



1 Introduction

Pattern flow is a way of interpreting language within the context of a linear frequency-based approach to describe the English language. The *Pattern Grammar* (Hunston/Francis 2000) is one of the main theoretical outcomes of the *COBUILD project* which was initiated in the 1980s and has served as a basis for state-of-the-art lexicography and related research ever since. The *Collins COBUILD English Language Dictionary* (Sinclair et al. 1987) was the first monolingual dictionary of English which was entirely based on frequency analysis of authentic language data and which presented full example sentences derived from the corpus analysis of the initial *Birmingham Collection of Texts*.

In the 1990s a further corpus-building initiative led by the director of the COBUILD project John Sinclair turned the original data collection into a 300-million-word monitor corpus called *The Bank of English*. This mega-corpus served as a source for the second edition of the *Collins COBUILD English Language Dictionary* (Sinclair et al. 1995) and for the compilation of *COBUILD Grammar Patterns I: Verbs* (Francis et al. 1996) and *COBUILD Grammar Patterns II: Nouns and Adjectives* (Francis et al. 1998). The *Pattern Grammar* (Hunston/Francis 2000) explores the theoretical basis and the compilation process of *Grammar Patterns I* and *II* and hereby takes *A Corpus-Driven Approach to the Lexical Grammar of English*. The 'Pattern Grammar'¹ reflects an entire theoretical framework for the lexico-grammatical description of the English language.

Grammar Patterns I and *II* as well as the second edition of the *COBUILD Dictionary* list the typical patterns of every lexical item in the dictionary. A pattern is defined in the *Pattern Grammar* as "all the words and structures which are regularly associated with [a] word and which contribute to its meaning" (Hunston/Francis 2000: 37). More precisely this means that specific words are frequently, i.e. typically, followed by specific grammatical structures or strings of elements. The 'Pattern Grammar' assigns labels that follow a

¹ Note that the present study will refer to the book *Pattern Grammar* (Hunston/Francis 2000) and differentiate it from the 'Pattern Grammar' which is used to refer to the general theoretical framework and as a cover term for the following publications: The two reference books *COBUILD Grammar Patterns I: Verbs* (Francis et al. 1996) and *COBUILD Grammar Patterns II: Nouns and Adjectives* (Francis et al. 1998) will be called *Grammar Patterns I* and *II* in the present study. The *Collins COBUILD English Language Dictionary* (Sinclair et al. 1987, 1995) will be referred to as the *COBUILD Dictionary*.



coding system to such combinations: The noun *hatred*, for instance, is typically followed by the preposition *of* and another noun phrase, so that it yields the pattern **N of n** (cf. Hunston/Francis 2000: 57). *Hatred* is here referred to as the key item of the pattern and thus represented as a capital letter in the labelling.

Patterns allow for linear text analysis. This means that we can identify all key items in a text and assign labels to them and to the sequences typically following them. Putting it simply, 'pattern flow' in this context, is defined as the overlap of such patterns (cf. Hunston/Francis 2000: 211-12). According to Hunston/Francis (ibid.: 215) pattern flow is one possible way in which patterns follow each other when being observed as a linear representation of text: they overlap. Basically, the present study aims at an answer to the question of what it is that overlaps.

Chapter 2 provides the linguistic framework as used in this study. As mentioned above, pattern flow is described within the framework of the *Pattern Grammar*, which is an outcome of corpus linguistic research. Thus, chapter 2 illustrates the development of some major linguistic concepts in the 20th century and discusses relevant paradigm shifts in linguistics. These paradigm shifts range from European Structuralism and the habit of classification and categorisation to British Contextualism and the interdependency of grammar and lexis to the advent of corpus linguistics and major changes in linguistic methodology and terminology caused by computer-aided analysis of authentic language data. The discussion focuses on two major points. Firstly, the 'Pattern Grammar' is based on the theoretical and methodological developments in corpus linguistics. Secondly, chapter 2 emphasises that language description has always been based on abstraction so that it can be claimed that the descriptive means of patterns equally rely on abstraction as Saussure's treatment of the linguistic sign. The only difference is hereby that different linguistic frameworks make use of different levels of linguistic description, i.e. abstraction.

Chapter 3 introduces the descriptive framework as it is used in the present study. The present study starts with the assumption that every linguistic theory, like the one of the 'Pattern Grammar', is based on a particular descriptive framework that reflects the theory. Patterns are represented by means of a specific coding system, i.e. by means of abstract labels that are assigned to language instances or to texts based on frequency of occurrence. That is, the labelling of patterns reflects the theory of the 'Pattern Grammar'. Pattern flow depends on the representation of patterns and patterns are a means of different levels of description as they can be interpreted as abstractions from instantiations. Thus, the discussion of abstractions and instantiations is a crucial

point in the present study. Chapter 3 concludes with the introduction of a model of lexico-grammatical pattern description used in the present study. The model is mainly based on the scales of rank and delicacy introduced by Halliday (1961) and supplemented by Kreyer (2014).

Chapter 4 deals with patterning in language. It starts off by contrasting hierarchical and linear descriptions of language and introduces some linguistic phenomena which are associated with linear language description. Furthermore, chapter 4 gives a detailed overview of patterns as they were identified during the compilation process of *Grammar Patterns I* and *II* and are dealt with and explained in the *Pattern Grammar*.

Chapter 5 explores pattern flow by presenting different approaches to patterns and their overlap. The chapter consists of a critical assessment of patterns in the 'Pattern Grammar', which is based on a discussion of the problematic nature of pattern elements in view of grammatical abstractions and their instantiations, i.e. of the labelling of patterns. Chapter 5 continues with the original definition of pattern flow and introduces five text samples that illustrate pattern flow and serve for different approaches to the overlap of patterns in text. The following critical assessment of pattern flow presents different perspectives towards the overlap of patterns making use of all possible levels of description that have been introduced and discussed before. The last part of chapter 5 presents pattern flow analyses which are based on the use of an online research tool and allow for an alternative representation of the five text samples, i.e. of the patterns and their overlaps in the texts. Chapter 5 aims at a qualitative instead of a quantitative analysis and at a re-interpretation of pattern flow. The whole chapter follows an explorative approach to pattern flow. As pattern flow is only a way of interpreting language and not a provable concept (cf. Hunston 2009; personal communication) as such this is considered the most suitable way of analysing or observing it. Chapter 6 summarises and concludes the present study.



2 Linguistic framework as used in this study

The *Pattern Grammar* (Hunston/Francis 2000) conveys an individual descriptive theory of the English language and the theoretical framework of *Grammar Patterns I and II* (1996, 1998). It is based on the theoretical, methodological and terminological outcomes of computer-aided, frequency-based, exhaustive language analysis. Pattern flow is a way of interpreting the English language that makes use of these outcomes and that generally supports the view that grammar and lexis are ultimately interdependent. Like any other descriptive approach to language, the theory called 'Pattern Grammar' relies on generalisation, i.e. on abstraction away from primary language data or instances in order to formulate a comprehensible theory about the nature of the English language.

Corpus linguistics has implemented new tools and has led to new insights and theories in terms of language description. Using Saussure's terms, corpus linguistics has made it possible to analyse huge amounts of 'parole', i.e. naturally occurring language data and hence to supplement descriptions of 'langue', i.e. the abstract language system, with concrete statements about *real* language in use. Referring to another of Saussure's famous dichotomies introduced in his *Cours de Linguistique Generale* (1916)², it can be claimed that corpus linguistic analysis often starts by observing regularities very close to the 'substance' of language³, i.e. concrete realisations, which then allow for statements about the 'form', i.e. the abstract language system and the rules that govern it.

The present study supports the view that some basic principles of modern linguistic description originate in European Structuralism and mainly in the work of Ferdinand de Saussure's *Cours de Linguistique Générale* (1916). His work shared some insights with tenets of American Structuralism during the 1930s and 40s, such as the distinction between (i) synchrony and diachrony, (ii) 'language system' and 'language behaviour' (Lyons 2002: 10), i.e. 'langue' and 'parole' in Saussure's terms, and (iii) of syntagmatic and paradigmatic relations.

² For increased reader-friendliness the present study will quote original text material from the first English translation of the *Cours de Linguistique Générale* into English (*Course in General Linguistics*) provided by Wade Baskin and published in 1960.

³ The 'substance' of language on the phonic level consists of sound waves going into our ears and graphic substance consists of graphic shapes that go into our eyes. Note that general linguistic description normally does not refer to such shapes but makes use of their abstraction by means of a metalanguage (cf. Esser 2011: 39ff.).



Saussure's description of the linguistic sign involves the distinction between (iv) signifier and signified and generally emphasises the abstract nature of linguistic description. It is similar to the treatment of the morpheme in later structuralist works. Furthermore, these works all share a general phonocentricity and the concept of 'double articulation' (cf. section 2.1.2). Their ideas can be contrasted with the theory of early Generativism in the 1950s which was mainly promoted by Noam Chomsky in his *Generative Grammar*. This contrast expresses a major paradigm shift in 20th-century language description.

The second, even more important, shift took place almost simultaneously with the development of the generative approach to language. Earlier structuralist methods of classification and categorisation of language were supplemented by exhaustive corpus analyses and frequential aspects of language data, e.g. the type/token relation (cf. section 2.2.2.2) as an adequate means of abstraction in corpus linguistics.

These paradigm shifts in linguistics naturally caused methodological improvement and simultaneously called for a constant refinement of linguistic theory and terminology. From a wider perspective, the forthcoming discussion will help to clarify the development and theoretical embedding of the 'Pattern Grammar' approach to English language description and develop the linguistic framework that is used in the present study. It is assumed that exploring pattern flow means to explore the descriptive measures and the degree(s) of abstraction that the theory of the 'Pattern Grammar' is based on. Consequently, this study will largely focus on a detailed account of the descriptive framework and the terminology used in the 'Pattern Grammar'.

The language model applied in this study is based on some traditional European structural and functional linguistic approaches as well as on works in British Contextualism. Regarding theoretical concepts and terminology of linguistic description it will notably refer to the works of Saussure, Lyons, Esser, Halliday, Firth and Sinclair.

2.1 Important linguistic concepts in the twentieth century

2.1.1 *The abstract language system*

In one of his four main dichotomies⁴ Saussure defined 'langue' as the object of linguistic study and synchronic grammatical description and distinguished it from 'parole', which he interpreted as the linguistically inconceivable "heterogeneous mass of speech facts" ([1916] 1960: 14). Saussure's definition of langue is still one of the most prominent and most explicit references to the fact that linguistic description relies on an abstract language system with its rules and regularities and a descriptive inventory, i.e. abstract units of description.

Similarly, though based on a different model of linguistic description, Chomsky claimed that linguistics should be concerned with internal facts of language. In his view, a grammar should capture the speaker's knowledge of language, as language "is a system represented in the mind/brain of a particular individual" (Chomsky 1988: 36). His so-called 'I-language approach' was based on the assumption that language represented an internal property of the human mind rather than being dependent on external facts or the speaker's production of sentences (cf. Cook/Newson 1996: 21). Chomsky's perspective designated a major paradigmatic shift in 20th-century linguistics: it 'moved' the abstract language system into the speaker's brain and therefore suggested an internal approach. In contrast, structuralism had referred to the language system as a social convention, which was why it was described as an external, or an 'E-language approach' (cf. Cook/Newson 1996: 21-23).

What shall be stressed here, however, is that even after this first shift of paradigm, linguistic analysis in general still started with the abstract language system. Chomsky introduced a similar terminology as Saussure. He distinguished between 'competence' and 'performance'. According to Chomsky, it was the linguist's task to model the linguistic 'competence' of the speaker which he defined as his general knowledge about language (cf. Chomsky 1965: 3-4; McEnery/Wilson 1996: 7). 'Performance' referred to actual language in use and was excluded from proper linguistic study. Besides the fact that Saussure's theory strongly differed from the one proposed by Chomsky, the similarity of the two pairs of terms ('langue'/'parole'; 'competence'/'performance') should be self

⁴ Besides the distinction between langue and parole, Saussure (cf. [1916] 1960) introduces three further main dichotomies treated in the *Course in General Linguistics*: synchrony/diachrony, syntagm/paradigm and signifier/signified.



evident. Both linguists defined the abstract language system as the proper object of language study and as the basis for individual language use. Nevertheless, neither of these theories clearly elaborated on the actual relation between the abstract system and individual language use, which is one of abstraction and instantiation. Saussure himself did not explicitly define *langue* as the abstraction of *parole*-instantiations, i.e. as the sum of generalised facts derived from individual speech acts. Especially because *parole* simultaneously touched upon physical, physiological and psychological aspects of language (cf. [1916] 1960: 9), it could not be captured in its unity and was excluded from pure linguistic analysis and description (cf. Heeschen 1972: 22-23).

Wells notices that “by definition, *langue* and *parole* stand in a chicken-and-egg relation to each other” (1947: 10) and refers to the following passage in the *Cours*:

[S]peaking is what causes language to evolve: impressions gathered from listening to others modify our linguistic habits. Language [*langue*] and speaking [*parole*] are then interdependent; the former is both the instrument and the product of the latter. ([1916] 1960: 19)

Consequently, from a modern perspective *langue* can be interpreted as a conventional abstraction from individual utterances (*parole*) that could not be immediately captured in their entirety before electronically supported language analysis. Since the advent of corpus linguistics the relation between *langue* and *parole* can be described as follows: language analysis starts by observing primary data, i.e. individual language use (*parole*/performance) which allows for a model of the abstract system (*langue*/competence). Consequently, corpus linguistic analysis has caused a second and even more significant paradigmatic shift: it allows for the exhaustive analysis of huge amounts of language data and frequency-based observations.

The abstraction-instantiation relation between *langue* and *parole* or competence and performance becomes more evident in the pair of terms introduced by Lyons who speaks of the ‘language system’ which is a generalised model of ‘language behaviour’ (Lyons 2002: 10). Referring to Saussure’s terminology as well, Tognini-Bonelli claims “that text is an instance of *parole* while the patterns shown up by corpus evidence yield insights into *langue*” (2001: 3). Leech (1992) summarises the basic change that exhaustive, frequency-based analysis has brought about. He notes a focus on linguistic performance rather than competence, a focus on linguistic description rather than linguistic universals

and idealisation, and a focus on a more empiricist rather than rationalist view of scientific enquiry (cf. Tognini-Bonelli 2001: 52).

The 'Pattern Grammar' tries to capture language behaviour by introducing a specific model, more specifically by presenting an inventory of frequently occurring patterns in English. The present study aims at testing the consistency of this model and its descriptive apparatus as well as the degree of adequacy in terms of the relation between the abstract system and the language instantiations it tries to capture.

2.1.2 Double articulation

European and American Structuralism as well as Prague School linguistics declared spoken language to be the object of language study while still maintaining Saussure's distinction between *langue* and *parole*. Although dedicated to the analysis of spoken rather than written language they never actually analysed spoken utterances, at least not in an exhaustive manner. Due to their general phonocentricity, structuralism and Prague School linguistics meant to focus on treatments of the phoneme and the distribution of its allophones but still dealt with an abstraction of spoken language all the same. The rationale for this particular focus on the phoneme, as a central unit of linguistic description, theoretically originated in the concept of 'double articulation' and implicitly in Saussure's definition of the linguistic sign.

According to Martinet's definition in his *Eléments de Linguistique Générale* (1960)⁵ 'double articulation' refers to the fact that human language can be divided into two different levels of articulation. The first level of articulation contains units that Saussure called linguistic signs: "a significatum [signified], its meaning or value, [...] and a significans [signifier] through which the sign is made manifest" (Martinet [1960] 1964: 24). More particularly, Martinet describes these units as "minimal signs, since none of them can be further analysed into a succession of signs" (ibid.: 24-25). They are now usually referred to as 'morphemes' while in Saussure's days the term 'morpheme' captured only "the 'formative' elements of a word (affixes, endings, etc.) as opposed to the root" (Wells 1947: 5), i.e. bound morphemes as opposed to free morphemes (cf. Bußmann 2006: 313).

⁵ The present study will quote the English translation *Elements of General Linguistics*, provided by Elisabeth Palmer in 1964.



The units of the second level of articulation comprise the phonic manifestation of language, i.e. the sounds. They represent the signifier as one of the two facets of the linguistic sign and are commonly referred to as phonemes, which are abstractions of phonic substance. Note that ‘first’ and ‘second’ level of articulation do not indicate succession in time. For Martinet, ‘premier’ and ‘deuxième articulation’ only meant that the segmentation and classification of language was of two different kinds and was referred to by different descriptive entities. In this sense, it was suggested that the morpheme as the smallest unit of linguistic description that *carried* meaning could only be accounted for by referring to those units that *distinguished* meaning by standing in opposition. Hockett (1960) used a different term to account for the same property of human language. He defined ‘duality of patterning’ like the following:

The meaningful elements in any language – “words” in everyday parlance, “morphemes” to the linguist – constitute an enormous stock. Yet they are represented by small arrangements of a relatively small stock of distinguishable sounds which are in themselves wholly meaningless. (Hockett 1960: 6)

Lyons in *Language and Linguistics* (2002: 20) elaborates on the same issue. He uses the term ‘duality’ instead of double articulation:

By duality is meant the property of having two levels of structure, such that units of the primary level are composed of elements of the secondary level and each of the two levels has its own principles of organization.

The definitions of double articulation given by both, Hockett and Lyons, stress a major theoretical issue of the present study: Elements of one level of linguistic description can be described by referring to elements on another level of description. The relation between such levels of description is one of hierarchy. Trnka (1964: 37) describes language as “a complicated multilevel system of at least four hierarchically arranged planes (or levels)”: i) ‘phonology’, ii) ‘morphology’, iii) ‘syntax’ and iv) ‘textlinguistics’/‘pragmatics’. His perspective towards language description is similar to Halliday’s concept of ‘rank’, which will be addressed in section 2.1.4. The discussion of double articulation emphasises another point to be raised, namely that current linguistics distinguishes decontextualized from contextualised descriptive entities (cf. e.g. Esser 2011: 39). The general distinction between decontextualised and contextualised entities of description goes back to the ones between ‘langue’ and ‘parole’ (cf. Saussure 1916) or ‘language system’ and ‘language behaviour’ (cf. Lyons 2002). ‘Decontextualised’ elements are, by their name, independent

of context, i.e. abstractions of a higher degree or level of description. 'Contextualised elements', also referred to as 'allo-units', are contextualised representations or variants in context of an abstract element of linguistic description (i.e. phoneme – allophones; morpheme – allomorphs, etc.). They exist on all possible levels of linguistic description, i.e. from phoneme to sentence⁶ (syntactic) level. Contextualised descriptive entities are part of 'syntagmatic' chains on their own level and carry characteristics of the next higher level at the same time (cf. Trnka 1964: 39).

2.1.3 Medium-transferability

The general phonocentricity of structuralism (cf. e.g. Harris 2001: 64) and Prague School linguistics was superseded mainly within British Contextualism. By promoting the term of 'medium-transferability', Lyons ([1981] 2002: 11) further increased the awareness that language description should include the spoken as well as the written medium. He explains it as follows:

It is one of the cardinal principles of modern linguistics that spoken language is more basic than written language. This does not mean, however, that language is to be identified with speech. A distinction must be drawn between language-signals and the medium in which the signals are realized. Thus it is possible to read aloud what is written and, conversely, to write down what is spoken. [...] In so far as language is independent [...] of the medium in which language-signals are realized, we will say that language has the property of medium-transferability.

Based on the concept of 'medium-transferability', Esser (2000) introduced an advanced model of Saussure's linguistic sign supplementing it by a written component. Esser stresses the existence of a medium-independent level of linguistic description. Esser's model also reflects important terminological issues to be solved when it comes to corpus linguistic methodology. This will be discussed in more detail in section 3.1 when defining the main terminology that is used for pattern analysis.

In sum, the traditional structuralist perspective was changed by recognising that linguistic form is realised by both spoken and written substance. This means that medium-independent abstract entities of description are generalisations of

⁶ American Structuralism especially focussed on allo-units, i.e. variants, of phonemes and morphemes. Daneš (1964) within the context of Prague School linguistics transferred the notion of allo-units to the level of the sentence, referring to allo-sentences as contextualised variants of an abstract syntactic pattern (cf. Esser 1984: 93).



medium-dependent instantiations of both media. The abstract language system has its manifestations in speech as well as in writing.

Corpus linguistics is aware of the distinction between the spoken and the written medium. This is because the corpus observation reveals different aspects of language, according to whether the analysed language data has its origin in speech or in writing. See for example Kennedy 1998 for the results of comparative studies of spoken and written data in terms of lexical and grammatical features of language. Compared to the old phonocentric perspective, corpus linguistics has a different focus on spoken language: The possibility to analyse huge amounts of authentic language data has raised interest in studying spontaneously produced language. As the use of spoken language is by far the commonest, specialised corpora of spoken language are believed to reveal major insights into the essential nature of language and language use. At the same time the compilation of spoken corpora is much more difficult and time-consuming, which is why most corpus-based studies have referred to collections of written data so far (cf. Kennedy 1998: 20).

The 'Pattern Grammar' and especially pattern flow offer a specific theoretical concept of patterning in language. The patterns that are listed in the two reference works *Grammar Patterns I* and *II* derive from frequency analyses of The Bank of English corpus, which contains written as well as spoken language. As the present study aims at a theoretical approach to the description of patterns as a means of abstracting from data, it will not differentiate between spoken and written data origin.

It should be stressed at this point that speech and writing rely on different systems of signs but are part of the same language system (cf. Harris 2001: 52 and Esser 2006: 28). Ultimately, this means that although the two media might reveal different ways of language patterning, there must be a single way of generalisation, i.e. a single comprehensive way of abstraction that accounts for such patterning. Thus, the analysis of patterns and their possible overlaps will take place at (a) medium-independent, i.e. abstract level(s) of linguistic description.

2.1.4 Rank and delicacy

Descriptive linguistics, on a most basic level, aims at translating real language instances into linguistic symbols. This process is based on the abstraction from primary language data, which means disregarding irrelevant features and classifying according to similar features (cf. Kreyer 2014). This provides for a linguistic vocabulary that is used to formulate generalisations about language

and to refer to linguistic entities on different ranks or levels of description. Halliday (1961) formulates this by distinguishing between ‘substance’ and ‘form’ of language. While substance refers to the “material of language”, form denotes “the organization of the substance into meaningful events” (Halliday [1961] 2002: 39). Consequently grammar, i.e. linguistic description, accounts for the form of language and is based on the abstract words and structures of language that express a process of abstraction from substance. Patterns, as proposed within the framework of the ‘Pattern Grammar’, are one way of abstracting from substance or of classifying according to similar features.

Drawing on Halliday’s concepts, Kreyer describes the language system as a “multi-tiered system, with each tier consisting of a set of elements or units [...] that combine [...] to form units of the next higher level” (2014: 74). Among the basic categories that Halliday ([1961] 2002: 42-45) proposes for a theory of grammar, the category of ‘unit’ will most be of interest here. The category of ‘unit’ contains five different subcategories, namely ‘sentence’, ‘clause’, ‘group’ (or ‘phrase’), ‘word’ and ‘morpheme’ (cf. Kreyer 2014: 75). These subcategories are associated with different ranks on a scale of abstraction.

The sentence, also called ‘clause complex’, takes the highest and therefore the most abstract rank of description, or ‘constituency’. A language consists of an infinite number of clause complexes (sentences) combining to form texts, which cannot be captured by generalisation⁷. Thus, the first level of exhaustive linguistic description of clause complexes is therefore the next lower level, i.e. the clause level. Clause complexes, highest on the scale of abstraction, are describable in terms of a finite set of (classes of) clauses or clause patterns as for example described by Quirk et al. (1985). The components of clause patterns, i.e. subject, predicate, object, adjunct and complement can be described in more detail by referring to the next lower level of description, namely the phrase level. Consequently, specific classes of phrases instantiate or realise clauses. Phrases are abstractions of words or combinations thereof and words can be described by the least abstract level of the rank scale, namely by classes of morphemes (cf. Halliday [1961] 2002: 44-45). In sum, the scale of rank consists of grammatical categories located on different levels of linguistic description. The relation from one rank to the next is one of instantiation or realisation from the clause complex down to the morpheme and

⁷ Although research into English textlinguistics and stylistics suggest, for example, so-called ‘superordinate’ or ‘rhetoric structures’ (cf. e.g. Esser, 1993 and 2009) for the description of texts, these models do not provide for generalisations on the descriptive level of clause complexes.

one of abstraction or generalisation from the morpheme up to the clause complex. Figure 2.1 below illustrates the above-described scale of rank.

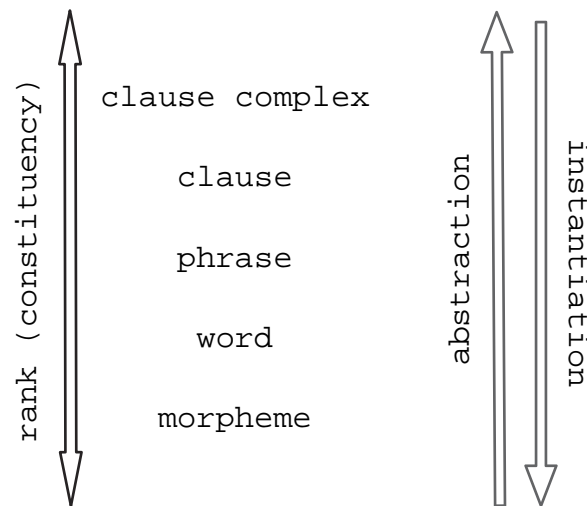


Figure 2.1: Scale of rank (constituency)

Besides the scale of rank, Halliday introduces another scale of abstraction, namely of ‘delicacy’, which is “the scale of differentiation, or depth in detail” ([1961] 2002: 48). Kreyer (2014: 81) describes delicacy as “being related to the willingness to regard instantiations or classes of units at a particular rank as identical or not”. In other words, a low level of delicacy would imply that a number of features of individual units are regarded as irrelevant and that the individual units are thus grouped together in one large set of units. For example, if we choose a low level of delicacy on the rank of the phrase, we group together a large set of units, say all phrases of the kind ‘premod. + Head’, and disregard further distinguishing features. This means we regard it as irrelevant to consider different structures of the premodification in terms of the premodifying items that occur, e.g. ‘Det. + Head’ or ‘Det. + Adj. + Head’, etc. (cf. Kreyer 2014: 82). An increased level of delicacy, on the other hand, leads to the clustering of units into a larger number of smaller classes because a larger number of different features is regarded as relevant (cf. Kreyer 2014: 81-82). For example, on the rank of the word, the most delicate description would refer to individual word forms (e.g. *tree*, *trees*, *tree’s*, *trees’*).

Kreyer further mentions that “rank and delicacy can [...] be interpreted as two interacting scales of abstraction, one in a vertical, the other in a horizontal dimension” (ibid.: 83). The five units in the scale of rank can be described with an increasing depth in detail in a horizontal dimension. As will be discussed

within the course of this study, patterns mainly employ the ranks of clause, phrase and word. Consequently, the clause complex as the most abstract level of constituency as well as the morpheme, as the least abstract level from a vertical perspective will generally be disregarded in terms of delicacy in this study. Figure 2.2 below illustrates the three most important ranks in association with both scales of abstraction proposed by Halliday. The figure is based on a more detailed version provided by Kreyer (2014: 84).

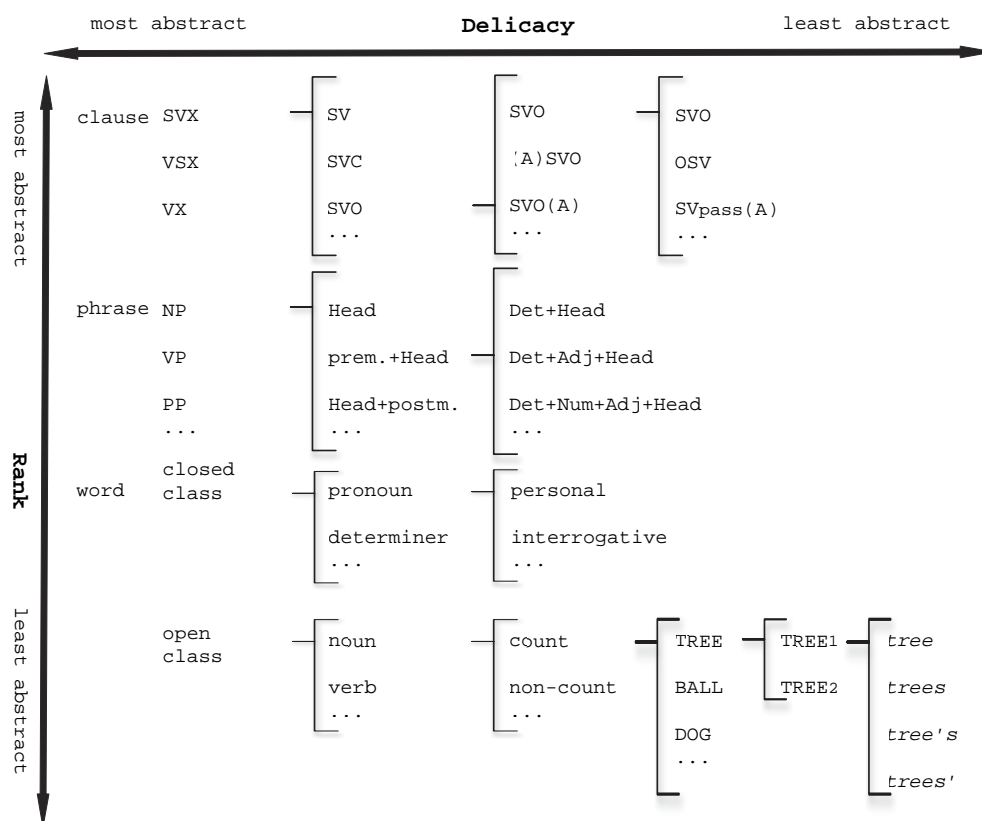


Figure 2.2: Rank and delicacy

Note that the lexeme TREE on the word rank in Figure 2.2 is split into the two lexical units TREE₁ and TREE₂ on a more delicate level of description. This means that one of the lexical units refers to the plant and the other to the geometrical object. Both, TREE₁ and TREE₂, can be abstracted to the lexeme TREE and they share the inflectional variants *tree*, *trees*, *tree's* and *trees'* on the least abstract level of word forms. Section 3.2 will deal with word forms, lexemes and lexical units in more detail.

Basically any utterance can be described in terms of the two scales of abstraction. Note that the scale of rank consists of decontextualized descriptive entities, i.e. abstractions on different levels, while the scale of delicacy (from left to right) shows an increase of contextualisation, i.e. contextualised entities (cf.



Kreyer 2014: 83). The following discussion shows how example (1) can be described in association with different levels of the vertical rank scale as well as the horizontal scale of delicacy. Table 2.3 additionally gives a summary of the description of example (1) according to the different scales of rank and delicacy, which the explanation will refer to in brackets.

(1) I wrote him a letter.

Table 2.3: Description of example (1) according to different scales of rank (R1-R3) and delicacy (D1-D5)

Example (1)	<i>I</i>	<i>wrote</i>	<i>him</i>	<i>a</i>	<i>letter</i>	
R1:	clause					
	D1:	S	V	X		
	D2:	S	V	O	O	
R2:	phrase					
	D1:	NP	VP	NP	NP	
	D2:	Head	Head	Head	Det. + Head	
R3:	word					
	D1:	closed class item	open class item	closed class item	closed class item	open class item
	D2:	pronoun	verb	pronoun	article	noun
	D3:	pers. pronoun	ditrans. verb	pers. pronoun	indef. article	count noun
	D4:	I	WRITE	HE	A	LETTER
	D5:	<i>I</i>	<i>wrote</i>	<i>him</i>	<i>a</i>	<i>letter</i>

At the most abstract level of both scales example (1) can be described as a clause with the pattern SVX (R1/D1). Every clause of the English language at least consists of a verbal element and often of an explicit subject as well. Depending on the type of verb, object(s), complements or adjuncts can follow the verbal element. In Figure 2.2, possible object(s), complements or adjuncts are indicated by means of the X following the subject and the verbal element. Remaining at the clause rank, the next less abstract level on the delicacy scale describes the instantiation or realisation of X. In the case of example (1), X is instantiated by two objects (*him, a letter*) resulting in the clause pattern SVOO (R1/D2). At this point, there is no use in choosing a higher level of delicacy on the clause rank (metaphorically moving further to the right in Figure 2.2).