in their surface form, while the surface form of phrases is negotiated only within the range of syntactic possibilities of the English language. The fact that the source of aesthetic pleasure is difficult to trace to formal linguistic structures, even in a hypothetical approach such as mine, further supports my initial claim that the aesthetic pleasure of reading Bowen's language stems from the processing experience itself, which in turn is influenced by the form of the text (Reber, Schwarz et al. 2004).

Further, in the sentences of *The Heat of the Day* and the paragraph in *The Last September*, Bowen trades a decrease in syntactic integrity for a corresponding increase in abstract formal coherence. Syntactic sentences are subject to abstract non-linguistic patterns such as parallelism, and to parallelism and symmetry on the level of the paragraph. By arranging sequential linguistic input into a non-linguistic form, authors can impose a non-random order on the text (Constable and Aoyama 1999a; 1999b; 2003).

6. Directions for future research

At the end of this thesis, let me turn to possible directions for further research. I begin with a brief outline for an experimental validation of my hypothetical discussion in the previous chapters. I then consider a more literary avenue of further research and discuss how Bowen's text can be classified within the canon of Modernist writing. Finally, I sketch a broader possible avenue of research into the evolutionary underpinnings of literature and literary reading.

Throughout my thesis, I have hypothesised about potential reading effects for individual sentences in Bowen's novels. Ideally, my analytical work will offer readily available material for experimental testing and will further constitute a readily adaptable set of concrete hypotheses: The model of literary sentence processing I have been applying requires experimental testing on several levels. First, the hypothesised impact of ambiguity, negation, parallelism, alliteration and rhyme on literary sentence processing should be assessed in an ERP study, allowing the testing for effects on processing difficulty and ease. The distinction between early and late processing should be tested. Ideally, experimental testing would include ERP measurements to assess the temporal dimension of literary sentence processing, allowing an assessment of the effects of syntactic ambiguity, negation, parallelism, alliteration and rhyme on early processing (stage 1 and 2 of the eADM), and late processing (stage 3 of the eADM) respectively. Measurements of early ELAN (early left anterior negativity) components or N400 responses would indicate that Bowen's sentences do indeed elicit early processing difficulties. Measurements of the P600 component would hint at difficulties in late processing. However, specific attention would have to be paid to the distinction between early processing difficulty as a result of ambiguity and negation on the one hand, and early processing ease as a result of parallelism, alliteration and rhyme on the other. ERP responses can be expected to occur for both difficulty and ease, yet should differ in their polarity and strength. For such experimental testing, the test material would have to be selected in a way which ensures that ambiguity, negation, parallelism, alliteration and rhyme are isolated and their effects can be directly traced. For example, sentences in which more than one of the above structures is present may have to be excluded from initial testing. Once the individual effects of the above structures have been confirmed, the effects of combinations of these structures on processing may be subjected to experimental scrutiny. Further, the distinction in the proposed model between early, text-

type independent and late, text-type dependent processing also needs to be tested. For instance, one group of test subjects would have to be told that the test sentences stem from a literary text, whereas a control group would have to believe these sentences to stem from a non-literary source. If ELAN and N400 measurements remain the same in both groups, this would suggest that the associated processing stages are indeed independent of text-type. If P600 and late POS measurements differ, this would indicate that the late processing stage is text-type dependent, as proposed by the model. However, these assumptions are based on standard interpretations of ERP components, and an experimental study would need to be able to account for different explanations of any measurements. In addition, fMRI testing could corroborate the findings of ERP studies and would allow for an assessment of the spatial distribution of responses to the sentences selected from literary sources.

While ERP studies can record online sentence processing, the aesthetic dimension of the model applied in this study would have to be assessed in a different way. On the one hand, the assumption of a fast negative affective response may be assessed during online processing. If fluency is indeed related to a physical reaction such as the fear response, there should be measurable physical markers such as skin conductance. On the other hand, readers might have to answer questions after reading, indicating whether and how they rate the stimulus material as aesthetically pleasurable. Post-stimulus questions may also allow the assessment of a distinction between the experience of aesthetic pleasure and aesthetic judgments of a novel as a work of art: Even if readers enjoy reading Bowen, they might not rate her novels as good artworks, or vice versa.

The experimental testing and validation of my hypothetical considerations about the effects of Bowen's narrative language on a sentence processing basis cannot, however, replicate the authentic experience of reading a Bowen novel under natural conditions. Nevertheless, experimental validation of my hypothetical work in this thesis would strengthen the validity of literary-linguistic analyses, offering support for further interdisciplinary work in this field.

In addition to the above suggestion of experimental research, my thesis also offers a comprehensive description of linguistic and non-linguistic forms in Bowen's narrative language. These observations may be used as the basis for further investigations within a more traditionally literary research area, such as looking into the linguistic and communicated forms in Bowen's œuvre, and they may likewise serve as the basis for a comparative study and even be inspired by current neuroscientific studies of reading (Hsu,

Jacobs et al. 2015). The classification of Bowen as a writer within the canon of twentieth century literature has not yet been resolved, and language may play a central role in future attempts to do so. Together, the results of my thesis, Bowen's own critical writings and existing literary scholarship may offer a starting point for further research.

In Bowen's view, narrative prose which does not affect and engage readers aesthetically (beyond a mere transfer of information) must regain such elements which have that potential:

> the rational and circumstantial telling of the story by the deliberately prosaic means of the novel, was not enough. Fiction must … recognize the poetic necessity. This came with Henry James. . . . His confluence of unstated things arising from his stated remark, from those very intellectual complications … came this desertion of the plain, straight, comprehensible fact, and this transition into a sort of no-man's land, which had ceased to be clear prose and was not yet explicit poetry. (Bowen (ca. 1950) 2010b, 156)

Bowen remains obscure about what she means by the narrative language "which has ceased to be clear prose", nor does she elaborate on this point. Throughout this thesis, I have suggested that selected narrative episodes and paragraphs in Bowen's novels assume forms which can elicit poetic, that is aesthetic, effects while never formally ceasing to be prose language. The primary aim of such "poetic" structures may be to appeal to the reader's aesthetic perception rather than intellectual comprehension.

The potential of prose language to elicit aesthetic pleasure in the reader is closely related to how Bowen fits into the literary genre of the novel. Generally, Bowen positions herself within an individual network of writers such as Katherine Mansfield, Gustave Flaubert, Henry James, Virginia Woolf, Eudora Welty, Henry Green, Ivy Compton-Burnett and Sean O'Faolain (Lee 1999b, 6, 140).[81] In particular, she places herself within a literary tradition based on her own understanding of literary language. In Bowen's estimation, authors who have successfully created such a poetic use of prose narrative are Henry James, Marcel Proust, James Joyce and Gertrude Stein ((ca. 1950) 2010b, 156, 160). According to Bowen, this linguistic "break-through" in Joyce and Stein "was made

[81] Bowen thinks highly of works by Mansfield (Bowen (1956) 1999), of Woolf's *The Waves* (Bowen (1954) 1999, 179), Welty's *The Golden Apples* (Bowen (1950) 1999; Bowen, Glendinning et al. 2009, 173), Henry Green's *Nothing* (Bowen, Glendinning et al. 2009, 172) and O'Faolain's *Midsummer Madness and Other Stories* (Bowen (1936-1958) 1999, 202).

… with a certain sacrifice of intelligibility", while Proust and Henry James succeeded in making that break-through "merely at the cost of a demand for more intuition and more understanding in the reader" ((ca. 1950) 2010b, 160-161). This statement seems to be obscure, but I assume Bowen means that comprehension in Proust and James relies more on affect or aesthetic experience than on intellect.

These considerations about the form and aesthetic effect of language in the novel also bear implications for the classification of Bowen within the literary canon. According to Hepburn, Bowen's essay "The poetic element in fiction" ((ca. 1950) 2010b) is significant in this question:

> Bowen bids a formal farewell to certain stylistic manœuvers of high modernism: complication for its own sake; technical virtuosity in the use of language; Eliot's claim that poetry ought to be at least as well written as prose. Bowen recognizes Joyce's and Stein's experimentalism as valid ways to access experience, but she does not admire the 'sacrifice of intelligibility' that experimentalism entails. (Hepburn 2010b, 360)

In the light of Bowen's essay and Hepburn's comment, it emerges that the notion of difficulty as a means of enabling the acquisition of new knowledge, what Bowen calls "enlargement" ((31 August 1958) 2008, 325), and as an eliciting condition for aesthetic pleasure, as conceptualised in the model of literary sentence processing proposed in this study, is indeed relevant in Bowen's poetic practice and in the context of literary tradition.

Such "experimentation" with prose language as Bowen demands is not only conditioned by linguistic possibilities but depends on historical context:

> Everything that we recognize as history
> must have left its mark on language
> violating fixed ideas on the subject,
> making further exactions and new demands.
> (Bowen (ca. 1950s/1960s) 2010c, 176)

According to this quote, Bowen understands language as a means for describing the human condition, including the social and physical environment. Language itself is subject to non-linguistic developments such as historical or social change. The view that developments beyond the literary text infringe on epistemological concepts, and, in doing so, also affect linguistic developments, touches on one of the basic assumptions in the

model on which my argument rests: In particular, I have suggested that historical context, world knowledge and genre knowledge influence the process of literary reading and interpretation in the late stage of sentence processing.

Existing literary scholarship has addressed a range of questions concerning the form and effects of Bowen's prose language, as I have outlined in the Introduction and the three main chapters. Despite the growing body of scholarly work on Bowen, the issue of classification and categorisation within literary tradition and the canon has not yet been resolved.[82] Especially formal aspects of Bowen's language that may be perceived as irritating, the negatively experienced reading process and problems with literary interpretation have contributed to difficulties with a conclusive classification of Bowen's œuvre within the corpus of twentieth century literature (White and Thurschwell 2013, 1). Bowen is seen as a writer to whose work "traditional concepts of realism cannot be successfully applied" (Stevens 2009, 185). Hence, Bowen has been seen as a "psychological realist" (Stevens 2009, 185), surrealist (Walsh 2007) or even a postmodern writer (Kitagawa 2000; Stevens 2009, 179). While some scholars consider Bowen's experimental treatment of form as a hallmark of Modernism (Caserio 1993; Corcoran 2004; Hepburn 2013), neither of the above-mentioned literary traditions fully accounts for the reading experience and challenges Bowen's novels seem to yield.

> In her formal structures also – from the relatively static *The Hotel* (1927), which is derivative of Forster and Woolf, certainly, as critics have said, but which maintains a tense edginess all of its own too, to the wildly and uncategorizably adaptive and fluid *Eva Trout* (1968) – she is variously inventive, experimental, unfixed: one intrinsic signature of her work is its sense of … boredom which would attend any act of formal repetition. The eventfulness of writing, and of reading, is the constant, testing novelty of further discovery and self-discovery; . . . . In these forms of stylistic and structural experiment Elizabeth Bowen is a writer deeply impressed by the ambitions of High Modernism, even if, until the final two novels, she never entirely loses touch with classic realism. . . . (Corcoran 2004, 4)

[82] Bowen's work has been examined in biographical (Miller 2000, 17; Stevens 2009, 179), Anglo-Irish and feminist approaches (Lee 1999a, 41; Stevens 2009, 179). Among the ideas discussed in relation to Bowen's writing are dissolution, hauntedness (Corcoran 2004, 9), porousness (Miller, Elward et al. 2009, 135), mergers of supposedly disparate entities or domains (Miller, Elward et al. 2009, 135; Osborn 2009a, 2) and the potentially troubling idea of characters in physical and abstract space (Towheed 2009, 114, 121, 126).

As Corcoran points out here, the criteria for categorising Bowen's novels pertain to both linguistic and non-linguistic features in her writing. Although Corcoran refers to the "eventfulness" of reading, neither he nor Bowen elaborates on this point. By way of filling this gap, I have argued that syntactic ambiguity, negation and parallelism, alliteration and rhyme all contribute to Bowen's ideal of rendering reading "eventful" ((1961) 1962d, 9).

Instead of classifying Bowen's entire œuvre as part of the same literary tradition, Corcoran and others have observed a development over time in her work, from more realistic and linguistically accessible texts, towards inaccessible, experimental, modernist or even postmodernist texts (Hinrichs 1998, 176-177). For instance, as the above quote from Corcoran's study suggests, Bowen's first novel *The Hotel* (Bowen (1927) 1996) is strongly related to other modernist writers such as Forster and Woolf, whereas the last novel *Eva Trout* (Bowen (1968) 2003) shows features associated with postmodernism. Within this development from modernism to postmodernism, the 1955 novel *A World of Love* (Bowen (1955) 2003) is arguably a turning point in Bowen's œuvre. This novel "is the one instance in which Bowen's style assumes a disproportionate importance" (Hinrichs 1998, 179 cit. Austin 1971, 48f.). The specific linguistic forms of Bowen's prose supposedly subvert any conventional literary conception of mimetic representation (Osborn 2009a; Osborn 2009b). Her tropes and imagery confront the reader with not-quite realist passages where characters are described in "'expressionistic' or non-naturalistic" ways (Osborn 2009a, 12; cit. Miller, Elward et al. 2009).

This estimation is based on the assumption that syntax and punctuation in literary texts should support the reader in understanding the narrative "world" (Osborn 2009b, 43). Syntax serves to define boundaries between the real and unreal, and between "the regular and the irregular, the familiar and the strange" (Osborn 2009a, 6). However, in this view, syntax and punctuation in Bowen's prose language often violate these boundaries. In doing so, her language undermines "mimetic representation" as a principle of "realistic discourse" (Osborn 2009b, 42), arguably unsettling interpretative conceptualisations. Apart from the insecure relation of reader and text in Bowen's writings, Osborn also asserts that her style foregrounds the material nature of the text as such (2009b, 46-50; Corcoran 2004, 3). This may be seen as a shared issue between Bowen's writing and modernism's concern with surface and depth, with the material and the ideational world (Bennett 2009; Corcoran 2004, 3; Hinrichs 1998, 178; Osborn 2009b, 46-50).

The formal structures of language are easier to assess than the online reading experience and may therefore offer a more objective starting point for non-experimental attempts to classify Bowen's work within the canon. However, far from offering a concrete corpus of textual structures, which would offer a basis for such a comparison, literary scholars have, so far, based their assessments on more general observations.

While literary scholarship has identified Bowen's language as a part of existing problems with a conclusive classification of her novels within realism or modernism, the model of literary sentence processing offers an answer to the source of these difficulties: During reading, specific syntactic structures of Bowen's language challenge the default processing mode. These challenges revolve around questions of linguistic animacy and can ultimately be seen to relate to agency and the relation between characters and physical objects in Bowen's narrative space. In doing so, the texts elicit early processing difficulties and challenge the late interpretive processing stage. This mechanism is only triggered by ambiguity and negation. Parallelism, alliteration and rhyme elicit early processing fluency but may produce difficulties in late processing, eventually yielding cognitive fluency and aesthetic pleasure. These sentence structures and effects are quite likely restricted to those narrative episodes which Bowen herself calls the "descriptive pieces" (Bowen and Jones (1950) 2010f, 272). Other passages in the novel may include simpler sentence structures which are easier to process and therefore have a smaller potential for eliciting aesthetic pleasure. The aesthetic pleasure of reading Bowen's "narrative language at white heat" ((ca. 1950) 2010b, 161) is therefore quite likely restricted to selected passages. Further research in this direction may link the concerns of literary scholarship with those of current neuroscientific studies: Recent empirical research has found that readers respond differently to realistic and "magical events" in fictional texts, and that "supra-natural contents" are "more surprising and more strongly related with reading pleasure" (Hsu, Jacobs et al. 2015, 1) than other passages. Further research may therefore take into account the sentence structures of such supra-natural passages, which may well be similar to surreal or modernist structures in some respects, and find out in how far the linguistic structure and the "violation of world-knowledge" (Hsu, Jacobs et al. 2015, 1) contribute to reading pleasure respectively.

I may here hypothesise that Bowen's novels combine realistic with modernist and surrealist text passages, each of which elicits a specific reading experience. The suggested model of literary sentence processing may be suited for the prediction and explanation of the reading experience associated with sentence structures which are likely to be related

to modernism and surrealism, rather than realism. For a comprehensive and conclusive classification of Bowen's language and her œuvre within the canon of twentieth century literature, comparative literary-linguistic analyses are necessary. My thesis offers a readily available set of sentence structures which may or may not be found in other literary texts as well.

Finally, I suggest how future research on Bowen may also open up to broader neurocognitive perspectives on literary reading and aesthetic pleasure. As I have illustrated throughout this thesis, many of Bowen's ideas about the role of language in literature lend themselves to a literary-linguistic study from a theoretical neurocognitive vantage point. Since Bowen's work predates modern neuroscience, any interpretation of her critical writings from a contemporary perspective must be applied with caution. Nevertheless, Bowen shows herself to be a keen observer of processes involved in writing and reading. Her critical prose work illustrates that critical thinking can yield a kind of knowledge about writing and reading, and this may in itself be a valid form of generating knowledge – perhaps in a way that modern neuroscience cannot. In the following, I consider several ideas prevalent in Bowen's critical writing, each of which relates to one or more elements of sentence processing and literary reading as postulated by neuroscience.

First, Bowen holds that engaging with fictional narrative, whether in oral or written traditions, is a universal cognitive need, independent of age and education. Narrative has an unmediated effect on the senses of the reader "who reads deeply, ravenously, unthinkingly, sensuously, as a child" (Bowen (1946) 1999, 48). Such a universal need may not be fulfilled, as Bowen says:

> by plain fact. . . . We accept it [facts]. But there is some errant part of us which cries, 'What next?'. . . . We are insatiable children: 'Tell us a story!' (Bowen (31 August 1958) 2008, 325)

Bowen's view on the distinction between fiction and non-fiction is corroborated by recent neurocognitive accounts of narrative production and comprehension. Mar points out, using a similar vocabulary as Bowen does:

> As narrative consumers we appear insatiable . . . . This affinity for narrative emerges at a very young age when we develop deep and long-lasting emotional attachments

> to the story-books and movies that surround us in childhood (Alexander, Miller, & Hengst, 2001). (Mar 2004, 1414).[83]

Further, the forms of literary language are not random, but they too depend in part on universal cognitive mechanisms. To Bowen, "[t]he apparent choices of art are nothing but addictions, pre-dispositions" ((1946) 1999, 53; cf. Ellmann 2003, 2).

Fictional narratives have a universal and unmediated effect on the reader's senses and emotions. Bowen considers the "necessity for enlargement" ((31 August 1958) 2008, 327) as a central motivation for engaging with fictional narrative, as I have already discussed in the Introduction. She elaborates on this thought as follows:

> We have within us a capacity, a desire, to respond. . . . We need to marvel. Overhung as we are by the nominal, concrete 'marvels' of our century – the triumphs of science, the masterworks of technology – we are creatures of numbed fancy and stunned senses. . . . Yet we await, it seems, the storyteller's cry of 'Behold!'. (Bowen (31 August 1958) 2008, 325)

Fictional narrative is seen as a means of eliciting aesthetic and emotional rather than rational or intellectual responses in readers. In the face of non-fictional "marvels" of science, only fiction is capable of engaging the reader's senses, imagination and emotion in such a way that fulfils universal and cognitive needs.

Bowen's notions on a universal cognitive need for narrative, a type of inherent form in language and specific effects of fiction versus non-fiction, are consistent with results from recent experimental literary studies and neurocognitive research: The brain does indeed engage differently with fictional than with non-fictional narratives, both of which elicit differential patterns of brain activation (Mar 2004; Miall and Kuiken 1999; Schlesewsky 2013; Schumacher 2014). The senses and emotions involved in reading fictional narratives should be relatively general, but perhaps readers draw on them specifically for reading (Armstrong and Detweiler-Bedell 2008). The view that fictional texts elicit different effects than non-fictional texts is part of the model of literary sentence processing: I have assumed that the late processing stage is text-type dependent. The reader should therefore respond differently to literary and non-literary texts. This also includes the differentiation between the generated linguistic forms of language on the one

[83] Alexander, Kristin J., Miller, Peggy J., and Julie A. Hengst. "Young children's emotional attachments to stories." *Social Development*, 10 (2001): 374-398.

hand, perhaps what Bowen calls "predispositions" ((1946) 1999, 53), and what Fabb calls the "communicated forms" (1999) of literature on the other.

Secondly, according to Bowen, the process of "enlargement" ((31 August 1958) 2008, 327) results from the active engagement of the reader with a narrative text. Reading narrative texts strongly depends on individual knowledge and hence differs from person to person. This engagement involves "a series of faculties" (Bowen (31 August 1958) 2008, 327):

> In acting upon us, the story is drawing upon us; our responses contribute; our contributions create. … The reality (for us) of the story is a matter of how much it has elicited from us. We enter in, and … know ourselves to be active. (Bowen (31 August 1958) 2008, 327)

Literary reading relies on the individual reader's experience and knowledge, both linguistic and non-linguistic. On the experiential level, the reader is exposed to unmediated physical responses such as to those "'jars, 'jingles' and awkwardnesses'" of Bowen's language which are meant to "'displease the reader'" (Bowen (1946) cf. Howard 1971, 181-182). Bowen herself appears to have sought out linguistic, formal and semantic difficulty as the source of such responses.

On the level of sentence comprehension and literary interpretation, the reader draws on lexical, semantic and more general knowledge about the text, the artist and literary tradition. According to Bowen, "[t]he content of the novel is what affects us; and the content, because it expands in the reader's mind, may by far exceed what is stated in the actual writing" (1962c, 216). While those linguistic and semantic elements which are explicitly contained in a text are relevant, those which have either been omitted or are only implied are likewise important, even "adding silent potentials to his [the author's] story" (Bowen 1962c, 216). Here, Bowen stresses that keeping meanings open to different, competing or even contradictory interpretations is an important part of literary texts. This reduction of fixed meanings is not a failure in the text but is essential to its success. However, the reader's scope in interpreting these meanings is linguistically and cognitively constrained. The reader "cannot … add to the novel what is not already there – … known by the author, though not necessarily in words set down" (Bowen 1962c, 217). Both the emotional effects and the capacity to interpret meanings in narrative texts depend on the individual experience and knowledge of the reader. Especially previous engagement with narrative texts play a role. Readers accumulate "layers of fictitious

memory" which "densify as they go deeper down" (Bowen (1946) 1999, 48). This suggests that fictional narrative may have a relatively direct impact on the reader's emotions. These immediate or early emotional effects may be stronger than the mediated effects of cognitive understanding which draws on real world context and genre expectations.

Bowen's observations here show a keen insight into the different elements of which knowledge of and about a language may consist and that they all contribute to literary reading. Even though she does not explicitly distinguish between lexical, semantic and pragmatic knowledge, Bowen's descriptions here can be understood in this way. Reading activates lexicalised meanings and semantic associations of lexemes in every sentence. While there is a certain agreement on meanings across readers, every individual reader may draw on very specific additional meanings which stem from personal experience. While lexico-semantic associations are activated in the early processing stage (stage 2 of the eADM), pragmatic knowledge such as genre knowledge or knowledge about a specific author or text, which more heavily depends on individual experience, is only drawn on in late processing (stage 3 of the eADM) (Bornkessel-Schlesewsky and Schlesewsky 2009a).

Thirdly, Bowen assumes that considering the value of a narrative text as a work of art depends on the reader's rational judgment. The rational appreciation of narrative texts as works of art depends on acquired knowledge. Rational appreciation may not necessarily be desirable from the artist's point of view because it interferes with the sensual, experiential aspect of engaging with narrative: "The young person is then thrown out of Eden; for evermore his brain is to stand posted between his self and the story" (Bowen (1946) 1999, 49). This effect depends on education, genre knowledge and text knowledge more generally. Bowen suggests that "[a]ppreciation of literature is the end of magic" ((1946) 1999, 49). Instead of being able to engage with a narrative in an unmediated fashion, with a "virgin susceptibility to what is written", the reader's formally acquired "taste" and "refine[ment]", the "chosen sensations and calculated thoughts", disrupt the ideal text-reader relation (Bowen (1946) 1999, 49). Bowen's notion that the emotional, sensual, aesthetic engagement with narrative as a form of art is distinct from explicit evaluation, or appreciation, is reflected in the neuroaesthetic model of aesthetic judgment and appreciation: A perceiver may find an artwork aesthetically pleasing but, based on knowledge about art or an artist, may still judge it to be poorly executed (Leder, Belke et al. 2004; Leder and Nadal 2014).

Bowen's own critical writings do not form a unified manifesto, and she focuses less on language than one might expect. While much of this work is concerned with plot, scene or literary genre, this may reflect the priorities of Bowen's commissioners more than her own. In any case, when Bowen does speak of language, it evidences its significance for her poetic practice and legitimises the interdisciplinary angle I have taken in this study.

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Zusammenfassung

In dieser literarisch-linguistischen Arbeit untersuche ich anhand dreier Romane Elizabeth Bowens die potentielle Wirkung von Satzstrukturen auf die Satzverarbeitung und ästhetisches Vergnügen als Bestandteil literarischen Lesens. Ich nehme an, dass Ambiguität und Negation schwierig, und Parallelismus, Alliteration und Reim hingegen einfach zu verarbeiten sind. Dies trifft sowohl für literarische und nicht-literarische Textsorten zu. Der auslösende Mechanismus für ästhetisches Vergnügen im Lesen literarischer Texte liegt in der Fähigkeit unvermittelte Veränderungen im Satzverstehen zu überwinden. Dies basiert auf einem generellen kognitiven Mechanismus und Bowen versteht es, diesen Zusammenhang zwischen sprachlicher Form und Wirkung auf das Satzverstehen im Sinne ihrer künstlerischen Praxis auszunutzen. Ich beziehe neuroästhetische, neurolinguistische sowie literaturwissenschaftliche Forschung ein und entwickele, basierend auf existierenden Modellen, ein Modell des Satzverstehens im Lesen literarischer Texte, welches den Zusammenhang zwischen sprachlicher Form und ästhetischer Wirkung im Satzverstehen in Bowens Romanen erklärt.

In der Einleitung, Kapitel 1, zeige ich auf, dass Sprache ein zentrales Thema Bowens künstlerischer Praxis ist, wie sie selbst in kritischen Texten betont. Anhand einer Rückschau auf literaturwissenschaftliche Arbeiten erarbeite ich die Bedeutung meiner Fragestellung für die wissenschaftliche Rezeption Bowens. Zudem erläutere ich meine Arbeitsweise, die sich auf die umfassende Analyse einzelner Sätze stützt. In Kapitel 2 analysiere ich syntaktisch mehrdeutige Sätze, die unvermittelte Schwierigkeiten im Satzverstehen auslösen können. Der Leser kann diese Ambiguität in vielen Sätzen vollständig lösen, während sie in anderen Sätzen bestehen bleibt. Insbesondere Sätze der zweiten Kategorie haben das Potential ästhetisches Vergnügen hervorzurufen. In Kapitel 3 widme ich mich Negationen, die ebenfalls zunächst schwer zu verarbeiten sind, aber ebenso das Potential haben mehr Bedeutung und ästhetisches Vergnügen zu kreieren. In Kapitel 5 zeige ich auf, dass der geschrieben Satz von zentraler Bedeutung für Bowens künstlerische Praxis ist: Parallelismus, Alliteration und Reim erleichtern die Satzverarbeitung zunächst, haben aber ebenfalls das Potential ästhetisches Vergnügen hervorzurufen. Das abschließende Kapitel 6 bietet einen Ausblick auf anschließende experimentelle und literaturwissenschaftliche Forschung.