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Verb-Second Intricacies: An Investigation into Verb Positions in English

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УНИВЕРЗИТЕТ У ПРИШТИНИ
ФИЛОЗОФСКИ ФАКУЛТЕТ

Ненад Пејић

Проблематика глагола као другог конституента: испитивање позиције глагола у енглеском језику

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ABSTRACT

The dissertation examines the verb-second phenomenon in English. The syntactic phenomenon in question has been investigated in two dimensions: synchronically, whereby the data from Modern English are inspected in the context of other Germanic languages, and diachronically, where the data from Modern English are examined in the contexts of Old and Middle English. It is argued that the verb-second phenomenon in Modern English is not residual in the sense that it represents a vestigial word-order that succeeded a verb-second syntax which corresponded better to other Germanic verb-second languages. Instead, following Kiparsky (1995), this syntactic phenomenon should be viewed as the historical core of Germanic verb-second phenomenon, best preserved in English, while other Germanic languages developed various innovations. In addition, an argument is presented that only less significant types of verb-second disappeared in the history of the English language, whereas the essential verb-second properties remain and still exist in the language, although with significantly lower frequency. Other relevant properties of the verb-second phenomenon are also examined in this dissertation, such as the question of the verb-second triggers in English, and in relation to that, the structures which tend to block the verb-second effect in this language; then, the question of underlying syntactic operations that stand behind the verb-second word order, namely movement of the finite verb to the INFL-position, and to the COMP-position; finally, the problems related to possible parametric properties of verb-second and to the nature of the main clause/embedded clause asymmetry. Linguistic contacts are considered the main factor that contributed to the sharp decline of the verb-second phenomenon in Modern English after the seventeenth century, and it is suggested that linguistic contact may be the factor that has significantly influenced the historical emergence of the verb-second phenomenon throughout the Germanic branch of the Indo-European family.

РЕЗИМЕ

Дисертација се бави проблематиком глагола као другог конституента у енглеском језику. Ова синтаксичка појава ретко се јавља у језицима широм света, а у оквиру индоевропске језичке породице, уз неколико изузетака, она је заступљена искључиво у језицима германске гране. Наиме, у готово свим германским језицима структура реченице је таква да глагол у личном облику, како год да се конституенти размештају, по правилу остаје на месту другог конституента у свим типовима независних реченица, а у појединим језицима, као што је исландски, оваква синтаксичка структура је обавезна и у зависним реченицама. Упадљиви изузетак међу германским језицима у овом погледу јесте енглески језик, у коме глагол обавезно заузима позицију другог конституента само у одређеним, прецизно дефинисаним конструкцијама, као што су неки типови упитних реченица и поједини типови узвичних реченица. У већини случајева, међутим, могуће су варијације у позицији глагола, тако да овај реченични елемент може, али не мора обавезно, да се нађе у позицији другог конституента. У енглеском језику је, у значајном броју конструкција са глаголом у оваквој позицији, у питању пре стилистичка него граматичка појава, јер се одабиром варијанте у којој је глагол у позицији другог конституента говорник руководи прагматичким, а не синтаксичким разлозима. То је навело поједине ауторе да овај тип реченичне структуре сматрају *резидуалним*, то јест реликтом једног старијег синтаксичког стања. Међутим, истраживање је показало да је овај тип редоследа конституената остао суштински непромењен у дијахронијској перспективи и да су само неки мање значајни типови ових конструкција нестали из језика. Сама природа овог синтаксичког феномена у енглеском језику, и његова специфичност у односу на друге германске језике тумачи се, не као резидуална појава, него као првобитно стање германске синтаксе које се највернији очувало управо у енглеском, док су у свим осталим германским језицима присутне касније настале иновације. Међутим, фреквентност конструкција са глаголом у позицији другог конституента у енглеском језику је значајно опала после седамнаестог века из разлога који су везани за проблематику усвајања матерњег језика, као и услед контакта са страним језицима. Ипак, сви разлози за ову синтаксичку промену нису сасвим јасни, тако да она остаје недовољно објашњена, што указује на потребу даљих истраживања у овој области.

CHAPTER 1

INTRODUCTION

1.1. The Problem

As any student of German, or any other Germanic language, knows very well, the finite verb in all main clauses, whether declarative, interrogative or imperative, always tends to occupy the position of the second constituent. In some languages, such as Icelandic, this also happens in most embedded clauses as well. No matter how the constituents are arranged, and what comes in the clause-initial position, the Germanic verb is always, by some strange grammatical force, drawn into the second position. Such arrangement of constituents within the clause structure is quite rare among the languages of the world, and within the Indo-European family of languages, with some rare exceptions, it is only found among the Germanic languages. This notable property of Germanic syntax has, therefore, been a frequent topic of numerous studies in the last decades, especially among the Scandinavian linguists, who are mostly focused on the significant syntactic differences in the way the verb-second effect is manifested in the Mainland Scandinavian languages on one hand, and Icelandic, and to some extent, Faroese, on the other.

But there is, within the Germanic group, one language which shows an even more striking syntactic difference in respect to the verb-second phenomenon, only in this case the difference is not related to the way the verb-second effect is manifested there, as much as it is related to the lack of its presence in the majority

of sentences. Unlike all other Germanic languages, which are classified as verb-second languages, English tends to favor the verb-third word order, i.e. the finite verbs in this language routinely take the position of the third constituent in most declarative contexts, which effectively makes English a verb-third language.

However, enough cases of the verb-second word order still exist in English to attest its genetic relation to other languages of the Germanic branch, thus only making more puzzling this syntactic discrepancy of English. The majority of authors who dealt with this syntactic issue accept the interpretation proposed by Rizzi (1990) according to which the verb-second phenomenon that is registered in English, and which is so different than the same phenomenon in other Germanic languages, represents the historical vestige of an earlier syntactic system which corresponded better to Germanic syntax. In addition, some recent research of Old English (e.g. van Kemenade 1987, Pintzuk 1991, Kroch and Taylor 1997, etc) showed that Old English indeed was a verb-second language.

This claim shall be examined in this dissertation, and an argument shall be presented that the verb-second structures which exist in Modern English cannot be considered residual in this sense; instead, they should, following Kiparsky (1995), be considered a core phenomenon. An argument shall also be presented against the generally accepted assumption that the verb-second phenomenon is something that was lost in the history of English. Although some verb-second properties did disappear from the language, the essential ones remained, and even some additional verb-second structures appeared that did not exist in Old English. In addition, other relevant properties of the verb-second phenomenon shall be examined, such as the question of the verb-second triggers in English, and in relation to that, the structures which tend to block the verb-second effect in this language; also, the underlying syntactic operation that stands behind the verb-second word order shall be investigated, in order to determine the exact landing site of verb movement in English; finally, the problems connected to possible parametric properties on one hand, and to the nature of the main clause/embedded clause asymmetry in respect to the verb-second phenomenon shall be addressed as well. The problem shall be investigated in two dimensions: synchronically, where the data from Modern English will be examined in relation to the data from other modern Germanic languages, and diachronically, where the data from Modern English shall be

examined in relation to Old English and Middle English. This complex approach should reveal, or at least throw some additional light, on the true nature of the verb-second phenomenon in the English language.

This research shall be performed within the generative grammar linguistic model in general and the Principles and Parameters framework in particular.

1.2. Generative Grammar

Several fundamental approaches towards constructing grammatical frameworks for natural languages have been developed in the modern theoretical linguistics of the last century, the most notable of which are: *Dependency Grammar*, developed in the first half of the last century by Lucien Tesnière; *Cognitive Grammar*, developed in the nineteen-seventies by Ronald Langacker; *Stochastic Grammar*, based on statistical processing of natural languages by using stochastic, probabilistic and statistical methods, developed from the nineteen-eighties on, simultaneously with the development of artificial intelligence; and *Functional Grammar*, developed by Simon C. Dik in the nineteen-seventies, and later revised and expanded by Kees Hengeveld and Lachlan Mackenzie and consequently renamed to *Functional Discourse Grammar*. However, Generative Grammar, which appeared in the late nineteen-fifties in the works of the MIT professor Noam Chomsky, turned out to be by far the most influential grammatical theory of the second half of the twentieth century, and it retains its relevance into the twenty-first century.

The idea for this grammatical theory was first developed in *The Logical Structure of Linguistic Theory*, a gigantic work of over one thousand typewritten pages written by Chomsky in the early fifties. During his year as a junior fellow at Harvard, Chomsky worked on developing a linguistic theory which would break with the taxonomic structuralist tradition developed by Leonard Bloomfield, which was the dominant linguistic theory of the age. He based his new theory on mathematical formalism, and insisted on a non-taxonomic approach. When, in 1955, Chomsky moved to the Massachusetts Institute of Technology, namely to their Research Laboratory of Electronics as the in-house linguist in Victor Yngve's mechanical translation project, he submitted only the ninth chapter of *The Logical*

Structure of Linguistic Theory as his doctoral dissertation under the title *Transformational Analysis*. The entire text of his *Logical Structure* was finally published only in 1975, almost two decades after it had been written, when the ideas that first appeared there already became widely accepted. Therefore, it was not this work, but *Syntactic Structures*, the first book Chomsky ever published, and in which he distilled the concepts he had earlier presented in *The Logical Structure of Linguistic Theory*, that created a revolution in linguistic theory and marked a decisive break with structuralist approach in a way not completely unlike the break Structuralism itself made with comparative linguistics when de Saussure's *Cours de linguistique générale* appeared in 1916.

What makes Chomsky's monograph a watershed moment in the annals of modern linguistics is its conception of a grammar as a theory of a language, subject to the same constraints on construction and evaluation as any theory in the natural sciences. Before its publication, it was generally accepted, not only in linguistics, but in all the humanities and social sciences, that a formal, yet non-empiricist, theory of a human attribute was impossible. Chomsky showed the opposite, thus presenting a completely new theory of the nature of grammar. In addition, he demonstrated the practical possibility of a non-empiricist theory of linguistic structure, devoting half of the volume to the presentation of and defense of a formal fragment of English grammar. The conception of a grammar as a theory of a language led Chomsky to the major insight of earlier theorizing about language — to de Saussure's famous distinction between *langue* and *parole*, which would be modified in Chomsky's theory as the distinction between linguistic competence and linguistic performance. Chomsky retained some other crucial conceptions of structuralism as well, most of all the very essence of structuralism, that is de Saussure's great insight that a structured interrelationship of elements which are characterizable as an autonomous system is what lies at the heart of language.

The true novelty of Chomsky's theory, on the other hand, is reflected in the fact that his conception placed syntactic relations at the centre of *langue*, thus focusing the theory of language on syntax, which, in turn, enabled Chomsky to lay the groundwork for an explanation of language creativity, which is the most distinctive aspect of human language. It is this fact – that syntax is put in the center of linguistic research – that makes the linguistic theory proposed by Chomsky

different from any other theory of language in the history of linguistics. Before *Syntactic Structures*, phonological and morphological systems were the focal point of the study of language, and all other aspects of language were studied on the side. However, both phonology and morphology present systems that are essentially closed and finite, so whatever their complexity be, their study can never lead to understanding the true nature of the phenomenon of human language. Only the study of syntax could possibly lead to an understanding of a speaker's capacity for linguistic novelty or to an explanation of the infinitude of language. And indeed, Chomsky's approach enabled researchers to view linguistic creativity as both limitless, and yet as rule-governed, simply because it perceived grammar as a set of instructions for generating the sentences of a language.

Ever since its appearance, Generative grammar has been under constant development and revision by Chomsky himself and by a number of other linguists, which eventually resulted in creating several distinct generative frameworks. The earliest version of the theory was often referred to as *transformational-generative grammar*, although transformational rules were never central to Chomskyan theory. In fact, Chomsky (1957: 6) himself has always credited Zellig Harris for having originated them. Transformational rules are simply one of any number of possible devices available to syntactic theory for the expression of formal generalizations. Chomsky's approach to the study of language goes far beyond specific rules, since it abandons a procedure based on induction in favor of adopting one based on generality, thus breaking with past practice of theoretical linguistics at its most fundamental point. Therefore, the generative approach to the study of language ceases to view grammar as an operationally derived synthesis of a corpus in favor of perceiving it as a theory of a language.

This evolution of the Chomskyan theory can be divided into several stages of its development that differ in the types of rules and representations that are used to predict grammaticality. These stages are commonly referred to as the *Standard Theory*, the *Extended Standard Theory*, the *Revised Extended Standard Theory*, the *Government and binding* or the *Principles and parameters theory*, and the *Minimalist Program*.

The Standard Theory corresponds to the original model of generative grammar that started with *Syntactic Structures*, and its core aspect is a distinction

between two different levels of representation of sentence structure — deep structure and surface structure. The deep structure represents the core semantic relations of a sentence, whereas the surface structure represents the phonological form of the sentence. The meaning of the deep structure and the sounds of the surface structure are connected to each other by transformational grammatical rules. According to Chomsky, different languages are very similar when the deep structure is concerned, since this level of representation contains properties common to all human languages, which appear as different languages because their surface structures do not correspond to each other and thus hide this utmost similarity. Linguistic performance was considered insignificant for the theory of language, i.e. for grammar, since, according to Chomsky, only competence refers to the actual linguistic knowledge which allows the speaker to construct and understand grammatical sentences. Therefore, the linguistic theory can be built by studying only an idealized version of language based on competence only, where the intuition of a native speaker is enough to define the grammaticalness of a sentence. Needless to say, this approach greatly simplified linguistic analysis.

The theories of grammar of different languages are evaluated as having *descriptive adequacy* versus *explanatory adequacy*. The former property describes the language in its entirety, i.e. it defines the infinite set of grammatical sentences in that language. The latter property is additional and it has been achieved only if the theory of grammar of a particular language gives an insight into the underlying linguistic structures in the human mind. In Chomskyan theory, explanatory adequacy for a grammar is the ultimate goal, since such grammar would make predictions about how linguistic knowledge is mentally represented, thus revealing the universal pattern of human language which is largely innate – the pattern which is usually referred to as Universal Grammar. This means that descriptive adequacy cannot be achieved if the explanatory adequacy has not been achieved first, since, according to Chomsky, real insight into the structure of individual languages can only be gained through comparative study of a wide range of languages.

This standard theory was extended and revised during the nineteen-sixties and the nineteen-seventies in the works of Chomsky and his followers who further developed the basic concepts, but also introduced some new ones. For example, two new levels of representation were introduced: *Logical Form* and *Phonetic Form*,

and the old concepts of deep and surface structure were abandoned. Also, generalized phrase structure is now expressed by a new component of the theory – the so-called X-bar theory, first proposed by Chomsky (1970) and further developed by Jackendoff (1977), in which the letter X is used to signify an arbitrary lexical category. When a specific utterance is analyzed within this theory, specific categories are assigned to X, so it may become N for a noun, V for a verb, A for an adjective, or P for a preposition. The latest revision, developed in the last decade of the twentieth century, is known as the *Minimalist Program* and it is based on the assumption that the language ability in humans shows signs of being incorporated under an optimal design with exquisite organization. Minimalism attempts to develop the two principles known as *economy of derivation* and *economy of representation*. According to economy of derivation, movements only occur in order to match *interpretable features* with *uninterpretable features*, whereas economy of representation states that grammatical structures must exist for a purpose, i.e. the structure of a sentence should be no larger or more complex than required to satisfy constraints on grammaticality. The distinction of Deep Structure vs. Surface Structure is not present in Minimalist theories of syntax, and the most recent phrase-based theories also eliminate Logical Form and Phonetic Form as unitary levels of representation.

The generative framework used in this dissertation, however, is the Principles and Parameters, developed within the Government and Binding theory. This theory is a radical revision of earlier theories of Chomsky, and its name refers to two central sub-theories of the theory, namely *government*, which is an abstract syntactic relation, and *binding*, which deals with the referents of pronouns, anaphors, and R-expressions. Government and Binding is the first Chomskyan theory of language which is based on the *principles and parameters* model of language. Although principle and parameters framework has been further revised by the Minimalist program, it is still considered the dominant form of mainstream generative linguistics.

The principles and parameters framework has been built around the central idea that a person's syntactic knowledge can be modeled with two formal mechanisms, the first being a finite set of fundamental *principles* that are common to all languages, and the second being a finite set of *parameters* that determine

syntactic variability amongst languages. The fact that every sentence must always have a subject, even if this constituent is not always overtly pronounced can be used as an example of a fundamental linguistic principle, whereas the rule which determines whether the subject of a sentence must be overtly pronounced illustrates a linguistic parameter, in this case the so-called *Pro-drop parameter* that regulates the use of null subjects in a language which allows this. The research goal within this framework would therefore be to identify all of the principles and parameters that are universal to human language, i.e. to determine the crucial set of principles and parameters which constitute Universal Grammar.

The theory of Universal Grammar has two important aspects: first, it is a theory of grammar across all natural languages, and second, it is a theory of innate linguistic knowledge, in the sense that the ability to acquire linguistic skills is a distinct human characteristic that is passed on genetically. Both aspects are inter-dependant, because, as Vikner (1995) states, "The amazing speed and ease with which children acquire their mother tongue is only really amazing when the immense number of different possible mother tongues is kept in mind" (Vikner 1995: 9). Since it needs to reconcile these two aspects, Universal Grammar must be highly comprehensive in order to provide explanation for all sorts of grammatical properties found in the languages of the world. At the same time, it also has to be relatively restrained in order to allow the new language learner to construct the grammar of his/her native language based on rather limited and imperfect linguistic evidence. In this way, one part of the grammar of a native speaker is derived from innate knowledge, and another part is derived from the language spoken in the immediate environment of the language learner during the process of the first language acquisition.

It is, therefore, assumed within this particular generative framework that Universal Grammar is based on a limited set of basic principles, which also puts a limit on the number of possible grammars. However, the number of parameters is not fixed in the initial pre-linguistic state — they only become fixed through the linguistic experience of the new language learner in the process of the first language acquisition. It is due to this fact that considerable variations appear between grammars constructed in this way. Moreover, since each individual has to reconstruct the grammar of his/her native language on their own, generation after

generation, nothing in this set of parameters can remained fixed forever from the point of view of the language as a whole. This is the source of perhaps the most fundamental quality of human language – its changeability in the course of time.

Viewed in this light, the principles would be the innate part of linguistic knowledge, and, as such, essentially the same for the entire human race, while the parameters are the part of language which is constructed in the process of language acquisition, and they are what makes languages of the world so diverse. Neither principles nor parameters need to be learned by exposure to language, which merely triggers the parameters to adopt the correct setting. This means that a parameter determines a set of properties related in such a way that choosing one particular parametric setting entails determining a number of surface properties of the language. In this way, a number of surface properties can be derived from a smaller number of underlying properties, so the differences between languages can also be surface and underlying. It is the goal of linguists to account for as many surface differences by postulating as few underlying differences as possible, thus uniting several surface linguistic phenomena under just one generalization.

In order to explain any particular phenomenon in a language which is the object of research, a linguist must determine the parameters which lie behind the phenomenon in question, and the most efficient way to do that is to cross-examine the data from the target language with the evidence available in other languages. Such approach is, therefore, accepted in this dissertation in an attempt to explain the verb-second phenomenon in the English language. In the next section, the basic relevant facts about Germanic languages shall be briefly presented.

1.3. Germanic Languages

The Germanic languages form a markedly distinct group within Indo-European linguistic family. They share some unique features that are not found in other Indo-European languages, and which are considered to be Germanic innovations in lexis, in phonology or in grammar.

The most notable lexical characteristic common to all Germanic languages is the existence of uniquely Germanic cognate words, i.e. words with etymologies

that are difficult to link to other Indo-European languages. These words are among the most common and frequent ones to date, for example, English words like: *broad, drink, drive, fowl, hold, meat, rain, sea, wife*, etc.

The most important of these common Germanic linguistic features in the field of phonology are the consonant shift known *Grimm's Law*, and the secondary phonetic change known as *Verner's Law*, which left a trace of Indo-European accent variations in voicing variations in fricatives; one prosodic change, the fixed stress accent which shifted onto the root syllable in all word classes, had a great impact on the future development of Germanic morphology, since it left inflectional endings in the position maximally removed from the accented syllable, thus encouraging their loss from the language. Consequently, at least half of the Proto-Indo-European noun cases, for example, which are still preserved in morphologically more conservative languages such as Sanskrit, Lithuanian, or the Slavic languages, are missing from Germanic languages.

But there are also other common Germanic characteristics in the domain of morphology, the most important being the innovations in the verbal and the adjectival systems. As far as the inflection of verbs is concerned, Germanic languages leveled the Indo-European verbal system of tense and aspect into the present tense and the preterit, but they also developed two distinct classes of verbs in respect to the way they form the preterit; these are the strong or vocalic verbs, which form the preterit by the means of ablaut, and the weak or consonantal verbs, whose preterit is formed by the means of a dental suffix [d] or [t], which is added to the present stem of the verb. In addition, the Germanic verb has also been extensively remodeled, showing fewer grammatical moods, and markedly fewer inflections for the passive voice. Germanic adjectives, unlike the verbs, were not divided into strong and weak, but they developed two distinct declensions, i.e. two different sets of adjectival inflectional endings depending on the definiteness of the noun phrase in whose structure the adjectives functioned as modifiers.

And in the field of syntax, the most prominent common Germanic characteristic is most certainly the verb-second phenomenon, a syntactic feature which is quite uncommon cross-linguistically, and which is definitely not inherited from Proto-Indo-European. This syntactic feature is the topic of this dissertation, and it will be discussed in detail later, especially in Chapter 4.

In fact, the verb-second phenomenon and the substantial corpus of Germanic cognates unknown in other Indo-European languages are the two distinct Germanic characteristics whose origin seems to be hardest to explain sufficiently. Feist (1932) was among the first who tried to give some account for the distinctive nature of the Germanic languages within the context of the Indo-European language family by proposing the so-called Germanic substrate hypothesis. Feist estimates that roughly a third of Proto-Germanic lexical items came from a non-Indo-European substrate. According to Feist, the elements of the common Germanic vocabulary and syntactic forms that do not seem to have an Indo-European origin show Proto-Germanic to be a creole language that appeared in result to a contact language synthesis between Indo-European speakers and a non-Indo-European substrate language used by the ancestors of the speakers of the Proto-Germanic language. The supposed reduction of the Proto-Germanic inflectional system is interpreted by Feist as the result of pidginization with that substrate. The culture and tribes from which the substrate material originated continues to be a subject of academic debate and study.

Thus Vennemann (2003) proposes a theory that the linguistic and cultural landscape of Europe north of the Alps and the Pyrenees was shaped in prehistoric times by the interaction of Indo-European speakers of languages related to Basque and to Semitic. These languages influenced the lexicon, grammar, and toponymy of the West Indo-European languages, namely Italo-Celtic and Germanic, which, as Vennemann claims, could be evidenced by various loan words structural features such as word-initial accent, and by numerous toponyms traditionally considered as Indo-European by virtue of their Indo-European head words, but which are, in fact, names that have been adapted to Proto-Germanic and other western languages through the addition of a suffix. According to Vennemann's controversial theory, a language family ancestral to Basque is a substratum of these Indo-European languages, while Punic, the Semitic language spoken in classical Carthage, is a superstratum of the Germanic languages, since, as Vennemann believes, Carthaginians colonized the North Sea region between the sixth and the third centuries BC. He finds the evidence for this early linguistic contact in numerous Semitic loan words in the Germanic languages, as well as in Germanic structural features such as strong verbs, and similarities between Norse religion and Semitic

religion. The Runic alphabet is, therefore, derived directly from the Phoenician alphabet used by the Carthaginians, without intervention by the Greek alphabet. Considering the fact that the verb-second phenomenon is also noted in languages like Hebrew and Arabic (Shlonsky 1997), Vennemann's claims and proposals should be considered as a possible direction for further research in respect to the origin of verb-second in Proto-Germanic.

Proto-Germanic itself, being the common ancestor of all Germanic languages, was spoken in the first millennium BC in the parts of northern Europe along the coasts of the Baltic Sea. The Germanic people remained in this area for almost a thousand years, surrounded by non-Indo-European Lapps in the North, Balto-Slavic peoples in the East, and Celts to the South and West. Their migration began in the second century BC and it resulted in spreading of the Germanic languages throughout Europe. Considering the three main directions of Germanic migrations, the Germanic languages are traditionally divided into three groups: East, North, and West Germanic. Their exact relation is difficult to determine from the sparse evidence of runic inscriptions, and they remained mutually intelligible throughout the Migration period, so that some individual varieties are difficult to classify; thus sixth-century Lombardic might as well be an Eastern or Western Germanic language, as it shows some characteristic of them both. In fact, all Germanic languages were most likely inter-comprehensible until at least the tenth century, long after the main Germanic migrations were complete. By that time, the East Germanic languages were already almost completely extinct. Gothic is the only East Germanic language which is relatively well-known, due to the existence of various longer texts, the earliest being the fourth century Gothic translation of the New Testament by the bishop Ulfilas. In the form of Crimean Gothic, which remained in use by isolated communities until the eighteenth century, it is also the longest surviving language of this sub-group, since the speakers of the other two known members, Burgundian and Vandalic, became linguistically assimilated by the neighboring languages by about the seventh century.

The North Germanic Languages are Danish, Faroese, Icelandic, Norwegian and Swedish, spoken in the northern part of Europe. These languages are still closely related, and, short of Icelandic, they all retained a high level of mutual intelligibility into modern times. They all descend from one common ancestor,

Norrœna, i.e. Old Norse, which remained unified until the eleventh century. Since practically all of the surviving Old Norse texts were written in Iceland, one of the last of the territories to be settled by the speakers of this language, it is sometimes called Old Icelandic. Modern Icelandic is also the most conservative language of this Germanic sub-group, since it preserved more of the Old Norse inflectional system than any other descending language. Faroese, the language of the Faroe Islands in the North Atlantic, is closely related to Icelandic. These islands were settled by the Scandinavians in the first half of the ninth century, most likely from the direction of the British Isles, not directly from Norway. Orkney and the Shetland Islands were also settled by Scandinavian Vikings in this period, and another insular language, called Norn, developed there, which was extinct by the early eighteenth century.

Although Faroese is, linguistically speaking, halfway in between Icelandic and other North Germanic languages, it is typically grouped with Icelandic into the so-called *Insular Scandinavian*, as opposed to *Mainland Scandinavian*, which comprises of Danish, Norwegian and Swedish. Historically, Norwegian was a West Scandinavian language, like Icelandic and Faroese. However, due to a prolonged period under Danish rule, from 1397 to 1814, the Danish influence was so strong that it resulted in creation of a linguistic mixture between these two languages. Consequently, two competing written standards of Norwegian exist today, the mixed Dano-Norwegian, called Bokmål, and the new, linguistically purified Norwegian, called Nynorsk, which is based on a synthesis of western and southwestern dialects of nineteenth-century Norway. Swedish, also spoken as a minority language in Finland, and Danish, also spoken by a small minority in Schleswig-Holstein, are East Scandinavian languages. Norwegian and Swedish are spoken on the Scandinavian Peninsula, Danish is spoken in Jutland and on the Danish islands north of Germany. With some eight million speakers, Swedish is the largest of the North Germanic languages, as opposed to Faroese which has only about 40 000 speakers, most of whom are also fluent in Danish, as the islands belong to Denmark. Taken together, all the languages of this sub-group have around twenty million speakers.

The earliest records of West Germanic were written in Old Frankish and date from the fifth century. During the extensive Germanic migrations, West

Germanic peoples scattered around Western and Central Europe, conquering what used to be the western part of the Roman Empire, so their languages spread over a large area. However, due to the strong influence of a superior culture, these languages were, sooner or later, assimilated by the local Romance vernacular in all areas that had been Romanized linguistically, and they were preserved only in the areas where Latin was not in common usage among the local population. Hence, large parts of Britain ended up Germanized, but vast areas of Southern and Western Europe remained Romance, even when the invaders managed to impose their name to their new territory, as was the case in Gaul, which became France.

Due to these complex historical circumstances, it is not easy to classify the languages of this Germanic sub-group, and many different subdivisions have been suggested in literature. Historically speaking, the most fundamental difference exists between the Anglo-Frisian languages, sometimes also called North Sea Germanic, and the other West Germanic languages, usually referred to as the Continental West-Germanic languages. This latter group is further subdivided into Low German and High German languages. But, from a modern point of view, the West Germanic languages are clearly divided into English on one side, and all the other West Germanic languages on another. Although English is West Germanic, it has many features otherwise typical of Scandinavian, such as its basic subject-verb-object word order. In addition, it has a very mixed vocabulary, which is mostly influenced by the Romance languages. It is undoubtedly the most widely spoken of all the Germanic languages. Frisian, the closest relative of English, is spoken in the northwest of the Netherlands, but almost all speakers are also fluent in Dutch.

Dutch is the standard language of the Netherlands, and one of the two standard languages of Belgium. A historical descendant of Dutch is Afrikaans, one of the two standard languages of the Republic of South Africa. The most important variant of Flemish, West Flemish, is mostly considered just a dialect of Dutch spoken in the westernmost part of Belgium. Apart from Dutch and its descendants, Low German itself is also classified as a language of the Low German sub-group. At one time a standard language of all northern Germany, after the country's unification it lost the former status and is now considered a vanishing local dialect, mainly spoken by the older generation of more rural areas of northern Germany, all of which also speak High German.

The dominant language in the High German group is German, the standard language of Austria, Germany, and Liechtenstein. Its various dialects in Luxembourg, Alsace, parts of Switzerland, and South Tyrol, and some German-speaking communities still exist throughout the Eastern Europe, as far east as Kazakhstan. In recent years, the German dialects spoken in northern, central, and eastern Switzerland — the so-called Swiss German — began to be considered a separate language, despite the fact that it consists of a group of related dialects, which are not always completely mutually intelligible. Also, it is no more structurally different from Standard German than numerous other High German dialects, such as Bavarian, Alsatian, or Luxemburgish, so considering Swiss German a distinct language remains controversial and somewhat arbitrary.

There is one among these many dialects, however, which deserves the rank of a separate language, due to its considerable structural, mostly syntactic differences in regard to German, and that is Yiddish, the language of the Ashkenazi Jews of Central Europe. Yiddish is a descendant of Middle High German, and it originally had two main variants, East and West Yiddish. However, West Yiddish, which was mainly spoken in otherwise German-speaking areas, disappeared in the eighteenth century, as its speakers were assimilated by German. On the other hand, East Yiddish, which was spoken mainly in otherwise Slavic speaking areas, survived, and it is still spoken in many parts of the world, mainly in Canada and the United States, but also in Argentina, Israel, and Russia, and others. Due to the Holocaust, this variety is practically extinct in the area in which it originated, i.e. Poland, the Czech Republic, Rumania, Ukraine, Byelorussia, and the Baltic states. Its vocabulary shows strong Hebrew and Slavic influence, and practically all of its speakers are also fluent in the languages of the countries in which they live.

When compared to some other language groups of the Indo-European family, Germanic languages differ from each other to a greater degree than, say, the Romance or Slavic languages. For instance, Germanic languages differ in the level in which they preserved the earlier linguistic features, so some, like Icelandic or German, appear relatively conservative, whereas others, like Afrikaans, Swedish, or especially, English, seem to be rather progressive in the sense that they developed mostly analytic grammatical systems with greatly reduced inflectional morphology and highly developed positional syntax.

CHAPTER 2

SYNTACTIC CHANGE

2.1. Introduction

One of the most prominent features of all human languages — if not even the most fundamental one, from which all other rise — is the fact that all languages change in the course of time. This inconstancy of language has been known, if not from the dawn of time, then at least ever since writing appeared, which enabled the latter generations to directly perceive the scope and the amount of change in the language of their day in respect to the language of their predecessors. A desire immediately grew to reveal the cause of language change so that it could be stopped, and the language preserved, protected from further "corruption" and decay — and philology was born, straightening the path for the science of language that was yet to come.

Thousands of years later, the historical linguistics of the nineteenth century mainly tried to establish the facts of language change, which was done predominantly by comparing sound systems and morphology, especially inflection, of various languages, but mostly the languages from the Indo-European linguistic family. Thus it was noted that the sounds of related languages corresponded to each other apparently systematically, so the phenomenon was called sound shift. It was further noted that these shifts took place in an extremely regular way and that they could be seen as phonetic laws. The Neogrammarians adapted this view, claiming

that all exceptions to sound laws could be explained by processes of analogy.

The problems regarding syntax, however, remained marginalized in the works of the nineteenth century comparative linguists. With the advent of Structuralism in the twentieth century syntax did receive an equal treatment as the other levels of linguistic structure, but this new approach, in turn, marginalized the historical aspect of the study of language, so the problems connected to the nature and causes of syntactic change remained mainly unaddressed.

Then, in the second half of the previous century, with the appearance of Generative Grammar, syntax became the central object of linguistic studies, and not only in synchronic dimension, since various generative frameworks reinstalled diachronic research as important and relevant for full understanding of linguistic phenomena. This chapter will deal with some problems connected to syntactic change in language as perceived from the generative perspective.

2.2. Actuation and Diffusion of Change

One of the most relevant problems in this respect is the *Actuation Problem*, formulated first by Weinreich, Labov, and Herzog (1968) as follows:

> Why do changes in a structural feature take place in a particular language at a given time, but not in other languages with the same feature, or in the same language at other times?
>
> (Weinreich, Labov, and Herzog, 1968: 102)

Weinreich, Labov, and Herzog argue that there are five problems which have to be solved to explain language change, and the problem of actuation is just one of them. These are the problems of constraints, transition, embedding, evaluation, and, last but not least, the aforementioned actuation. All these problems still remain basic problems in explaining language change within the generative framework. The *constraints* problem refers to determining of what changes in a language are possible in a given state. The *transition* problem is concerned with the way in which a language moves from one state to a succeeding state. The *embedding* and *evaluation* problems deal with the questions of how a change is related to other features of the language in which language change occurs and what

effect the change has on these other features. Finally, the *actuation* problem refers to the reasons and causes of change.

The question of actuation is essentially an internal linguistic question, since it is concerned with changes in the formal structures of language, specifically in linguistic competence. These changes may be influenced by performance during language acquisition. But there are also many extra-linguistic problems in which the emphasis is put on the social aspect of language, and they are also highly relevant for revealing the forces behind linguistic change. For an innovation in language to appear, all that it takes is that a new linguistic form appears in the speech of one single member of the linguistic community, but only if this innovative form spreads the change in the language as a whole will take place. It may therefore be important to examine certain social factors, such as prestige, or social and geographical mobility, and to determine whether, and in what way, they influence the spread of a linguistic innovation.

Milroy (1992: 169-72) therefore makes a distinction between *actuation*, which is just another name for innovation, and *diffusion* of change, which is just another name for its implementation. *Actuation* can be defined as the process by which a change is begun, and it occurs at the moment when a new linguistic form or structure is created. *Diffusion*, on the other hand, is the process by which new forms or structures are spread between different speakers or between different lexical items. Once the innovation in question has been diffused to all members of a given speech community, a linguistic change is complete. However, this process is not that transparent when observed through the lens of historical linguistics, due to the fact that, while the process of diffusion remains visible in the form of linguistic variations in written records from a certain period, direct evidence for actuation, for it's motives and reasons, remain hidden, as they take place in the mind of the speaker. In other words, a researcher can relatively easily gather evidence that a certain change did take place at a given time, simply by analyzing the text preserved from that period, but revealing the factors that caused this change to appear in the first place seems to be a much harder problem to solve.

This problem seems particularly difficult in the case of syntactic changes. Proposals for solution to the cause and nature of syntactic changes in a language

typically involve such notions as structural ambiguity or external factors, such as phonological erosion. The process of diffusion, in particular, is far-better researched and understood in relation to the spread of new phonological variants. In application to syntax, on the other hand, it is not certain whether a purely social account of diffusion is appropriate or whether these changes are caused by predominantly inter-linguistic factors. The fact remains that some syntactic changes spread rapidly through a community, whereas others spread only very slowly. For example, Middle English subordinate clauses changed their order from predominantly subject-object-verb to predominantly subject-verb-object in a short space of time in the twelfth century (Lightfoot 1991: 71), whereas some other syntactic changes, such as the development of *do*-support for expressing negation, took centuries to complete (Ellegård 1953: 162).

According to Kroch (1989b: 200) the relevant question in such cases should be whether the method of actuation interacts with or affects the nature of diffusion. It may be that syntactic change is different from phonology in this respect. The main difference between syntactic and phonological changes in this respect is reflected in the fact that, unlike sound changes, the diffusing syntactic structures cannot be observed directly by those acquiring them. That is, an underlying word order is not spread directly by observation. Instead, the language learner must individually abstract a syntactic structure from the linguistic data he is exposed to during the process of language acquisition. Kroch therefore proposes that, under such circumstances, diffusion should be best thought of as multiple instances of the actuation of the same change.

As far as the actuation of syntactic change is concerned, there have been a number of different approaches in literature in regard to this problem. One line of enquiry has developed out of the study of typology and universals. The best example for such an approach is the hypothesis of *Universal Consistency in History* proposed by Hawkins (1983), according to which word-order change is presumed to always be consistent with hierarchies of possible orderings. Givón (1977), on the other hand, suggests that languages with predominant verb-subject-object word order will typically develop into languages with predominantly subject-verb-object word order through the extension of topicalization of the subject. More recently, there has been a resurgence of interest in grammaticalization (Hopper and Traugott

1993; Traugott and Heine 1991). The focus of research in this model is put on the change in status of full lexical items to grammatical markers; for example, the verb *go*, a lexical verb of motion, underwent one such change when it became a marker of futurity.

According to Hale (1998), there is a particular kind of relationship between language acquisition and language change. Starting out from Universal Grammar, i.e. the initial state of grammar, presumably an expression of the genes, which can be modeled in terms of a system of abstract principles, the learner constructs a number of intermediate knowledge stages during the acquisition process based on the evidence provided by the input. Each time the language learner becomes aware of the relevant evidence necessary to trigger a certain property of the grammar, his linguistic knowledge increases and the grammatical system he is constructing becomes more complex. Eventually, the process of grammar construction gives rise to a fixed knowledge state which represents the grammar acquired by the learner in the course of language acquisition.

Hale's perspective therefore implies that grammar change is necessarily an abrupt phenomenon, namely a clearly identifiable difference between the target grammar and the acquirer's grammar. In other words, innovations result from cognitive processes that determine the process of language acquisition, resulting in a grammar in the mind of the individual speaker that differs from the target grammar. Under this approach, language change is to be identified as a rather sociolinguistic notion, referring to the diffusion of a given change in a speaker community.

One of the most influential among these different approaches to the cause of linguistic change, however, is the Principles and Parameters approach. This approach originates from the belief that a prerequisite for investigation of typological change is the explicit and detailed study of syntactic change in specific languages. Furthermore, the Principles and Parameters approach allows an explicit formulation of the role of language learners during the acquisition process in initiating change in the core grammar, due to the fact that it is in the mind of the language learner where a syntactic change actually stems before it manifests in the utterance which is directly observable. The question of whether syntactic change is

an abrupt or a gradual phenomenon put aside, it seems apparent that the problems relevant for the issue of syntactic change cannot be either fully understood nor solved without taking into account the process of language acquisition as the locus of change.

2.3. The Locus of Change

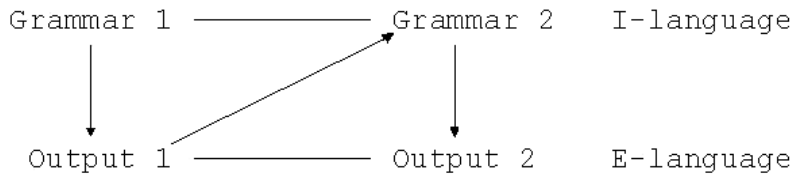
According to Andersen (1973: 767), who was among the first authors to discuss the problems of language change within the generative framework, any speaker's internalized grammar is determined by the verbal output from which it has been inferred. In other words, the process of language acquisition is the place where the cause and the origin of linguistic change should be looked for. The reason for this is the fact that language learners do not have direct access to the grammar of the language they learn — they must recreate it instead. In order to do it, they make hypotheses on the basis of the data that they receive in the form of spoken utterances from their surroundings.

In generative grammar, these data are considered to be the input, and the contact of the language learner with this input creates the so-called *trigger experience*, i.e. these linguistic data activate the inborn, genetically preconditioned mechanisms of Universal Grammar stored in the brain of the language learner. After the trigger experience has taken place, the language learner makes various hypotheses about the structure of the language he is acquiring, testing them against more of the input, and then revising them where necessary.

However, not all of the incorrect hypotheses that had been made get to be corrected. Furthermore, some do get to be corrected, but only by what Andersen calls *adaptive rules*, i.e. rules used to fill the holes in the output of the grammar in order to make it conform to that of other speakers. Andersen suggests that speakers whose own output is produced using adaptive rules will be more sympathetic to the language learner's failure to acquire them, and therefore will be less inclined towards correcting them. In this way, language learners are indirectly encouraged to acquire grammars from which even the adaptive rule has been dropped.

Thus, in the process of establishing the grammar of his native language on the basis of the output of those around him, the language learner may often get confused by the variation and unsystematic change in the nature of the linguistic evidence he is exposed to, which may, in turn, lead him to construct a grammar that is more or less different in structure from the grammar of the speakers that surround him. The probability that this would happen directly corresponds with the frequency of structures that are being acquired: the less frequent they are, the more likely it is that the language learner shall create the wrong hypothesis about their underlying structure, and vice versa. In this way, insufficient exposure to less frequent pieces of evidence for the grammar leads to constructing grammars that produce a surface output containing the commonest constructions, but which fail to produce less frequent constructions or which introduce new constructions not attested in the input. This can be illustrated as follows:

(1)



Output one in the diagram (1) represents the speech of the parent grammar, i.e. the grammar of their external E-language. The language learner constructs his grammar, labeled as Grammar 2, on the basis of Output 1. This happens without reference to the Grammar 1 of the parents, since the language learner has no access to it. As the diagram shows, the only existing relation is the relation between Output 1 and Grammar 2. The relation between Grammar 1 and Grammar 2 in principle does not exist. This means that there is no direct relation between the grammars of speakers, which are often called their internal, or I-languages, whether they belong to the same generation or to different ones. Every change in language is, therefore, synchronic by definition, since it takes place as each new language learner constructs his grammar.

Anderson's (1973) proposal for the process of language acquisition as the locus of language change is now widely accepted in generative grammar literature (e.g. Lightfoot 1979, 1991;, Roberts 1993, Kroch 1989b, and others).

2.4. Language Change versus Grammar Change

It seems self-evident that the proper object of formal linguistic study within all modern linguistic frameworks is *language*, understood, in generative grammar, as the linguistic knowledge of an idealized speaker or hearer. Chomsky's (1965) classical statement was the foundation of this view:

> Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogenous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance.
>
> (Chomsky 1965: 3-4)

In more recent work Chomsky (1986b: 20-23) refines and further develops this notion of language as the object of linguistic study, especially in terms of the distinction between internalized language or *I-language*, and externalized language or *E-language*. Language is externalized in the sense that the construct is understood independently of the properties of the mind/brain. *Externalized language* is thus defined as the set of actual or potential speech events or expressions that are in use in a speech community, which makes language understood in this way fairly close to the common-sense notion of language. *Internalized language*, on the other hand, is defined as some element of the mind of the person who knows the language, acquired by the learner, and used by the speaker or hearer. Understood in this way, as the linguistic knowledge stored in the brain, language also includes the internalized production system, i.e. grammar, which generates a potentially infinite range of linguistic output representations. It should be noted, however, that, in this case, *linguistic output representations* are not to be equated with *linguistic output* as such. The former are abstract linguistic representations, i.e. structured sets of features, produced by the grammar that are mapped to sequences of sounds/signs — which *is* the actual linguistic output, and, as such, a part of external language — by the speaker's production system.

Chomsky (1986b) argues forcefully that the proper object of linguistic study must be internalized language, which is understood as a synonym for linguistic competence, and is often referred to as simply *grammar*. In other words, any principle or rule of grammar that is posited by the linguist is to be seen as a part of

internalized language. Viewed in this light, Universal Grammar is conceived as a theory of formal universals of human language:

> Universal Grammar now is construed as the theory of human I-languages, a system of conditions deriving from the human biological endowment that identifies the I-languages that are humanly accessible under normal conditions.
>
> (Chomsky (1986b: 23)

Once the idea is accepted that the proper object of the formal study of language change is internalized language, and therefore *grammar*, then the very notion of *language change* must be redefined as a change between individual grammars. In this way, the notion of 'language change' becomes synonymous with the notion of 'grammar change'.

The focus of investigation of historical linguistics based on Principles and Parameters theory is, therefore, put on *grammar change* rather than on *language change*. This distinction is crucial and has important ramifications for the way in which a researcher is to approach historical change. The distinction between grammar change and language change correlates with the distinction usually made in generative approaches between a speaker's *linguistic competence*, i.e. his knowledge and understanding of the language, and his *linguistic performance*, i.e. what the speaker does with that knowledge and understanding he possesses. The competence of the speaker, grammatical or otherwise, is reflected by what he knows about his native language. An important method for obtaining information about this grammatical knowledge is by eliciting a native speaker's judgments about wellformedness. A considerable discrepancy may exist between competence and performance. Linguistic competence is relatively steady and unchangeable, and not liable to variations. Linguistic performance, on the other hand, reflects the steady state of linguistic competence behind it rather imperfectly, since it is influenced by a number of external factors, such as slips of the tongue, boredom, tiredness, lack of attention, various emotional states, all sorts of distractions etc. From diachronic perspective, the number of these factors which influence linguistic performance is even larger. As Fischer et al. (2000) put it:

> …as the case may be when working with historical data, factors that are beyond our reach, such as the possibility of a piece of written performance like a manuscript being a late copy of a copy of a translation from Latin, written in winter when the scribe's fingers

> were cramped by frost, with a quill that was badly in need of sharpening, while the candle was running low. What we aim at when we study historical change from this perspective is to isolate from the set of historical data, which comprises historical written performance material, those data that reflect changes in the competence of speakers, changes in grammars.
>
> (Fischer et al. 2000: 4)

An implication of this view of grammar change is the notion that the process of acquisition of the grammar of the native language is the main locus of change. According to Kiparsky (1982), data from language change provide a window on the form of linguistic competence and, as such, are of particular interest to Principles and Parameters approach to historical linguistics. Instances of change can show something about the grammars of languages, because they provide a different view of a partially hidden abstract system when it changes from one state to another. This in turn may throw light on the precise way the theory of grammar should be formulated.

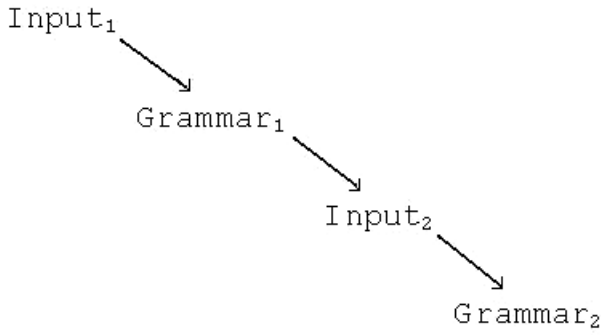
2.4.1. The Logical Problem of Language Change

The exact way in which the language learner is capable of constructing a mature grammar of his native language in an astonishingly short time even in situations when the linguistic evidence available is rather impoverished is known in literature as *the logical problem of acquisition*, first formulated by Chomsky (1986b). Resolving this problem is actually one of the central tasks of generative grammar. The answer that Chomsky gives to this question is based on the assumption that the initial state of Universal Grammar, i.e. the human language capacity, is a highly structured system of abstract principles and parameters, the values of which are filled in by the language learner on the basis of his/her exposure to the language environment. Due to the existence of this innate linguistic knowledge, language learners always succeed in acquiring the target grammar that generates the linguistic data they are exposed to, even if this data is apparently flawed and insufficient.

Language transmission is, therefore, necessarily discontinuous, since each time a language learner is engaged in the task of first language acquisition,

language is created afresh in the mind of each individual. During this process, the language learner constructs a grammar based on the linguistic input he/she receives. The assumption here is that the process of language acquisition is highly deterministic, i.e. the same input presented in the same order gives rise to the same grammar, cf. (e.g. Lightfoot 1999, Hale 1998). Under such circumstances, change can take place only in the case when the language learner is exposed to a linguistic input that differs in some way from the input that gave rise to the target grammar. Presented in a diagram, this situation would look as follows:

(2)



The chain of events displayed in the diagram (2) led Niyogi and Berwick (1998) to formulate *the logical problem of language change*, in an obvious response to the Chomsky's notion mentioned above. According to them:

> … if all children successfully attain the grammars of their parents and they continue to do this generation after generation, then the linguistic composition of every generation would look exactly like the linguistic composition of the previous generation and languages would not change with time. Yet they do.
>
> (Niyogi and Berwick 1998: 192.)

In other words, they raise the question of the exact way in which one grammar (i.e. $Grammar_1$) could possibly produce an output (i.e. $Input_2$) which is different from the input that led to the acquisition of that $Grammar_1$ in the first place — under the assumption, of course, that $Grammar_1$ was constructed to match $Input_1$. The factors which might blur the evidence for certain properties of $Grammar_1$ in $Input_2$, which is the output of $Grammar_1$, are of particular relevance here, and they must be identified and explained if the cause of change is to be fully understood.

Therefore, under the plausible assumption that language acquisition is a

deterministic process in which two different sets of input data give rise to two different grammars, the possibility of language change can be attributed to changes in the *Primary Linguistic Data*, that is the set of partially parsed linguistic signals on the basis of which the learner constructs a grammar (Chomsky 1965: 25). In other words, it is usually assumed that for some reason, the Primary Linguistic Data the language learner is confronted with differs from the Primary Linguistic Data that gave rise to the target grammar, due to factors such as language contact, phonological erosion and the consequential morphological changes, or reanalyzes that blur the evidence for certain properties of the target grammar in the linguistic input the learner receives (e.g. Lightfoot 1979, 1991, 1999, Hale 2007, Roberts 2007).

Various authors tend to put emphasis on different factors which might blur the linguistic evidence for the language learners, causing innovations in syntactic structures to appear thus launching the process of change. Among these are certain grammar-external factors, such as language contact, or prescriptive grammatical rules enforced by the education system, or some socio-linguistic factors, such as the fact that the language learner normally receives input data from a range of speakers who might have different individual grammars, which in turn obscures the evidence for certain properties of the target grammar. One thing is quite obvious, though — the transmission of the features of the target Grammar_1 to the acquirer's Grammar_2 is neither direct nor instantaneous, since the relevant pieces of information are not directly accessible from the input. Instead, this transmission is mediated by a number of intermediate steps and stages that may hinder a flawless acquisition of properties of the target grammar.

2.5. The Principles and Parameters Model of Change

The general framework for the study of syntax adopted in this dissertation is Principles and Parameters theory, so the model of syntactic change developed within this framework deserves to be introduced and examined in some depth here.

The Principles and Parameters framework is not one single set of ideas or theoretical notions, but rather an approach to the study of language. Its nature is

perhaps best captured in the following quote from Chomsky:

> The study of generative grammar has been guided by several fundamental problems, each with a traditional flavor. The basic concern is to determine and characterize the linguistic capacities of particular individuals. We are concerned, then, with states of the language faculty, which we understand to be some array of cognitive traits and capacities, a particular component of the human mind/brain. The language faculty has an initial state, genetically determined; in the normal course of development it passes through a series of states in early childhood, reaching a relatively stable steady state that undergoes little subsequent change, apart from the lexicon. To a good first approximation, the initial state appears to be uniform for the species. Adapting traditional terms to a special usage, we call the theory of the state attained its *grammar* and the theory of the initial state *Universal Grammar*.
>
> (Chomsky 1995: 14)

The object of study relevant for Principles and Parameters framework is, therefore, the grammar of the native speaker, and it is understood as one language learner's choices for his native language with respect to the abstract parameters that are part of Universal Grammar.

According to (Chomsky 1981a: 3-9), the competence of a native speaker can be reduced to innate universal *principles* of grammar, part of the genetic endowment of the human species, with a limited set of *parameters*. Thus, the principles are the unchanging rules of each module of the grammar, whereas parameters are susceptible to change and act as some kind of ‘switches’ which set the limits on possible variation between languages. Therefore, a language learner is free only to set each parameter either positively or negatively on the basis of experience. Since the number of parameters is highly constrained, the complexity of the process of acquiring the native language is greatly reduced, enabling the language learner to learn his native tongue even in situations where he is exposed to relatively limited linguistic evidence about its structure. The entire Principles and Parameters framework is based on this view.

In addition, parameters also define the dimensions along which languages may differ from each other. According to the concept of grammar based on Principles and Parameters, it is anticipated that a number of surface cross-linguistic differences can be reduced to the setting of a single parameter. Each parameter is expected to be manifested in a number of exponent constructions. For example,

(Hawkins 1983: 132) observes that human languages do vary significantly, but not in unconstrained ways. For example, it has been observed that the position of syntactic heads with respect to their complements tends to be fairly consistent within each language. Thus, languages like English, where the verb precedes the object, tend to have prepositions, that is, the head in these languages precedes its complement, whereas languages like Japanese, where the object precedes the verb, tend to have postpositions, that is, the head follows its complement.

In the Principles and Parameters framework, this typological observation made above about the relative position of heads and complements in various languages may be reduced to a *Head Ordering Parameter*, a single 'switch' set either to head-first or head-final order. According to this parameter, the presence of prepositions in a language follows automatically once the head-first setting is established on the basis of verb-object order in the trigger experience.

The null-subject parameter is yet another example of a well-established parameter with multiple exponents. In the classical formulation of this parameter (Rizzi 1982), a positive setting determines three syntactic properties of a language — namely, the presence of null subjects and of *Free Subject Inversion* and the absence of *that*-trace effects. English, as illustrated in the example (3), has none of these properties: both the null subjects in the example (3a) and the free inversion of the subject and verb in the example (3b) are ungrammatical. Finally, A'-movement of a *wh*-element in subject position across an overt complementizer is not possible either. That is, in the example (3c), the presence of the complementizer *that* prevents movement of *who*[1]. For example:

(3) a. *Has spoken.

b. *Has telephoned John.

c. *Who$_i$ do you believe that t_i will come?

Italian, on the other hand, allows all three constructions, as it is presented in the example (4):

[1] Under standard analyses, *that* acts as a potential governor of the trace, but fails to properly govern it. Therefore (3c) is a violation of the *Empty Category Principle* (ECP), which requires that *wh*-trace and other empty categories be properly governed by the closest potential governor (Chomsky 1986a: 47-8).

(4) a. Verrà.
will-come
He/she will come.

b. Verrà Gianni.
will-come Gianni
Gianni will come.

c. Chi credi che ti verrà?
who believe-[2nd Sing] that will-come
Who do you believe (that) will come?

(Rizzi 1982: 117)

As it can be seen in the Italian sentences in the example (4), all three are analyzed as involving a null subject. Therefore, a language like Italian, which allows null subjects, will allow all three, whereas a language like English, which does not, will lack all three.

It can be concluded that changes of the settings in parameters such as the ones described above are crucial for explanation the nature of language change. Namely, a change occurs once some of these parameter settings are changed. It is expected that changes in parameter settings will occur periodically, and that these parameter changes will affect all the constructions controlled by the parameter at approximately the same time. In order to explain a certain change in syntax, therefore, it is necessary to account for the mechanisms by which such parametric changes are possible. So far, accounts of syntactic change in a parametric framework have been attempted for various aspects of syntactic change in English (Kroch 1989b; Lightfoot 1991; Roberts 1985, 1993; Warner 1997), for the loss of verb-second and null subjects in French (Adams 1987; Clark and Roberts 1993; Roberts 1993), the loss of null subjects in Swedish (Falk 1993; Platzack 1987: 396-8) and for the change from object-verb to verb-object order in Yiddish (Santorini 1992, 1995).

2.5.1. Parametric Change

According to Lightfoot (1991: 167-9) there are six core characteristics of parametric change:

1. Each parameter change is manifested by a cluster of simultaneous surface changes.
2. Parameter changes sometimes set off ‘chain reactions’ in the form of other parameter changes.
3. Changes involving new parameter settings take place more rapidly than non-parametric changes.
4. New parameter settings cause the total disappearance of old constructions.
5. Any significant change in meaning is generally a by-product of a new parameter setting.
6. New parameter settings occur in response to shifts in unembedded data only.

Hale (1994: 149), on the other hand, finds this set of six properties unsatisfying. In his opinion, the difference between Feature 1, ‘a cluster of simultaneous surface changes’, and Feature 2, ‘chain reactions’, is hard to maintain purely in terms of data. In fact the distinction is entirely theory-internal and should be defined as such. With Feature 5, it is unclear what would constitute a ‘significant change in meaning’. Feature 6 is a hypothesis open to empirical investigation in acquisition studies rather than historical syntax, but a priori seems rather unlikely. In any case, it can hardly be taken as a defining property of parametric change.

If Hale’s remarks are accepted, then a reduced set of core features remains which a theory of parametric change must hypothesize. The distinction that Lightfoot makes between simultaneous surface changes and chain reactions reflects a distinction inherent in the definition of parameter. Since a parameter by definition has exponents in a number of areas of surface grammar, a change in parameter setting will have immediate changes in a number of areas. Other changes are also possible, perhaps even changes in other parameters, but these are not directly attributable to the parameter change itself. In particular, the changes brought about by the parameter change in the first place will alter the input data for the next generation of language learners, perhaps considerably reducing the evidence for the

correct setting of some other parameter. On the other hand, this may not happen. In any case, parametric shifts could be brought about by means other than by such chain reactions (Hale 1994: 150-1). Therefore, there seems to be little point in concentrating on Feature 2 of parameter changes, especially since it confuses the situation with respect to Feature 1. Feature 1, however, lies at the heart of the notion of parameter as an abstract 'switch' with a number of surface exponents. If the 'switch' changes, then wide-ranging effects should be expected to manifest on the surface.

The binary nature of parameters means that Feature 3 is also a logical necessity in such a theory. Parametric change must be swift because there can be no intermediate grammars between one parameter setting and another. The situation in historical lexical semantics, where old and new meanings of a word may coexist for centuries, can be used as an illustration of this point, or the situation in morphology, where erosion of inflectional endings may proceed via many intermediate stages.

In fact, given that single parameters have multiple exponents, an even stronger claim could be made that the new parameter setting as a whole 'diffuses'. It is therefore not possible, at least to the extent that usage reflects naturally acquired rather than consciously learned norms, for part of a parametric shift to be taken over — a new syntactic pattern that a parameter shift introduces is not expected to spread without the other syntactic effects of the parameter shift spreading with it.

Kroch (1989b) argues that a given syntactic change appears simultaneously in the environments to which it will apply, but at varying initial levels of dominance. He further claims that thereafter change proceeds at a constant rate in each environment. The diffusion of an entire parameter setting should, perhaps, be envisioned precisely in this way, which can be referred to as *uniform diffusion*.

Finally, obsolescence should be a feature of parametric change, rather than smooth changes in frequency of use. If the core grammar changes, then the set of sentences that it generates must also change. One consequence will typically be the elimination of constructions. These constructions will have been relatively infrequent in performance, since they failed to prevent the parameter shift. On the other hand, obsolescence may well be a feature of lexical change as well, so it alone

is not enough to define a parametric change.

Moreover, a theory of parametric change requires a modification of the notion of *diffusion*, as well as the modification of the distinction between actuation and diffusion. It is clear that parameter settings themselves cannot diffuse, since language learners do not have direct access to them in the way that they have direct access to sound changes.

Diffusion of syntactic change, under the parametric model, is, therefore, of a very different nature from diffusion of phonological change. Each time a new individual adopts the new parameter, it is via the same procedure as the first individual. Each speaker discovers the parameter change anew. A parametric shift spreads in so far as the change of parameter setting in one speaker or group of speakers tilts the trigger experience of language learners towards the new setting. That is, once one speaker shifts to the new setting, the amount of data in favor of the old parameter setting falls, whilst the amount of data in favor of the new parameter setting rises. Language learners exposed to speakers with the new setting are more likely to acquire that setting. The directionality of the change is thus maintained. In that sense, the spread of a syntactic change involves multiple actualization of a change rather than diffusion. Of course, the extent to which this multiple actualization occurs is likely to be influenced by sociolinguistic factors such as the shape of social networks, the extent to which data come from speakers with social prestige, and so on.

Alongside parametric change, some grammatical change may be lexical. This may show variability between different items of the same syntactic category. On the other hand, suddenness may also be a property of this type of change, in so far as it involves features that may be set only positively or negatively in the lexicon.

2.6. Mechanisms of Syntactic Change

When, in the second half of the nineteenth century, the change in language was first noted as a set of systematic and regular phenomena, some linguistic processes were also identified as the source of that regularity, namely the processes

of *analogy* and *transformation*. At the time, these two important mechanisms of language change were predominantly used to explain the change in phonological and morphological spheres.

Within generative frameworks of the twentieth century, various theories of syntactic change have been developed, but they all still acknowledge these two processes of analogy and transformation to be the main two phenomena which explain language change, and in particular syntactic change. The only difference is that the process of transformation is now referred to as *reanalysis*, but regardless the change in name, this process did not lose any of its former importance for the historical linguistic theory. On the contrary, in modern treatments of syntactic change, reanalysis has been considered the single most important factor to understand syntactic change, and it is therefore not surprising that most work in this field has assumed some variant of this notion.

However, reanalysis is not the only force behind syntactic change. According to Harris and Campbell (1995) there are at least three mechanisms which can be identified in a language which undergoes syntactic change. They classify these mechanisms as internal and external, depending on whether they work from within the language itself or from the outside. Apart from reanalysis, they identify *extension* as another internal mechanism of syntactic change, because this process can be considered the inverse of reanalysis since it does not change underlying structure. Language contact, the third mechanism of change, is classified as an external one because it involves motivation towards change from outside the affected language. According to Harris and Campbell, phenomena like actualization and grammaticalization are not considered to be independent mechanisms of syntactic change, but only specific kinds of reanalysis.

2.6.1 Internal Mechanisms

The two internal mechanisms of syntactic change that will be discussed in this section are reanalysis and extension, two phenomena which have gained a great deal of attention in the effort to explain syntactic change in language.

2.6.1.1 Reanalysis

According to Harris and Campbell (1995) reanalysis can be defined as:

> … a mechanism which changes the underlying structure [surface constituent structure] of a syntactic pattern and which does not involve any immediate or intrinsic modification of its surface manifestations.
>
> (Harris and Campbell 1995: 61)

They note, however, that although reanalysis itself does not directly affect the surface structure but only the underlying structure, there might be additional changes which involve modification of surface manifestations, but these are mechanisms other than reanalysis.

Harris and Campbell claim that reanalysis changes underlying structure directly, which means that this mechanism can affect (i) constituency, (ii) hierarchical structure, (iii) category labels, (iv) grammatical relations, and (v) cohesion. They further note that semantic change may also be involved in many of these reanalyses. Here are some examples where reanalysis has taken place in each of these aspects of underlying structure:

(i−ii) Constituency and hierarchical structure. One example where constituency and hierarchical structure have changed is known from the history of German. Here, the infinitival construction *um zu* + Infinitive formerly had the prepositional phrase structure as illustrated in (5):

(5) [Er ging aus um Wasser] [zu holen].
[he went out for water] [to fetch]
He went out for water, to fetch (it).

(Harris and Campbell 1995: 62)

Harris and Campbell note that originally in such sentences the nominal *Wasser* (water) was governed by the preposition *um* (for). The nominal, however, came to be understood as the logical object of the infinitive *Wasser zu holen* (to fetch water). These were then reanalyzed in the infinitival construction as objects, and *um* lost its former locative meaning in these environments and came to be understood as the introducing morpheme for the infinitival construction:

(6) [Er ging aus] [um Wasser zu holen].

[he went out] [for water to fetch]

He went out to fetch water.

(Harris and Campbell 1995: 62)

Another quite similar example of reanalysis comes from English. According to Harris and Campbell, the English complementizer construction with [*for* + *to*] is the result of the reanalysis of a former construction in which the [*for* + DP] belonged to the main clauses. This is illustrated in the following example:

(7) [It is bet for me] [to sleen my self than ben defouled thus].

It is better for me to slay myself than been violated thus.

It is better for me to slay myself than to be violated thus.

(Harris and Campbell 1995: 62)

Harris and Campbell point out that although *me* is part of the surface constituent *for me* in the example (7), it functioned as co-referential to the logical subject of the infinitive *to sleen*. The construction [*for* + DP + Infinitive] was reanalyzed as a constituent, which can be seen in the Modern English example in (8) where the whole constituent can be pre-posed:

(8) [For me to slay myself] [would be better than to be violated thus].

(Harris and Campbell 1995: 62)

(iii) Category labels. Harris and Campbell argue that the reanalysis of a verb in a serial verb construction as an ad-position, together with the reanalysis of the dominating node as an ad-positional phrase is an example of a change that mainly affects category labels. Such a case is the development of the verb *wo* (to be) in the African language Twi. This verb has been reanalyzed as a preposition *at* which resulted in the reanalysis of its dominating node Verb Phrase to Prepositional Phrase. In this way, grammatical relations are affected by this kind of reanalysis, whereas constituency and word order remain unaffected.

(iv) Grammatical relations. Harris and Campbell note that the loss of the

inversion construction in English presents reanalysis of grammatical relations. In Old English, an inversion rule made initial subjects indirect objects, which can be seen in expressions like “me thinks”, which is traditionally referred to as an impersonal construction. This optional rule started to appear less and less frequently. Due to the weakening and loss of the inflectional case-marking system on nouns, the effects of the rule became less obvious, and finally the construction was reanalyzed in the following way: the surface object, i.e. the underlying subject, was reanalyzed as surface and underlying subject. As the example of “me thinks” illustrates, reanalysis even affected pronouns although they contain evidence for case-marking. This implies that learners sometimes ignore evidence, in this case maybe because the force of the loss of case-marking on nouns was so strong that it also affected the role of pronouns in these cases.

(v) Cohesion. According to Harris and Campbell (1995: 63), cohesion defines the status of a linguistic sequence as a fully independent word, a clitic, an affix, or an unanalyzable part of a larger unit. Furthermore, these four statuses form a continuum, which means that an element which is at one time a fully independent word may become a clitic and then an affix, ending up as an unanalyzable part of another word. They also point out that independent words may be manipulated by the syntax, but unanalyzable parts of words cannot, which further implies that information regarding cohesion must be found in underlying structure. The fact that cohesion is related to surface phenomena like stress will become clear in the example of the development of the question particle *ti*, which has been adopted by colloquial French and Franco-Provençal. This development provides a clear example of reanalysis. In Middle French, the two forms contrasted in the examples (9) and (10) could be found:

(9) Aime il?
Does he love?

(Harris and Campbell 1995: 66)

(10) a. Dor*t*−il?
Does he sleep?

b. E*st*−il?

Is he?

(Harris and Campbell 1995: 66)

As shown in the examples above, the special type of word order characteristic for questions, [verb-subject-...] is found here. The final *l* was eroded in the pronunciation of colloquial speech, which in examples like (10) lead to forms ending in [*ti*]. This element was reanalyzed as a marker for questions involving third person masculine pronominal subjects. It was later extended and became a general interrogative particle which is shown in the examples (11) and (12):

(11) Les filles sont *ti* en train de dîner?

the girls are [question] in way of to dine

Are the girls eating dinner?

(12) Tu vas *ti*?

You go [question]

Are you going?

(Harris and Campbell 1995: 66)

The question here is, what is it that causes reanalysis to take place? It has been assumed that it is ambiguity which is necessary for reanalysis to take place. One definition of structural ambiguity implies that each of the possible readings of a sentence is a structure which is otherwise available in the language. One such example is illustrated in (13) where two different structures are possible:

(13) Visiting relatives can be dangerous.

a. To visit relatives can be dangerous.

b. Relatives who visit can be dangerous.

(Harris and Campbell 1995: 70)

Harris and Campbell point out that both the readings in the example above, (13a) and (13b), with their different structures, are found in unambiguous contexts which means that neither of the readings is only found in ambiguous contexts.

Moreover, if only one of the structures existed, an example like (13) would not be ambiguous. Therefore, in order for reanalysis to take place it seems to be essential that two analyses be possible. Harris and Campbell claim, however, that opacity is not a prerequisite to reanalysis but it can, in the form of structural ambiguity, trigger grammatical changes. It is also not essential that every token of the structure in question be analyzable in more than one way. Example (9) above shows that in Middle French not all third person masculine questions used [*t*], and yet [*t*] of verbs was reanalyzed as part of a question marker for questions with third person masculine subjects, which later became the general form to mark questions. What these facts show is that reanalysis can take place even while there are examples with unambiguous structures which present the old structure. Harris and Campbell refer to the patterns which can be structurally ambiguous and which thus provide the input to reanalysis as the basis of reanalysis. Hence, the pattern in the example (10) was the basis of the reanalysis of *ti*.

2.6.1.1 1. Grammaticalization

Meillet (1937), who seems to have coined the term 'grammaticalization', defines this phenomenon as the attribution of grammatical character to an erstwhile autonomous word. The best-known and most widely discussed example of grammaticalization in the history of English is the sequence of changes through which modal verbs like *can*, *may*, *will*, *shall*, and *must* were transformed from a set of verbs that were somewhat special main verbs to the finite auxiliaries that they are in present-day English. The result of this sequence of changes was that the modal verbs became grammatical function words—markers of mood. In other words, the modals were grammaticalized from main verbs to modality markers.

According to Fischer et al. (2000), the term *grammaticalization* can also refer to a particular approach to the study of language which she calls 'grammaticalization theory':

> Grammaticalization theorists take the phenomenon of grammaticalization as part and parcel of language, and are primarily interested in the cognitive mechanisms that drive grammaticalization. They tend to stress the long-term, diachronic aspects of this type of change; indeed they speak of diachronic

> processes, and emphasize that language is a changing object in time.
>
> (Fischer et al, 2000: 26)

Harris and Campbell view this phenomenon in a somewhat different light. According to them, grammaticalization "...is one type of macro-change, consisting minimally of one process of reanalysis, but frequently involving more than one reanalysis" (Harris and Campbell 1995: 92). They note that in the literature two sorts of processes are typically the focus of study:

> 1) the *lexical-item-to-grammatical-morpheme* model, which usually involves some kind of phonological reduction and quite often a change in status from an independent word to a clitic and/or affix;
>
> 2) the *discourse-structure-to-morpho-syntactic-markings* model, which deals with the fixing of discourse strategies in syntactic and morphological structure.

Harris and Campbell point out that grammaticalization is often associated with the phenomenon known as *semantic bleaching* which is the essence of reanalysis. They argue that during the process of grammaticalization a complex structure may be reanalyzed as a simpler structure, or category labels may be reanalyzed. They call these processes reanalysis because the structure is altered, while the surface representation may remain the same. This can be seen when looking at the development of English *will*: when *will*, which originally meant "want", became semantically bleached and was grammaticalized as a future marker, the surface representation did not change at first, only its grammatical status changed. Thus, Harris and Campbell consider reanalysis an important part of the macro-change of grammaticalization which is partly independent of the other micro-changes in the sense that they do not happen at the same time. Moreover, they argue that reanalysis does not entail the other micro-changes which take place when we speak of grammaticalization. Although these changes often occur in parallel and are related with each other, they are not the same change.

2.6.1.2 Extension

Harris and Campbell define extension as:

> …a mechanism which results in changes in the surface manifestation of a pattern and which does not involve immediate or intrinsic modification of underlying structure.
>
> (Harris and Campbell 1995: 51)

It is often supposed that extension is limited to morphology, but, according to Harris and Campbell, that is not the case as it, although this process may be easier to identify in that domain than in the domain of more abstract syntax. In addition, they claim that extension is not the same as analogy, although the former process can be seen as part of the latter process. Harris and Campbell rather speak of *analogues* which they define as "a condition where a structural similarity exists between two or more items, or classes, or constructions, etc." (Harris and Campbell 1995: 51). They argue that the existence of the analogue often motivates change through extension, but it may also stimulate change through reanalysis or through borrowing. However, it is not necessary for any change to occur.

It is generally assumed that some syntactic changes proceed by the means of *Lexical Diffusion*, i.e, the process where a change is spreading word by word through the lexicon. Harris and Campbell note that in synchronic syntax there is the concept that rules and patterns are lexically governed, especially with respect to several aspects of complementation. Thus in Modern English, verbs like *hate* may take the [*for...to*] pattern whereas verbs like *expect* cannot. This is illustrated in the following example:

(14) a. I hate for you to leave early.

b. *I expect for you to leave early.

(Harris and Campbell 1995: 83)

The sentences in the example (14) show synchronic differences among verbs in these contexts. Thus, Harris and Campbell note that it is not surprising that, when investigating these patterns diachronically, variation of this kind can be found. They further point out that changes which involve complementation in one way or another spread through the lexicon. They base this claim on the evidence procured by Warner (1982) who showed that, in Middle English, the verb *bigynne* could occur with the [*for ... to*] pattern whereas in Modern English the verb *begin* can only occur with *to*. According to Harris and Campbell this small change

demonstrates diachronic lexical diffusion of syntactic patterns because the rule to use the *to*-pattern in this context was generalized and thus the syntax of English changed in this respect. Harris and Campbell point out that extension, although it is a powerful mechanism of language change, is less varied than it would suggest and underlies certain conditions. They state that:

> ...the process of extension is systematic, and the environment into which a rule may be extended is restricted by the nature of the rule in the particular language. Observed extensions generalize to a natural class based on categories already relevant to the sphere in which the rule applied before it was extended.
>
> (Harris and Campbell 1995: 101)

Hence, in the example above, the type of extension could be defined as "removing a condition from a rule". According to Harris and Campbell, this means that there is a requirement which must be met in order for a rule to apply. Moreover, this requirement or condition specifies exactly where (in which environment) this rule applies. In respect to the example above, this would mean that with verbs which could take both patterns, the condition to use the [*for* ... *to*] pattern was removed. Consequently, these verbs and the verbs which could only use the *to*-pattern now both have the same condition and thus have the same pattern in this special environment.

2.6.2 External Mechanism

Unlike the internal mechanisms of syntactic change, which have received a substantial treatment in generative literature, issues connected to the external mechanisms of syntactic change have been rather neglected. The problems concerning language contact have traditionally been marginalized ever since the nineteenth century and the Neogrammarian concept of a homogeneous system as the sole legitimate object of analysis. Chomsky himself adopted a similar view:

> Linguistic theory is concerned with an ideal speaker-listener, in a completely homogeneous speech community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest and errors (random or characteristic) in applying his knowledge of the language in actual performance.
>
> (Chomsky 1965: 3-4).

Idealization of this kind might be correct for synchronic work, but it presents diachronic work with some serious problems. When syntactic phenomena are investigated from a diachronic perspective in order to identify and explain the changes which have taken place, researchers always have to assume that factors like language contact might play a certain role because changes in syntax from one generation to another are often evident. Therefore, the ideal object of analysis cannot be a completely homogeneous speech community but rather a heterogeneous one, under the assumption that through the course of time speech communities have contact with each other. A number of studies (Kroch 1989b, 1994; Kroch and Taylor 1997; Pintzuk 1991) have appeared in recent decades, which clearly show that there are cases where syntactic change can be explained only if language contact is taken into consideration.

2.6.2.1 Language Contact

There has been quite a lot of evidence in recent literature in favor of the claim that language contact is one of the important forces which trigger syntactic change. For example, the contact situation in Kupwar village in Maharashtra, India, where Kannada, a Dravidian language, is in contact with Marathi and Urdu, two Indo-Iranian languages (Kroch 2001). Kannada, which had a zero copula, borrowed a syntactic feature from Indo-Iranian, namely the use of the overt copula with predicative adjectives[2].

As this example shows, syntactic change due to contact may lead to the borrowing of syntactic features. On the other hand, language contact can also lead to the loss of features which distinguish the languages in contact. It has long been assumed that the contact with Old Norse was the reason for reduction and subsequent loss of case-marking system in Old English (e.g. Jespersen 1938).

The phenomenon of substratum effects can also be used as a specific example of linguistic contact which leads to syntactic change; in this case, the contact situation appears when adult second-language learners acquire their second language imperfectly and then pass certain features of this language on to their children, who thus become native speakers of exactly this language. Kroch (1999)

[2] See Gumperz & Wilson (1971).

notes that imperfect learning is the main cause of language change due to contact. However, the language learners whose acquisition is imperfect in this case are typically not children but adults.

It has not yet been sufficiently explained why speakers adopt features of another language or why certain features of a native language are carried over into an adult learner's second-language. What is indisputable, however, is the fact that:

> …grammatical features are not often borrowed by native speakers of a language and conversely, that they are likely to appear as interference effects in adult second-language acquisition.
>
> (Kroch 1999: 23).

In addition, Kroch (2001) emphasizes that interference effects point towards a causal account of certain kinds of change due to contact. If a group of adults learn a second-language and acquire this language imperfectly, and if their second-language becomes the primary linguistic data for a group of children, then these children who acquire the language as their native language will adopt interference features from their parents into their native language, and will spread it to others. In this case, the cause of imperfect learning is clear and language change is less mysterious than in cases of first-language acquisition.

Since contact with Old Norse has been proposed to be one of the relevant factors in disappearance of the verb-second word order in the history of English, the issues regarding this particular mechanism of syntactic change will be discussed in greater depth in the Chapter 5 of this dissertation.

2.7. Theories of Syntactic Change

Two different approaches to diachronic English syntax have emerged in the last few decades and the main difference between them lies in the way in which they try to explain word order variation through time, and, through this, the very nature of syntactic change in language history. Santorini (1989) refers to these two approaches as to *structuralist* versus *variationist* approach.

Both approaches base their explanations on the existence of Universal Grammar — a rich, highly structured system of linguistic rules which consists of principles and parameters that are set by triggers in the linguistic environment of

every new learner of a language. On top of this, both approaches have in common the assumption that a close connection and interaction exists between the processes of language change and the language acquisition.

The great, if not even radical difference between these two approaches, however, lies in the way in which they attempt to explain certain important diachronic syntactic phenomena, such as the evident slowness and gradualness of change in language, or the variation in use of old and new forms by the speakers during a period of change. Thus, according to the Structuralist approach, the basic propellant of syntactic change is the abrupt grammatical reanalysis performed at random by a new generation of language learners. The Variationist approach, on the other hand, advocates the gradual progress of syntactic change performed mainly by means of synchronic variation within the grammars of individual speakers.

2.7.1. Structuralist Aapproach

The representatives of the Structuralist approach to syntactic change attempt to explain changes in grammar by proposing an abrupt grammatical reanalysis which takes place during the process of language acquisition. In this section, some major theories shall be presented that advocate this approach.

2.7.1.1. Lightfoot (1991) and van Kemenade (1987)

The Structuralist approach is best displayed in the work of David Lightfoot (e.g. 1979, 1981, 1988, 1989, 1991), a firm believer in sudden grammatical reanalysis as the power behind diachronic changes in syntax. He believes that a learner of language, during the process of language acquisition, adopts a grammar which is never completely identical to the grammar of the previous generation. This difference in grammar between the speakers of different generations is, of course, only the surface phenomenon; the real difference between the old and the new grammar lies deeper in the structure of language and it actually reflects a change in the setting of a parameter in Universal Grammar.

According to Lightfoot (1991), parametric change begins with changes in the frequency with which certain constructions are chosen for use by the members

of the linguistic community. Such changes do not involve a change in the grammar as such, since the set of grammatical sentences remains the same. However, changes in frequency may reduce the availability of evidence for a particular parameter setting within the trigger experience, potentially to such an extent that at least some of the language learners adopt a different parameter setting from that of their predecessors. They then begin to produce performance with the incorrect parameter setting, and therefore, through their own speech, provide additional positive evidence to others in support of the new parameter setting. In this way, more and more new language learners are led to set the parameter in the new way. Once a new parameter setting has been adopted, a number of other simultaneous changes in any other features linked to that parameter will follow naturally.

It is important to note, however, that variation in frequency of different syntactic features, for example two different types of word order, is not a grammatical change in itself, although it may be a significant factor in causing a change in grammar. As Lightfoot himself puts it:

> …this no more reflects a difference in grammars than if some speaker were shown to use a greater number of passive or imperative sentences. Rather, it reflects the kind of accidental variation that is familiar from studies in population genetics.
>
> (Lightfoot 1991: 67)

A parametric change results in the obsolescence of particular constructions rather than in mere changes in its frequency. For this reason, an older syntactic feature, for instance an earlier type of word order, will completely disappear from the language only when the parametric change has taken place. Until that moment, the two word orders will both be used in speech, although with different frequency. That is why a drop in frequency of some syntactic structure does not yet reflect a grammatical change. The parametric change itself, on the other hand, is characterized by the sudden obsolescence of syntactic patterns that were compatible only with the old parameter setting.

In this way, every syntactic change, being the surface manifestation of parametric change, typically passes through several successive stages. First, a series of gradual changes takes place which have no grammatical significance. Grammatical competence remains the same, but the relative frequency of the output, i.e. the linguistic performance, alters because of some unspecified external

factors. In the next stage, this unsystematic change in relative frequencies alters the trigger experience for the language learners in such a way that some language learners cease to have access to enough relevant data to be able to set the parameter correctly. Once some language learners set a parameter differently, the next stage takes place in which they contribute to the trigger experience of the next generation simply by using the language, further impoverishing the data in favor of the old parameter setting, and perhaps introducing new constructions that provide positive evidence in favor of the new setting. The effect of these circumstances is a rapidly increasing propensity for the new generation of language learners to set the parameter in the new rather than the old way.

The loss of underlying object-verb order in Old and Middle English can illustrate Lightfoot's hypothesis. Due to the verb-second rule which existed in Old English, the underlying object-verb order was generally obscured in surface data. According to Lightfoot, the relevant question here refers to the way in which the language learners could have acquired the correct underlying order. However, since it is not possible to gather direct evidence about language acquisition in languages such as Old English, Lightfoot first turns to investigating how the new language learners acquire the correct underlying word order in a modern language similar to Old English, namely in Dutch.

He argues that language learners in Dutch can learn that the verb moves from its base position from the evidence of verb-second main clauses like the one in the following example:

(15) In Utrecht *vonden* de mensen <u>het idee</u> gek.
in Utrecht *found* [-3rd Sg] the people <u>the idea</u> crazy.
In Utrecht people found the idea crazy.

(Lightfoot 1991: 52)

The sentence in the example (15) shows that the verb *vonden* and direct object *het idee* are not adjacent. Complements must universally be base-generated adjacent to their heads, therefore one of them must have moved.

Language learners are able to infer that the verb moves leftwards across the object in the sentence in (15) from a position following the object from 'signposts'

in Dutch which indicate the original position of the verb. These signposts are elements such as separable verbal particles and negative markers which can be expected to be base-generated adjacent to the verb. After the verb has moved, these particles remain behind in post-object position, indicating that the verb itself moved from a position following the object. For instance, in the example (16) the separable particle *op* remains in post-object position, even though the verb *belt* has moved leftwards.

(16) Jan *belt* de hoogleraar op.
Jan *calls* the professor up
Jan is calling the professor up.

(Lightfoot 1991: 53)

Similar evidence for the position of the verb is available from modal constructions in sentences such as the one in the example (17) where the non-finite lexical verb remains in its underlying clause-final position after the object.

(17) Jan *moet* de hoogleraar opbellen.
Jan *must* the professor up-call
Jan must call the professor up.

(Lightfoot 1991: 53)

According to Lightfoot, similar evidence existed in Old English as well. Sentences can be found like the one in the example (18), parallel to sentences such as the one in the example (15), in which the verb is placed to the left of its object and non-adjacent to it.

(18) þe *gegaderode* Ælfred cyning his fierd.
then *gathered* Alfred king his army
Then King Alfred gathered his army.

(Lightfoot 1991: 60)

Evidence like this allows the language learners of Old English to infer verb-raising. As for the way in which the language learners deduces that the verb has

moved from post-object position, Lightfoot claims that learners of Old English had access to a certain amount of evidence that might establish this. Separable verbal particles, such as, for instance, *stand up* in the modern language, appear in Old English in a number of positions in main clauses, but in some cases, as in the clause in the example (19), they occur in the clause-final position that would indicate the base-position of the verb.

(19) þa *sticode* him mon þa eagon ut.
then *stuck* him someone the eyes out
Then someone poked his eyes out.

(Lightfoot 1991: 61)

Further evidence would come from the existence of verb-final main clauses, such as the one in the example (20), which would show the underlying object-verb word order directly.

(20) He hine an bigspell *ahsode*.
he him the parable *asked*
He asked him about the parable.

(Lightfoot 1991: 63)

Gradually, the frequency of word-order patterns where the verb could not have been fronted, in particular verb-final main clauses like the one in the example (20), declines. This change did not reflect a difference in the grammar, but rather an increasing propensity to choose certain options made available by the grammar rather than other possible options (Lightfoot 1991: 67). The verb-final word order in the type of sentences such as the one in the example (20) had provided good evidence for underlying object-verb order, and thus its decline significantly reduced the evidence for that order.

So, according to Lightfoot, it was the decline in the frequency of this type of data that led to the loss of object-verb order in the history of English. Eventually there was simply insufficient evidence for a language learner acquiring English to set the appropriate parameter to the object-verb setting:

> Consequently, as matrix instances of object-verb diminished to a certain point, underlying object-verb order became unlearnable and the verb-order parameter came to be set differently.
>
> (Lightfoot 1991: 67)

The result was a parametric change from the underlying object-verb to verb-object word order in English. Under the parametric account of change, it is expected that a parametric change triggers changes in other exponents of the relevant parameter, resulting either in the rapid disappearance or appearance of particular constructions, or in assignment of a new structure to constructions which are not compatible with the old grammatical setting. In this case, Lightfoot links two other rapid changes to the parametric change in the relative order of the verb and its object. First, separable verbal particles like *ut* from the sentence in the example (9), previously generated in a parallel way to objects, were reanalyzed as post-verbal adverbs everywhere, no longer prefixing to the verb in embedded contexts. And second, the change to verb-object word order spread rapidly to embedded clauses, where previously only object-verb word order had been possible.

The great majority of generative grammarians who also deal with problems of diachronic syntax accepted Lightfoot's structuralist approach to syntactic change, albeit with certain modifications. Van Kemenade (1987), for instance, tries to explain the change in base word order from object-verb in Old English to verb-object in Middle English as a resetting of the parameter specifying the direction of theta-role assignment, from leftward to rightward. She believes that the high frequency of right-branching surface structures in all clause types — which itself occurred in consequence to a gradual increase in the frequency of both postposition and verb raising during the Old English period — was the very phenomenon which triggered the change in word order. The logic behind this explanation is obvious: since this common West Germanic linguistic phenomenon known as *verb raising* attaches infinitival/participial complements to the left or right of the auxiliary verb, it is to be expected that an increase in the frequency of verb raising with right attachment would result in an increase in the frequency of right-branching surface structures. Verb-seconding, on the other hand, moves inflected verbs leftward to the INFL-position towards the COMP-position. Being the process which generates a surface structure which requires the inflected verb to take the position of the second

constituent in the clause regardless of the grammatical function of the first constituent, verb-second word order was obligatory in matrix clauses throughout the Old English period. Van Kemenade, therefore, presumes that it could not have played any significant role in the Middle English change of base word order from the object-verb pattern to the verb-object pattern. According to Kemenade, the change in word order was complete by the beginning of the thirteenth century.

Lightfoot (1991), as it was presented above, agrees with van Kemenade upon the type of change that occurred. However, he states that the change took place around the year 1100, i.e. a century earlier than it is assumed by van Kemenade. But he disagrees with her explanation of the phenomenon that triggered the change and with her dating of the change, since he believes that the change in word order was launched by the high frequency of post-verbal objects in matrix clauses, and not the high frequency of right-branching surface structures in all clause types.

Many earlier studies (e.g. Bean 1983, Gorrell 1895, Kellner 1892, Kohonen 1978, Mitchell 1985) did report the rather gradual increase of frequency of post-verbal objects in matrix clauses in the Old English period, an increase that possibly reached 80% during the eleventh century. But for Lightfoot, this gradual increase does not reflect a change of a parameter in the underlying Universal Grammar. On the contrary, he believes that the gradual increase of the frequency of post-verbal objects is actually a direct consequence of an increase in the frequency of verb seconding in matrix clauses. The argument, needless to say, only applies to matrix clauses with the main verb inflected, since post-verbal objects are derived by the verb-second rule only in such clauses, whereas in clauses with auxiliary verbs, the verb-second constraint does not affect the position of the main verb in the form of infinitive; therefore, in such clauses, the object remains in the pre-verbal position.[3]

The situation in subordinate clauses was rather different; during the entire Old English period, pre-verbal objects remained quite common in such clauses — until verb-object surface word order suddenly appeared at the beginning of the twelfth century. It is this abrupt emergence of a new, previously uncommon word order that, according to Lightfoot, proves a change in parameter setting, from

[3] Unless, of course, the object is affected by postposition, in which case it may take a different position in the clause.

object-verb to verb-object base word order.

Lightfoot presents four possible explanations of the apparent gradualness and variation in syntactic change in particular, and the linguistic change in general.

First, the use of a particular construction may become more frequent within a linguistic community, perhaps as a result of being associated with a new function, while the grammar itself remains constant. For example, the increase, mentioned above, in the frequency of post-verbal objects in matrix clauses during the Old English period does not indicate a change in the grammar which occurred during that period, but rather indicates the fact that a particular rule, in this case verb-second constraint, began to be used with a higher frequency.

Second, if the change involves the recategorization of lexical items, this recategorization may progress slowly and affect different words in different orders and with different frequencies.

Third, the very nature of language acquisition normally ensures that change progresses gradually, at least as far as the surface forms of a language are concerned. The primary linguistic data which trigger the process of language learning normally come from child's parents. The grammar adopted by children may be different from the grammar of their parents, but it still must generate outputs similar enough to ones generated by the grammar of the parents to preserve the unobstructed communication between different generations of speakers, or else the very purpose of learning a language would be compromised. Or, as Lightfoot (1991) puts it himself:

> Because grammars are abstract objects, grammars with quite different structural properties might generate sets of sentences which were more similar to each other, and grammars differing in just one parametric setting might generate wildly different outputs.
>
> (Lightfoot 1991: 161)

To apply this to the case of English word order and its change — while Old English word order strictly followed the object-verb basic pattern, processes of verb-seconding and postposition derived many surface structures with post-verbal objects. In this way, the clauses generated according to the rules of the Old English object-verb grammar and those generated by the rules of the Middle English verb-object grammar were, on the surface of language, quite similar.

Fourth, a linguistic community can adopt a new parameter setting only on the individual basis, each speaker for himself, and therefore rather slowly. At any given time, only some members of the linguistic community are affected by the change, never all of them. This might explain the fact that, during the transitional period between late Old English and Early Middle English some language learners were adopting the old object-verb grammar and others a new verb-object grammar.

Authors who advocate variationist approach, naturally, criticize the model of syntactic change suggested by Roberts and, especially, the one proposed by Lightfoot. Thus Pintzuk (1991) points out that it cannot account for the fact that during a period of syntactic change, variation may exist not only on the level of the language community, but also within the grammars of the individual speakers of that community. She has found evidence for alternating object-verb and verb-object base word order within individual texts starting as early as the tenth century and continuing throughout the Old English period. Moreover, she claims that Lightfoot implicitly acknowledged the fact that synchronic alternation between grammatical subsystems may exist, at least in the language of some mature speakers, when he stated that "…the data are sometimes not as clean as that idealization would suggest, because a writer often commands more than one form of a language" (Lightfoot 1991: 162). She further claims that, in the case of the underlying order of verbs and their complements whose appearance Lightfoot set around the year 1100, the alternation between two word orders existed more than a century before the time that Lightfoot assigns to the change.

In addition, Allen (1990) proved that clauses with pre-verbal objects were used productively until at least the beginning of the fifteenth century, which means that object-verb surface word order could not only be understood, but also generated, albeit at a relatively low frequency, for at least an additional three centuries after the year 1100 which Lightfoot marked as the date by which most language learners adopted the new verb-object word order. Clearly, this fact cannot be adequately explained by Lightfoot's analysis.

It therefore seems apparent that, even when the gradual spread of a new parameter setting within the community is taken into account, the hypothesis of sudden reanalysis of underlying word order from the strictly object-verb pattern in the Old English period to the strictly verb-object pattern in the Middle English

period is not sufficient to explain the variation in word order empirically discovered in the texts preserved — an argument widely used by the Variationists as evidence that the Structuralist approach to the problems of syntactic change is inadequate.

2.7.1.2. Roberts (1993)

Similar to Lightfoot, Roberts (1993: 148) also proposes a model of linguistic change in which the appearance of a new construction or a change in frequency of an old one does not immediately result in any change in the grammar, so the set of syntactic structures generated by that grammar remains the same. After all, a change in frequency with which certain structures are selected in performance is perfectly possible for non-syntactic reasons, and thus no change in the grammar is necessary at this stage.

Roberts (1993) distinguishes three components in his theory of language change. A *step*, defined as "the appearance of a new construction, or a significant change in the frequency of a construction" (Roberts 1993: 158), is a diachronic relation between E-languages; a *parametric shift* is a diachronic relation between I-languages; and a *Diachronic Reanalysis*, the reanalysis of a given structure, is a relation between the E-language of one generation and the I-language of the next. Diachronic Reanalyses are caused by the *Least Effort Strategy*, which prompts learners to choose the grammatical representation containing the shortest possible set of chains, and they often provoke parametric shifts by eliminating the evidence for a given parameter setting; Roberts suggests that they are always minimal, that is, that each reanalysis reduces the structure as little as possible. Although steps and Diachronic Reanalyses can reduce the frequency of constructions, only parametric shifts can make them ungrammatical.

Every change begins with a step, which is a performance phenomenon. Since performance is the input data for first-language acquisition, a change in the frequencies of constructions may alter the way in which a new generation of language learners analyzes the language. The reason why a step causes a change reflects in the fact that language learners had previously had to reject some structurally simpler analysis of some construction because of counter-evidence in the triggering experience. However, as a consequence of the step, the aspect of the

trigger experience which forced rejection of the simpler analysis becomes rarer, sufficiently so that it fails to lead the language learner to reject the simpler analysis. Alternatively, the evidence in favor of the new analysis becomes more frequent, and so more compelling to the language learner. Some language learners therefore adopt a new structure for a familiar construction, i.e. a mechanism of Diachronic Reanalysis takes place.

The nature of the reanalysis is determined by another mechanism of syntactic change, the *Least Effort Strategy*, similar to Lightfoot's (1979) *Transparency Principle*. This means that:

> Representations assigned to sentences of the input to acquisition should be such that they contain the set of the shortest possible chains consistent with (a) principles of grammar, (b) other aspects of the trigger experience.
>
> (Roberts 1993: 156)

In other words, the language learner assigns to a given sentence of the input the syntactic structure involving least movement, regardless of the effect that this has on parameter settings. Essentially, this is a way of formalizing the intuitive notion of 'simplicity' of structure in terms of chain positions. The mechanism of Diachronic Reanalyzes frequently creates the conditions for parametric changes, by removing the structural evidence for a given parameter setting. This new setting causes unexpected and sudden changes to the set of grammatical sentences. Once the language learner adopts a new parameter setting, the structure of a number of constructions may have to be changed in order to accommodate the new setting. That is, the parameter change triggers other Diachronic Reanalyzes (Roberts 1993: 160).

The changed parameter may also mean that old constructions simply cannot be generated by the grammar any more, and some new ones not generated by the previous grammar may suddenly appear:

> …the elimination of structures is associated with parametric changes, but changes in frequency and status . . . of structures may be the consequence of lower-level factors, typically Diachronic Reanalyzes.
>
> (Roberts 1993: 198)

These steps may in turn feed back into the system perpetuating syntactic change.

As it can be observed from what is said above, the most important distinction between the model for language change proposed by Roberts (1993) and the model proposed by Lightfoot (1991) is the postulation of Diachronic Reanalyzes as a separate phenomenon from steps and parameter changes in this model. As Lightfoot (1997) points out, though, the distinction between a parametric shift and a Diachronic Reanalysis is not entirely clear. Roberts himself allows that "[a]ll Diachronic Reanalyses may turn out to be instances of Parametric Change" (Roberts 1993: 159). As well, this theory does not explain why the Least Effort Strategy should provoke a reanalysis in one generation of learners and not another.

2.7.2. Variationist approach

The representatives of the Variationist approach to syntactic change attempt to explain changes in grammar by proposing a model of gradual change which takes place over several generations of language learners and which is performed mainly through synchronic variation within the grammars of individual speakers. In this section, some major theories shall be presented that advocate this approach.

2.7.2.1. Kroch (1989)

The Variationist approach, as proposed by Kroch (1989a, 1989b), attempts to explain syntactic change by presuming that:

> …speakers learning a language in the course of a gradual change learn two sets of well-formedness principles for certain grammatical subsystems over historic time pressures associated with usage (presumably processing or discourse function based) drive out one of the alternatives.
>
> (Kroch 1989b: 349)

In other words, Kroch claims that at least some instances of change involve synchronic competition between syntactic alternates over time. According to this hypothesis, the alternation involves more than just free variation in surface forms. In fact, in his study of the rise of periphrastic *do* in Late Middle and Early Modern English, Kroch demonstrates that the frequency of the use of *do* vs. the simple verb

form increased over time at the same rate in five different syntactic contexts. On top of that, he also shows that a change in the placement of the adverb *never* occurred at the same rate during the same period.[4] Thus the fact that both changes advanced at the same rate, and the fact that the various syntactic contexts all exhibited the same rate of change, seem to indicate that the variation in surface forms and word order actually reflects a single underlying alternation in the grammar. For Variationists, both the gradualness of change and the variation exhibited by individual speakers are integral parts of the theory of syntactic change.

Kroch (1999) is especially critical towards Lightfoot's notion of a gradual drift in usage which is followed by a sudden change in grammar, stating that the empirical evidence for existence of such a drift are, at best, uncertain. According to Kroch, the problem lies in the fact that the phenomenon to which Lightfoot refers as "drifting" has no obvious motivation; therefore, he finds it unclear why the frequency of a certain form undergoing change should be incorrectly learnt in one case, but correctly learnt in practically all the other cases. He cites cases such as the stability of the frequency of the placement of adverbs in the history of English as an example where drift would have most likely occurred, but did not (Kroch 1999: 6-8). In his opinion, if the drift model was correct, the loss of movement of the finite verb to the INFL-position in Middle English would have caused an increase in the frequency of pre-verbal adverbs. However, the frequency of pre-verbal adverbial placement versus post-verbal placement remained the same throughout time, thus rendering the motivation for the change in frequencies that bring about a reanalysis extremely unclear.

In order to avoid postulating drifts in the frequencies of use that occur prior or independently of grammar change, Kroch (1989b, 1989b, 1999, 2003 a.o.) attempts to explain syntactic change by presuming that:

> … speakers learning a language in the course of a gradual change learn two sets of well-formedness principles for certain grammatical subsystems over historic time pressures associated with usage (presumably processing or discourse function based) drive out one of the alternatives.
>
> (Kroch 1989b: 349)

He claims that at least some instances of change involve synchronic

[4] See Chapter 3, section 3.2.3.1., of this dissertation.

competition between syntactic alternates over time. Unlike Lightfoot's approach, which has pretension to universality, this approach does not claim that every change that affects syntax of a language progresses by the means of synchronic variation, but only that some specific cases of syntactic change can be sufficiently explained by this process.

The model of language change proposed by Kroch is known as *Imperfect Transmission*. In this model, the grammatical change is not perceived as something that takes place at the end of a long period of drift — instead, it represents the first stage in the process of change. According to the hypothesis of Imperfect Transmission, change occurs when, for a variety of reasons, a language learner "mislearns" the grammar of his speech environment. In this way, each new generation of language learners creates a grammar that is somewhat different from the one they were originally exposed to. This subtle but cumulative difference in grammar, according to Kroch, eventually creates a difference in the patterns of usage.

Basing the model in the principles and parameters framework, Kroch (2003), following Clahsen (1991) and Penner (1992) (both cited in Kroch, 2003), assumes that language learners set linguistic parameters in an irreversible way. Therefore, when the learner first encounters some input that makes reference to a certain parameter, he/she will set it accordingly. If all the following input that he/she is exposed to is consistent with this parameter setting, the learner will simply assume that this is the target grammar and nothing further will happen.

However, if, later on, the language learner comes into contact with data which contradicts the first parameter setting, he/she will invariably realize that they cannot simply reset the parameter, nor can they put the parameter on both settings; therefore the language learner is compelled to create a separate grammar which has the parameter in question set in the opposite way. The language learner has now become "bilingual" or "bi-dialectal", in the sense that he has two, or even more, separate grammars established in his mind and can use either one of them at will. The two grammars do not, however, coexist completely harmoniously — they are in a specific state of semi-collision which Kroch (1989b) and Pintzuk (1991) call *grammar competition*. In a first language acquisition sense, this term corresponds to a situation where a child mistakenly acquires a parameter setting that is clearly

different from the majority of input sentences she is exposed to. According to Kroch (2003), if the language learner is young enough and the primary linguistic data conclusively support the second, newer grammar, then he/she will begin using the second grammar at the expense of the first. After a period of variation, i.e. competition, the second grammar will prevail over the first, becoming the dominant grammar that the speaker uses, and it will practically eradicate the grammar which the learner had adopted first.

Kroch (1989b) proposes a model of language change which essentially mirrors the process of grammar competition in acquisition, but on a larger scale. According to this model, language change occurs when the primary linguistic data available to learners consistently requires the creation of two grammars, the competition between which is not eradicated within the critical period of acquisition. Speakers can, therefore, live their entire lives with multiple grammars, and they make choices as to frequencies at which they use one grammar over the other that are "probabilistically influenced by features of context and situation" (Kroch, 1989b: 3).

Further support for parameter-based grammar competition comes from the rate that the time course of language change takes. If the assumption that the grammars in competition differ in the setting of an abstract parameter is correct, then the result of a parametrical difference should manifest itself as a series of correlated changes that instantiate the abstract change and not as a single difference in form. Therefore, one would expect all the elements affected by the parametrical change to be changed at the same rate.

This is known in Kroch (1989a) as the *constant rate hypothesis*. More specifically, it is the claim that, although the rate of use of different grammatical options in competition will most likely differ across contexts at each period in time, the rate of change will be the same across contexts (Kroch, 1989a: 6). The realization of this hypothesis can be illustrated through the case of the loss of verb-second in the history of French. As shown in the figure (1), the losses of pro-dropped subjects, full nominal subject inversion, and pronoun subject inversion proceed at the same rate, as would be expected if they were the result of a change in a certain verb-second parameter.

(1)

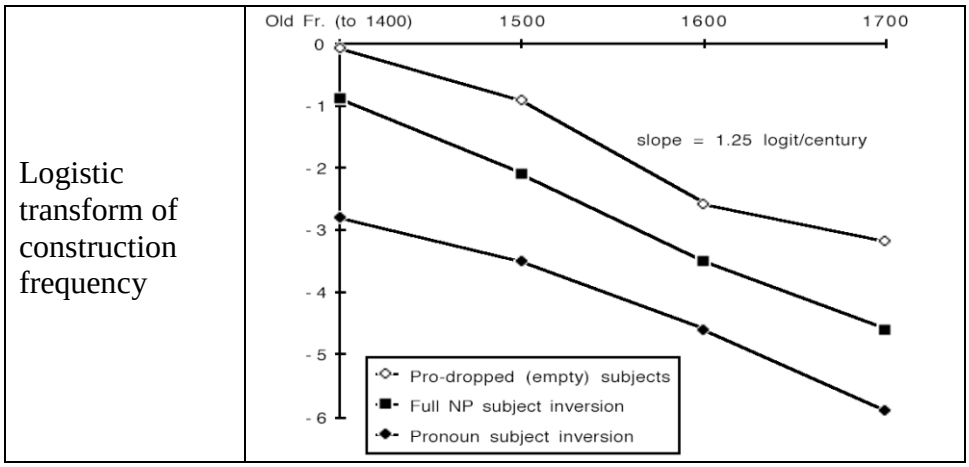


Figure 1: The decline of inversion and null subjects in Middle French. (adapted from Fontaine 1985: 90)

2.7.2.2. Yang (2000)

Yang (2000) proposes yet another approach to diachronic linguistic research that strongly links language change with acquisition. He compares the tension that exists between the discrete and symbolic nature of grammatical competence and the variable, heterogeneous nature of performance with the tension that exists between the discrete basis of Mendelien genetic and the continuous distribution of genotypes in populations. He views language acquisition as being similar to evolution:

> In light of the variational thinking in biology, the linguistic difference between children and adults may not be children's imperfect grasp of adult language, as traditional approaches have suggested. Rather, it may reflect principled hypotheses of language that children entertain before conclusively settling on the target language. Hence, language acquisition can be viewed as a variational process in which the distribution of grammars changes as an adaptive response to the linguistic evidence in the environment.
>
> (Yang, 2000: 234)

As in Kroch's model, this "variational process" is realized through multiple grammar competition and replacement. In this model, within the finite collection of grammars that make up Universal Grammar, each grammar (G_i) is associated with a weight (p_i), which denotes the probability with which the learner will access the grammar. According to Young, when an input sentence is presented, a grammar is selected, which together results in language acquisition. The probability that certain

grammar would be selected is determined by its weight. The grammar is then used to analyze the sentence. If the sentence can be successfully parsed using the selected grammar, it is rewarded: i.e. its weight is increased, and the weights of all the other grammars are indirectly punished: i.e. their weights are decreased. If the selected grammar fails to parse the input, it is punished and the other grammars are rewarded. This process continues until a single grammar has a weight that ensures that it will be exclusively selected.

In accordance to the common assumption that Universal Grammar remains constant from generation to generation, the language change must be due to a situation where two generations are exposed to different linguistic evidence, which results in different knowledge of language. According to Yang, the different linguistic evidence can arise in a variety of ways such as through the migration of foreign speakers who introduce novel forms into the language, through linguistic innovation, or through more general social and cultural factors (Yang, 2000: 237). These factors will create a situation where the input evidence will seem to reflect two conflicting grammars. The proportion of expressions that belong to Grammar 1 (G_1) that are incompatible with Grammar 2 (G_2) is called the advantage of G_1, and the proportion of expressions in the environment that belong to Grammar 2 that are incompatible with Grammar 1 is called the advantage of Grammar 2. Therefore, according to Yang's theory of acquisition, Grammar 2 will overtake Grammar 1 if the advantage of Grammar 2 is higher than Grammar 1. The change takes the shape of the logistic, as shown in figure (2):

(2)

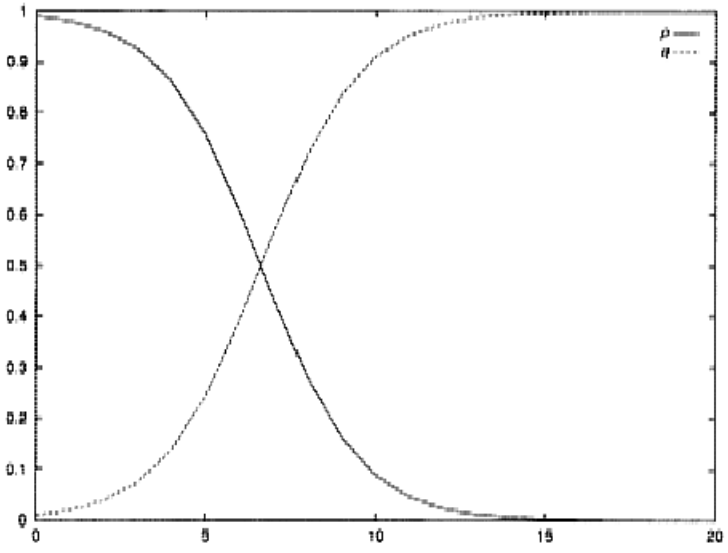


FIGURE 2. One grammar (q) replacing another (p) over time. The X-axis denotes the number of generations, and the Y-axis denotes the weights of the two competing grammars. (Yang 2000: 240)

Due to the repeated "punishment" of unsuccessful grammars that it proposes, a corollary of Yang's model is that, once a grammar is on the rise, it is unstoppable (Yang 2000: 239).

2.7.2.3. Clark and Roberts (1993)

Clark and Roberts (1993) propose another theory, which takes an evolutionary look at language acquisition and change. They perceive the process of language acquisition as a form of natural selection among hypotheses about the target grammar. According to their theory, hypotheses are made up of sets of parameters and encoded as strings of binary digits. Each hypothesis translates into a parsing device; these parsing devices are tested against each input datum, and their fitness is judged based on how they interpret the datum. The most important factor is the well-formedness of each parse, specifically the number of basic grammatical principles which are violated.

Other factors are also considered, including the elegance of the parse, measured as the number of nodes contained in it, and the number of superset parameters; these factors are important when distinguishing among equally grammatical interpretations. A superset parameter is one which, when set a given way, produces a set of sentences which includes all sentences that could be generated with the parameter set the other way. If the learner were to incorrectly postulate the superset setting, there would be no evidence available to disprove this hypothesis, and the language acquired would be a superset of the target language; in order for this not to happen, such hypotheses must be selected against, as per the *Subset Condition* of Berwick (1985). When the relative fitness of the hypotheses is determined for a given datum, the most fit hypotheses are selected for special "mating operations": a crossover mechanism, by which a new hypothesis is formed from parts of two old ones, and a mutation operator, which forms new hypotheses by randomly changing parameter settings. Over time, parameter settings which are frequently expressed in the input will be selected for, while those which are unable

to interpret the input will be selected against; thus, the population of hypotheses will tend towards the optimal settings for the target language. This process does not, however, guarantee that the learners' grammars will be identical to those of their parents. If a parameter is unambiguously expressed in the language, it is stable, but if the evidence becomes ambiguous between various settings, the language becomes unstable and prone to change. Instability can arise for various reasons: phonological changes may make syntactic parameter settings difficult to interpret; a change in one parameter may destabilize another one; or the language may become "shifted," with learners setting parameters in such a way that they interact to produce a superset language. Once a language becomes unstable, learners turn to internal factors of Universal Grammar, specifically elegance and the Subset Condition, to choose between hypotheses.

This model is similar to Yang (2000) in that, as in his model, the outcome of language acquisition is determined by the compatibilities of grammars with the linguistic input data in a "Darwinian selectionist manner" (Yang, 2000: 240). The differences between these two models lies mainly in the fact that Clark and Roberts (1993) do not accept existence of multiple grammars within the head of a single speaker, whereas Young does, as well as Kroch before him. These evolutionary theories are impressive, but as Kroch (1999) notes, theories such as that of Clark and Roberts "are useful hypotheses, no doubt, but unless they can be further specified to make empirically testable predictions, they will remain speculative" (Kroch 1999: 35).

2.8. Conclusion

A syntactic change has taken place in a language when a generation of speakers produces a structure that is different from the structures produced by the previous generations. The presence of this new structure in written texts remained from the past is sufficient for the change to be observed. For the change to be explained, on the other hand, it would be necessary to identify the causal forces that provoked the change and to clarify their interactions. It seems clear, from everything presented in this chapter, that these causal forces are to be looked for in two places: within the language itself, in the process of the first language

acquisition during which the new generation of language learners adopts a somewhat different set of grammatical rules in respect to the grammar of the adult speakers, and outside of language, especially in contacts with other languages. As far as the disappearance of the verb-second from English is concerned, both set of factors are highly relevant, even necessary for the explanation of this syntactic change in English.

CHAPTER 3

VERB MOVEMENT

3.1. Introduction

Verb movement, one of the most important instances of head movement, is a syntactic operation in which the verb leaves its basic position and moves to one of the c-commanding head positions. So far, two different verb movement operations have been well-established within the Principles and Parameters framework: the movement of the finite verb to the INFL-position (I^o), and the movement of the finite verb to the COMP-position (C^o).

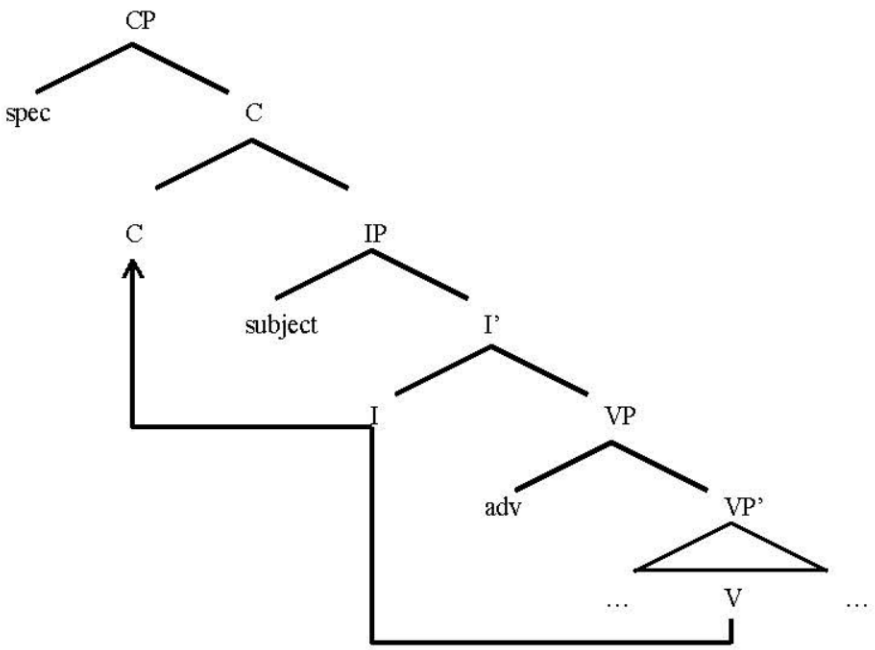
The first one, movement of verb to INFL-position, takes the finite verb from its base position and places it in a higher position, i.e. the position situated in between the projection of the verb and the position of the subject. In this way, the finite verb surfaces on the left of adverbs that are taken to be located at the left edge of the basic verb position (VP), which makes this movement directly observable. To put it simply, the verb moves from its basic position to the INFL-position in order to pick up morphological inflection, such as tense and/or agreement. For this reason, INFL has been reinterpreted in some frameworks as a conflation of two separate heads, agreement (AGR^o) and tense (T^o).

The other verb movement, the movement of the finite verb to the COMP-position, places the verb in a position higher than the structural position of the subject, under the assumption that the movement of the verb to COMP-position must be performed through the INFL-position, because there is no alternative way

in which Vº could move directly to Cº by skipping Iº. This is due to the so-called head movement constraint originally formulated by Travis (1984: 131), according to which a head may only move into the next governing head position. In effect, this constraint places a limit on the distance over which a head may be moved. And the reason why the verb needs to move to a higher position in the structure in the first place, is because the output requirements determine that the verb cannot stay in a particular position (Chomsky 1995).

As the diagram (1) shows, the lexical domain of the Verbal Phrase (VP) is dominated by a functional domain consisting of two projections from functional heads, the head of the Inflection Phrase (IP), which is the maximal projection of INFL, and the head of the Complementizer Phrase (CP), which is the maximal projection of COMP. It is generally accepted that the functional domain consists of a set of heads that instigate movement of elements from the lexical domain. The properties of these functional heads, especially the properties of the Inflection Phrase, the position where inflection is generated, are considered responsible for word order differences in general, including differences in verb placement.

(1)



In real life, however, things are a bit more complex than this. The position in which the verb surfaces in declarative clauses shows considerable variations

from language to language. Some, like French, manifest movement of verb to the INFL-position, but not movement of verb to the COMP-position, while others, like Swedish, have quite the reversed situation, as they have movement from verb to COMP without manifesting movement from verb to INFL; some languages, like Icelandic, have both movements, whereas others, like English, have neither one. In addition to that, the position of the finite verb in embedded clauses in some languages, like German, Dutch or Swedish, differs from its position in the main clauses, thus further complicating the situation.

The real importance of verb movement to INFL-position and verb movement to COMP-position for the Principles and Parameters framework is reflected in that these two verb movement operations are clearly parameterized options, since a language can have one of them, both, or neither of the twain.

The main problems in regard to the grammatical interpretation of verb movement are rather heterogeneous, but they can be grouped into three major areas: the problems of explaining the true nature of the positions to which the verb moves, the problems of defining the triggering forces behind these movements, and the problems of explaining the difference in verb placement not only in different languages, but also within the linguistic material from the same language.

So far, the questions concerning the nature of the target positions, and the ones focused on what triggers the movement, have been addressed in various researches with considerable success. The problems connected to cross-linguistic and language-internal differences in verb placement, on the other hand, still remain largely unresolved, among others the problems regarding one of the most important manifestations of verb movement — the verb-second phenomenon. It is self-evident that none of the questions concerning the placement of the verb in the position of the second constituent in English — or the absence of the verb in such a position — could be answered without a thorough explanation of the verb movements which lie beneath the surface word order in the deep structure of the language.

3.2 Verb movement to INFL

Well-known is the fact that the finite verb in some languages must precede a particular class of elements, including sentence adverbs, negation and floating

quantifiers, while in other languages the situation is quite the opposite, so the finite verb obligatorially follows these elements. This difference could be formally expressed as follows:

(2) a. ... subject V_{finite} *adv/neg/FQ* ...

b. ... subject *adv/neg/FQ* V_{finite} ...

Translated into real languages, for instance French and English, the patterns presented in the example (2) would look like this:

(3) a. *Jean souvent *embrace* Marie
Jean *embrace* souvent Marie

b. *John *kisses* often Mary
John often *kisses* Mary

(Pollock 1989: 367)

Evidently, the word order acceptable in one language is considered ungrammatical in another, and vice versa. The syntactic explanation of the sentences given in the example (3) would be that the verb has crossed the adverb on its way to INFL-position in French but not in English — under the assumption the adverbs are left-adjoined to Verb Phrase, and taking it as a given that verbs in either French or English do not move as high as the COMP-position in declarative clauses (cf. Emonds 1976; Pollock 1989).

In Mainland Scandinavian languages, finite clauses embedded under a non-bridge verb never display subject-verb inversion. The finite verb must follow VP-adverbs in these cases, indicating that it has not left its base position. Here are examples from Danish (4) and Swedish (5):

(4) a. *…at Peter *havde* ofte læst den
…that Peter *had* often read it

b. …at Peter ofte *havde* læst den
…that Peter often *had* often read it

(5) a. *…att Jan *kysser* ofta Maria
…that Jan *kisses* often Maria

b. …att Jan ofta *kysser* Maria
…that Jan often *kisses* Maria

Vikner (1995: 143)

What these examples clearly demonstrate is the fact that, in cases in which there is no verb-second requirement, the clause structure of Danish and Swedish is identical to that of English, i.e. in the absence of the verb-second constraint, the finite verb does not leave its base position in either one of these languages.

But this is not the case with other Germanic languages. In Icelandic and Yiddish, subject-verb inversion takes place in embedded clauses as well. Generally speaking, this makes it impossible to test in a direct way whether these languages have independent movement of verb to the INFL-position. However, Vikner (1995) observes that, in both Icelandic (6a) and Yiddish (6b), subject-verb inversion is blocked in embedded clauses that are introduced by wh-words like *af hverju* (why), so he concludes that the verb-second is also blocked in these contexts.

(6) a. *Ég veit ekki af hverju í herberginu *hefur* kýrin staðið
I know not why in the room *has* the cow stood

b. *Ikh veys nit ven in tsimer *iz* di ku geshtanen
I know not when in the room *has* the cow stood

Vikner (1995: 138)

These examples could serve as a testing ground to see whether verb movement to INFL-position takes place in these languages, and, as expected, they show that the finite verb precedes VP-adverbs, indicating that it moves to a VP-external position even when the effect of verb second is filtered out:

(7) a. *Ég veit ekki af hverju kýrin oft *hefur* staðið í herberginu
I know not why the cow often *has* stood in the room

b. Ég veit ekki af hverju kýrin *hefur* oft staðið í herberginu

I know not why the cow *has* often stood in the room

(8) a. *Ikh veys nit ven di ku oyfn *iz* geshtanen in tsimer

I know not when the cow often *has* stood in the room

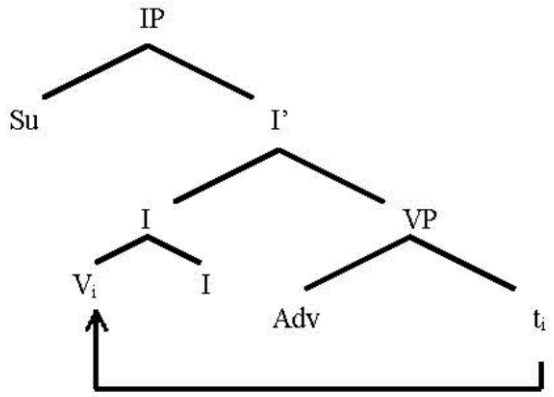
b. Ikh veys nit ven di ku *iz* oyfn geshtanen in tsimer

I know not when the cow *has* often stood in the room

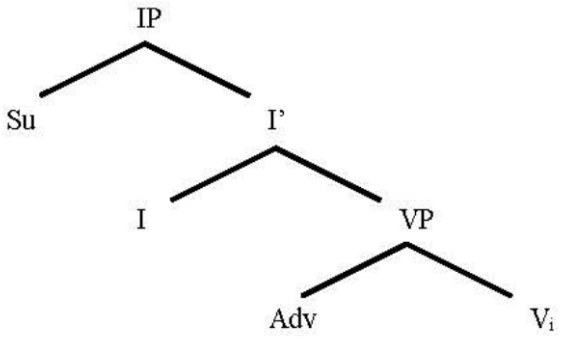
Vikner (1995: 138-139)

The contrast in verb position between the sentences given in the example (6) and the sentences given in the examples (7) and (8) could thus be considered a concrete manifestation of the contrast abstractly displayed in the pattern given in the example (2).

(9) a.



b.

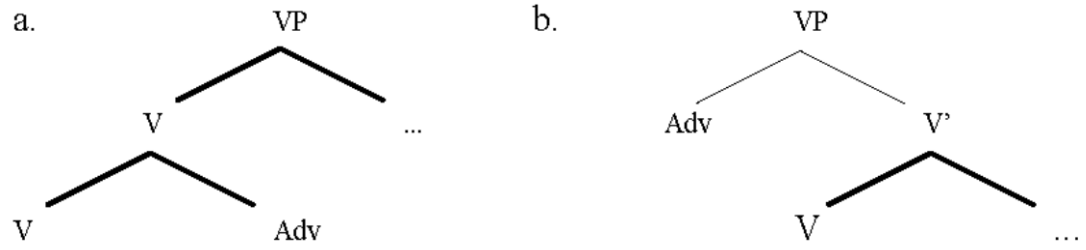


If one assumes that, in Icelandic and Yiddish, elements of the adverbial class occupy a fixed position at the left edge of VP, then a conclusion could be drawn that the finite verb in Icelandic and Yiddish crosses the adverb on its way to

a functional INFL-position (I) in the same way it happens in French, which is displayed on the diagram (9a), as opposed to English or the Mainland Scandinavian languages, in which finite verbs stay in their base position, as in the diagram (9b).

Not every author, however, agrees with this standard analysis. Thus Williams (1994) argues that the verb occupies a fixed position across languages and that the difference in (2) lies in whether adverbs can be right-adjoined to verb or not. His proposal can be illustrated by the following diagram:

(10)



According to Williams' analysis, the contrast between the two deep sentence structures does not involve verb movement at all; it is, instead, the consequence of the possibility that exists in some languages to build [$_V$ V-Adv] complexes in their lexicon. Williams claims that such a lexical operation is blocked in English, since, unlike French, it has a right-headed morphology.

However, if Williams's analysis is accepted, then a question remains unanswered of why the possibility of syntactically generating an adverb to the left of the Verb Phrase is radically excluded in a language like French. Since French allows infinitival constructions in which the infinitive can follow the adverb without any problem, as it is demonstrated by the sentence in the example (11), it is apparent that the option of generating adverbs to the left of the Verb Phrase must be allowed in French, at least in principle.

(11) Jean *aime* de souvent embrasser Marie
Jean *loves* to often kiss Marie
Jean *likes* to kiss Mary often.

(Pollock 1989:367)

It is rather obvious that in this case the adverb has not simply been left-adjoined to the verb, because if that had been the case, then it would be impossible to understand why the same option is blocked with finite verbs (cf. 3a).

3.2.1. Corelation with Inflectional Morphology

The placement of the finite verb before or after sentence adverbs does not seem to be an arbitrary difference at all (Platzack and Holmberg 1989). It has long been noticed that movement of the verb out of its basic position stands in direct correlation with the state of inflectional morphology in a given language[5]: wherever this movement is registered as a regularly appearing operation, a relatively rich inflection was also reported for the language, e.g. Roberts (1992), Rohrbacher (1992), Vikner (1995), Bobaljik and Thráinsson (1998). The part of inflectional morphology that seems particularly relevant in this context is number and person agreement[6]. The paradigms of verbal subject agreement seem to indicate that languages such as Icelandic, with many distinctions within this paradigm, tend to place the verb to the left of adverbs, as opposed to languages with a poor agreement paradigm, such as Swedish, which favor placement of verbs after adverbs. For example:

(12) a. Icelandic (inf. segj-a)

	Sg.	Pl.
1st	seg-i	segj-um
2nd	seg-ir	seg-id
3rd	seg-ir	segj-a

b. Swedish (inf. bit-a)

	Sg.	Pl.
1st	bit-er	bit-er
2nd	bit-er	bit-er
3rd	bit-er	bit-er

The fact remains that Swedish had, in its past, just as rich a paradigm as Icelandic still does, and, in these former stages, it favored the placement of the final

[5] Unlike the Scandinavian languages and English, which demonstrate verb-object word order, the syntax of Germanic languages with predominant object-verb word order, such as Dutch or German, is such that the presence or absence of inflection-related verb movement is rather hard to establish empirically. Therefore, they do not directly favor the arguments presented in this section, although they do not undermine it either.

[6] As Vikner (1995: 132) points out, though, the presence or the absence of verbal inflection, namely of the person/number agreement, does not itself trigger or block the verb movement to INFL-position, so it cannot be stated that only the languages which have such an agreement, also have the verb movement to INFL, and vice versa, because such a prediction would clearly be wrong.

verb to the left of the adverb. The Old Swedish paradigm is given in the following example:

(13) Old Swedish (inf. älsk-a)

	Sg.	Pl.
1st	älsk-a(r)	älsk-um
2nd	älsk-a(r)	älsk-in
3rd	älsk-a(r)	älsk-a

As the subordinate Old Swedish sentence given in the example (14) shows, the finite verb precedes the negation marker — the word order which was apparently allowed in Old Swedish, but which is considered ungrammatical in present day Swedish.

(14) …æn han *sivngær* ægh thigianda messu…
…if he *sings* not silent mass
…if he does not sing the mass silently…

(Rohrbacher 1992:47)

According to Rohrbacher (1992), this seems to indicate that if a language loses some of its subject agreement through time, the constituent order gradually switches from [V_{finite}-*Adv*] to [*Adv*- V_{finite}]. It has not yet been satisfactorily explained, however, why the possibility of lexical adjunction of adverbs in a language should be determined by richness of its inflection.

A number of authors, among others Emonds (1978), Pollock (1989), Platzak (1988), Platzak and Holmberg (1989), Vikner (1995), argue that the mere presence of the inflection is not enough to trigger the movement of the verb to INFL, but that the inflection has to be strong enough to initiate such a syntactic consequence. It is therefore the richness of verbal inflection that triggers the movement, which would not take place in a language which still has person and number agreement preserved to some extent, but where this agreement is relatively poor and insufficient for triggering the movement of the verb to INFL-position.

Yet, the consensus has not been made about how rich the inflectional morphology needs to be in order for the movement to take place. Clearly, the exact

number of existing verbal inflecting endings that designate person and number is not a relevant factor, because both French and Faroese, for example, have three endings preserved, and yet the verb movement to INFL is only present in French, but not in Faroese (Vikner 1995: 133).

Platzack and Holmberg (1989: 70) propose an alternative concept — the concept of *substantial number of distinctions*. They suggest that the movement of the verb to INFL is triggered by the existence of distinctions between different persons. They developed the concept in order to account for the difference between two Scandinavian dialects, the Swedish dialect of Älvdalsmålet, and the Norwegian dialect of Hallingdalen. While Älvdalsmålet shows both number and person distinctions, the verb in Hallingdalen is only inflected for number, but not for person. At the same time, only Älvdalsmålet has verb movement to INFL-position.

(15) a. Älvdalsmålet (inf. kast-a)

	Sg.	Pl.
1st	kast-ar	kast-um
2nd	kast-ar	kast-er
3rd	kast-ar	kast-a

b. Hallingdalen (inf. kast-æ)

	Sg.	Pl.
1st	kast-a	kast-æ
2nd	kast-a	kast-æ
3rd	kast-a	kast-æ

(Platzack and Holmberg 1989: 97-98)

However, this account still predicts that Faroese and French should both have verb movement to INFL, which is not the case for Faroese. Therefore, Platzack and Holmberg's suggestion is typically amended by the claim that the relevant distinction here is whether person distinctions are present in the plural, while the singular inflection is irrelevant. But this modification is completely arbitrary and it is very difficult to justify it.

To avoid this problem, Roberts (1993) proposes that the existence of distinct inflectional endings in both singular and plural is the actual trigger of verb movement to INFL. Thus Älvdalsmålet has two plural and one singular distinct ending, which is sufficient to show the language learner that material generated in INFL requires the verb to move there; Hallingdalen, on the other hand, has only one distinct ending for the singular, whereas the plural forms are indistinguishable from the infinitive, and this amount of verbal inflection is apparently not powerful enough to trigger the move of the verb to the INFL-position.

To abridge this difficulty, Rohrbacher (1994) suggests that the connection between the verbal inflection and the movement of the inflected verb to the INFL-position should be formulated in a way which would include an additional requirement — that in at least one tense either singular or plural the given language has to mark the first and the second person unambiguously. This means that the movement to INFL would be triggered only if the verbal system preserves the difference in form not only between the first and the second person, but also between them and the third person, and all of these forms need to differ from the form of the infinitive.

Bobaljik (2003), on the other hand, proposes that the relevant question for explanation of the correlation between inflectional morphology and verb movement to the INFL-position should be whether the morphology forces the existence of two distinct functional heads — one for Tense and one for Subject agreement — or not.

What these different views and proposals clearly show, then, is that the relationship between the presence of subject-verb agreement in a given language, and the presence of the movement of the finite verb to the INFL-position is an implication rather than an equivalence.

Accounts of the relation between overt morphology and overt verb movement to the INFL-position have also differed on the question of how strong this correlation is. These differences in turn motivate — or are motivated by — different theories in regard to the nature of the parameter involved, and the way in which it can be set. At one extreme, Rohrbacher (1992) proposes that the relation between richness of agreement morphology and the order of the verb and the negation element is a bi-conditional:

(16) rich agreement morphology ←→ V-to-I

Roberts (1999: 291) states that “there are certainly languages with V-movement that lack the relevant morphology”. He therefore proposes a weaker version of this relation:

(17) rich agreement morphology → V-to-I

The basic idea behind these proposals is reflected in the fact that the

agreement morphology is perceived as a trigger for acquiring the marked value of the parameter that results in the overt movement to the INFL-position. Even if this morphological trigger is absent, however, a child could still acquire the same value of the parameter if there is enough syntactic evidence for it. The theory proposed by Bobaljik and Thráinsson (1998), and Bobaljik (2003) also relies on a unidirectional implication:

(18) distinct morphemes for agreement and tense → V-to-I

The essential idea of this proposal is that the verb movement out of the VP-position occurs necessarily if distinct agreement and tense heads are present in the structure. If there are distinct morphemes, then there must be two syntactic heads, essentially those of Distributed Morphology, hence the left-to-right implication; but given the possibility of phonologically null morphemes, these heads may be present without overt morphological realization, the result being the absence of the right-to-left implication.

Alexiadou and Fanselow (2000) on the other hand, completely reject the existence of any correlation between richness of verbal inflectional morphology and the obligatory movement of the finite verb to the INFL-position. They claim that this hypothesis is empirically inadequate, and that the verb movement to INFL across languages is independent of morphology. They argue, instead, that the correlation between overt movement and the presence of rich morphology is a consequence of the mechanisms by which rich morphology comes into being in the diachronic development of languages, and of the restricted nature of the mechanisms by which syntactic processes such as verb movement can be lost.

They claim essentially that the association of the word order in which the finite verb precedes the negative marker with rich, i.e. suffixal, agreement is merely the result of a conspiracy of historical contingencies. According to them, suffixal verbal agreement arises through the reinterpretation of a subject pronoun cliticized to a verb. Namely, the sequence [V + clitic] is reinterpreted as [V+AGR]. In order for the suffixial reinterpretation of such a clitic to be possible, the verb must appear in front of the subject pronoun, either in INFL or in COMP. For example:

(19) a. [$_{\text{INFL}}$ verb] [$_{\text{VP}}$ subject ....]

b. [$_{COMP}$ verb] [$_{IP}$ subject ....]

Thus, strong suffixal inflection can arise only if there is verb movement. If the finite verb does not move to either INFL or COMP, then the subject pronoun is simply not on the correct side of the verb to be reanalyzed as a suffixal inflection by language-acquiring children. In this way, the *genesis* of a rich agreement system is logically dependent on the leftward movement of the verb. In other words, they basically propose almost the same one-way implication as the one given in (17):

(20) suffixal agreement morphology → V-to-I

Unlike the explanation given by Roberts (1993) the explanation provided by Alexiadou and Fanselow (2000) is based on the historical origins of verbal agreement; therefore, there does not seem to be any immediate source of explanation for the differential maintenance of the Verb-Negation order in subsequent generations depending on the maintenance of the agreement morphology. The authors themselves acknowledge that it should be just as easy, or as difficult, to lose the finite verb movement to INFL-position in a system with rich morphological agreement as it would be in a system with no such agreement at all.

Ackema (2001) is another author who argues that a direct causal connection does not exist between rich inflection and movement of the finite verb to the INFL-position. Instead the two are related because having verb movement to INFL and not having rich inflection are, according to Ackema, alternative ways of avoiding a violation of the same constraint, namely a general constraint that disfavors complex structure below the word (X^{o}) level. This constraint is a ranked, violable constraint, as in the optimality-theoretic conception of grammar. Its interaction with two other relevant constraints, which concern economy of movement and realization of the input in the output, will account for the fact that languages can vary in their tolerance level for the amount of inflection on unmoved verbs. Ackema's analysis thus attempts to explain why no single definition of richness can exactly divide the languages which have verb movement to the INFL-position from the ones who do not have it.

Bobaljik (2003) discusses the evidence gathered by a number of researchers of the Scandinavian languages according to which certain dialects of Swedish and

Norwegian exist which share the inflectional paradigm of the standard language, but which still allow the finite verb movement to the INFL-position — such data would, therefore serve as counterexamples to the existence of a bi-conditional. Furthermore, he makes the point that although loss of morphology in Danish and English correlates with their loss of movement of the finite verb to the INFL-position, in both cases there appears to be a significant time-lag between the two processes.

In addition, Heycock et al. (2003) provides evidence that some speakers of Faroese show variation in the placement of the verb, but do not show matching variation in their morphology. This would mean that along with the above-mentioned Mainland dialects, the data from Faroese, too, do not support the bi-conditional.

Of course, if the movement of finite verb to INFL-position is a grammatical option regardless of morphology, as suggested by Roberts (1993), and Alexiadou and Fanselow (2000), or regardless of overt morphology, as proposed by Bobaljik and Thráinsson (1998), the fact that this option is typically lost at some point after a morphological paradigm has changed still needs to be explained. The essential problem in this case is connected to the exact way in which the evidence for movement of verb to the INFL-position become so poor that subsequent generations of speakers hypothesize instead a grammar with no such overt movement.

Alexiadou and Fanselow (2000) propose that the children who have lost Stylistic Fronting from their grammar reinterpret an adverb-verb order arising from Stylistic Fronting of the adverb. In addition, they claim that Stylistic Fronting depends on pro-drop, which in turn depends on richness of agreement morphology.

Roberts (1993), on the other hand, makes a proposal, concerning English in particular, that relies crucially on the status of English modals and auxiliary *do*. However, due to the considerable grammatical differences between English and Mainland Scandinavian languages in regard to both the auxiliary *do* and the modal verbs, it seems that the natural extension of his proposal onto these languages is not at all possible, so an alternative explanation would be necessary for Faroese and the Mainland dialects in question.

One difference between the Scandinavian languages and English that may be crucial in this regard is that, of course, the former family of languages still exhibits the verb-second phenomenon, whereas it is not the case with English. In other words, the finite verb in Mainland Scandinavian languages obligatorily follows an initial XP in the declarative main clause, whether that initial constituent is the subject or some other element. In other words, the finite verb in these cases does not move to the INFL-position only, but proceeds even higher, and lands in the COMP-position. Therefore, in these languages, the movement of the verb to the INFL-position is not always directly observable, being obliterated by the subsequent move of the finite verb from INFL to the COMP-position. As a result, the finite verb in all the Scandinavian languages precedes negation in main clauses. Therefore, a language learner cannot use data demonstrating the existence of verb movement to the COMP-position as evidence which could trigger the postulation of the marked value of the parameter forcing the movement of the verb to the INFL-position.

3.2.2. Verb Movement to INFL in West Germanic Languages with Object-Verb Word Order

Germanic languages in which the verb obligatorily follows the object in the structure of the clause, such as Dutch and German, but also Afrikaans, Flemish, Frisian and Swiss German, are all considered to be verb-second languages. Since the verb-second word order is interpreted as a consequence of the movement of the finite verb to the COMP-position, it is self-evident, according to the head-movement constraint given in the section 3.1., that it is not possible for the verb to move from its base-position to the COMP-position in a single step, because functional heads can only move into the position of the next higher head. Therefore the finite verb in all verb-second languages, including the aforementioned ones, must necessarily move to INFL on their way to the COMP-position. However, this particular form of movement of the inflected verb to the INFL-position is a part of the verb-second phenomenon and is not directly observable.

Concerning the existence of the independent move of the finite verb to the INFL-position in these languages, i.e. the move which is not an intermediary stage of the verb movement to COMP, but an independent syntactic operation, consensus

among the scholars has not yet been made in regard to whether it takes place in these languages at all. If the correlation with inflective morphology is indeed the answer to the problem of identifying the force that lies beneath the movement of the finite verb to the INFL-position, then the current situation in respect to verbal inflection in these languages should be able to point out the correct answer. The present tense paradigms in each of these languages are presented in the following examples:

(21) a. Afrikaans (inf. gooi)

	Sg.	Pl.
1st	gooi	gooi
2nd	gooi	gooi
3rd	gooi	gooi

b. Dutch (inf. gooi-en)

	Sg.	Pl.
1st	gooi	gooi-en
2nd	gooi-t	gooi-en
3rd	gooi-t	gooi-en

c. Frisian (inf. goai-je)

	Sg.	Pl.
1st	goai	goai-e
2nd	goai-st	goai-e
3rd	goai-t	goai-e

d. Flemish (inf. werk-en)

	Sg.	Pl.
1st	werk-en	werk-en
2nd	werk-t	werk-t
3rd	werk-t	werk-en

e. German (inf. werf-en)

	Sg.	Pl.
1st	werf-e	werf-en
2nd	wirf-st	werf-t
3rd	wirf-t	werf-en

f. Swiss German (inf. ghei-e)

	Sg.	Pl.
1st	ghei-e	ghei-e
2nd	ghei-sch	ghei-et
3rd	ghei-t	ghei-e

If Roberts (1993) is right in his claim that that the existence of distinct inflectional endings in both singular and plural is the force that triggers finite verb movement to the INFL-position, then one should expect verb movement to INFL to exist in all of these languages, with the exception of Afrikaans, which does not meet Roberts' criteria. All the other Germanic languages with object-verb word order have distinct inflectional endings in both singular and plural.

If, on the other hand, Rohrbacher (1994) is right in his claim that it is necessary for a language to mark the first and the second person unambiguously in at least one tense, either singular or plural, then only German and Frisian would meet the criteria for having verb movement to the INFL-position.

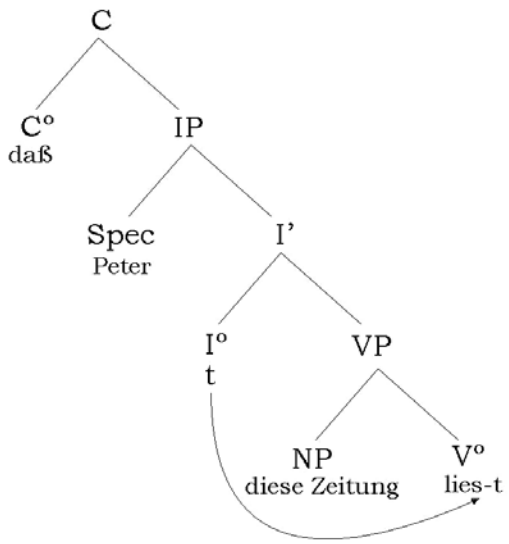
Some authors (e.g. Travis 1991, Zwart 1991) believe that, in German, INFL

precedes VP, so there is no need for the movement of the finite verb to the INFL-position. For example:

(22) Ich bezweifle, daß Peter diese Zeitung *liest*
I doubt that Peter this newspaper *reads*
I doubt that Peter reads the newspapers

And the structure of this clause would have to be analyzed like this:

(23)



Vikner (1995), on the other hand, disagrees with the analysis of the subordinate clause from the example (52a) in the way presented in the diagram (52b). He argues that, although in general it is not possible to insert any elements between the verbs at the end of an embedded clause in German, as it is shown in the examples in (54a) and (55a), the same elements may occur after the last verb, as presented in the examples in (54b) and (55b):

(24) a. *… daß sie nicht gesagt, [daß Peter reich ist], hat
… that she not said that Peter rich is [has]
…that she has not said that peter is rich

b. … daß sie nicht gesagt hat, [daß Peter reich ist]
… that she not said [has] that Peter rich is
…that she has not said that peter is rich

(25) a. *… weil er lange nicht mehr gesprochen [mit ihr] hat
… because he long not more talked with her [has]
…because he has not talked to her for a long time

b. … weil er lange nicht mehr gesprochen hat [mit ihr]
… because he long not more talked [has] with her
…because he has not talked to her for a long time

Vikner (1995: 142)

In his opinion, the positions of the constituents in brackets are the major problem that arises in the analysis of these German clauses. He proposes two possible analyses for them.

The first possibility is that, in the clauses in (24b) and (25b), the finite verb is in the INFL-position, and the extraposed constituents are adjoined to the right of the Inflection Phrase (IP). Therefore, in order to rule out as ungrammatical the clauses from the examples in (24a) and (25a), adjunction to Verb Phrase (VP) would have to be independently excluded in German. But that would make this account incompatible with right-adjunction to Verbal Phrase being possible.

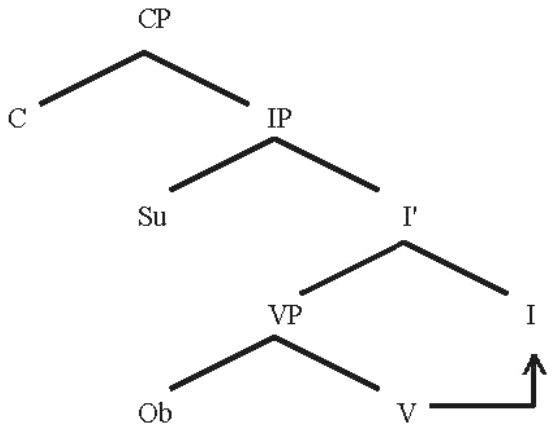
The second option is that the movement of the finite verb to the INFL-position has not taken place, so the verb is in its base-position V^{o}. In that case, the grammatical sentences are derived through adjunction to the higher Verb Phrase. But for this analysis to be correct, adjunction to the highest Verb Phrase should be possible, whereas adjunction to any Verb Phrase but the highest should be impossible. If adjunction to any Verb Phrase but the highest were not impossible, the grammatical clauses in the examples (24a) and (25a) could not at all be explained.

If adjunction to the right of Verb Phrase is possible in German, then it would seem to exclude the analysis in which the verb movement to the INFL-position takes place in embedded clauses. However, on closer inspection, it turns out that the conditions essential for the analysis which allows the verb movement to the INFL-position cannot be fulfilled. According to Vikner (1995: 156), these contradictory findings make it impossible to prove either the existence or the

absence of movement of the finite verb to the INFL-position in German, although they do not directly disprove either of the possibilities.

The main problem with verb movement to the right reflects in the fact that its effects cannot be seen in the surface word order, so even if it does take place, it will remain undetected. The movement of the verb rightward to some head-final functional category can be presented in a diagram in this way:

(26)



Since a verb movement as the one presented in the diagram (26) is string-vacuous, it does not lead to a change in word order and, therefore, remains invisible. This means that it could take place in both Dutch and German, it could take place in neither, or it could take place in just one of these languages, but there is no way to determine what actually happened. It, therefore, seems to be rather difficult to determine the status of the Germanic languages with the predominant object-verb word order in respect to verb movement to the INFL-position. The data from these languages do not provide any indecisive evidence for either excluding or maintaining this syntactic operation. Thus, this question remains wide open for discussion.

3.2.3. Verb Movement to INFL in English

When, in the deep clausal structure, the finite verb moves from its basic position to the INFL-position in order to acquire number and person agreement, it surfaces on the left of adverbs that are taken to be located at the left edge of the VP-position. Therefore, if the finite verb precedes a medial adverbial or a negation, it is

possible to conclude that the verb movement to the INFL-position has taken place, whereas if the finite verbs occurs in the right of a medial adverbial or a negation, i.e. if it appears in the surface structure in the position after such an element, then this syntactic operation did not happen[7].

Like Danish, Norwegian or Swedish, English belongs to Germanic languages without movement of the finite verb to the INFL-position. This is not unexpected, since English, just like these Mainland Scandinavian languages, does not have tenses in which first and second person are unambiguously marked either in the singular or in the plural. The English verbal paradigm for present and preterit looks as follows:

(27) English (inf. sing)

	Sg.	Pl.
1st	sing	sing
2nd	sing	sing
3rd	sing-s	sing

(28) a. English (inf. sing)

strong

	Sg.	Pl.
1st	sang	sang
2nd	sang	sang
3rd	sang	sang

b. English (inf. work)

weak

	Sg.	Pl.
1st	worked	worked
2nd	worked	worked
3rd	worked	worked

As the examples (27) and (28a-b) show, the forms of the verb for the first and the second person singular of present are identical, and in plural there is no distinction of person or number whatsoever, so the forms are identical to those of the imperative and the infinitive. Preterit has weak or strong inflection for the category of tense, but the categories of person and number are not expressed, so there is no agreement with the subject. The imperative forms exist only for the second person, and they do not have a distinction in number, whereas the

[7] As mentioned in the section 3.1., INFL has been reinterpreted as a conflation of two separate heads, agreement and tense. In this way, one node (I^o) has been replaced by two separate nodes of (AGR^o) and (T^o). Therefore, in a framework which reinterprets INFL in this way, the finite verb would first move to the position of the Tense node, and then from it to the Agreement node. In other words, V^o does not simply move to I^o any more; instead, there exists movement from V^o to T^o, and then from T to AGR^o. It is therefore possible for the finite verb to move just to the Tense node and stay there. In fact, this may be exactly what happens in English and other languages which lost verb movement to the INFL-position. However, since such movement has no relevance for the verb-second phenomenon, it will not be discussed here.

subjunctive is practically extinct in Modern English. The personal ending *–s* for the third person singular of the present indicative, is, therefore, the only representative of person/number agreement in English, with the exception of the verb *to be*.

A considerable number of authors, like Emonds (1978), Pollock (1989), Chomsky (1991), Rizzi (1990), Vikner (1995), among others, assume that this inflectional element is actually base-generated in I^o, but it subsequently moved downward to join with the verb in the base-generated position of the latter. The affix-hopping analysis of Chomsky (1957) is the ultimate source of this view.

The linguistic data for the English language, in respect to movement of the finite verb to the INFL-position, can actually be classified into two groups, depending on the function that the verb in question performs within the clause.

If the finite verb is, at the same time, the main verb of the clause, it never moves to the INFL-position, as it is presented in the example (29a). Moreover, since English is not a verb second language, even the verb movement to INFL as the intermediary landing site during the verb movement to the COMP-position is absent in the language, as shown in the example (29b-c):

(29) a. *Jane *wears* often this skirt.
Jane often *wears* this skirt.

b. *At work *wears* Jane often this skirt.
Jane often *wears* this skirt at work.

c. *At work Jane *wears* often this skirt.
Jane often *wears* this skirt at work.

The finite verb, which is at the same time the main verb, acts in exactly the same way in embedded clauses as well, i.e. it remains in its base-position and does not move to a higher one. For example:

(30) a. *[I noticed that] Jane *wears* often this skirt.
[I noticed that] Jane often *wears* this skirt.

b. *[I noticed that] at work *wears* Jane often this skirt.
[I noticed that] Jane often *wears* this skirt at work.

c. *[I noticed that] at work Jane *wears* often this skirt.
[I noticed that] Jane often *wears* this skirt at work.

On the other hand, when the finite verb is not also the main one, but an auxiliary verb instead, the situation is somewhat more complex. English auxiliary verbs clearly show some instances of verb movement to the INFL-position in main clauses. For example:

(31) a. Jane has often worn this skirt.
b. *Jane often has worn this skirt
c. *At work has Jane often worn this skirt.
d. *At work Jane has worn often this skirt.
e. At work Jane has often worn this skirt.

The sentences in the examples (31a-e) evidently show that, when the finite verbs functions as an auxiliary, verb movement to the INFL-position can take place in English. Moreover, the ungrammaticality of the sentence in the examples given in (31c) confirms that the movement which takes place in the sentence in the example (31a) is an independent movement of the finite verb to INFL, and not a part of the verb-second phenomenon.

The situation is the same with the embedded clauses in which the finite verb functions as an auxiliary verb. Here, too, the finite auxiliary verb moves to the INFL-position, regardless of whether the finite verb is a proper auxiliary or a modal verb. For example:

(32) a. [I noticed that] Jane had often worn this skirt.
b. ?[I noticed that] Jane often had worn this skirt.
c. *[I noticed that] at work had Jane often worn this skirt.
d. [I noticed that] at work Jane had often worn this skirt.

(33) a. [I thought that] Jane would often wear this skirt.

b. ?[I thought that] Jane often would wear this skirt.

c. *[I thought that] at work would Jane often wear this skirt.

d. [I thought that] at work Jane would often wear this skirt.

The semi-modals, *dare* and *need*, present a special case in respect to the presence or absence of inflection and the presence or absence of the infinitival marker *to*. They can either behave like the main verb and take both inflection and the infinitival marker, in which case the movement to the INFL-position cannot take place, or they can behave like proper modals verbs, without inflection and *to*-infinitive, in which case the movement to the INFL-position will take place:

(34) a. Jane never needs to wear spectacles at all.

Jane need never wear spectacles at all.

In this way, the data from English somewhat undermines the attempts, discussed in section 3.2.1., to establish a direct correlation between movement of the finite verb to the INFL-position and the richness of inflectional morphology. English modals are especially problematic in this respect, considering the fact that they literally have no inflection whatsoever, yet they are perfectly capable of moving to INFL. Since in their case it is definitely not any morphological factor that triggers this move, the question remains open in regards to what does force their movement to the INFL-position.

One other correlation connected to movement of the finite verb to INFL-position, however, is rather obvious in English — the fact that only those elements which can appear in the INFL-position, as shown in the example (35a), may also move to the COMP-position, as shown in (35b). This is an important restriction to the verb-second phenomenon in English.

(35) a. Jane *has* often worn this skirt.

Why *has* Jane often worn this skirt?

In all the instances where verb-second is needed in a clause in which the verb cannot move to INFL-position, *do-support* must be used.

(36) a. Jane often wears this skirt.

*Why wears Jane often this skirt?

Why does Jane often wear this skirt?

The semi-modals *dare* and *need* make this point especially clear, as they allow both options, albeit in different forms. As demonstrated in the example (34), they can only appear in the COMP-position in the form without inflection and the infinitival marker, which stands in direct correlation with the fact that they can also appear in the INFL-position only in their form of proper modals devoid of all inflection and the infinitive marker.

(37) a. Why need Jane wear spectacles at all?

*Why needs Jane to wear spectacles at all?

3.2.3.1. The Loss of Verb Movement to INFL

Platzack (1988) argues that the weakening of the inflectional paradigm is the principal cause of the loss of movement of the finite verb to the INFL-position. He finds the evidence for this claim in the history of his native Swedish, where the loss of verb movement to INFL took place in the period between the beginning of the sixteenth century and the end of the eighteen century — the very same period when the system of verbal inflection in Swedish had also rapidly declined. According to him, it was not until the weakening of the person and number agreement has begun that the subordinate clauses started to appear in which the order of the constituents, and particularly the position of the verb, demonstrate the absence of movement of the inflected verb to the INFL-position. Once the agreement was finally lost, the change of the word order was also complete.

Following the same line of thinking, it would be reasonable to assume that English, which in its present state has only some very limited instances of movement of the finite verb to the INFL-position, has also followed the same path in its history. Between the mid-twelfth and the late fourteenth century, i.e. during the Middle English period, verbs showed agreement with the subject in number and person to an extent that significantly surpasses the agreement in Modern English.

Here is the example of the Middle English present tense paradigm in two dialects: Southern, which used to be the most important variety in the Old English period, and Midlands, which gained importance in the centuries following the Norman conquest, and which provided the bases for the Modern English standard:

(38) a. Southern (inf. sing-en)

	Sg.	Pl.
1st	sing-e	sing-eþ
2nd	sing-est	sing-eþ
3rd	sing-eþ	sing-eþ

b. Midlands (inf. sing-en)

	Sg.	Pl.
1st	sing-e	sing-en
2nd	sing-est	sing-en
3rd	sing-eþ	sing-en

As the example in (38) shows, both dialects demonstrate the distinction in person in singular, but not in plural, although Midlands additionally makes the distinction between the plural forms and the form of the third person singular — the distinction which is lost in Southern due to the leveling of the Old English singular ending –eþ and plural ending –aþ; this distinction in Midlands dialect, however, is preserved at the expense of the distinction between the indicative and the subjunctive, which consequently led to the disappearance of the subjunctive mood in Modern English. Nevertheless, given the relative richness of agreement that obviously existed in Middle English, one would expect that movement of the finite verb to the INFL-position must be present in some form, and it is, indeed, the case, as it is demonstrated in the following examples:

(39) a. He *weneth* alwey that he may do thyng that he may nat do.
He always *thinks* that he can do things that he can't do.

b. …for þe Britons *destroiede* alwai þe cristen peple þat seynt Austyne hade baptisede.
…for the Britons always *killed* the Christians that St. Austin had baptized.

c. Þe 3ong man *resortyd alwey* to þe preste.
The young man always *resorted* to the priest.

(40) a. …for God *3eueþ* neuer two tymes to-geder
…for God never gives two times together

b. …and y ne *seiȝ* neuer þe ryȝtful for-saken

…and I *have* never *seen* the righteous forsaken

c. He thought he *sawe* never so grete a knyght.

He thought he *had* never *seen* so great a knight.

d. …for þey *synneden* neuere.

…for they never *sinned*.

(41) a. This emperour Claudius was so obliuiows þat, sone aftir he had killid his wyf, he asked why sche *cam not* to soper.

This emperor Claudius was so oblivious that, soon after he had killed his wife, he asked why she didn't *come* to supper.

b. He mad eke a precept þat no Jew into Jerusalem schuld entre, but Cristen men he *forbade* not þe entre.

He also made a law that no Jew should enter into Jerusalem, but he did not *forbid* Christians from entering.

c. Ich ne *hidde* nouȝt þy mercy.

I did not *hide* your mercy.

d. Bott I *sawe* noght synne.

But I did not *see* sin.

e. …but he *wythdrowe* not hir temptacyon.

…but he did not *withdraw* her temptation.

f. …but Balyn *dyed* not tyl the mydnyghte after.

…but Balyn did not *die* till the midnight after.

(Santorini and Kroch: 2007: 125)

As the Middle English sentences given in the examples (39-41) clearly show, the finite verb always precedes both a medial adverbial and a negation — a surface word order which is taken to be a reliable indicator of the underlying

movement of the finite verb from its base position to the INFL-position. At the same time, in Modern English translations of the sentences from (39-41), the finite verb invariably appears in the position after these elements, indicating that no verb movement has taken place in those cases. The situation in English is, in this respect, an exact parallel to the situation in Mainland Scandinavian languages, where verb movement to the INFL-position was lost as well, doubtless under the same conditions as in English.

Most authors (e.g. Kroch 1989a, Roberts 1993, Lightfoot 1997) agree that the reduction in inflectional morphology seems to be the key factor which led to the loss of verb movement to the INFL-position in the history of English. By the beginning of the sixteenth century, the agreement system of Middle English underwent significant simplification, as most of the inflectional endings were lost. This development in the domain of morphology had an immediate reflection on the syntax of the language, which now, among other changes, tended to favor the clause structure with the word order in which the finite verb follows medial adverbs and negation. According to Kroch (1989a), just between 1475 and 1525, the frequency of the constructions in which the finite verb preceded medial adverbs and negation dropped from roughly 65% to 10%, indicating the corresponding loss of verb movement to the INFL-position.

Lightfoot (1997: 263), on the other hand, places the loss of verb movement to the INFL-position much later, in the early seventeenth century. Warner (1997: 381) supports this claim, based on the data provided by Ellegård (1953) and Tieken (1987), and allowed the possibility that the verb movement to the INFL-position finally disappeared even somewhat later, towards the beginning of the eighteenth century.

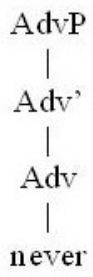
At any rate, the loss of movement of the finite verb to the INFL-position, initiated the appearance of several important syntactic developments at the end of the Middle English period and the beginning of the Early Modern English period, which culminated in the complex grammar of Modern English that exists today. Not all syntactic consequences of the loss of movement of the finite verb to the INFL-position had the same impact on the grammatical system, however. When medial adverbials are concerned, the loss of verb movement to INFL only resulted in a position switch between finite verbs and medial adverbials, which simply led to

the modern word order in which the adverb comes before the finite verb, as it can be observed in the examples given in (60-61). When the negation is concerned, on the other hand, the consequences of the loss of movement of the finite verb to the INFL-position had a deeper impact on the grammatical system of the language, initiating the appearance of two further syntactic change, the change in the syntactic status of *not* and do-support.

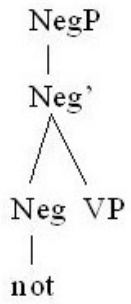
3.2.3.1. 1. The Change in the Syntactic Status of *Not*

According to Rizzi (1990: 23), the syntactic structure of the negative *not* in Modern English is different from the syntactic structure of other negative words, such as, for example, *never* (Santorini and Kroch 2007). The intransitive *never* is a maximal projection in its own right, the transitive *not* is a head, rather than a complete phrase on its own. This difference could be presented in a diagram like so:

(42) a.



b.



In early Middle English, however, *not* was an ordinary adverb, just like *never* still is in Modern English, or *pas* in French. The main proof for this is the fact that, like *never* or many other negative adverbs throughout the history of English, *not* could appear in the position of the first constituent in the structure of the clause — a process known as negative inversion. For example:

(43) a. Nohht ne *stannt* itt stille.
It didn't *stand* still.

b. Nohht ne *mihht* itt oppnenn hemm Þe 3ate off heoffness blisse.
It *could* not open the gate of heaven's bliss for them.

(Santorini and Kroch: 2007: 128)

Since *not* was an adverb just like any other, it would be natural to assume that the loss of verb movement to the INFL-position would result in *not* switching position with the finite verb and appearing in front of the latter, just like it happened with other adverbs, as displayed in the examples (39-40). The data from Late Middle English, on the other hand, clearly show that this did not happen, as presented in (41). What these Middle English data indicate is that *not* changed its syntactic nature at one point in the history of English in the sense that it stopped being an ordinary adverb and became a head. In result, the structures presented in the example (43) would be ungrammatical in Modern English. For example.:

(44) a. Not *did* it stand still.

b. *Not *could* it open the gates of heaven's bliss for them.

Never, on the other hand, can still undergo negative inversion without making the structure ungrammatical. For example:

(45) Never *did* Jane wear this skirt before.

Never *could* she fit into this skirt before.

A further piece of evidence that *not* changed from a phrase to a head is the fact that, in early Middle English, *not* could adjoin not just to V', but also to I', as it is shown in the sentences in the example (46). In other words, *not* behaved exactly like *never* and other Middle English adverbs, as presented in the example (47).

(46) a. Þatt Jesuss nohht ne *wollde* Ben borenn nowwhar in þe land.

that Jesus did not want to be born anywhere in the land.

b. …ða þinges ðe hie naht ne *scolden* ȝiuen.

…the things that they shouldn't give.

(Santorini and Kroch: 2007: 129)

(47) He swore þat Saxones neuer *shulde* haue pees ne reste.

He swore that the Saxons *should* never have peace or rest.

(Santorini and Kroch: 2007: 130)

On the other hand, while *not* lost the ability to adjoin I' in Modern English, as displayed by the ungrammatical sentences in the example (48), other adverbs preserved this ability as shown in the example (49).

(48) a. *the things that he not *should* give
*that Jesus not *would* be born anywhere in the land

(49) a. Jane never *will* wear this skirt.
Jane always *can* wear this skirt.

Kroch and Taylor (1993: 25) believe that the change in the status of *not* from being a complete adverbial phrase towards becoming a head was essentially complete by the beginning of the fifteenth century. Some other authors, however, argue that the transition of *not* was not completed in the Middle English period at all. Thus Roberts (1993: 293) points out that sentences like *John not smokes* were still grammatically possible in Early Modern English, around 1600, which indicates that *not* still was a maximal projection and not a head. In fact, the contracted form *–n't*, which clearly is a head, does not appear in written texts until the second part of the seventeenth century. It therefore seems highly probable that the transition in the status of *not* was only complete at the very end of the Early Modern English period. Lightfoot (1997: 263) shares this view, and argues that it is not the position of *not* but its inversion which provides salient data to language learners, resulting in rapid shift in negatives which indeed took place in this period.

3.2.3.1. 2. The Rise of *Do*-Support in English

As the person and number agreement began to weaken in Middle English, leading to the consequent disappearance of verb movement to the INFL-position, the reanalysis of *not* from a phrase into a head was taking place, initiating yet another syntactic change — the rise of *do*-support.

What apparently happened was that, due to the loss of verb movement to the INFL-position in sentences containing the negative *not*, the language learners in the Middle English period were in danger of acquiring a grammar in which generating ordinary negative sentences was not possible (Lightfoot 1997: 261). Human

language, of course, has hidden internal mechanisms which always prevent such aberrations from actually taking place. The English language of the day had a number of different possibilities for resolving this grammatically undesirable situation. One obvious solution was that some other adverb, like, for example, *never*, could take over the function of the negative head *not*. This actually did happen in the vernacular, and such constructions are preserved to this day, as it is shown in the example (50), but it never became the dominant way of expressing negation and in the end it did not prevail.

(50) a. Did you see that movie?
Nope. I never *did*.

b. Did you see that film?
No, I *did* not.

Another possibility was that the language learners might have managed to acquire verb movement solely on the strength of the word order cue in sentences containing *not* (Santorini and Kroch 2007). And indeed, this possibility, too, was employed, albeit only with the auxiliary verbs *be* and *have*, and it is still in use. As it can be seen from the sentences in the examples (51) and (52), *not* in the presence of these two auxiliaries does not obligatory trigger do-support.

(51) a. Jane *has not* worn this skirt.
b. Jane hasn't worn this skirt.
c. *Jane does not have worn this skirt.

(52) a. Jane is not invited to the party.
b. Jane isn't invited to the party.
c. *Jane does not be invited to the party.

As these examples demonstrate, the predominant option that the language learners finally chose in order to make up for the changes in the status of *not* was based on a syntactic development that had taken place in the thirteenth century, long before the transition of *not* from a phrase into a head. This earlier syntactic

change, completely unrelated to the loss of movement of the finite verb to the INFL-position, was the development of the verb *do* into an auxiliary element.

The exact way in which this development took place is not quite clear. Santorini and Kroch (2007) propose an interesting hypothesis which links the origin of auxiliary *do* to its former, now obsolete use as a causative verb. There was a construction in Middle English which has since been lost from the language, and which involved one causative verb and one lower verb whose agent could be left unexpressed. For example:

(53) a. Kyng Edwarde *dede* assemble a grete hoste.
King Edward had a great army assembled.
lit. 'King Edward had someone assemble a great army'

b. This Constantin *ded* clepe a gret councel at Constantinople.
This Constantine had a great council called at Constantinople.
lit. 'This Constantine had (someone) call a great council at Constantinople.'

c. He *ded* make ferþingis and halfpenies, whech were not used before.
He had farthings and halfpennies made, which weren't used before.
lit. 'He had (someone) make farthings and halfpennies.'

(Santorini and Kroch: 2007: 131)

In addition, there was a certain dialectal difference in regard to the choice of causative verb in Middle English; *do* was favored in east Midland, the language of London, but the West Midland dialect preferred the verb *make* in these constructions.

According to Santorini and Kroch (2007), the usage of *do* as causative seems, at first, to have been the matter of style, since the sentences like *He had a great army assembled* are used in many discourse contexts more or less interchangeably with simple sentences like *He assembled a great army*. It is possible that the construction itself appeared in result to the contact with French, a language which still has causative constructions of this type. For example:

(54) a. Edouard a *fait* assembler une grande armée.
Edward has made assemble a great army
lit. 'Edward had (someone) assemble a great army.'
(Santorini and Kroch: 2007: 131)

According to Santorini and Kroch (2007), in situations of dialect contact, it was possible, for West Midlands speakers, who favored the use of the causative *make*, to misinterpret sentences with the causative *do* from the East Midlands dialect as just another way of saying a simple sentence. Based on this misinterpretation, they might then themselves have begun to use *do*, but as an auxiliary verb bleached of its causative content rather than as a causative verb for which they would have continued to use their own *make*. Since the border between the East and West Midlands dialects runs diagonally through England, the chances of dialect contact and of the reinterpretation and adoption of *do* as an auxiliary verb were good. Regardless, it is West Midlands speakers who first used *do* as an auxiliary verb. Once the auxiliary use was established, it could then have spread to other dialects, especially in big cities like London, where people came from many different dialect backgrounds and where dialect distinctions were leveled as a result.

In Modern English, *do*-support is required in *yes-no* questions, non-subject *wh*-questions, negative declaratives and in negative imperatives for lexical verbs, but prohibited for the verb *be*, for the auxiliary *have*, and for the modal verbs. It is also prohibited in non-emphatic affirmative declaratives. For example:

(55) a. Did Jane wear that skirt yesterday?
b. What did Jane wear yesterday?
c. Jane did not wear that skirt yesterday.
d. Do not wear that skirt, Jane!
e. Jane did wear that skirt yesterday.

These facts are usually explained by the assumption that auxiliary verbs undergo overt movement to the INFL-position but lexical verbs do not. Therefore, the negation performed by the means of *not* with lexical verbs obligatorily triggers *do*-support, whereas it is not the case with other negative adverbs. For example:

(56) a. *Jane not *worn* that skirt.
Jane *did* not wear that skirt.
Jane *didn't* wear that skirt.

b. Jane never *worn* that skirt.
*Jane *did* never wear that skirt.

But the situation that can be observed in Modern English did not develop overnight. The constructions with auxiliary *do* were quite rare and sporadic before the fifteenth century. However, from the late Middle English on, its frequency in negative sentences rapidly grew, concurrently with the weakening of agreement and the subsequent loss of verb movement to the INFL-position. According to a common analysis of Middle English (Kroch 1989a, and others), questions exhibit movement of the finite verb to the COMP-position, as shown in the example (57), and declaratives movement of the finite verb to the INFL-position. The evidence for this is typically found in the facts concerning word order. The situation in Middle English in this respect is such that the verb precedes the subject in questions, as shown in the example (58a), and in declaratives the verb precedes *not* and adverbs, as demonstrated in the examples (58b) and (58c) respectively:

(57) a. And wherfore *doth* the earth sustaine me?
And wherefore *does* the earth sustain me?

b. *Dyd* ye wryte this with your owne hande?
Did you write this with your own hand?

(58) a. *Bileuest* thou this thing?
Do you believe this thing?

b. But he *spack* not one worde.
But he did not say a word.

c. Here men vndurstonden ofte by this nyght the nyght of synne.
here men understood often by this night the night of sin

People here often considered this night as the night of sin.

(Han and Kroch 2000: 2-3)

Based on the behavior of indicative sentences, Roberts argues that the rise of *do* forms is a reflex of the loss of the finite verb movement to the INFL-position. Once verb movement to the INFL-position was lost, it was replaced by the lowering of INFL. However, since the requirement that a verb must move to the COMP-position persists in questions, auxiliary *do* is inserted in the INFL-position as a last resort device and then moves to the COMP-position. In negative declaratives, negation blocks INFL lowering, stranding the material in the INFL-position. Again, auxiliary *do* is inserted in the INFL-position to support the stranded material as a last resort device. For example:

(59) a. They *dyde* <u>not</u> set theyr mynde on golde or rychesse.
They *did not* set their mind on gold and wealth.

b. Christ *dyd* <u>not</u> praye for Iames and Iohan for the other.
Christ *did* <u>not</u> pray for James and John and for the other.

(Han and Kroch 2000: 3)

According to Roberts (1985) and Kroch (1989a), English completely lost movement to the INFL-position for lexical verbs in the middle of the sixteenth century. From that time on, only the auxiliaries *be* and *have* and the modal verbs could still appear in the INFL-position. However, empirical facts do not seem to support this claim.

Thus Ellegård (1953) provides a quantitative study of the development of *do* forms in various sentence types using a collection of sentences extracted from texts ranging in time from late Middle English to the 18th century. Figure 1, from Ellegård (1953: 162), plots the relative frequency of *do* forms in affirmative and negative declaratives, affirmative and negative questions, and negative imperatives, based on a sample of more than 10,000 tokens. After the middle of the sixteenth century, the frequency of *do* in (non-emphatic) affirmative declaratives declines steadily until, by the beginning of the eighteen century, the use of *do* in this environment is prohibited. The frequency of *do* in negative declaratives and in both

affirmative and negative questions rises continuously until sometime after the eighteenth century, *do* becomes obligatory in these environments.

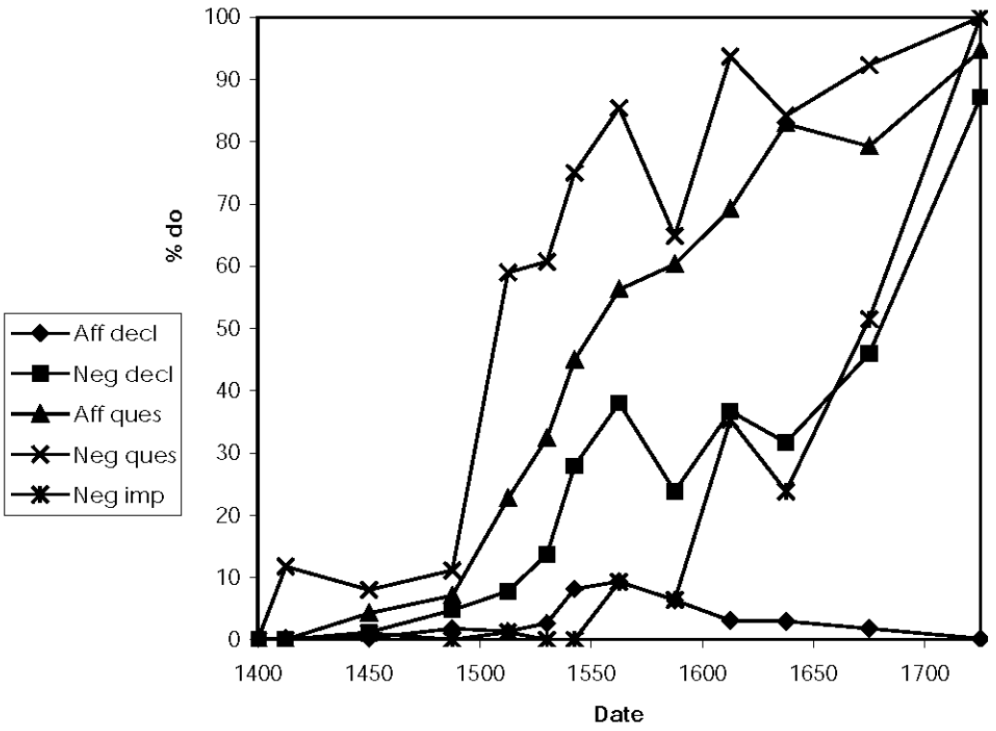


Figure 1: Percent of *do* forms in various sentence types (from Ellegård 1953: 162)

If English completely lost verb movement to the INFL-position in the middle of the sixteenth century, as Roberts and Kroch claim, then categorical *do*-support should appear in questions and negative declaratives at this point. But the facts gathered by Ellegård do not confirm this, as it can be seen from the figure 1. Lightfoot (1993) therefore proposes that the verb movement to the INFL-position in English was used much later in the history of English. On the other hand, Kroch (1989a) gives statistical evidence that there was a grammatical reanalysis in the middle of the sixteenth century. He argues that the rate of the rise of *do* forms in questions, negative declaratives and affirmative declaratives, is the same up to the middle of the sixteenth century. But after this period, the percentage of *do* forms in affirmative declaratives begins to decline, and it continues to rise in negative declaratives, until it stabilized into its modern usage by the eighteenth century.

3.2.3.2. Conclusion on the Loss of Verb Movement to INFL in English

It seems, based on the data discussed in the previous sections, that the loss

of movement the finite verb to the INFL-position in English was a process that lasted for several centuries, and it is apparently not yet completely finished, as there are still some traces of the finite verb in the INFL-position in Modern English, as discussed in the section 3.2.3. Furthermore, several successive stages can be identified in the process of losing this syntactic operation in English.

The process apparently begun with the loss of the relatively rich inflective paradigm of Old English, mostly caused by some phonological processes, such as leveling of the vowels in unstressed syllables, which eventually led to the gradual weakening of the number and person agreement of the finite verb with the subject of the sentence. It could be argued that the disappearance of inflective endings only meant the loss of morphological evidence for the move of the finite verb to the INFL-position. But there is also strong syntactic evidence for the existence, or the absence, of the finite verb's presence in the INFL-position, such as negation or inversion. And what these evidence show is that, although the process of losing movement of the final verb to the INFL-position apparently did begin in Middle English, the English language of this period still shows sufficient evidence for the existence of this syntactic operation to enable Middle English to be put in the same group of languages which still have finite verb in INFL, such as Icelandic or Yiddish, but also Old Norse, or Middle Swedish and Middle Danish, mainland Scandinavian languages whose Modern descendents subsequently lost this syntactic movement in the same way and under the same conditions as it happened in English.

Thus in early Modern English, the finite verb can still be found in the INFL-position, but not nearly in as many syntactic contexts as it was the case in the earlier stages of the language. The main reason for this is the development of *do*-support, but also the development of modal verbs, a completely new class of auxiliaries in English. These syntactic developments were the way in which the language reacted to the loss of verb movement to the INFL-position and in which it tried to compensate for it.

Therefore the change in the syntactic status of the negation *not*, and the consequential rise of *do*-support in English can be considered the next stage in the loss of verb movement to the INFL-position. The progress of *do*-support is followed by corresponding decline in syntactic evidence for the existence of

movement of the finite verb to the INFL-position. According to Lightfoot (1991), the sudden change of distribution of the verb *do*, detected in Ellegård's (1953) quantitative study, marks the point in history of the English language when the decline of verb movement to INFL began. Kroch (1989a) and Roberts (1993), on the other hand, interpret the same data as an indicator of the final point of the loss of verb movement to the INFL-position in English. Apparently, the consensus on the exact date of the loss of this syntactic operation is still a matter of debate.

Another stage in the loss of the finite verb movement to the INFL-position in English is marked by its decline in interrogative inversion, which led to verb movement to INFL in other contexts. This is reflected in the steep decline in the seventeenth century of the word order in which the finite verb can still precede *not*. (E.g. *They know not what they do*.)

Finally, at some point during the eighteenth century, the existence of the finite verb movement to the INFL-position reached a level which can still be registered up to date, in which the finite verb can be found in the INFL-position in interrogative and negative constructions only with a small number of exceptional lexically specified items, as it is presented in the section 3.2.3.

As Warner (1997: 383) points out, this syntactic change has a coherent shape in that it is triggered by an initial morphological loss, which led to the abduction of a doubly valued parameter. This was not a change that involved the simple resetting of a parameter, but an instance of gradual syntactic change whose extension in time is a product of social and stylistic diffusion rather than of a centrally grammatical mechanism.

3.3. Verb Movement to COMP

Due to the head-movement constraint presented in the section 3.1., according to which functional heads can only move into the position of the next higher head, the movement of the finite verb to the COMP-position cannot be performed directly, in one step. Instead, this syntactic operation is realized in two steps: the first one including movement of the finite verb from its base-position to the INFL-position, and the second one comprising of verb movement from the

INFL-position to the COMP-position. In result, the finite verb lands in a position higher than the structural position of the subject, which, in the surface word order, manifests as the subject-verb inversion in declarative clauses, where the finite verb always takes the position of the second constituent, preceding the subject. Hence the most notable effect of movement of the finite verb to the COMP-position — the verb-second effect.

3.3.1. The Verb-Second Effect

In a nutshell, the verb-second effect means that subject-verb inversion is obligatory in a clause structure in which the position of the first constituent is filled by any other element except the subject. In other words, the finite verb must, in such a structure, appear in the position that precedes the subject of the clause, and the only available position that satisfies this requirement is the position of the second constituent. Such a clause would become ungrammatical if some element is placed in between the clause-initial XP and the finite verb. For example:

(60) Jane *could* never fit into this skirt before.

(61) a. Never *could* Jane fit into this skirt before.
b. *Never Jane *could* fit into this skirt before.
c. *Never into this skirt *could* Jane fit before.

As the sentence in the example (60) shows, when the subject is in the sentence-initial position the verb follows it in the position of the second constituent. However, this is not the case of verb-second simply because the finite verb in this structure remains in the position to the right of the subject. Clearly, in this sentence verb movement of any kind cannot be detected, and the verb remains in the position lower than the position of the subject. The fact that the finite verb here is placed in the position of the second constituent is only the reflection of subject-verb-object word order which is a syntactic characteristic of Modern English.

The sentence in the example (61a), on the other hand, displays verb-second effect, because not only that the finite verb is in the position of the second

constituent, but it is also placed to the left of the subject, i.e. in a position higher than the position of the subject. It is completely clear that, in the sentence given in the example (61a), the finite verb had moved from its base-position, the one to the right of the subject, and landed in a higher position, the one to the left of the subject. Since the number of slots to be filled in the clause structure is not indefinite, but strictly limited, it can be concluded that the finite verb moved from its base-position and filled an empty slot to the left of the subject — the slot reserved for a complementizer, i.e. the position of the function head labeled COMP. In other words, the finite verb moved to the COMP-position, resulting in a clause structure with verb-second word order. The ungrammaticality of the sentences in the examples (61b) and (61c) are solid proof that the second position for the finite verb in this syntactic context is obligatory. Therefore, the sentence given in (61a) is indeed an instance of verb-second.

Had a complementizer been present in the sentence given in (61a), on the other hand, the COMP-position would have been filled by that element, and no movement of the finite verb to COMP would have been possible. For example:

(62) [Jane was fat as a pig until last month,]…

a. …so <u>she</u> *could* never fit into that skirt before.

b. *… so never *could* <u>she</u> fit into that skirt before.

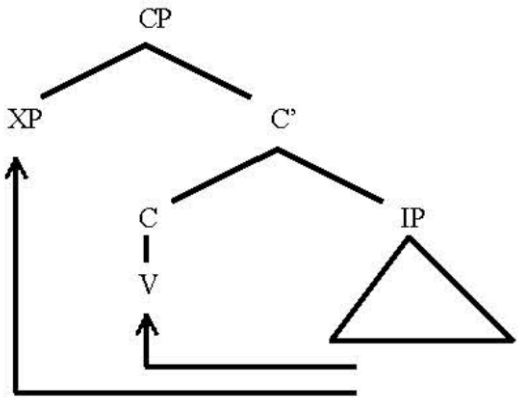
c. *…so *could* <u>she</u> never fit into that skirt before.

The presence of the complementizer *so* in the embedded clause in the example (62a) blocks movement of the finite verb to the COMP-position, as it is proven by the ungrammaticality of the embedded clauses in the examples (62b) and (62c). Clearly, in these syntactic contexts, the left position of the finite verb is not possible.

The idea that the verb-second effect is the outward manifestation of movement of the finite verb to the COMP-position in sentences without complementizer goes back to den Besten (1977) and Thiersch (1978), and it is now widely accepted in literature that deals with generative grammar. The verb-second phenomenon is, therefore, taken to be the crucial evidence for verb movement to the COMP-position.

The simplest way to analyze the general pattern of the verb-second effect would be to adopt two separate but concurrent movement operations: the first one moves some phrasal node (XP^{o}), for example an adverbial, to sentence-initial position, and the other one puts the finite verb in second position. Given standard X-bar assumptions, verb-second is then straightforwardly captured by postulating a functional projection called Complementizer Phrase (CP^{o}), i.e. the maximal projection of COMP. The fronted XP^{o} then fills the unique specifier position of the moved verb. Presented in a diagram, these two syntactic operations would look as follows:

(63)



As the diagram (63) demonstrates, the verb second effect is derived from two separate rules of movement:

a) a rule which moves the finite verb to the second position in the structure of the sentence, the verb fronting being obligatory for every root clause;

b) a rule which moves any XP constituent to the first position of the sentence. This movement is obligatory for every root declarative clause.

Therefore, when these two rules are applied to a sentence like one given in the example (60), a new sentence is derived, with verb-second word order, such as the sentence given in the example (61a).

3.3.1.1. Verb-Second Languages

As stated in the previous section, the sentences with verb-second word

order, such as the English sentence in the example (61a), are derived by the means of two rules of movement.

Modern English, however, is not at the same time a representative of the verb-second language. Although verb-second word order does exist in English, as the sentence in the example (30a) attests, the aforementioned rules of movement are not generalized in English, i.e. they are applied in only some rather limited syntactic contexts. Modern English is, therefore, not a verb-second language.

But all other Germanic languages are verb-second languages, because these two rules are generalized and they apply in all main declarative clauses, and even in some embedded clauses. In fact, Germanic languages are taken to be text-book examples of verb-second languages — and in a quite literal sense of the word, since the basic facts and the majority of data related to the verb-second phenomenon which have been studied in generative grammar have been drawn precisely from the languages belonging to this branch of the Indo-European tree.

The verb-second effects that exist in Modern Germanic Languages will be discussed in detail in the next chapter of this dissertation.

But although the Indo-European Germanic branch provides an exceptionally rich domain of microvariation for the verb-second phenomenon, it does not completely exhaust the cross-linguistic inventory of verb-second languages, since languages classified as verb-second are found throughout the Indo-European linguistic family. Within Romance languages, (Poletto 2002) reports Rhaeto-Romance as a verb-second language, and (Anderson, 2005) also classifies different dialects of Rumantsch as such. There have been various claims (Stephens, 1982; Schapansky 1996; Borsley and Kathol 2000; Jouitteau 2005, 2007) that Modern Breton, a member of the Indo-European Celtic branch, is also a verb-second language, but this is still a matter of intensive debate.

Verb-second phenomenon is not restricted to Centum languages only. Among the Slavic languages, there is one, Sorbian, which is classified as a verb-second language (Jouitteau 2009). In this case, however, there is no doubt that verb-second word order developed in contact with German. But Kashmiri, spoken in India by more than four million people, is a Satem language in which the verb-second properties developed independently from contact with the Western verb-

second languages (Raina 2002).

Outside of the Indo-European family, Shlonsky (1997) suggested that Hebrew, a member of the Hamito-Semitic family, should be analyzed as a verb-second language. Estonian, belonging to the Finno-Ugric family, is also a verb-second language, but this property is almost certainly developed in contact with German, just like it was the case with Sorbian (Ehala 1998, 2006).

Finally, verb-second phenomenon is noted, although it is not well-documented, in various languages of the world such as Papago, belonging to the Uto-Aztecan family (Bhatt 1999), Karitiana, belonging to the Tupi-Arikem family, and spoken by less than three hundred people in the Amazon region of Brazil (Everett 2006), Hotgarhi, a dialect of Himachali (Hendricksen 1990), and others.

When the data from language history of various Indo-European languages are included, the list of verb-second languages is even more extended, mostly to Celtic and Romance Languages. Early Irish (Doherty 2000), Old Irish (Adger 2006), Middle Welsh (Willis 1998), and Cornish (Borsley and Kathol 2000) all exhibited the verb-second phenomenon. Various Romance languages also had a verb-second stage in their syntactic development, as it is confirmed for Old French (Adams 1987, Vance 1995), Old Spanish (Fontana 1993), Old Portuguese (Ribeiro 1995) and Medieval Northern Italian dialects (Benincà 1984).

And, last but not least, Old English, which is now commonly analyzed as a verb-second language (Kemenade 1987; Pintzuk 1991), thus encircling the Germanic domain and giving the final touch to the verb-second phenomenon as a quintessential property of Germanic languages.

3.3.2. Verb Movement to COMP in Main Clauses

Under the assumption that Chomsky's (1986b) extension of the X-bar system includes the heads C^o and I^o and their maximal projections Complementizer Phrase (CP) and Inflection phrase (IP), movement of the finite verb to the COMP-position, and its consequential landing in the position of the second constituent, can be explained by the fact that there are only two positions available in front of the subject — a maximal projection and the finite verb. These two elements differ in

projection level, so their order is typically XP^{o}-X^{o}, rather than X^{o}-XP^{o}. These properties are derived from the structure of Complementizer Phrase, which, in turn, follows the X-bar schema as presented in (64):

(64) $[_{CP}$ Specifier $[_{C'}$ C^{o} Complement]]

The COMP-position is, of course, the natural position for the complementizers. It is therefore assumed that, if a sentence already contains some complementizer, the verb movement to the COMP-position cannot take place, because this position is already occupied. Only in sentences without complementizers could the finite verb move to the COMP-position and consequently appear in the position of the second constituent. For example:

(65) a. Er sagt dass die Kinder diesen Film gesehen *haben*.
he says that the children this film seen *have*
He says that the children have seen this film.

b. Diesen Film haben die Kinder gesehen
this film *have* the children seen
The children have seen this film.

(Vikner 1995: 43)

Apparently, complementizer *dass* in the embedded clause in the example (65a) blocks verb movement, so the finite verb *haben* appears in the final position. In the root clause given in (65b), on the other hand, the structure does not contain any complementizer, and the finite verb *haben* occupies the position of the second-constituent, thus indicating that verb movement to the COMP-position did occur.

German conditional clauses, which, similar to their English counterparts appear in two structural variations, provide even stronger supporting evidence for the hypothesis that the presence of complementizers in a structure blocks movement of the finite verb to the COMP-position. For example:

(66) a. Wenn ich mehr Zeit gehabt *hätte*, [ich mehr Bücher gelesen].
If I *had* had more time, [I would have read more books].

b. *Hätte* ich mehr Zeit gehabt, [ich mehr Bücher gelesen].
Had I had more time, [I would have read more books].

(67) a. *Wenn *hätte* ich mehr Zeit gehabt, [ich mehr Bücher gelesen].
*If *had* I had more time, [I would have read more books].

b. **Hätte* wenn ich mehr Zeit gehabt, [ich mehr Bücher gelesen].
**Had* if I had more time, [I would have read more books].

(Vikner 1995: 43)

In the embedded clause in the example (66a) there exists a complementizer, and the verb is, in consequence, placed after the subject, in the final position. In the embedded clause in the example (66b) on the other hand, the structure contains no complementizer, so the clause-initial position, which is in the example (66a) occupied by the complementizer *Wenn*, is not filled with the finite verb, which stands in front of the subject.

The ungrammaticality of the embedded clauses in the example (67a-b) clearly shows that there is only one empty slot in front of the subject, i.e. there is room for only one constituent, and that sufficiently explains why the presence of a complementizer in a structure efficiently blocks movement of the finite verb to the COMP-position, thus preventing verb-second effect from taking place in such contexts.

The situation in which the presence or the absence of a complementizer in a structure determines word order is not limited to German. Platzack (1986a: 200), for instance, shows that the distribution of pronominal subjects in Dutch is not as unlimited as the distribution of full subjects realized by noun phrases. If an embedded clause contains a subject which is realized by a noun phrase, then both variations in word order, *complementizer-subject-adverbial* and *complementizer-adverbial-subject* are possible in Dutch, as illustrated in the example (68a-b); if the subject is realized by a personal pronoun, on the other hand, only the word order comprising of the sequence is *complementizer-subject-adverbial* possible, whereas the word order comprising of the sequence *complementizer-adverbial-subject* is considered ungrammatical. For example:

(68) a. … dat Lise gisteren ziek *was*
…that Lise yesterday sick *was*
…that Lisa was sick yesterday.

b. … dat gisteren Lise ziek *was*
…that yesterday Lise sick *was*
…that Lisa was sick yesterday.

(69) a. … dat ze gisteren ziek *was*.
… that she yesterday sick *was*
…that she was sick yesterday.

b. *… dat gisteren ze ziek *was*
… that yesterday she sick *was*
…that she was sick yesterday.

(Platzack 1986a: 200)

The distribution of pronominal subject is also more limited than the distribution of the nominal subject in some Dutch main clauses, such as, for instance, *yes/no*-questions, in which the word order sequence *complementizer-adverbial-subject* is ungrammatical in all cases when the subject is a pronoun:

(70) a. *Was* Lise gisteren ziek?
was Lise yesterday sick
Was Lisa sick yesterday?

b. *Was* gisteren Lise ziek?
was yesterday Lise sick
Was Lisa sick yesterday?

(71) a. *Was* ze gisteren ziek?
was she yesterday sick
Was she sick yesterday?

b. *_Was_ gisteren ze ziek?
was yesterday she sick
Was she sick yesterday?

(Platzack 1986a: 200)

(Platzack 1986b: 45) reports exactly the same situation in respect to subject distribution in his native Swedish.

(72) a. … att han verkligen *har* gjort det här
… that he really *has* done this
…that he has really done this

b. *… att verkligen han *har* gjort det här
… that really he *has* done this
… that he has really done this

(73) a. … att Kalle verkligen *har* gjort det här
… that Kalle really *has* done this
…that Kalle has really done this

b. …att verkligen Kalle *har* gjort det här
… that really Kalle *has* done this
…that Kalle has really done this

(74) a. *Har* han verkligen gjort det här?
Has he really done this?

b. **Har* verkligen han gjort det här?
has really he done this

(75) a. *Har* Kalle verkligen gjort det här?
Has Kalle really done this?

b. *Har* verkligen Kalle gjort det här?

has really Kalle done this?

Has Kalle really done this?

(Platzack 1986b: 45)

As the Swedish sentences in the examples (72-75) show, in embedded clauses, only non-pronominal subjects may be separated from the complementizer on their left, and in verb-second structures, which are characteristic for main clauses, only non-pronominal subjects may be separated from the verb on their left.

Thus the evidence from not only West Germanic languages, but also from the Mainland Scandinavian languages, support the hypothesis that the presence of a complementizer in clause structure blocks verb movement to the COMP-position, thus disabling the verb-second effect from taking place. Based on these data, Vikner (1995: 45) concludes that an adjacency requirement holds between COMP and pronominal subjects in all Germanic verb second languages, since in verb-second structures, which are characteristic for main clauses, only non-pronominal subjects may be separated from the verb on their left, whereas in embedded clauses, only non-pronominal subjects may be separated from the complementizer on their left.

When all the relevant linguistic data from Germanic languages are taken into consideration, however, the situation becomes far more complicated. Under the assumption that the clause structure presented in the diagram (1) is the representative of the underlying clause structure in general, i.e. of the underlying structure of both main and embedded clauses alike, than the reason why verb movement to the COMP-position can only take place in main clauses and not in embedded clauses is pretty obvious, and the explanation in the tradition of den Besten (1977) seems perfectly plausible: complementizers in embedded clauses block movement of the finite verb to the COMP-position by filling the only available structural slot to the left of the subject, so the finite verb does not have a vacant position on the left of the subject to move into. In result, sentences like the ones given in the examples (62b) and (62c) are ungrammatical.

And yet, languages exist in which verb-second word order is detected in embedded clauses as well, despite the complementizer. They apparently show that the presence of a complementizer in clause structure does not *always* block

movement of the finite verb to the COMP-position, and that the explanation of this syntactic operation in the tradition of den Besten must be either modified to include these cases as well, or completely abandoned in favor of an alternative explanation.

3.3.3. Verb Movement to COMP in Embedded Clauses

The explanation of the verb-second effect in the tradition of den Besten (1977), Thiersch (1978), and others (e.g. Haider 1986, Holmberg 1986, Platzack 1986a, Taraldsen 1986, etc.), according to which the finite verb moves to the COMP-position in cases when this position is not filled by a complementizer gives a plausible interpretation of the verb-second word order in all Germanic verb-second languages in which such word order takes place only in main clauses, but not in embedded clauses, the latter containing a complementizer in the clause initial position which effectively blocks verb movement to the COMP-position. Therefore, the explanation of the verb-second effect in these languages relies on two basic assumptions, the first assumption being that the verb-second word order is an outward manifestation of movement of the finite verb to the COMP-position, and the second assumption being that there is only one COMP-position available in clause structure in main and embedded clauses alike.

There are, however, two Germanic languages, Icelandic and Yiddish, in which the verb-second word order is also regularly found not only in main clauses, but also in embedded clauses introduced by some complementizer. Here are the examples of an Icelandic (76a) and a Yiddish (76b) embedded clauses with verb-second word order:

(76) a. …<u>að</u> í herberginu *hefur* kyrin staðið
…that in the room has the cow stood
…that the cow has stood in the room.

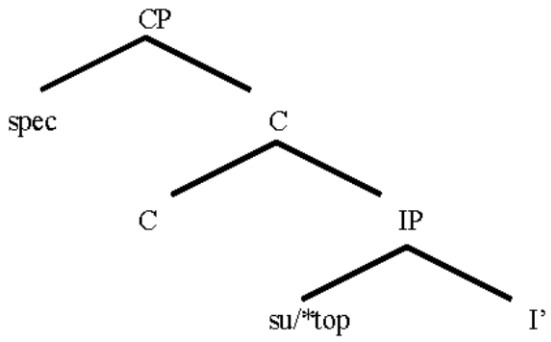
b. …<u>az</u> morgn *vet* dos yingl zen a kats
…that tomorrow will the boy see a cat
…that the boy will see a cat tomorrow.

(Koeneman 2000: 11)

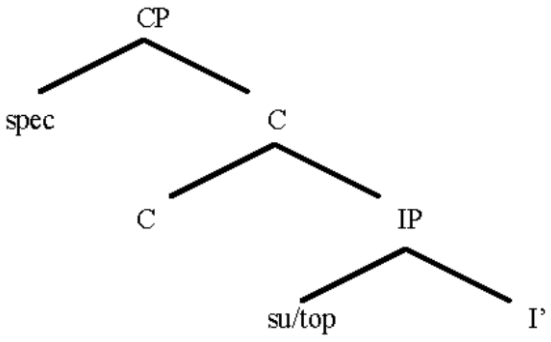
As these examples show, the presence if complementizers *að/az* does not prevent the finite verbs from taking the second position to the left of the subject. Under the assumption that clauses in general have the underlying structure as it is presented in the diagram (1), i.e. the structure consisting of VP plus IP and CP, it is not possible to easily account for linguistic data presented in the example (76). This situation, therefore, immediately raises a question whether the existence of the verb-second effect in embedded clauses should lead to a revision of the traditional explanation which identifies verb movement to the COMP-position as the syntactic mechanism which places the finite verb in the position of the second constituent.

Some authors (e.g. Diesing 1990, Santorini 1992, Rögnvaldsson and Thráinsson 1990) believe that an alternative explanation for these cases is needed, so they argue that the parameterization lies in Inflectional Phrase specifier (IP-spec) being either a structural subject position, as presented in the diagram (77a), or an optional topic position, as displayed by the diagram in (77b).

(77) a.



b.

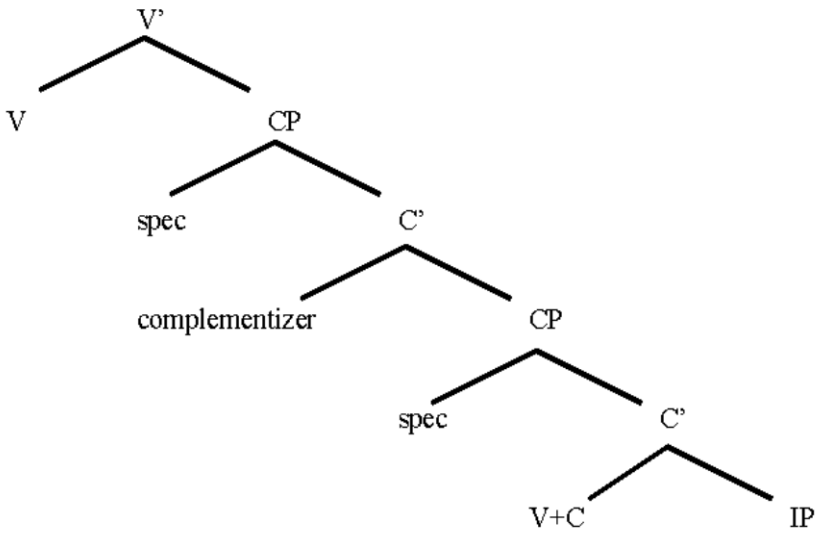


According to this analysis, Icelandic and Yiddish choose the option presented in the diagram (77b), thereby allowing topicalization to IP-spec and, consequently, verb movement to the INFL-position. All other Germanic verb-second languages choose the option presented in the diagram (77a), where IP-spec is a structural subject position, so movement of the finite verb to the INFL-position does not take place.

A greater number of authors (e.g. de Haan and Weerman 1986, Holmberg 1986, Platzack 1986a, Rizzi and Roberts 1989, Iatridou and Kroch 1992), however, adopted the view according to which the traditional den Besten's explanation of the verb-second word order should not be abandoned, but modified in order to cover verb-second occurrence together with complementizers in the same structure. It is therefore suggested that each clause which contains both a complementizer and the finite verb in the position of the second constituent must include not just one, but two Complementizer Phrases, meaning that these structures would have two COMP-positions, albeit of different projection levels — the higher one, which is filled by the complementizer, and the lower one, occupied by the finite verb.

This analysis assumes that Icelandic and Yiddish embedded clauses have a richer tree structure than the main clauses, consisting of two functional heads c-commanding the canonical subject position. The underlying structure of embedded clauses which display the verb-second effect would, therefore, look as presented in the following diagram:

(78)



Vikner (1995) suggests that the data from Icelandic and Yiddish are best accounted for by allowing *CP-recursion*, a process originally introduced by de Haan and Weerman (1986) to capture the phenomenon of embedded verb-second under a specific sub-class of Scandinavian verbs known as *bridge verbs*[8].

In the situation when the traditional structural solution offered by den Besten (1977) proves inconclusive, both approaches, one which suggests that the verb-second word order may arise in embedded clauses through movement of non-subjects to IP-spec rather than to CP-spec, and another, which proposes that Icelandic and Yiddish have CP-recursion in embedded clauses, while other Germanic languages do not have it, provide some useful insights into the problems related to the verb-second phenomenon. They will, therefore, be discussed in greater detail in the Chapter Four of this dissertation.

3.3.4. The Loss of Verb Movement to COMP

English is the only Modern Germanic Language without the generalized verb-second effect, which leads to an obvious conclusion that it is the only Germanic language which underwent the loss of movement of the finite verb to the COMP-position at one point in its history. Since the loss of this syntactic movement in English will be discussed in detail in Chapter Five of this dissertation, the loss of verb-second word order in French and Welsh shall be presented here as an illustration for the disappearance of verb movement to the COMP-position in the history of a language.

3.3.4.1. The Loss of Verb-Second in French

Despite some alternative analyses (e.g. Kaiser and Zimmermann 1995), which claim that the verb movement to the COMP-position in French never existed, and that the evident numerous cases of earlier subject-verb inversion had nothing to do with the verb-second effect, the opinion prevails, in both traditional and generative literature, that Old French was a verb-second language, sharing the

[8] A small group of verbs, like *say, believe, think*, that are able to select complement clauses showing subject-verb inversion.

syntactic properties typical of verb-second phenomenon with neighboring Germanic verb-second languages.

Although Modern French has lost these syntactic properties, it still displays the verb-second word order in certain limited contexts, just like Modern English. These constructions in both languages are often referred to as residual verb-second (Rizzi 1990). Apart from its regular occurrence in interrogative contexts, verb-second word order in Modern French also appears after certain non-interrogative clause-initial adverbs and adverbial expressions. In addition, it may also occur in clauses with fronted objects or prepositional phrases, as well as in embedded subjunctive clauses. Finally, the logical subject in impersonal constructions may follow the finite verb, whether the verb is preceded by a lexical expletive or not. But even in declarative contexts in which it does appear, subject-verb inversion in Modern French is not obligatory, except for so-called *incised clauses*[9] , and some isolated cases such as inversions after *toujours* in the expression *toujours est-il que* (in any case), *encore* (with the meaning of 'be that as it may'), and *tel* in combination with the copula *être* (Grevisse and Goose 2007: 476), as well as inversions after an embedded clause directly followed by adversative *toujours* and *si* (Koopmann 1910: 89).

According to (Grevisse and Goosse 2007: 476-481), there is a significant difference between the constructions with the verb-second word order in which the subject is realized by a pronoun, and the constructions with full nominal subjects. In clauses with pronominal subject, the position of the first constituent is occupied by either an adverbial, as in the example (79b), or a stressed attribute, as presented in the example (179b):

(79) a. Ainsi *demeura*-t-elle un très long moment.
so *stayed*-she a very long moment
So she stayed for a very long moment.

[9] Incised clauses show up after a (part of a) sentence in direct speech and feature a *verbum dicendi* directly followed by a (non-)pronominal subject, illustrated in (i) from Grevisse & Goose (2007: 473):

(i) "Donne-lui tout de même à boire", *dit* mon père.
give him all the same to drink, *said* my father
"All the same, give him something to drink," my father said.

b. Plus justes *seraient*-ils s' ils suggéraient que …

more just *would-be*-they if they suggested that

They would be more just if they suggested that …

(Grevisse and Goosse 2007: 478)

Constructions featuring a nominal subject, on the other hand, show a wider distribution: an attribute may be stressed in sentence-initial position and not taken up in the ensuing sentence (80a), the subject may represent a kind of definition or enumeration (80b), the finite verb may be linked to the previous clause (80c), the finite verb may be un-accusative (80d) or there may be in sentence-initial position either an adverb or an adverbial phrase (80e) or an indirect object (80f) or a single attribute (80g):

(80) a. Grande *fut* ma surprise quand …

big *was* my surprise when

My surprise was great when …

b. *Sont* meubles par leur nature, les corps qui …

are furniture of their nature the objects which

The following objects are furniture by nature: …

c. Ah ! voilà le cimetière de Ziès. Y *dorment* le petit Nicolas et le vieux Jérôme.

ah there-is the cemetery of Ziès there *sleep* the little Nicolas and the old Jérôme

Ah! There is the cemetery of Ziès. Little Nicolas and Old Jérôme sleep there.

d. *Passait* une riche voiture, contenant trois femmes turques inconnues.

was-passing a expensive car containing three women Turkish unknown

An expensive car was passing which contained three unknown Turkish women.

e. Aussitôt s' *établit* un combat de générosité.
right-away [ref.] *established* a contest of generosity
Right away, there started a contest of generosity.

f. A chaque jour *suffit* sa peine.
to every day *suffices* its trouble
Each day has enough trouble of its own.

g. Seules *restaient* les difficultés professionnelles.
alone *were-remaining* the difficulties professional
Only the professional difficulties were remaining.

(Grevisse and Goosse 2007: 479-490)

As the sentences in the example (80) demonstrate, there are only some rather restricted syntactic contexts in which verb-second word order, as the outward manifestation of movement of the finite verb to the COMP-position, is allowed in Modern French declarative clauses. But these restrictions are a relatively recent development. In Medieval French, which is conventionally divided into Old French (900-1300) and Middle French (1300-1600), verb-second word order appears to be a relatively unrestricted phenomenon, independent from the nature of the subject.

The verb-second status of Old French has been fairly uncontroversial in both traditional and generative literature ever since Thurneysen (1892) first described this syntactic property in the language. The situation in Middle French, on the other hand, has been more uncertain, as the linguistic facts are less obvious here, and as such susceptible to different interpretations, predominantly in various generative grammar frameworks. Nevertheless, it seems that subject-verb inversion was rather common for Middle French as well (Lemieux and Dupuis 1995: 80).

According to Ledgeway (2007: 141) the high frequency of declarative clauses with verb-second word order was predominantly the consequence of the unrestricted nature of the pre-verbal position in Medieval French: while the finite verb in these constructions always appears in the position of the second constituent, preceding the subject, the clause-initial pre-verbal position may be filled with a number of constituents other than the subject, such as direct objects (81a), indirect

objects (81b), prepositional complements (81c), predicative complements (81d), adverbials or adverbial phrases (81e), and embedded clauses (81f).

(81) a. Un altre adversarie li *suscitad* nostre Seignur, Gozám, le fiz Helyadám …

a other adversary him *raised-up* our Lord Gozám the son Helyadám

And our Lord raised up against him another adversary, Gozám, the son of Helyadám …

b. A cest conseil s' *acorderent* li prince et li baron.

to this advice [ref.] *agreed the princes* and the barons

The princes and the barons agreed on this resolution.

c. et avec lui *ala* son frère le duc d' Orliens, ses oncles le duc de Berry, le duc de Bourgongne et le duc de Bourbon, et […]belle compaignie de seigneurs et de chevaliers et escuyers.

and with him *went* his brother the duke of Orleans his uncle the duke of Berry the duke of Burgundy and the duke of Bourbon and nice crowd of lords and of knights and knaves

and his brother, the Duke of Orleans, his uncle, the Duke of Berry, the Duke of Burgundy and the Duke of Bourbon, and […] a multitude of lords, and knights, and knaves all went with him.

d. Bele *fud* la feste …

beautiful *was* the ceremony

The ceremony was wonderful …

e. car tant *fut* Charles le Simple en prison …

for so-long *was* Charles the Simple in prison

for Charles the Simple was in prison for that time …

f. Tandis que le roy attendoit la delivrance son frere, *envoia* le roy frere Raoul, le frere preescheur, a un amiral …

while the king was-awaiting the release his brother *sent* the king Brother Raoul the brother preacher to an emir

While the king was waiting for the release of his brother, the king sent Brother Raoul, the preacher, to an emir …

(Ledgeway 2007: 141)

The question that immediately arises in the light of the existence of such variations in the position of the first constituent in Middle French is whether all these instances of the verb-second word order are the result of movement of the finite verb to the COMP-position, or perhaps the consequence of some other syntactic operation unrelated to verb movement.

In fact, Old French had certain syntactic properties which could make its verb-second nature less obvious, such as clitic object pronouns, as displayed in the example (82a), and pro-drop, as shown in the example (82b):

(82) a. Tu m'as amé celéement et jou toi.
you me-have loved in secret and I you
You have loved me in secret and I you.

b. Si est en si grant desconfort.
so is (he) in such great distress
He was in such great distress.

(Adams 1989: 117)

The majority of authors (e.g. Cardinaletti and Roberts 1991, Adams 1987, Kroch 1989a) do not count object clitics, such as *m'* in the example (82a), as preverbal constituents that take part in the verb-second word order. Therefore, the only independent preverbal element in this sentence is the subject *tu*. The sentence in the example (82b), on the other hand, which has no phonologically realized subject, could be interpreted in two ways: as a verb-second sentence with a post-verbal null subject or as a non-verb-second sentence with the null subject before the verb. However, the distribution of null subjects suggests that *pro* follows the verb — they are found in the same environments as post-verbal subjects, suggesting that pro is licensed only when it is post-verbal (Adams 1987). In addition, since the underlying word order of Old French was subject-verb-object, any sentence with an initial subject has a derived verb-second word order which is identical to its underlying order.

Old French seems to have verb second effects in a wider range of embedded clauses than the modern asymmetric verb-second languages allow. Lemieux and

Dupuis (1995: 80) consider these constructions to be evidence that Old French had generalized embedded verb-second. In addition, they note that adverbs of negation, such as *pas*, appear between the verb and a post-verbal subject in Old French, whereas in asymmetric verb-second languages, such as Dutch and Danish, the post-verbal subject is adjacent to the verb. They also claim that that the licensing of the subject in verb-second clauses does not involve double verb raising to CP, that is movement of the finite verb to the INFL-position, and then movement of the finite verb to the COMP-position. Instead, they analyze all cases of the verb-second word order in medieval French as the result of only verb movement to the INFL-position. Moreover, they argue that the same syntactic movement also produces verb-second effect in embedded clauses alike, which means that, according to their analysis, both Old and Middle French were non-asymmetric verb-second languages similar to Icelandic or Yiddish. They propose certain evidence against an interpretation of embedded verb-second clauses as Complementizer Phrases, namely that constituents can be extracted out of embedded verb-second, which is not possible for embedded Complementizer Phrases such as the complements of bridge verbs, and that embedded verb-second clauses are often subjunctive — and subjunctive verbs, according to Lemieux and Dupuis, are dependent on the main clause verb, and therefore too clearly subordinate to be interpreted as an embedded root clause. Based on these facts, they claim that the finite verb in verb-second sentences is in the INFL-position, with the subject remaining in Spec,VP and with Spec,IP acting as a topic position rather than a subject position.

However, the main problem with this explanation is that it does not explain the situation in Modern French at all. In other words, if movement of the finite verb to the COMP-position never existed in the history of French, the verb-second effect being the result of the movement of the finite verb to the INFL-position, then it is self-evident that the loss of the verb-second word order in French could not be caused by the loss of verb movement to the COMP-position. Verb movement to the INFL-position, on the other hand, was never lost in the history of French, and it still takes place in the language, as it was presented in the section 3.2. So if movement of the finite verb to the INFL-position really was the syntactic force behind the verb-second phenomenon in Medieval French, and that syntactic force is still active in the language up to date, why did verb-second disappear in the first place? In

addition, their analysis does not explain the fact that verb-third word order was frequent in subordinate clauses (Côté 1995) or the large differences in the frequency of verb-second in main and subordinate clauses (Hulk and van Kemenade 1995).

Aware of this contradiction, Lemieux and Dupuis (1995: 103) argue that the loss of verb-second in the history of French is connected to the loss of another syntactic property — the loss of null subject. They suggest that there are two reasons for the loss of these two characteristics of Middle French, the first one being the loss of directional government, and the second one a change in the accentual pattern of the language.

In addition, they propose that the loss of the superficial manifestations of the verb-second constraint in Modern French must take into account some changes in the narrative structure of the language, because a small class of elements whose original syntactic function was to satisfy the verb-second requirement and at the same time establish a predicative relation between the verb and its subject is no longer able to fulfill these two functions.

Platzack (1995: 205-216) describes the loss of verb second in any language as a change in position of the finiteness feature [+F]: in verb-second languages, this feature is in the COMP-position, whereas in non-verb-second languages it is in the INFL-position. The main consequence for this change in position for French was a significant change in the distribution of null subjects.

In addition, he attributes the loss of verb-second in French to two major factors, to the development of subject clitics, and to the predominant subject-verb-object word order in the language. The importance of the latter factor is reflected in the fact that the subject-verb-object word order can be produced both by a grammar with verb second and by a non-verb-second grammar where subject-verb-object is the underlying word order. The same is true of sentences with a pronominal subject between the topic and the finite verb. Based on these facts, Platzack postulates a period in the history of the language when an overwhelming majority of the sentences uttered could be given two different structural interpretations, not only because of the underlying word order, but also because the cliticization of subject pronouns made many sentences with initial non-subjects ambiguous. For example:

(83) En verité, il a esté et est bon valeton
in truth he has been and is good valet-[dim.]
In truth he has been and is a good little valet.

(Platzack 1995: 209)

Sentences such as the one in the example (83) could either be interpreted as non-verb-second sentences in which there are two constituents before the finite verb, or as verb-second sentences in which the clitic does not count, like the object clitic in the example (82a). Such a situation, where numerous structures are syntactically ambiguous, is a necessary prerequisite for a syntactic change to take place. In the case of loss of verb movement to the COMP-position in French, Platzak believes that it took place during the fourteenth and the fifteenth centuries, i.e. at the end of the Middle French period.

In a similar analysis, Hulk and van Kemenade (1995) propose that the difference between asymmetric verb-second languages and non-verb-second languages lies in the relative salience of the functional heads C^{o} and I^{o}; thus, a language may be C-oriented or I-oriented. The motivation for verb raising is thus a licensing condition: in a C-oriented language, C^{o} must be lexicalized. According to their analysis, Old French was a C-oriented language, with restrictions on embedded verb-second, but during the Middle French period it shifted to become an I-oriented language, showing similar characteristics to non-asymmetric verb-second languages. These characteristics appeared because fronting by adjunction to Inflection Phrase, as well as by movement to the COMP-position, became possible. Hulk and van Kemenade believe that this can be traced back to the cliticization of subject pronouns: sentences with a fronted initial constituent and a preverbal subject pronoun can be interpreted in two ways, with the initial constituent in Spec,CP or adjoined to Inflection Phrase. Eventually, this ambiguity gave rise to XSV sentences with a full nominal subject, which could only be interpreted using IP-adjunction. The loss of verb-second in French, according to Hulk and van Kemenade, should therefore be attributed to the loss of rich verbal agreement; without this inherent morphological licensing, movement of the subject to Spec,IP was necessary to license the φ-features of I^{o}. This meant that Spec,IP was no longer available as a topic position.

Côté (1995) points out, in response to their analysis, that it is not entirely clear why this would cause verb-second to be lost, rather than causing the verb-second structures to be reanalyzed as Complementizer Phrases.

In addition, both this, and the analysis proposed by Platzak encounter the same problem in that the proportion of XSV orders with pronominal and nominal subjects at different times does not support the idea that these orders spread from cliticized subject pronouns to other types of subject. In other words, there does not seem to be a period when these orders are only possible with pronouns and not with nominal subjects (Vance 1995), and the relative proportion of pronouns and full noun phrases in this type of structure remained stable throughout the Middle French period (Lemieux and Dupuis 1995).

Adams (1989) also links the loss of verb-second to the cliticization of subject pronouns, but rather than saying that the former caused the latter, she proposes that both changes were due to changes in stress. Adams considers verb-second to be a combination of two independent properties: verb fronting and heavy stress. Languages with heavy stress require the initial constituent to be stressed; however, verbs are generally not stressed, unless they are focused. Because of this requirement for initial stress, languages with both verb fronting and initial stress must move some constituent into Spec,CP to precede the verb, leading to verb-second effects. Adams thus attributes the loss of verb-second in French to the loss of initial stress; this change is manifested first in the appearance of initial weak object pronouns, and cliticization of subject pronouns. Old French at first did not allow weak object pronouns in the clause-initial position, requiring either a tonic form as in (84a) or an initial verb as in (84b), but it later became possible to have an initial weak form as in (84c):

(84) a. Moi doiz tu dire ton afere.
to-me must you tell your business
You must tell me your business.

b. Cuides me tu por si pou esmaier?
think-me you for so little frightened
Do you think me frightened over such trifles?

c. Me siét il bien li hurepiaus?
on-me-sits it well the coiffure
Does this hairdo look well on me?

(Adams 1989: 118)

As a consequence of the gradual shift to phrase-final stress, verb-second effects were lost during the fifteenth century. However, Adams's analysis only describes the loss of one of the components of verb-second, while the loss of the second component, verb fronting, is unaccounted for.

Kroch (1989a) also bases the loss of verb-second in the history of French on the change in phrasal accent. After the change in accent, there was only one stress per intonation phrase; since topicalization requires two stresses within one intonation phrase, it was no longer possible after this change. Once topicalization became impossible, pre-posed constituents were reanalyzed as being left-dislocated rather than topicalized. Since left-dislocated constituents don't count for verb-second effect, this led to more cases of verb-third word order, thus further weakening the evidence for verb-second.

Côté (1995) links the loss of verb-second in French to a change in the opposite direction. According to her analysis, Old French in the twelfth century was a symmetric verb-second language, but in the thirteenth century it was a mixture of symmetric and asymmetric verb-second structures, allowing both types of subordinate clauses. Thus, Old French was in the process of changing from a symmetric to an asymmetric verb-second language, but it lacked any clear asymmetries in word order between main and embedded clauses, such as the position of the finite verb in languages with subject-object-verb word order, such as Dutch and German, or the differences in the position of phrasal adverbs seen in the modern Scandinavian languages. Because of this, it failed to meet the learnability conditions for asymmetric verb-second so this syntactic feature was lost entirely. However, Côté does not offer any explanation for the reason why Old French began changing from symmetric to asymmetric verb-second in the first place.

Roberts (1993) analyses the loss of verb-second in the history of French as a loss of Nominative Case assignment under government — a change which also

accounts for the loss of simple inversion and null subjects. Several changes between Old French and Middle French made the verb-second constraint difficult to acquire. According to Roberts, the fact that asymmetric verb-second and subject-verb-object word orders became more common in Middle French than in Old French shows that Middle French was a transitional system in which matrix clauses could be either Complementizer Phrases, in which an asymmetric verb-second constraint has applied, or Agreement Phrases, which allow non-verb-second sentences. The development of complex inversion in the fifteenth century further weakened the evidence for verb-second, since complex inversion requires Complementizer Phrase to have two specifier positions, which is incompatible with verb-second phenomenon. In addition, there was an expansion in the contexts in which null subjects were allowed; Roberts attributes this to pre-verbal null subjects becoming possible, so that sentences with null subjects became ambiguous.

Due to of all of the above factors, while Middle French still allowed verb-second word order, it did not provide as clear evidence for it to language learners as was available in Old French. In the sixteenth century, according to Roberts, learners switched to the simpler non-verb-second analysis and lost the option of Nominative Case assignment under government.

Once this option was lost, post-verbal subjects were no longer possible; this ruled out verb-second word order, as well as simple inversion, because the subject had to precede the finite verb even when there was another topicalized constituent. It also made pro-drop impossible: although pre-verbal as well as post-verbal null subjects were possible before the change, Roberts suggests that in languages where *pro* is licensed only under agreement, a morphologically rich Agr^{o} is required to identify it. However, rich agreement markers were lost from French during the twelfth or thirteenth century, so that *pro*-drop became impossible once licensing under government was no longer an option.

There are several difficulties with Roberts' analysis. First, the reason for preverbal null subjects becoming possible is not explained. It is not obvious why a morphologically rich Agr^{o} is not needed to license *pro* under agreement in languages where licensing under government is also possible; if it were needed, preverbal null subjects would be impossible in Middle French. It is also not clear why the verb-second constraint should have been lost at that particular time.

In an analysis partially similar to one proposed by Lemieux and Dupuis (1995), and partially to one proposed by Roberts (1993), Vance (1995: 173-189) also proposes that a large portion of the inversion structures that occur in the Middle French period can be attributed to a non-verb-second grammar.

The crucial clause-type in this respect is a hybrid "verb-second free inversion construction", which is consistent with both a grammar in which obligatory verb movement to the COMP-position applies and with a grammar in which it does not apply. She argues that the rise in this hybrid construction over the course of the fourteenth and the fifteenth centuries reflects the growing generalization of alternative means of producing inversion structures, to the detriment of the structures produced strictly under movement of the finite verb to the COMP-position. In other words, her analysis proposes two types of inversion in Old French: verb-second type inversion, as illustrated by the example (85a), with the finite verb in COMP and the subject in Spec,IP, and free inversion, as illustrated by the example (85b), where the subject is at the right periphery of VP:

(85) a. Sor ceste piere edefierai je m'eglise
on this rock will-build I my-church

b. Si plorerent assez a cest departement cil qui plus cuidoient avoir les cuers et durs et orgueillox
thus cried much at this departure those who most thought to-have the hearts both hard and proud

(Vance 1995: 174)

Some sentences are ambiguous between the two types of inversion, as the one in the example (86):

(86) Maintenant s'en ala la damoisele.
now refl-'en' went the maiden
Now the maiden went away.

(Vance 1995: 176)

In addition, Vance presents evidence that the initial constituent of the clause was gradually reanalyzed as being unrelated to inversion. In her opinion, both

changes in the grammar of French had their origins at least as early as the thirteenth century. The cliticization of preverbal subject pronouns — a syntactic development often claimed to be a source of the loss of verb second in French — appeared much later, and this shift in the proportion of pronominal and nominal inversions in Middle French has the effect of masking, on the surface, the fundamental decline in verb-second that is taking place. Vance's account of the loss of verb-second effect in Middle French perceives inversion structures as a source of grammatical reanalysis of Complementizer Phrases as Inflection Phrases in the history of the language). But unlike Lemieux and Dupuis, who see inversion structures as Inflection Phrases even in Old French, Vance makes a fundamental difference between the types of inverted word orders produced in Inflection Phrases and the types produced in Complementizer Phrases. Her claim is that Complementizer Phrase inversions may — and, in the case of subject pronouns, must — have immediately post-verbal subjects. These particular structures are, of course, restricted to main clauses, and they have an obligatory pre-verbal non-subject constituent. Inflection Phrase inversions, on the other hand, generally have Verb Phrase-final subjects; in addition, they also strictly exclude pronouns, and they may occur in embedded contexts as well. Since they are essentially "free inversions" and not verb-second structures, they may in fact be verb-initial in Middle French. It is the coexistence of these two underlyingly different inversion constructions that sets in motion the decline of movement of the finite verb to the COMP-position in the history of French.

In conclusion, it seems clear that numerous factors may have played a part in the loss of the verb second constraint in French. Perhaps there is no single cause for this change, but rather a set of circumstances which, taken as a whole, made verb-second word order too difficult to maintain. It seems relatively certain, however, that the loss of movement of the finite verb to the COMP-position is not a recent development in French — it took place much earlier, in the transition from Old French, which was a strict verb-second language, to Middle French which, on the surface, still displays verb-second word order in numerous constructions with subject-verb inversion, but in which verb movement to the COMP-position is already heavily restricted, so the second position of the finite verb is, in fact, in many cases the result of syntactic operation independent from verb-movement.

3.3.4.2. The Loss of Verb-Second in Welsh

Welsh is a member of the Brythonic sub-group of Celtic languages, along with Breton and Cornish. All three languages descended from British, a language spoken across most of Great Britain during the first half of the first millennium AD and before. Languages closely related to British were spoken in Continental Europe at about the same time, but they all disappeared leaving no trace in the form of written documents. As Willis (1998) shows in his brilliant study of the syntactic change in Welsh, this language had a stage in syntactic development in which a verb-second rule was operative in grammar, but that subsequent changes have led to the innovation of verb-initial main-clause word order which is characteristic for Modern Welsh. The history of Welsh is conventionally divided into four periods: Early Welsh (550-800), Old Welsh (800-1100), Middle Welsh (1100-1400), and Modern Welsh (1400 to the present day) (Jones, 1979: 19-22). The stage in its history relevant for the verb-second phenomenon and its loss is Middle Welsh.

According to Willis (1998: 96-101), the finite verb in Middle Welsh main clauses generally appears in non-initial position, and it is preceded by a wide range of constituents. In declarative sentences, it is obligatory that at least one constituent precedes the finite verb, and there is frequently more than one constituent in the pre-verbal position. For example:

(87) a. A'r ederyn a *doeth* y'r ynys honn.
and the bird [prt][10] came to the island this
And the bird came to this island.

b. Ac ystryw a *wnaethy* Gwydyl.
and trick [prt] *made* the Irish
And the Irish played a trick.

c. Yn Hardlech y *bydwch* seith mlyned ar ginyaw…
in Harlech [prt] *be*[fut.] seven years at dinner
In Harlech you will be at dinner for seven years…

[10] [prt] stands for a pre-verbal particle that appears between the clause-initial constituent and the verb.

d. Atref y *doeth* Arthur…

homeward [prt] *came* Arthur

Arthur came home…

(Willis 1998: 50-51)

Willis argues that the Middle Welsh declarative sentences, as the ones given in the example (87) display a verb-second parallel to that found in modern Germanic languages, as the Welsh finite verb also must appear in the second position in these constructions. In addition, in most embedded clauses, the verb obligatorily appears immediately after the complementizer, as in the example (88), resulting in Verb-Subject-Object order.

(88) a. A chyt *archo* ef yti rodi yr eil, na dyro…

and though *implore* [subj.] he to-you give [VN] the second [neg.] give [imp.]

And though he implore you to give him the second, do not give (it)…

b. A phan *welas* y brenhin hynny a barwnyeit y llys, ny bu hoff ganthunt.

and when *saw* the king that and barons the court [neg.] was glad with-them

And when the king and the barons of the court saw that, they were not pleased.

(Willis 1998: 53)

Based on data like this, Poppe (1989:51) has formulated the syntactic rule for the order of constituents in Middle Welsh main clauses, in which (C_1) stands for a fronted constituent which governs the choice of particle, (C_2) represents a second fronted constituent, (V) is the finite verb, (S) stands for the non-fronted subject, and (O) for non-fronted object:

(89) (C_2), C_1 V (S) (O)

As the pattern in (89) shows, in Middle Welsh one constituent precedes the verb in an affirmative declarative main clause, whereas the C_2, position is required for cases of multiple fronting where two constituents precede the verb. Poppe (1989:61) suggested that all preverbal constituents in Middle Welsh are instances of

topicalization. Moreover, he claimed that the set of elements which may occupy the C_2, position is different from that which may occupy the C_1 position: while the C_1 position is filled by a constituent acting as topic or focus for the sentence, the C_2 position is normally reserved for a scene-setting adverbial or a left-dislocated constituent. The different nature of C_1 and C_2, therefore, corresponds in a Government and Binding framework to the specifier position of Complementizer Phrase and a Complementizer Phrase adjoined position respectively.

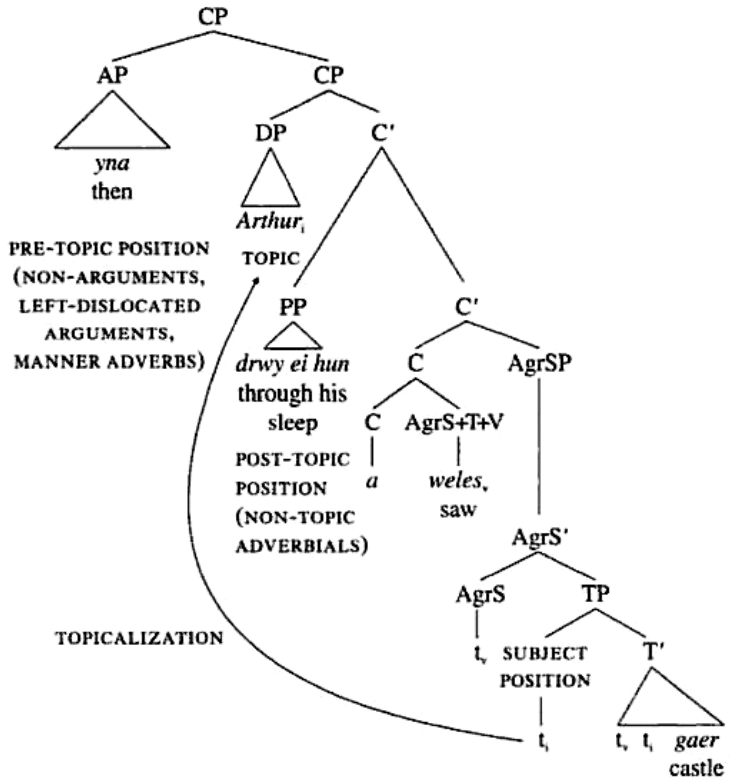
Willis (1998: 55) argues that only C_1 constitutes a landing site for syntactic movement, whereas C_2 is unconnected with movement. Therefore it is proper to speak of topicalization and fronting with respect to position C_1 only. In addition, he claims that certain types of adverb placement are independent of topicalization, which makes the postulation necessary of an additional immediately preverbal syntactic position. The adverb-placement rules of Middle Welsh complicate the account of verb-second in this language, making it different in respect to the verb-second phenomenon in Germanic languages. The finite verb in the structure of the Middle Welsh main clause can be preceded by a number of adverbs, which can obliterate the fact that the structure has verb-second word order. Willis therefore divides these adverbials into three separate categories: pre-topic adverbials, interposed adverbials, and left dislocations.

In addition, he claims that Middle Welsh makes two other recursive preverbal positions available. One of them, adjunction to Complementizer Phrase, is reserved for adverbials with a topic or discourse-connective interpretation, and left dislocated elements. Willis argues that such adverbials are in fact left dislocated, but because of their status as adjuncts or as adverbs they may be base-generated in this position. The other recursive preverbal position involves adjunction to the head C′, and is reserved for adverbs lacking a topic interpretation. This latter position is invisible to movement rules, and may not therefore be occupied by arguments or any other elements that must be generated in a lower position. For example:

(90) Yna Arthur drwy ei hun a *weles* gaer
then Arthur through his sleep [prt] *saw* castle
Then Arthur through his sleep saw a castle.

The sentence in the example (90) has the structure in which all three pre-verbal positions are filled. The subject of the sentence undergoes topicalization to Spec,CP, and the finite verb raises to the COMP-position in two steps. The adverb *yna* (then) is base-generated adjoined to Complementizer Phrase where it receives a topic interpretation. The adverb *drwy ei hun* (through his sleep) is base-generated adjoined to C′, and thus does not receive such an interpretation. Presented in a tree-diagram, the structure of the sentence from the example (90) would look as follows:

(91)



Towards the end of the Middle Welsh period, however, this verb-second system began to break down. As it is customary within various diachronic generative grammar frameworks, the explanation for this syntactic change is found in the domain of language acquisition. Therefore Willis (1998: 181-198) focuses his research on determining what evidence a language learner can use to acquire the grammars postulated for their language. The assumption here is that language learners have the task of producing a grammar whose output approximates to the language that they hear around them. Hence it is necessary, in accounting for syntactic this change, to explain not only the exact way in which the language learners acquired the conservative linguistic system, but also to show what aspects

of that system were acquisitionally ambiguous — that is, prone to a different syntactic analysis.

The statistic studies of Middle Welsh prose show that the most frequently attested word order in writing was the order comprising of the sequence *adverbial-prt-verb-subject-object*, and that the next most frequent word order was the one consisting of the sequence *subject-prt-verb-object*. In such a syntactic situation, it is clear that main clauses with subject-verb-object word order provide the language learner with clear data; the only problem is that these data are compatible either with a verb-second analysis, or with subject-raising to SpecIP, which makes them acquisitionally ambiguous. When confronted with sentences with such ambiguous structure, the language learner will be given no particular reason to opt for the more complex verb-second grammar. The same is true of clauses whose structure comprises of the sequence adverbial-subject-verb-object, where the adverb might be adjoined to Inflection Phrase, and the subject-verb-order word order might simply be the result of subject raising.

Once the ambiguous structures like these are wrongly analyzed, there is high probability that the language learner would try to analogically extend these re-analyzed structures to the structures with the most frequent adverbial- verb-subject-object word order. Such a misinterpretation of linguistic facts at the expense of the verb-second word order would be even easier because of the fact that Middle Welsh was not a strict verb-second language, as it allowed preverbal adverbs to occur in positions other than SpecCP, some being adjoined to Complementizer Phrase or the head C′.

On top of this, the textual evidence shows that object topicalization was on the decline in the medieval period, and that it became rare quite early, perhaps as early as the fourteenth century. By the Early Modern non-contrastive direct-object topicalization, with the exception of the direct object of impersonal verbs, became quite rare, although not ungrammatical. Inasmuch as object topicalization was good evidence for verb-second, this represents an impoverishment of the triggering data for the acquisition of a positive setting of the verb-second parameter.

Furthermore, the loss of pre-verbal particles after pronominal subjects additionally obscured a crucial piece of evidence for acquisition of verb-second

structures, and when these particles, during the sixteenth century, disappeared after nominal subjects as well, this verb-second acquisitional evidence was completely removed from the language.

All these changes provided the language learner with opportunities for simpler analyses of verb-second structures which do not require a full verb-second system in syntax.

Willis therefore argues that, during the period when topicalization was lost, the three verb-second structures typical for Middle Welsh, namely subject-verb-object, Adverbial-verb-subject-object, and object-verb-subject, ceased to be acquired as a single, unified verb-second phenomenon. In so far as these orders were replicated in successive generations of speakers, they were generated using grammatical rules unconnected with verb-second. The verb-second parameter was thus reset to a negative value and verb-second was lost from the grammar of Middle Welsh.

In conclusion, it seems rather obvious from Willis's analysis, that the lost of the verb-second phenomenon in Middle Welsh, and therefore the loss of movement of the finite verb to the COMP-position in this language, was not a case of change that took place abruptly, but rather an instance of a gradual syntactic change, the path for which had been straightened by slow erosion of the trigger experience for the correct acquisition of the verb-second rule, i.e. by a series of subsequent grammatical changes which, taken together, obliterated the evidence for verb-second for language learners and led them to assume simpler syntactic structures in which no verb movement occurs.

3.4. Conclusion

The movement of the finite verb from its base position to either INFL or COMP is the syntactic operation which lies at the base of the verb second phenomenon. Full explanation of these two forms of verb movement, and the reasons and circumstances of their loss in English, however, may be a complex task, as the data from various languages often contradict each other. Thus, it is widely accepted that the loss of rich inflectional morphology is the cause of the loss

of verb movement to the INFL-position. However, the data from English contradict this; English modal verbs are still capable of moving to the INFL-position, yet they are the least inflected verbs in the language and they show absolutely no agreement in person and number with the subject in any of the syntactic contexts.

As far as the verb-second effect is concerned, two things seem to be of particular relevance: first, not all cases of the verb-second surface word order are the result of movement of the finite verb to the COMP-position, and second, as the case of Welsh and, especially, French, shows, the factors involved in the loss of this syntactic phenomena are numerous and heterogeneous. It can therefore be concluded that, when loss of verb-second effect in English is concerned, a satisfying explanation cannot be reached if the research is focused on a single, most important factor that caused this change. Instead, it seems apparent that the analysis must take in consideration a full set of inter-linguistic and extra-linguistic circumstances which, taken as a hole, resulted in the decline of the verb-second phenomenon in the English language.

CHAPTER 4

VERB-SECOND IN GERMANIC LANGUAGES

4.1. Introduction

The verb-second word order, i.e. the type of clause structure in which the verb takes the position of the second constituent, has been recognized as one of the common syntactic features of Germanic languages from the very beginning of the Germanic Linguistic tradition[11]. In fact, since this syntactic phenomenon is rather scarcely found outside of Germanic languages, it has often been referred to as a quintessential Germanic syntactic characteristic. As such, it has been receiving a considerably high degree of attention from linguists devoted to both synchronic and diachronic research for more than a century. In fact, the verb-second phenomenon had been fully described, and the basic facts about it presented, in a monograph by Erdmann in 1886:

> Verb in the second position, i.e. one nominal before the verb, all others following (the verb). /…/ If (the declarative clause) contains only a nominal phrase, this phrase (usually the subject) begins the clause and the verb finishes it. /…/ But even if the clause contains several nominal phrases, only one of them would be placed before the verb /…/; all the others follow the verb. The choice of the nominal phrase preceding the verb is left in German to the preference of the speaker, he fronts the noun, which presents the most opportune starting point for the purpose of the speech. /…/ It is entirely wrong for some grammarians to concede to the subject nominative a peculiar right to initial position; any oblique case, any adverbial or predicate modifier can just as well be fronted /…/, in

[11] See for instance Behagel 1892, Delbrück 1878, Wackernagel 1892.

> fact emphatically stressed or entirely insignificant, short or very extensive phrases.
>
> (Haider and Prinzhorn 1986: 182)

The Germanic languages which show the verb-second phenomenon are German, Dutch, Afrikaans, Frisian, Swiss German, West Flemish, Yiddish, Danish, Modern Icelandic, Norwegian, Swedish and Faroese. The only exception here is Modern English because it shows verb-second only in limited contexts. In all other contemporary Germanic languages, the finite verb obligatorily occurs in clause-second position in main clauses, i.e. it immediately follows the clause-initial constituent, whatever this constituent is. Therefore verb movement to the second position implies that another constituent moves to the clause-initial position (cf. Chapter 3, section 3.3.1.). This fronting operation where any constituent may appear in first position is called *topicalization*. This topicalized constituent which triggers the verb-second effect can be a subject, an object, a prepositional phrase, an adverbial, or a *wh*-phrase. For example:

(1) Subject - Verb$_{[finite]}$

Ge. a. Thomas *hat* das Buch gelesen.

Da. b. Thomas *har* denne bog læst.

Du. c. Thomas *heeft* dit boek gelezen.

En. d. Thomas *has* read the book.

(2) Object - Verb$_{[finite]}$

Ge. a. **Dieses Buch** *hat* Thomas gelesen.

Da. b. **Denne bog** *har* Thomas læst.

Du. c. **Dit boek** *heeft* Thomas gelezen.

En. d. ***This book** *has* Thomas read.

(3) Prepositional Phrase - Verb$_{[finite]}$

Ge. a. **Für dieses Buch** *hat* Thomas bezahlt.

Da. b. **For denne bog** *har* Thomas betalt.

Du. c. **Voor dit boek** *heeft* Thomas betaald.

En. d. ***For this book** *has* Thomas paid.

(4) Adverbial - Verb$_{[finite]}$

Ge. a. **Gestern** *hat* Thomas das Buch gelesen.

Da. b. **I gar** *har* Thomas denne bog læst.

Du. c. **Gisteren** *heeft* Thomas det boek gelezen.

En. d. *__Yesterday__ *has* Thomas read this book.

(5) WH-Phrase - Verb$_{[finite]}$

Ge. a. **Was** *hat* Thomas gelesen?

Da. b. **Hvad** *har* Thomas læst?

Du. c. **Wat** *heeft* Thomas gelezen?

En. d. **What** *has* Thomas read?

Trips (2001: 257)

As it can be seen from the examples above, Modern English does not adhere to the Germanic verb-second pattern, since the only grammatical sentences are those in the example (1d), in which a subject precedes the finite verb and in the example (5d), in which a *wh*-phrase precedes the finite verb. This is further supported by the sentences in the example (6) which show that, while verb-third order is grammatical in Modern English, it is not possible in German, Danish and Dutch.

(6) Verb-Third Order

Ge. a. *Gestern Thomas *hat* dieses Buch gelesen.

Da. b. *I gar Thomas *har* denne bog læst.

Du. c. *Gisteren Thomas *heeft* dit boek gelezen.

En. d. Yesterday Thomas *read* this book.

Trips (2001: 258)

Both Modern English and some of the Germanic languages shall be discussed in more detail in respect to the verb-second phenomenon in the remainder of this chapter. But first, some issues in regard to the verb-second word order and the basic word order should be addressed.

4.2. Basic Word Order and Verb-Second

As it was mentioned in the previous section, the verb-second phenomenon in Germanic languages was observed and described in the second half of the nineteenth century. However, the comparative linguistics was never too much engaged with syntactic problems as it was focused predominantly on phonology and morphology. In the second half of the twentieth century, however, the discussion shifted to problems different than those that pre-occupied the nineteenth century linguists. The underlying word order of both main and subordinate clauses has now become a central issue of discussion.

Lehmann (1974) and Friedrich (1975) were the first to discuss Indo-European word order from a typological point of view. While Friedrich argued for a basic subject-verb-object word order, Lehmann found evidence for subject-object-verb in the oldest Indo-European languages and reconstructed this pattern as the basic order of constituents in a clause for Proto-Indo-European (cf. also Lehmann (1993), Gamkrelidze and Ivanov (1984), Stepanov (1989)). The change from object-verb to verb-object order has been described for many descendant languages of the Indo-European family (Faarlund 1985 for Germanic languages, and Leumann, Hofmann and Szantyr 1965 for Latin).

With the advent of generative grammar, a different approach came into play; seemingly aberrant word order patterns were now analyzed as a product of the interplay between basic word order and highly restricted dislocations, so that the dispute between Lehmann and Friedrich could be settled. Thus Krisch (1997: 302) showed that most of Friedrich's subject-verb-object sentences are best understood as sentences with right dislocated constituents. According to Krisch, none of the attested Indo-European languages has truly free word order — they are all configurational, as Proto-Indo-European must have been itself, i.e. their word order is relatively rigid on the level of deep linguistic structure. Krisch's work presumably solved the problem of basic Proto-Indo-European word order, so the interest in current studies in Indo-European word order has shifted to a phenomenology of dislocations and the factors that trigger them. And so, the verb-second phenomenon once again came into the spotlight to become "one of the most tantalizing topics in the current theatre of research" (Lightfoot 1995: 31).

It is important to note, however, that verb-second word order cannot be equated with object-verb word order. It is tempting, but it would be wrong, to assume that, if a language has one of them as a dominant pattern it follows that it must have the other. Faarlund (1990: 60-61) demonstrates that the two concepts are not at all synonymous, and that a language may very well be verb-second without having the verb-object word order, and vice versa. He takes English as a typical example of the verb-object pattern unaccompanied by the verb-second word order:

(7) Last year we *visited* Paris.

(Faarlund 1990: 61)

The verb in the sentence from the example (7) takes the position of the third constituent, but the structure of adverbial-subject-verb-object clearly shows the verb-object pattern.

However, the example Faarlund uses has a marked structure, so it can be objected that, as such, it may not be valid as an argument about basic word order. His point remains valid, though, due to the simple fact that the 'verb' referred to in the verb-second context is always the *finite* verb, whereas the 'verb' discussed in the context of the verb-object pattern is the *main* verb, whether it be finite or not. In the case of simple verbs, i.e. the verbs in either Simple Present or Simple Past Tense when English is in question, the finite and the main verb are one and the same; however, when any of the many English compound verbal forms is used, the verb from the verb-second context is now the auxiliary verb, whereas the verb from the verb-object context remains the main verb, but it is now invariably in non-finite form and is subcategorized for a complement. Hence sentences with two verbs may exits in English, where one verb is in second position and another is preceding its complement.

(8) a. We *have* never ***visited*** Paris.

b. *We never *have* ***visited*** Paris.

(Faarlund 1990: 61)

German is a fine illustration of the fact that a language can be verb-second and exhibit the object-verb pattern at the same time. In the following example, the

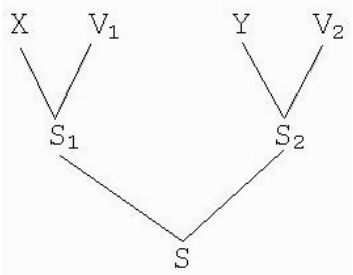
first verb, the auxiliary, is in the second position, while the main verb follows its object.

(9) Helmut *hat* seine Frau **geliebt**.
Helmut *has* his wife **loved**.
Helmut has loved his wife.

(Faarlund 1990: 61)

Vennemann (1974) was among the first[12] to present arguments for the underlying *subject-verb-object* word order[13] in relation to the verb-second constraint in Germanic languages. He tries to explain the rise of the verb-second word order by the means of the gradual process he refers to as *unisententiation*, i.e. the process by which two formerly independent simple clauses, S1 and S2, the latter standing in an explicative relation to the former, are joined into one complex sentence, within which the first clause becomes main, and the second becomes subordinate/embedded[14]. This process can be showed graphically like so:

(10)



One of the rather obvious consequences of this unsententation lies in the fact that the verb in the main clause is positioned more to the left than the verb in the embedded clause. It is in this simple fact that Vennemann identifies the origin of the verb-second constraint. In his opinion, the very position of the verbs in a complex sentence began to signalize the actual syntactic status of the clauses which they constituted, whereby the left position of the verb marked the main clause, and

[12] See also Ross 1970.
[13] *Subject-verb-object* is often assumed to be a basic word order, and it is argued by some authors (e.g. Kayne 1995) to be the only underlying order allowed by Universal Grammar.
[14] In this respect, Vennemann's approach is quite different from the approach of Haiman [1974] who connects the appearance of the verb-second constraint to the rise of lexical subjects, especially the rise of expletives, as the elements crucial for derivation of verb-second word order.

the right position of the verb labeled the clause as subordinate. And, since the position of the first constituent in the main clause was already occupied by anaphoric elements, the position of the second constituent became the one naturally reserved for the verb. In other words, the verb-second constraint, according to Vennemann, developed as a form of syntactic compromise.

Vennemann argues that verb-second constraint originally developed in this way in all Germanic languages, and that the present-day differences in which the phenomenon is manifested in various languages of this group only reflects the later successive developments which obscured the earlier state of the matter. In addition to this, he assumes that a constant proclivity existed in Germanic languages to transplant the verb-second word order to subordinate clauses as well, and that this tendency resulted in remodeling the syntax of subordinate clauses upon the one of the main clauses. Such remodeling, needless to say, would have only been possible in the situation in which some alternative means exist by which it is possible to identify individual clauses as main or embedded; therefore, Vennemann's analysis presupposes the appearance of a distinct category of conjunctions to take over the role of designating subordination.

This process of syntactic remodeling did not affect various Germanic languages to the same extent; Icelandic or English, for example, were affected to a greater extent than some continental languages like German. That is, according to Vennemann, the reason why German preserved, and even strengthened the clear distinction of word order between main and embedded clauses, whereas in English, as well as in the North Germanic Languages, the word order of the main clause was able to spread into subordinate clause, thus blurring the original difference in their structural patterns.

Vennemann, however, remained relatively isolated in his analysis based on subject-verb-object word order, as the analysis which assumes an underlying subject-object-verb order with verb-second movement gained a far wider acceptance among the contemporary linguists.

There are several strong arguments in favor of the *subject-object-verb* hypothesis, and they are based on evidence gathered from different Germanic languages.

First, it is apparent that, when sentences containing compound verbs are taken into consideration, the verb-second position is always restricted to only finite verbal elements. Here are some examples from German:

(11) a. Hans *hat* Maria getroffen.
Hans *has* Maria met
Hans has met Maria.

b. Hans *wird* Maria getroffen haben.
Hans *will* Maria met have
Hans will have met Maria.

c. Hans *darf Maria* treffen.
Hans may Maria meet
Hans may meet Maria.

(12) a. … weil Hans Maria getroffen *hat.*
… because Hans Maria met has.
… because Hans *has* met Maria.

b. … weil Hans Maria getroffen haben *wird.*
… because Hans Maria met have will
… because hans will have met Maria.

c. … weil Hans Maria treffen *darf.*
… because Hans Maria meet may.
… because Hans may meet Maria.

Haider and Prinzhorn (1986: 41-42)

Haider and Prinzhorn (1986) interpret this self-evident fact as follows: since the finite verbal element in subordinate clauses is always in final position, a simple solution ought to be to generate a string of verbs clause-finally and to move the last element into second position.

(13) NP1 NP2 V3 V2 V1 → NP1 V1 NP2 V3 V2

Second, in German and Dutch many verbs have separable prefixes. In main clauses these prefixes always appear in final position. Since these verbs form a semantic unit, the particle and the verb must be base-generated in one position. In the situation in which the verbs were to be inserted in second position, the language in question would have to develop two distinct new rules, a rule of particle final and a rule of verb final, because in some cases only the particle stands in final position and in other cases the whole verbal "compound".

(14) a. Meine Mutter *steht* immer sehr fruh ***auf***.
My mother *gets* always very early ***up***
My mother always gets up early.

b. … weil meine Mutter immer sehr fruh ***aufsteht***.
… because my mother always very early ***gets up***
… because my mother always gets up very early.

Haider and Prinzhorn (1986: 42)

But if the particle plus the verb is generated clause finally, then the verb-second rule, which moves the finite verb only, would produce the correct result.

(15) NP_1---- NP_2 prt V_{finite}

Third, in German, the initial position in a clause can be occupied by any noun phrase or adverbial, which was observed by Erdmann and others in the nineteenth century. Based on this fact, Thiersch (1978) assumes two rules to generate main clause order: one *verb fronting rule,* which moves the finite verb and one *topicalization rule*, which moves any noun phrase or adverbial to initial position. The verb fronting rule is obligatory in main clauses, whereas the topicalization rule does not apply in *yes/no* questions, imperatives and conditionals. On the other hand there are cases where only the topicalization rule applies in embedded clauses: in relative clauses and embedded questions this rule moves the wh-word to the initial position of the subordinate clause, but there is no application

of the verb fronting rule.

Finally, in the case of Scandinavian languages, in which the prevailing type of word order is the SVO order, the verb-second effect is not so conspicuous if the subject is fronted in main clauses, since then the linear order does not differ from the order in embedded clauses. Platzack (1988) has demonstrated, however, that the clause structure can be different in spite of the identical linear order. He supports his claim by the evidence provided by the position of negation and adverbials in Swedish: in subordinate clauses the adverbial and the negation take pre-verbal position, but in main clauses, due to the change in verb position, the position of these constituents is post-verbal.

4.3. Typological Variations of Verb-Second

Ever since den Besten (1983) and Tiersch (1978), movement of the finite verb to the COMP-position has been identified as the syntactic operation behind the verb-second effect (cf. Chapter 3, section 3.3.). Syntactic asymmetry is, therefore, expected to always accompany the verb-second effect, as this phenomenon should, by definition, be restricted to only main clauses, in which the COMP-position is not filled; the complementizer which binds embedded clauses to main clauses, on the other hand, blocks movement of the finite verb to the Comp-position, because it fills this position itself.

And indeed, such syntactic asymmetry between main clauses and embedded clauses in respect to the position of the finite verb is found in most Germanic languages. Here are examples from German (16a) and (16b) and Danish (17a) and (17b) which illustrate this point:

(16) a. Er sagt, **dass** <u>die Kinder</u> diesen Film gesehen *haben*.
He says **that** <u>the children</u> this film seen *have*
He says that the children have seen this film.

b. Diesen Film *haben* <u>die Kinder</u> gesehen.
this film *have* <u>the children</u> seen.
The children have seen this film.

(17) a. Han siger **at** børnene *har* set denne film.
he says **that** children-the *have* seen this film
He says that the children have seen this film.

b. Denne film *har* børnene set.
This film *have* children-the seen
The children have seen this film.

(Vikner 1995: 43)

The verb-second word order in the main clauses from the examples above is typically analyzed as an instance of movement of the finite verb to a pre-sentential position presumably in the domain of the Complementizer Phrase. The structure for main clauses with verb-second structure is slightly different in languages with the basic subject- object-verb word order with clause-final INFL, such as German, in comparison to the languages with the basic subject-verb-object word order with clause-medial INFL, such as Danish. The following analyses illustrate the verb-second clause structure in German (18a) and Danish (18b):

(18) a. [Spec,CP [C' [C° [I° $Vfin_i$ + I]$_j$] [IP [I' [VP … t_i] t_j]]]]
b. [Spec,CP [C' [C° [I° $Vfin_i$ + I]$_j$] [IP [I' t_j [VP t_i …]]]]]

Both analyses, as it can be seen, put the first constituent in the Spec,CP position, and the finite verb, generated as the head of the VP, first moves to I°, undergoing head-to-head movement to pick up its inflectional features, such as Tense and, especially, Agreement, and then it moves to C° — that is if the COMP-position is empty. If it is filled, the movement to C° is blocked. Thus, the analysis captures the empirical generalization that verb-second takes place regardless of the word order of the rest of the clause.

The analyses presented in the example (18) explain the origin of the syntactic asymmetry in regard to all types of main clauses, that is declarative, interrogative and imperative, which have the finite verb in the second position, as opposed to the structure of embedded clauses which do not have verb-second word order. This asymmetry in clause structure exists in both Germanic languages with

subject-verb-object and subject-object-verb basic word order.

However, the data from Modern Germanic languages clearly show that, regardless of the theoretical restriction on the verb-second effect assumed by analyses of verb movement in the tradition of den Besten (1983) and Tiersch (1978), verb-second word order does appear even in embedded clauses of some Germanic languages. This embedded verb second belongs to two different types, one which appears in embedded clauses which do not contain a complementizer, and in which the COMP-position is free to be filled by the finite verb, and another which is found in embedded clauses which *are* introduced by a complementizer, and in which, therefore, the COMP-position is already filled by this element.

The first type of the embedded verb-second structures is found in language like German, Danish and Faroese in which verb-second word order occurs in embedded clauses only when these clauses function as complements of a certain kind of verbs known as *bridge verbs*. The term is used to name a class of verbs that allow themselves to be extracted from their sentential complement. Bridge verbs can be understood to quote a statement and allow a double CP-complement, in the sense that there is a new verb-second structure following a *that*-complementizer. This can be illustrated by the following examples from Danish:

(19) a. Vi ved **at** Bo *har* ikke læst denne bog.
We know **that** Bo *has* not read this book.

b. Vi ved **at** denne bog *har* Bo ikke læst
we know **that** this book *has* Bo not read
We know that Bo has not read this book.

c. *Vi beklag at denne bog har Bo ikke læst
we regret that the book has Bo not read
We regret that Bo has not read the book.

(Vikner 1995: 67)

These sentences are analysed as follows:

(20) Vi ved …

a. … [$_{CP}$ at [$_{CP}$ denne bog$_i$ har$_j$ [$_{IP}$ Bo ikke t$_j$ læst t$_i$]]

b. … [$_{CP}$ at [$_{CP}$ Bo$_i$ har$_j$ [$_{IP}$ t$_i$ ikke t$_j$ læst denne bog]]

c. … [$_{CP}$ at [$_{IP}$ Bo ikke her last denne bog]]

(Vikner 1995: 67)

Vikner (1995) analyses cases of embedded verb-second like the ones in the above examples as CP-recursion, under the widely accepted assumption that these embedded clauses are, in fact, quoted main clauses. In other words, these embedded clauses with the verb second structure are just main clauses in disguise, in which the finite verb moves to the COMP-position, so the existence of verb-second order here does not affect the syntactic asymmetry between the two major types of clauses[15].

The fact that these embedded clauses actually exhibit movement of the finite verb to the COMP-position may blur the difference between main and embedded clauses in respect to the verb-second order. This is why the term 'main clause' is often abandoned in the literature that discusses the verb-second phenomenon, in favor of the term 'root clauses', which is used to designate clauses that are main clauses from an illocutionary point of view, and do not have a filled complementizer position at deep linguistic structure. Therefore the clauses with the verb-second structure are often referred to as the root clauses, and the clauses without the verb-second structure are referred to as non-root clauses.

There are, however, two Germanic languages, Icelandic and Yiddish, in which this distinction would make less sense, because they have the verb-second word order not only in clauses, whether main or embedded, in which the COMP-position is empty, but also in embedded clauses in which this position is filled by a complementizer. The verb-second word order occurs in both types of clauses relatively freely, and it is apparently compatible with a base-generated complementizer (cf. Chapter 3, section 3.3.3.). In these two languages, an asymmetry between root and non-root clauses in respect to verb movement does not seem to exist at all. Moreover, it seems that verb movement in Icelandic and

[15] German also allows this type of embedded Verb-Second, though only with a subset of bridge verbs and not with the overt complementizer *dass* (that) (Fischer et all 2000: 112).

Yiddish is not related to the presence of a complementizer in the first place. Here are the examples from Icelandic (21) and Yiddish (22) to illustrate this:

(21) a. Jón efast um **að** á morgun *fari* María snemma á fætur.
John doubts on **that** tomorrow *will* Mary get up early
John doubts that Mary will get up early tomorrow.

b. Jón harmar **að** þessa bók *skuli* ég hafa lesið.
John regrets **that** this book *have* I read
John regrets that I have read this book.

(22) a. Jonas tsveyfelt **az** morgen *vet* Miriam fri oyfshteyn.
Jonas doubts **that** tomorrow *will* Miriam get up early
John doubts that Mary will get up early tomorrow.

b. Jonas bedoyert **az** dos bukh *hob* ikh geleyent.
John regrets **that** this book *have* I read
John regrets that I have read this book.

(Vikner 1995: 72)

The same sentences could not be translated in, say, Danish or German and retain the same structure, as it is illustrated by the sentences in the examples (23) and (24) respectively:

(23) a. *Johan tvivler på **at** i morgen *står* Maria tidligt op.
John doubts on **that** tomorrow *will* Mary get up early
John doubts that Mary will get up early tomorrow.

b. *Johan beklager **at** denne bog *har* jeg læst.
John regrets **that** this book *have* I read
John regrets that I have read this book.

(24) a. *Johan bezweifelt, morgen *wird* Maria früh aufstehen.
John doubts, tomorrow *will* Mary get up early
John doubts that Mary will get up early tomorrow.

b. *Johan bedauert das Buch *habe* ich gelesen.
John regrets this book *have* I read
John regrets that I have read this book.

(Vikner 1995: 72)

Clearly, the situation in Icelandic and Yiddish presents the traditional analysis with certain problems: if the verb-second phenomenon is the result of movement of the finite verb to the COMP-position, then how can it exist in structures in which the COMP-position is already filled, so the finite verb cannot move to fill it itself? In order to resolve this theoretical problem, much energy has been spent to analyze embedded verb-second structures in the same way as verb-second in main clauses, i.e. to generalize the verb-second phenomenon in both types of clauses as much as possible.

Thus Vikner (1995) analyzes embedded verb-second in terms of CP-recursion, claiming that C° remains the position of the finite verb in main as well as in embedded clauses, but that the complementizer in embedded clauses takes the higher C°, and the finite verb the lower C° in the construction.

Iatridou and Kroch (1992) assume that verb-second takes place in the Inflection Phrase, i.e. the finite verb lands in the position of I° and the pre-verbal XP lands in the position of Spec,IP.

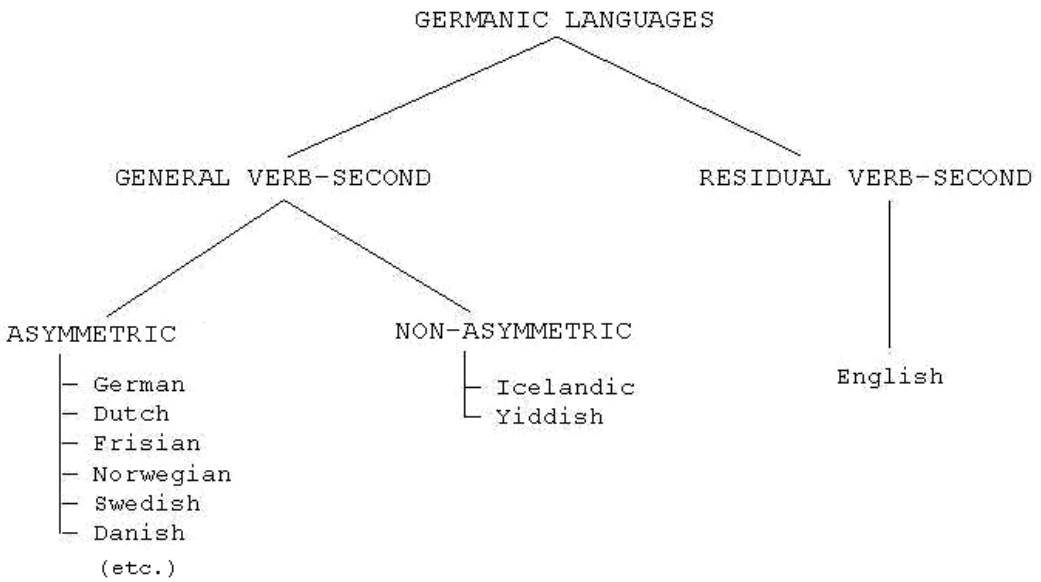
Cardinaletti and Roberts (1991) claim that there is another functional projection level ZP (AgrIP) which is located between CP and IP. Whenever the finite verb occurs in second position it is in Z° (AgrI°) and the preverbal XP in Spec,ZP (Spec,AgrIP).

Some other authors (e.g. Travis, 1984, 1991; Zwart, 1991) claim that verb-second takes place at the Complementizer Phrase only if there is a non-subject topic. Thus, if there is a subject in the clause-initial position in a verb-second language like German, the finite verb moves only as far as I° and the subject is in

the position of Spec,IP. This type of theory is different from the other three mentioned above in that they assume different positions for subjects/non-subjects in verb-second clauses.

Apparently, there is a sharp difference between verb-second Germanic languages in respect to the structure of embedded clauses — whereas the majority of them allow verb-second word order in embedded clauses only in limited contexts, Icelandic and Yiddish seem to allow verb-second word order in all clauses, regardless of their syntactic status. This important syntactic characteristic of various Germanic languages has been used in typology of these languages, so they are often classified, based on this root/embedded asymmetry into *limited-embedded verb-second languages*, versus *general-embedded verb-second languages*, or, even more frequently, into *asymmetric verb-second languages* versus *non-asymmetric verb-second languages*. And, on top of it all, there is Modern English, whose verb-second clauses are limited to only certain syntactic contexts even in main clauses. The division of Modern Germanic languages in respect to the verb-second phenomenon is presented in the following diagram:

(25)



4.4. Asymmetric Verb-Second Languages

Asymmetric verb-second languages are those Germanic languages in which there is a difference in structure between main end embedded clauses: whereas all main clauses, whether declarative, interrogative, or imperative, typically show verb-second word order, embedded clauses can have verb-second word order only in some very limited context, namely in embedded structures containing bridge verbs, i.e. a small group of verbs that can be extracted from their sentential complement.

All Modern Germanic languages, with the exception of English on one side, and Icelandic and Yiddish on another, are classified as asymmetric. This group of verb-second languages is therefore comprised of major West Germanic languages like Dutch, Frisian, and German, and Mainland Scandinavian languages like Norwegian, Swedish, Danish, but it also includes some minor languages such as Afrikaans, West Flemish, Swiss German and Faroese.

4.4.1. Verb-Second in German

Erdmann (1886) was the first to describe the crucial property of the German verb-second phenomenon, as cited in the section 4.1. He reports that the finite verb occurs in main clauses after the first constituent, and that the choice of this constituent is free. For example:

(26) a. Er *möchte* einen Kaffee trinken.
he *wants* a coffee to drink
He wants to drink coffee.

b. Einen Kaffee *möchte* er trinken.
a coffee *wants* he to drink
He wants to drink coffee.

c. Wer *möchte* einen Kaffee trinken?
who *wants* a coffee to drink
Who wants to drink coffee?

d. Was *möchte* er trinken?
what *wants* he to drink
What does he want to drink?

(Haider 1986: 47)

In other syntactic structures, the finite verb occurs not in the second, but in initial or final position. For example, in *yes/no*-questions like (27a) the finite verb is placed in initial position, whereas in embedded clauses like (27b) it occurs sentence-finally:

(27) a. *Möchte* er einen Kaffee trinken?
wants he a coffee to drink
Does he want to drink coffee?

a. …, dass er einen Kaffee trinken *möchte*.
…, that he a coffee to drink *wants*
…, that he wants to drink coffee.

(Haider 1986: 47)

Notably, Erdmann was also the first to count the subject as one of the arbitrary initial constituents — an insight that remained unnoticed in his day. His analysis, however was not destined for oblivion, as it was rediscovered almost a century later, this time within the generative framework.

Thus Koster (1975) adduces arguments that the underlying position of the verb is clause final, and that this entails a process of fronting for the non-final verb positions. In other words, he claims that the embedded clause structure is the base-generated one and that the word order in main clauses is derived by movement. And, since in embedded clauses the verb always follows its complements, the natural assumption that would result from this is that the verb-phrase is head-final:

(28) a. …, dass er [$_{VP}$ein Auto kaufen] wollte.
…, that he a car to buy wanted
…, that he wanted to buy a car.

b. …, dass sie [$_{VP}$sein Buch lessen] konnte.
…, that she his book read could
…, that she could read his book.

(Haider 1986: 48)

Furthermore, since auxiliaries tend to follow non-finite verbal elements in embedded clauses, which are themselves base-generated, Inflection Phrases seem to be head-final as well. For example:

(29) a. …, dass [$_{IP}$sie mit dem Auto gecommen ist].
…, that she with the car come is
…, that she came by car.

a. …, dass [$_{IP}$sie angerufen hat].
…, that she phoned has
…, that she has phoned.

(Haider 1986: 48)

Thiersch (1978) shaped up the basic strategy for investigating this syntactic phenomenon in German, i.e. he performed the generative execution of Erdmann's insights. He assumes two processes of fronting, one moving the finite verb to the initial position and one moving an arbitrary constituent to the pre-verbal position. Finally, den Besten (1977) proposes a hypothesis according to which the verb position should be related with the position of complementizer, and this assumption made possible establishing the correlation between verb-second and verb-final phenomena on one side, and between embedded and non-embedded clauses on the other. Den Besten's hypothesis is still widely accepted by the researches in the field of generative grammar that deals with position of the constituents. Den Besten assumes that that it is the complementizer *dass* that is responsible for blocking verb movement, where the presence of this complementizer is apparently incompatible with a fronted finite verb. For example:

(30) a. *… dass gestern *hat* er ihn *gesehen*

… that yesterday has he him seen

… that he has seen him yesterday.

b. *… dass *hat* er ihn gestern *gesehen.*

… that has he him yesterday seen

… He saw him yesterday.

(Haider 1986: 49)

In terms of den Besten's classical analysis, verb-second does not feature in embedded clauses introduced by a complementizer precisely because the second-position finite verb and the complementizer are assumed to compete for the same structural slot, namely C°. Standard German conforms to this expectation by permitting embedded verb-second exclusively in the absence of an overt complementizer and particularly in cases where the subjunctive should prescriptively be employed. For example:

(31) a. Karl sagt, er *käme* um 10 Uhr nach Hause.

Karl says he *come*[subj] at 10 hour to home

Karl says he will come home at 10 o'clock.

b. *Karl sagt, **dass** er *käme/kommt* um 10 Uhr nach Hause.

Karl says **that** he *come*[subj]/*come*[ind] at 10 hour to home

Karl says that he will come home at 10 o'clock.

(Haider 1986: 49)

As the sentences in the example (31) show, neither a subjunctive nor a matrix-style indicative verb in second position is compatible with an overt complementizer in standard German.

The position which the verb can take in German depends on two parameters, on finiteness and on availability of a position in COMP. However, Haider (1986) claims the common, yet superficial definition that main clauses have the finite verb in second position and that embedded clauses are verb final is wrong, because it

only covers the unmarked clauses. He argues that perfectly well-formed embedded verb-second clauses can be found in German, just as verb-final non-embedded ones:

(32) a. Er hoffte, er *würde* rechtzeitig eintreffen
he hoped he *would* on time arrive
He hoped he would arrive on time.

b. Die Hoffnung, er *würde* rechtzeitig eintreffen
the hope he *would* on time arrive
The hope (that) he would arrive on time.

c. Dass mir das nicht früher aufgefallen *ist*!
that me that no earlier *struck*
That I did not notice it earlier!

d. Was du nicht *sagst*!
what you not *say*
What you do not say!

(Haider 1986: 50)

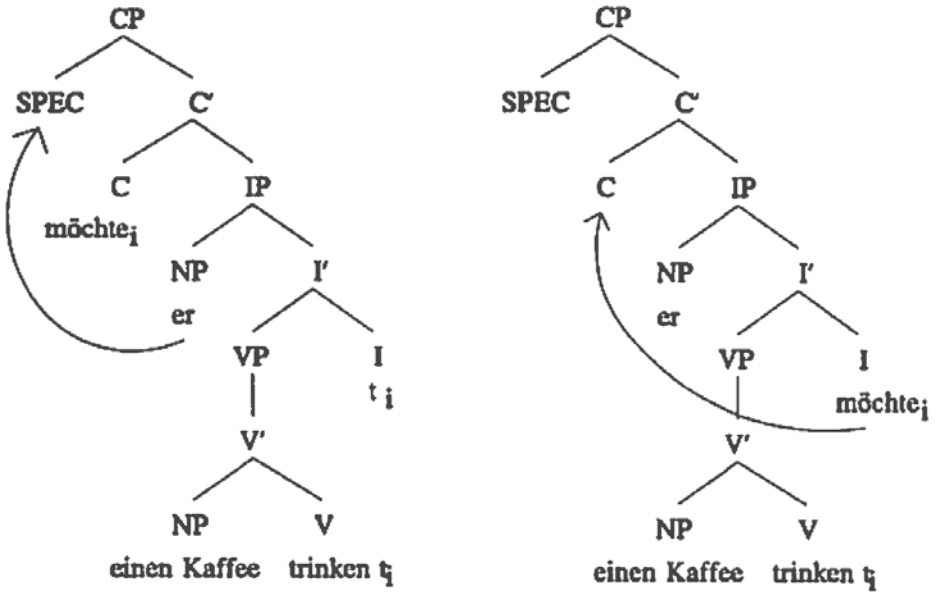
One obvious possibility for analyzing the sentences in the examples (31a) and (31b) is to treat them as direct quotations. Haider, however, dismisses such an analysis on the ground that firstly, subjunctive is a property of embedding and secondly the pronoun in the quotation would be *ich*. And the sentences in the examples (31c) and (31d) are stylistically constrained to contexts of exclamation or musing questions, but, even more significantly, these are non-embedded clauses with the finite verb in final position.

It is at this time a generally accepted opinion among the generative grammarians that the structure of the main clause is a derived structure, and that its derivation is the result of the application of two processes, fronting the verb and fronting a constituent to the position that precedes the verb.

Therefore, in the process of derivation of the main clause word order from the verb-initial structure, a phrasal element is moved up to spec of Complementizer

Phrase. In most cases, this would be the subject Noun Phrase, but it could be any other phrase if the speaker wanted to focus or topicalize it. The structure of the main clause derived in this way can be represented in the diagram (33a).

(33) a. b.



As the diagram (33b) shows, the derivation of a *yes/no*-question with the finite verb in the initial position requires that the complex moves from I to C.

Evidence for this close relationship between C and I comes from the fact that structures with complementizers and structures with fronted verbs are in complementary distribution, as shown in example (34):

(34) a. …[$_{CP}$ dass [$_{IP}$ sie ihn sieht
…that she him sees
…that she sees him

b. [$_{CP}$ sieht$_i$ [$_{IP}$ sie ihn t$_i$
sees she him
She sees him.

c. [$_{CP}$ sie [$_{C}$ sieht$_i$ [$_{IP}$ ihn t$_i$
She sees him.

d. *… [$_{CP}$ [$_{C}$ dass sieht$_i$ [$_{IP}$ sie ihn t_i

e. *… [$_{CP}$ [$_{C}$ dass sie [$_{IP}$ sieht$_i$ ihn t_i

Kroch and Santorini (1991) argue that C^o is the structural position of the finite verb in German. They support their claim by two different pieces of evidence found in the language. They claim that there there are two types of conditional clauses in German: the type introduced by the overt complementizer *wenn* (if), shown in (35a), and the type marked not by the presence of an overt complementizer, but by the position of the finite verb, presented in (35b). This latter type is often referred to as *asyndetic* conditional clauses.

(35) a. Wenn mein Freund dem Mann gestern das Buch gegeben *hätte*.
if my friend the[dat.] man yesterday the[acc.] book given *had* [cond.].
If my friend had given the man the book yesterday.

b. *Hätte* mein Freund dem Mann gestern das Buch gegeben…
Had[cond.] my friend the[dat.] man yesterday the[acc.] book given
Had my friend given the man the book yesterday…

(Santorini and Kroch 2007: 132)

The finite verb in the example (35b) occupies exactly the same clause-initial position as the complementizer in the sentence in (35a), clearly suggesting that the verb has moved to C. It can therefore be assumed that the complementizer and the finite verb in the examples (35a) and (35b) are competing for the same syntactic slot. If this assumption is correct, then conditional clauses with both a complementizer and a clause-initial verb should be ungrammatical. This is indeed the case, as shown in the example (36).

(36) *{hätte wenn, wenn hätte} mein Freund dem Mann gestern das Buch gegeben.

(Santorini and Kroch 2007: 132)

The second piece of evidence for verb movement to C^o comes from the position of object pronouns. In addition to the variability that German exhibits in the position of finite verbs, it also allows quite a lot of freedom in regard to word

order, and object pronouns regularly occur between complementizers and the subject, as shown in the following example:

(37) wenn ihm mein Freund gestern das Buch gegeben *hätte…*
if him[dat.] my friend yesterday the[acc.] book given *had*
if my friend had given him the book yesterday…
(Santorini and Kroch 2007: 133)

If the assumption is correct that asyndetic conditional clauses like ones in the examples (35a) and (35b) involve verb movement to the COMP-position, then it would be expected that object pronouns could immediately follow the finite verb, as shown in the example (38), just as they immediately follow the complementizer in (37), and, indeed, that is so:

(38) a. hätte ihm mein Freund gestern das Buch gegeben
had him[dat.] my friend yesterday the[acc.] book given
if my friend had given him the book yesterday
(Santorini and Kroch 2007: 133)

Kroch and Santorini (1991) further support their idea that that non-clause-final finite verbs in German move to the COMP-position by the distribution of object pronouns in direct questions. In German, direct *yes/no*-questions require movement to the COMP-position, and direct *wh*-questions require the additional movement of a *wh*-phrase to Spec,CP. This is shown in the examples (38) and (40); in these and all the following examples, constituents in Spec,CP are in boldface, and the verb in C is in italics.

(39) a. *Hat*$_i$ mein Freund dem Mann gestern das Buch gegeben t_i?
has my friend the[dat.] man yesterday the[acc.] book given
Did my friend give the man the book yesterday?

(40) a. **Was$_i$** *hat*$_j$ mein Freund dem Mann gestern t_i gegeben t_j?
what[acc.] *has* my friend the[dat.] man yesterday given
What did my friend give the man yesterday?

b. **Wann$_i$** *hat*$_j$ mein Freund dem Mann t_i das Buch gegeben t_j?
when has my friend the[dat.] man the[acc.] book given
When did my friend give the man the book?

c. **Wem$_i$** *hat*$_j$ mein Freund t_i gestern das Buch gegeben t_j?
who[dat.] *has* my friend yesterday the[acc.] book given
Who did my friend give the book to yesterday?

d. **Wer$_i$** *hat*$_j$ dem Mann t_i gestern das Buch gegeben t_j?
who[nom.] *has* the[dat.] man yesterday the[acc.] book given
Who gave the man the book yesterday?

(Santorini and Kroch 2007: 134)

Object pronouns can immediately follow the finite verb in this case as well, in accordance to Kroch and Santorini's analysis, as shown in the examples (41) and (42).

(41) *Hat*$_i$ ihm mein Freund gestern das Buch gegeben t_i?
has him[dat.] my friend yesterday the[acc.] book given
Did my friend give him the book yesterday?

(42) a. **Was**$_i$ *hat*$_j$ ihm mein Freund gestern t_i gegeben t_j?
what[acc.] *has* him[dat.] my friend yesterday given
What did my friend give him yesterday?

b. **Wann**$_i$ *hat*$_j$ ihm mein Freund t_i das Buch gegeben t_j?
when *has* him[dat.] my friend the[acc.] book given
When did my friend give him the book?

(Santorini and Kroch 2007: 134)

In German, Spec,CP is a substitution node, which means that it has no content until it gets to be filled by movement. The Complementizer Phraze itself is the projection of a morpheme in the head C^o which, though silent, contains

information that identifies a sentence as declarative, interrogative, imperative, conditional, and so on. Kroch and Santorini take this as evidence that verb movement to the COMP-position must be adjunction, just like verb movement to the INFL-position. In addition, German allowes non-*wh*-phrases to move to Spec,CP. This movement, known as topicalization to distinguish it from the movement of *wh*-phrases, is always accompanied by verb movement to the COMP-position. In result to this, German declarative clauses, like those presented in the example (43) are structurally parallel to their *wh*-question counterparts in the sentences shown in the example (40).

(43) a. **Das Buch**$_i$ *hat*$_j$ mein Freund dem Mann gestern t_i gegeben t_j.
The[acc.] book *has* my friend the[dat.] man yesterday given
My friend gave the man the book yesterday.

b. **Gestern**$_i$ *hat*$_j$ mein Freund dem Mann t_i das Buch gegeben t_j.
yesterday *has* my friend the[dat.] man the[acc.] book given
My friend gave the man the book yesterday.

c. **Dem Mann**$_i$ *hat*$_j$ mein Freund t_i gestern das Buch gegeben t_j.
the[dat.] man has my friend yesterday the[acc.] book given
My friend gave the man the book yesterday.

d. **Mein Freund**$_i$ *hat*$_j$ t_i dem Mann gestern das Buch gegeben t_j.
my friend has the[dat.] man yesterday the[acc.] book given
My friend gave the man the book yesterday.

(Santorini and Kroch 2007: 135)

Unstressed pronouns in German can immediately follow the finite verb in declarative main clauses, just as in the corresponding *wh*-questions.

(44) a. **Das Buch**$_i$ *hat*$_j$ <u>ihm</u> mein Freund gestern t_i gegeben t_j.
the[acc.] book *has* <u>him</u>[dat.] my friend yesterday given
My friend gave him the book yesterday.

b. **Gestern**$_i$ *hat*$_j$ ihm mein Freund t_i das Buch gegeben t_j.
yesterday *has* him[dat.] my friend the[acc.] book given
My friend gave him the book yesterday.

(Santorini and Kroch 2007: 136)

A peculiarity of German is that it allows Spec,CP to be filled not only by movement of the finite verb, but also by direct substitution of the morpheme *es* (it). For example:

(45) **Es** *hat*$_i$ mein Freund dem Mann gestern das Buch gegeben t_i.
it *has* my friend the[dat.] man yesterday the[acc.] book given
My friend gave the man the book yesterday.

(Santorini and Kroch 2007: 135)

This means that, on top of the subject requirement, which also exists in English, German has an additional syntactic requirement, the so-called topic requirement; if this requirement is not satisfied by an element which has full meaning, it must be satisfied by a semantically empty element, i.e. by an expletive element. This is the main difference between *it* or *there* in English, which satisfy only the subject requirement, and *es* in German, which also has to satisfy the topical requirement.

So the fact remains that the finite verb in a German main clause cannot take the third position because there simply is no structural slot to the left of the position Spec,CP for any constituent to occupy; therefore, the finite verb in these clauses must always occupy the only structurally free position, and that is the one of the second constituent. It is this structural feature that makes German so "well-behaved" in terms of grammatical regularity. No matter which element begins a German declarative sentence, the verb is always the second element. The subject will either come first or immediately after the verb if the subject is not the first element. Such a simple, hard and fast rule has always in the past been a dream-come-true of every traditional grammarian.

4.4.2. Verb-Second in Dutch

In Dutch, it is easy to produce distributional evidence for at least two different verbal positions in a clause: the finite verb in declarative main clauses obligatorily appears in the position of the second constituents, while the obligatory position of the finite verb in embedded clauses is the final position. For example:

(46) a. Ik geloof dat de man een boek *heeft* gezien.
I believe that the man a book *has* seen
I believe that a man has seen a book.

b. De man *heeft* een boek gezien.
the man *has* a book seen
The man has seen a book.

c. *Ik geloof dat de man *heeft* een boek gezien.
I believe that the man *has* a book seen
I believe that a man has seen a book.

d. *De man een boek gezien *heft.*
the man a book seen *has*
The man has seen a book.

(Weerman 1989: 14)

The second position is only available for finite verbs and not for nonfinite verbs. Moreover, the verbal position is independent of the function of the first constituent. Hence, the first constituent is not necessarily the subject as in the example (46b), but it may be an object, or an adverbial as well:

(47) a. **Een boek** *heeft* de man gezien.
a book *has* the man seen.
The man has seen a book.

b. **Gisteren** *heeft* de man een boek gezien.
yesterday *has* the man a book *seen*
Yesterday, the man has seen a book.

(Weerman 1989: 14)

Clearly, the obligatory second position of the finite verb is a syntactic feature just as conspicuous for Dutch as it is for German. In addition to this, however, in Dutch imperative sentences and *yes/no*-questions the position of the first constituent may be empty.

Weerman (1989: 15) argues that, from a distributional point of view, the second position for the finite verb in Dutch is the same position as the position of the complementizer. He finds evidence for this claim not only in Modern Dutch but also in Middle Dutch. For example:

(48) a. Wanneer *heeft*-ie een boek gezien?
when *has*-he a book seen
When has he seen a book?

b. …wanneer of-ie een boek gezien *heeft*
…when whether-he a book seen *has*
…whether he has seen a book

(49) a. Nu *moetene* onse vrouwe bewaren.
now *must*-him our lady save
Now Our Lady must save him.

b. Soe *troestse* de hope vander goetheit gods.
so *comfort*-her the hope of-the kindness God's
The hope of the God's kindness comforts her so.

c. …datten God niet en *spaert*
…that-him God not [neg.part.] *saves*
…that God does not save him.

d. …datsi <u>de moeder</u> *wacht.*

…that-them <u>the mother</u> *waits*

…that the mother waits for them.

(Weerman 1989: 15)

Modern Dutch sentences in the example (48) clearly show that, in a main clause, a subject clitic *ie* immediately follows the finite verb, while the question word *wanneer* precedes it, whereas in an embedded clause, the complementizer *of* immediately follows the pronominal subject, while the question word *wanneer* precedes the complementizer, not the finite verb. And Middle Dutch sentences in the examples given in (49) show that the constituents which immediately follow the finite verb in a main clause are object clitics, whereas in embedded clauses object clitics immediately follow the complementizer, although only in those cases when the subject itself is not a clitic. According to Weerman, these facts strongly suggest that there is one position in Dutch in which either the complementizer or the finite verb appears, and that it explains the similarities in the distribution of clitics and *wh*-phrases in main and embedded Dutch clauses. This means that the complementizer and the finite verb are in complementary distribution in the language, although in Dutch, especially in its standard variety, the complementizer may be absent in embedded clauses if a *wh*-phrase appears in front of the embedded clause.

When the underlying word order is taken into consideration, Dutch evidently displays object-verb word order[16], like the majority of the West Germanic languages. This word order is thought to have been the original Proto-Germanic word order, although in the oldest stages of the Germanic languages the division between object-verb and verb-object word order is rather blurred, so alongside the majority of sentences in which the finite verb follows the complementizer, such as the Middle Dutch examples in (50), examples have also been found, as given in (50) which suggest that the Middle Dutch finite verb could actually precede the complement.

[16] Although Kerstens (1981) proposed a claim that the word order in Duch is, in fact, verb-subject-object, and that the final position of the verb is derived by the process of Sentence-extraposition. (Weerman (1989: 26)

(50) a. dat si des nimen en *seide*
that they this[gen.] nobody[neg.part.] *said*
that none of them said this

b. alse du dan dine alomsene *wels* gheuen…
if you then your alms want give…
if you want to give your alms then…

(51) Du sout *heete* prophete des almegteges.
you shall be *called* prophet [of the] almighty
You shall be called the prophet of the almighty.

(Weerman 1989: 19)

Indeed, as the sentences given in the example (51) attest, this word order is still possible in Modern Dutch in all cases where the complement is either a prepositional phrase or a focused noun phrase; and in the cases where the complement is realized by a clause, this word order is even obligatory, as confirmed by the sentences in (52).

(52) a. dat we spreken *over de oorlog*
that we speak *about the war*

b. dat we ontmoeten *de minister van Binnenlandse Zaken*
that we meet *the minister of foreign affairs*

(53) a. *dat we *dat we gek zijn* zeggen
that we that *we crazy are say*
that we say that we are crazy

b. dat we zeggen *dat we gek zijn*
that we say *that we crazy are*
that we say that we are crazy

(Weerman 1989: 20)

Weerman (1989: 20) claims that the verb-second effect demonstrated in the sentences given in examples (51-53) is different from the verb second effect caused by the obligatory second position of the final verb as described for the sentences given in (46-49). This difference is threefold:

- in sentences given in the examples (51-53), the first constituent must always the subject, whereas in the sentences given in the examples (46-49) this is not a necessary requirement for them to be grammatical;

- in sentences given in the examples (51-53) the verb which occupies the position of second constituent can be not only finite but also non-finite, whereas in the sentences given in examples (46-49), the verb-second effect is displayed only for the finite verbs;

- in sentences given in the examples (51-53) the verb obligatorily takes the second position in both root and embedded clauses, whereas in the sentences given in examples (46-49), the verb-second phenomenon is restricted only to the main clauses.

All this indicates that in the sentences given in the examples (51-53) the verb-second effect is actually just a side-effect of the verb-object word order, so the second position for the verb in these cases is accidental, and not the result of the structural syntactic requirement, as it is the case in the sentences given in the examples (46-49).

As far as the verb-second cases in (46-49) are concerned, they are usually explained in the same way as the corresponding cases of verb-second in German. Following Thiersch (1978) and den Besten (1983), it is assumed that the finite verb moves to the COMP-position in main clauses but it cannot do so in embedded clauses because this position is already filled by the complementizer. And following Travis' (1984) *Head Movement Constraint*, heads move in a successive-cyclic fashion, i.e. they cannot skip over intervening heads. Therefore, it is assumed that in a main clause with verb-second word order, the finite verb first moves from its base position in VP as far as INFL, which contains inflection, and then further up to COMP. In this way the movement of the finite verb to the COMP-position is explained by means of a connection with the first constituent.

If a general restriction is assumed according to which a specifier can only be

filled if the head is filled, then whenever a constituent is moved into the *wh*-specifier position, COMP has to be lexical. According to general restrictions, the COMP-position can be filled by a base-generated complementizer, or by verb movement to it; given that *wh*-movement is obligatory, verb movement to the COMP-position follows automatically. For example.:

(54) a. [welke boeken$_i$ [$_C$zal$_j$] [de man e$_i$ zien e$_j$]
What books *will* <u>the man</u> see?

b. *[welke boeken$_i$ [$_C$ø [de man e$_i$ zien zal]]]
what books <u>the man</u> see *will*
What books will the man see?

(Weerman 1989: 34)

On the other hand, Travis (1984) claims that, in Dutch as well as in all the other Germanic languages with object-verb words order, the INFL-position is on the left of V'. She, therefore, proposes a different structure for a sentence with the subject in first position than a sentence with another constituent in first position:

(55) a. [$_{IP}$ de man [$_I$ ziet$_i$] [$_{VP}$ een boek e$_i$]
the man *sees* a book

b. [$_{CP}$ een boek [$_C$ ziet$_i$] [$_{IP}$ de man [I e$_i$] [$_{VP}$ e$_j$ e$_i$]]]
a book *sees* the man

(Travis 1984: 123)

According to Travis, it is purely accidental that the verb-second effect in (55a) and (55b) look alike from a distributional perspective.

Weerman (1989: 32) disagrees with Travis's analysis. In his opinion, her proposal has several disadvantages, the major one being the implication that an adverb can appear on the left of an IP. Thus, if the sentence given in the example (56a) is analyzed in accordance to Travis's proposal, then it would be possible to predict a main clause, such as the one given in an example (56b), to be grammatical, but that would not be correct.

(56) a. [$_{CP}$ [$_{C}$ dat] [$_{IP}$ waarschijnlijk de man een boek ziet]]

that probably the man a book sees

that the man probably sees a book

b. *[$_{IP}$ waarschijnlijk de man [$_{I}$ ziet$_i$] een boek e$_i$]

probably the man sees a book

the man probably sees a book

Weerman (1989: 32)

Zwart (1991, 1992), on the other hand, supports Travis's (1984) analysis. He points out that the analysis in the tradition of den Besten (1983) in which the verb moves to COMP and the subject to Spec,C has the undesirable consequence that it does not allow making of any kind of formal distinction between topicalizations and subject initial main clauses. He argues that in Dutch as in all other West Germanic languages, at least one functional head exists below C^o to the left of VP, demonstrated by the cliticization phenomena, so there is no reason to analyze the verb second character of subject initial main clauses in Dutch by assuming that the verb moves to C^o, and the subject to Spec,C. He assumes, instead, that in subject initial main clauses the verb moves to AgrS, and the subject to AgrSP, and that in topicalizations the verb moves on to C^o, triggered by the presence of a topic in Spec,C, claiming that such an analysis is preferable on both conceptual and empirical grounds. In Zwart's opinion, a verb-second constraint is:

> ...nothing but a description of the facts to be explained. In particular, each of the movements leading to the observation of a 'Verb-Second Constraint' has to be explained independently of the constraint itself.
>
> (Zwart 1992: 76)

In his opinion, notions like *first* or *second* are meaningless in grammatical sense, and the only notions grammar is sensitive to are the ones concerning the presence or the absence of a particular feature, in this case the presence of grammatical features in functional head positions, which trigger movement to these head positions or to the Spec positions of these heads. Since licensing generally takes place in Spec-Head configurations, verb-second effects are not unexpected. Moreover, verb-second effects are also present in languages which do not obey the verb-second

constraint, such as English. According to Zwart, the real issue to be addressed in all discussions about the verb-second phenomenon is the question why some languages have overt Spec-Head constellations in all constructions, and others only in some. A *verb-second constraint* describes this fact, but does nothing to explain it.

4.4.3. Verb-Second in Frisian

Being the closest existing relative of English, as the two languages form the Anglo-Frisian subgroup of the West Germanic languages, Frisian is, in many respects, highly relevant for any research dealing with any grammatical analysis where English is compared to other Germanic languages. Unfortunately, this relevance does not spread onto the field covering the verb-second phenomenon, because in this respect, the data from Frisian mostly is quite different from anything that can be found in English. Indeed, in many respects, the data from Frisian fit in with the data from other West Germanic languages, especially the ones from Dutch. It can thus be observed that, in main clauses, the finite verb takes the position of either the second or the first constituent. For example:

(57) a. Hy *sjocht* my oan.
he *sees* me at
He looks at me.

b. *Hy my oan *sjocht.*
he me at *sees*

(58) a. My *sjocht* hy oan.
me *sees* he at
He looks at me.

b. *My hy *sjocht* oan.
me he *sees* at

(59) a. *Sjocht* hy my oan?
sees he me at
Does he look at me?

b. *hy my *sjocht* oan
he me *sees* at

(60) a. *Sjoch* my oan.
see me at
Look at me.

b. *my oan *sjoch*
me at *see*

de Haan and Weerman (1986: 78-79)

As the sentences in the above examples show, the finite verb obligatory takes the second position in declarative main clauses whether they are with topicalization, like the sentence in the example (58a), or with topicalization, illustrated by the sentence in the example (57a). On the other hand, in interrogative sentences, such as the one in the example (59a), as well as in imperative sentences, such as the sentence in the example (60a), the finite verbs occupy the sentence-initial position. The fact that all the sentences in the examples (57b), (58b), (59b) and (60b) are considered ungrammatical is a proof that the position of first constituent is obligatory for the finite verb in questions and commands, whereas in declarative main clauses the finite verb obligatory fills the position of the second constituent.

The finite verb in embedded clauses, on the other hand, behaves almost exactly like the finite verbs in Dutch or German, i.e. it normally takes the sentence-final position. For example:

(61) a. [Ik tink net]… dat hy my oan *sjocht*.
[I think not]… that he me at *sees*
[I don't think]… that he looks at me

b. [Ik tink net]… *dat hy *sjocht* my oan
[I think not]… that he *sees* me at

de Haan and Weerman (1986: 79)

In declarative main clauses in which complex verbal forms appear, the position of the finite verb does not differ from the structures with simple verbs, and the auxiliary is always in the position of the second constituent. For example:

(62) a. Hy *seach* it famke.
He saw the girl.

b. Hy *wol* it famke sjen.
he *wants* the girl see
He wants to see the girl.

c. Hy *hat* it famke sjen wold.
he *has* the girl see wanted
He has wanted to see the girl.

d. Hy *soe* it famke sjen wold hawwe.
he *should* the girl see wanted have
He should have wanted to see the girl.

de Haan and Weerman (1986: 80)

The fact that the verbal form is complex does not disturb the position of the finite verb in embedded clauses either, so the auxiliary verb always occupies the clause-final position regardless of the number of the non-finite forms in a given construction. For example:

(63) a. [Ik tink]… dat hy it famke *seach.*
[I think]… that he the girl *saw*
[I think]… that he saw the girl.

b. [Ik tink]… dat hy it famke sjen *wol.*
[I think]… that he the girl see *wants*
[I think]… that he wants to see the girl.

c. [Ik tink]… dat hy it famke sjen wold *hat.*
[I think]… that he the girl see wanted *has*
[I think]… that he has wanted to see the girl.

d. [Ik tink]… dat hy it famke sjen wold hawwe *soe.*
[I think]… that he the girl see wanted have *should*
[I think]… that he should have wanted to see the girl.

de Haan and Weerman (1986: 80)

There is, however, one peculiarity of the Frisian verb-second that makes this verb-final West Germanic language stand out from its relatives like Dutch or

German — in Frisian, verb-second word order can occur in embedded clauses introduced by overt complementizers. For example:

64 a. Pyt sei **dat** hy my sjoen *hie*.
Pyt said **that** *he* me seen *had*

b. Pyt sei **dat** hy *hie* my sjoen.
Pyt said **that** he *had* me seen

c. Pyt sei **dat** my *hie* er[17] sjoen.
Pyt said **that** me *had* he seen
Pyt said that he had seen me.

de Haan and Weerman (1986: 84)

De Haan and Weerman (1986) argue that these cases are only apparent exceptions to the standard analysis because there is recursion on Complementizer Phrase in such sentences. This recursion introduces a second COMP-position which becomes the landing site for the fronting verb. De Haan and Weerman point out that such recursion is limited in scope, occurring with bridge verbs like *say* and *believe* but not with factive verbs like *regret*, or other negated or inherently negative matrix verbs. Thus, the sentences given in the example (65) allow only verb final order:

(65) a. Pyt **betreuret** dat er my sjoen *hie*.
Pyt **regrets** that he me seen *had*

b. *Pyt **betreuret** dat hy *hie* my sjoen.
Pyt **regrets** that he *had* me seen
Pyt regrets that he had seen me.

(66) a. Ik **leau** net dat hy him wol rede *kin*.
I **believe** not that he him save *can*

[17] The form er in Frisian is the clitic form of the subject pronoun hy (de Haan and Weerman 1986: 84).

b. *Ik **leau** net dat hy kin him wol rede.
I believe not that he can him save
I do not believe that he can save him.

(67) a. Pyt **betwivelet** dat er my sjoen *hie*.
Pyt **doubts** that he me seen *had*

b. *Pyt **betwivelet** dat hy *hie* my sjoen.
Pyt **doubts** that he *had* me seen
Pyt doubts that he had seen me.

(68) a. Pyt **woe** sizze dat er my sjoen *hie*.
Pyt **wanted** to-say that he me seen *had*

b. *Pyt **woe** sizze dat hy *hie* my sjoen.
Pyt **wanted** to-say that he *had* me seen
Pyt wanted to say that he had seen me.

de Haan and Weerman (1986: 86)

The authors further state that CP-recursion occurs in just those environments and with just those verbs that allow deletion of the overt complementizer. They do not attempt to explain this correlation, but it seems to suggest that CP-recursion occurs only when the embedded clause is governed by a local L-marking verb. Clauses not governed by a lexical head, such as adjunct clauses and sentential subjects, do not allow embedded verb-second. For example:

(69) Adjunct clauses
a. Ik sil fuortgean, at jo dizze film net sjen *wolle*.
I will leave if you this film not see *want*

b. *Ik sil fuortgean, at jo *wolle* dizze film net sjen.
I will leave if you *want* this film not see
I will leave if you do not want to see this film.

(70) Sentential subjects

a. Dat jo dizze film net sjen *wolle*, fernuvert my/is ferfelend.
that you this film not see *want* surprises me/is annoying

b. *Dat jo wolle dizze film net sjen, fernuvert my/is ferfelend.
that you *want* this film not see surprises me/is annoying
That you do not want to see this film surprises me/is annoying.

de Haan and Weerman (1986: 87-88)

It seems apparent, due to the data presented above, that Frisian exhibits clear counter-examples to the strong correlation between complementizer absence and embedded verb second found in German and Dutch. However, de Haan and Weerman (1986: 89) argue that such counter-examples should not be taken to undermine the analysis of verb-second word order as verb movement to the COMP-position. Rather, they claim, the language allow CP-recursion, and the recursion on CP provides additional embedded Cº and Spec,CP positions into which the finite verb and the topic can move. Besides, the syntactic context in which embedded verb-second is possible in Frisian is limited to clauses governed by an L-marking non-negative bridge verb, and it creates an island for extraction. Any other embedded environment disallows verb-second word order in this language.

4.4.4. Verb-Second in Norwegian

Norwegian is generally considered to be a typical verb-second language. In Standard Norwegian[18], the finite verb must always appear in the second position in all main clauses, i.e. it is always placed right after the initial constituent. The only exceptions from this rule are found in *yes/no*-questions, where the finite verb is the first element, and in left dislocated structures, where the finite verb is the third element (Taraldsen 1986: 5). Here are some examples, compared to Modern English, that illustrate this claim:

[18] The examples illustrating the Standard Norwegian pattern are drawn from "riksmål", one of the two official standards. "Nynorsk", the other standard variety, is similar in all essential respects. Also, all dialects of Southem Norway show the word order properties described below. Only northem dialects are exceptional. (Taraldsen: 1986)

(71) a. *Jens ikke *skjønte* dette spørsmålet.
Jens *skjønte* ikke dette spørsmålet.
Jens *understood* not this question
Jens did not understand this question.

b. *Hvem ikke *skjønte* dette spørsmålet?
Hvem *skjønte* ikke dette spørsmålet?
who *understood* not this question
Who did not understand this question?

c. *Dette spørsmål *skjønte* Jens ikke?
Dette spørsmålet *skjønte* Jens ikke.
this question *understood* Jens not
Jens did not understand this question?

d. *Hvilket spørsmål Jens ikke *skjønte?*
Hvilket spørsmål *skjønte* Jens ikke?
which question *understood* Jens not
Which question did Jens not understand?

e. *Jens ikke *skjønte* dette spørsmålet?
Skjønte Jens ikke dette spørsmålet?
understood Jens not this question
Did Jens not understand this question?

f. *Dette spørsmålet, Jens ikke *skjønte* det.
Dette spørsmålet, Jens *skjønte* ikke det.
this question Jens *understood* not it
This question, Jens did not understand it.

(Taraldsen: 1986: 7-8)

Norwegian verb-second regularly appears in the subject-initial declarative clauses, as shown in the example (72a), where the finite verb is assumed to have

moved across negation, and the non-subject-initial declarative in (72b) where there is verb movement across the subject. The verb also moves across the subject in *yes*/*no*-questions, as illustrated in (72c).

(72) a. *Kristin ikke *liker* norsk vær.
Kristin *liker* ikke norsk vær.
Kristin *likes* not Norwegian weather
Kristin does not like Norwegian weather.

b. *Italiensk mat hun ofte *spiser*.
Italiensk mat *spiser* hun ofte.
Italian food *eats* she often
Italian food she often eats.

c. *Hun *leser* ofte bøker?
Leser hun ofte bøker?
reads she often books
Does she often read books?

(Westergaard 2006: 37)

On the other hand, there are some clause types in Norwegian which require non-verb-second word order (Westergaard 2006). Sentence (73a) illustrates that there is generally no verb movement across an adverb or negation in embedded clauses[19], and sentence (73b) shows that there is no verb movement across the subject in embedded questions. Exclamatives in Norwegian also require non-verb-second word order, as illustrated in (73c).

(73) a. *Det er noen studenter [som leser aldri bøker].
Det er noen studenter [som aldri ***leser*** bøker].
it are some students who never read books
There are some students who never read books.

[19] Verb-second word order is possible, but not preferred, in certain embedded clauses in Norwegian, most commonly in complements to so-called bridge verbs (see Vikner 1995 and Bentzen 2005).

b. *Jeg lurer på [hva *liker* hun].
Jeg lurer på [hva hun *liker*].
I wonder on what she *likes*
I wonder what she likes.

c. *Kor fin *er* du!
Kor fin du *er*!
how nice you *are*
How nice you *look*!

(Westergaard 2006: 38)

The inflected verb is also the initial constituent of Norwegian conditional clauses whenever they are not introduced by a complementizer:

(74) *Jens ikke *skjønner* dette spørsmålet, er alt tapt.
Skjønner Jens ikke dette spørsmålet, er alt tapt.
understands Jens not this question is everything lost
If Jens does not understand this question, everything is lost.

(Taraldsen 1986: 9)

In other embedded clauses, however, the finite verb does not have to be the second or first constituent:

(75) a. Vi vet at Jens ikke *skjønte* dette spørsmålet.
we know that Jens not understood this question
We know that Jens did not understand this question.

b. Vi vet hvem som ikke *skjønte* dette spørsmålet.
we know who that not understood this question
We know who did not understand this question.

c. Vi vet hvilket spørsmål Jens ikke *skjønte.* .
we know which question Jens not understood
We know which question Jens did not understand.

d. Vi lurte på om Jens ikke *skjønte* dette spørsmålet.
we wondered if Jens not understood this question
We wonder if Jens did not understand this question.

e. Hvis Jens ikke *skjønner* dette spørsmålet, er alt tapt.
if Jens not understands this question is everything lost
If Jens does not understand this question, is everything lost?

(Taraldsen 1986: 9)

However, in cases where the verb-second position, or, as the matter of fact, the verb-first position as well, involves positioning the finite verb to the left of the negation or a sentence adverbial, it can take neither the first nor the second position:

(76) a. ?Vi vet at Jens *skjønte* ikke dette spørsmålet.
we know that Jens understood not this question
We know that Jens did not understand this question.

b. *Vi vet hvem som *skjønte* ikke dette spørsmålet.
we know who that *understood* not this question
We know who did not understand this question.

c. *Vi vet hvilket spørsmål *skjønte* Jens ikke.
we know which question *understood* Jens not
We know which question Jens did not understand.

d. *Vi lurte på om *skjønte* Jens ikke dette spørsmalet.
we wondered if *understood* Jens not this question
We wonder if Jens did not understand this question.

e. *Hvis *skjønner* Jens ikke dette spørsmålet, er alt tapt.
if *understands* Jens not this question is everything lost
If Jens does not understand this question, is everything lost?

(Taraldsen 1986: 10)

A peculiarity of Norwegian is that *at-clauses*, as shown in the example (76a), may marginally have main clause word order. The same is true of topicalization. To the extent that topicalization occurs in embedded clauses, producing sentences with about the same degree of acceptability as (76a), the finite verb is placed in the position immediately following the topic.

The examples given above immediately draw attention to the problem of the mechanics of Norwegian verb-second. Taraldsen (1986) claims that the exact way in which the finite verb gets to take either the second or the first position in Norwegian is not any different than that described by den Besten (1977) for Dutch or by Koster (1975) for German. That means that the inflected verb gets into second (or, sometimes, first) position by moving into COMP. If the word order found in embedded clauses is taken as basic, then the canonical position of the finite verb would be the position shown in (77), where W represents an arbitrary string of sentence adverbials, the negation and floating quantifiers:

(77) $[_S$ l COMP $[_S$ NP W $[_{VP}$ V NP ...]]]

Suppose that S^1 is embedded in S^2 along with a landing site X^m for wh-phrases and topicalized constituents:

(78) $[_S$ 2 X^m $[_S$ l COMP $[_S$ NP W $[_{VP}$ V NP ...]]]]

If this explanation is accepted, then all the grammatical sentences in the above examples, and none of the ungrammatical ones, are derived by obligatory movement of the finite V into COMP in root contexts. The word order of left dislocated sentences is also accounted for, if such sentences consist of (78) plus a left dislocated constituent.

However, the interpretation of Norwegian verb-second as the result of verb movement to the COMP-position does not instantly explain why the Norwegian finite verb must appear in the second (or first) position in certain contexts, i.e. what is the force that compels the finite verb to move to the COMP-position in these contexts. Kayne (1982) suggested that this problem might be explained by taking arguments in consideration. He argues that a Noun-projection is an argument of something, and, as such, it must be governed by an argument-taking element, that is

by a predicate. A predicate itself, on the other hand, does not need to have any arguments; therefore a Verb-projection does not neccesserily need to combine with an argument.

If COMP is the head of S^1 and S^2, then the categorial status of the element in COMP determines the categorial status of S^1 and S^2, given X-theory. In particular, if COMP is filled by a Noun-type element, for instance a complementizer like *that*, the maximal projection of COMP is a Noun-projection, and, consequently, an argument. Such clauses must therefore be governed by an argument-taking element, i.e. minimally be embedded. If the clause is not an argument, in particular if it is a root sentence, COMP must therefore be verbal, which explains why the finite verb moves into COMP in these cases. Conversely, verb movement to the COMP-position is blocked when the maximal projection of COMP should be an argument, since a V-projection is not an argument. In this way, Kayne's proposal explains not only the obligatory nature of verb movement to the COMP-position in root sentences and in certain adverbial clauses, but also the inapplicability of the same verb-movement in argument clauses.

Based on Kayne's analysis, Taraldsen (1986) explains the reason for the presence of verb-second word order in non-subordinate wh-questions[20]. He postulates that a Norwegian root sentence is an instance of S^2 dominating X^m and S^1. He further assumes that COMP is not only the head of S^1, but also of S^2. If that assumption is accepted, then the contents of COMP would be the factor which determines the syntactic category of the entire clause. Thus, when the finite verb moves to the COMP-position, the clause will be verbal.

However, this does not mean that the syntactic category of an interrogative clause is determined by COMP in non-root contexts as well. In Norwegian, a fronted *wh*-phrase goes to the X^m-position both in root contexts and in embedded interrogatives. And, as it is shown in the example (79), a *wh*-phrase *may* occur under X^m in an embedded interrogative as well:

[20] Unlike the standard language, many dialects of Norwegian do not have a strict verb-second requirement in *wh*-questions, and it has been argued that the dialect variation represents stages in a diachronic development from verb-second to non-verb-second language (Westergaard 2005). Moreover, certain Norwegian dialects, such as Nordmøre, do not have obligatory verb-second in any type of *wh*-question (see Åfarli 1986)

(79) Vi vet hvem som har gjort dette.
we know who that has done this
We know who has done this.

(Taraldsen 1986: 11)

Norwegian permits an initial wh-phrase to co-occur with an overt complementizer. This is readily accounted for if the structure is analyzed as shown in the example (80):

(80) a. vi vet [$_S$2 *hvem*$_i$ [$_S$l somi [$_S$e$_i$ har gjort dette]]]

The assumption that *som* itself, but not the entire wh-phrase, occurs in COMP may be taken as an explanation for the fact that *som*, unlike the wh-phrase, does not survive verb movement to the COMP-position:

(81) *Hvem *som skjønte* ikke dette problemet?
who that understood not this problem
Who did not understand this problem?

(Taraldsen 1986: 11)

The grammaticality of sentences like the one in the example (82) also presupposes that the fronted *wh*-phrase leaves the COMP-position free to serve as an 'escape hatch' for subject extraction:

(82) Jens skjønner ingen hva - sier.
Jens understands nobody what says
Jens does not understand what anybody say.

(Taraldsen 1986: 11)

(83) *Jens*$_i$ [$_S$l skjønner [$_S$ingen V [$_S$2 hva$_j$ [$_S$1 e$_i$ [S e$_i$ sier e$_j$]]]]]

However, if the head Y is the only constituent of Y^m that may be governed from outside Y^m, then the well-formedness of (83) crucially presupposes that the occurrence of e$_i$ properly governing the subject trace is itself situated in the head

position of S, i.e. in the COMP-position rather than in some other peripheral position.

Taraldsen (1986) further argues that subject extraction is possible only to the extent that *wh*-movement does not affect the COMP-position. He supports this claim by the observation that relative clauses contrast with interrogatives in this respect. Although a non-subject may be extracted from a relative clause in Norwegian, the subject may not be extracted in the following case:

(84) a. Jens kjenner jeg ingen vi ville presentere for.
Jens know I nobody we would introduce to
Jens and I do not know anybody whom we would introduce to us.

b. *Jens kjenner jeg ingen - ville presentere oss for.
Jens know I nobody would introduce us to
Jens and I do not know anybody whom we would introduce to us.

(Taraldsen 1986: 12)

On the analysis adopted here, (84b) would be expected to be grammatical just in case it could be analyzed as (85):

(85) $Jens_i$ $[_{S}1$ kjenner $[_{S}$ jeg V ingen $[_{S}2$ wh_j $[_{S}1$ e_i $[_{Ss}$ e_i ville presentere oss for e_j]]]]]

However, the ungrammaticality of sentences like the one in the example (86) indicates that, unlike interrogative clauses, Norwegian relative clauses do require *wh*-phrases to be placed in the COMP-position rather than the X^m-position:

(86) *Her er den mannen *hvis hest som* vant Oslo Derby.
here is the man whose horse that won Oslo Derby
Here is the man whose horse won the Oslo Derby.

(Taraldsen 1986: 12)

This can only indicate without a doubt that (85) is ill-formed. The *wh*-phrase must itself be in the COMP-position. According to Thoraldsen, the ungrammaticality of

(84b) follows from the fact that there is no room for an "extra" trace which would help the subject trace meet the ECP.

In this way, Thoraldsen finds strong motivation for basing the analysis of verb-second effects on Kayne's theory of the functional content of syntactic categories. The major implication of his analysis is the suggestion that it might be misguided to look for a single verb-second parameter. Moreover, he points out that there are at least two different reasons why the inflected verb in Norwegian and related languages must move to the COMP-position, and they can be summarized like so:

> 1) a non-argument S^2 headed by COMP must have COMP=V so that S^2 is a predicate as proposed by Kayne (1982), and
>
> 2) in S^2 with an argument in the X^m-position, COMP must be filled with verb in order for S^1 to become a predicate so that the X^m-position becomes an A-position.

In general, whenever placing verb in a head position X renders a structure well-formed by turning the projections of X into predicates, it should be expected that a verb-second effect may arise.

4.4.5. Verb-Second in Swedish

In Swedish, like in all other Germanic languages except English, the finite verb must occupy the position of the second constituent in the structure of declarative main clauses and in constituent questions, which makes it a typical verb-second language. Peculiar for Swedish, however, is that, in clauses which display the verb-second word order, it does not allow two or more constituents in front of the finite verb. Here are some examples of Swedish declarative sentences:

(87) a. Erik *hade* verkligen köpt boken.
Erik *had* really bought [the] book
Erik had really bought the book.

b. Erik *köpte* verkligen boken.
Erik *bought* really [the] book
Erik really bought the book.

c. Den boken *köpte* Erik i London.
that book *bought* Erik in London
That book, Erik bought it in London.

d. Erik verkligen *hade* köpt boken.
Erik really had bought [the] book
Erik had really bought the book.

(88) a. Vad *hade* Erik köpt i London?
What *had* Erik bought in London?

b. Vad *köpte* Erik i London?
what *bought* Erik in London
What did Erik buy in London?

c. Var *köpte* Erik den där boken?
where *bought* Erik that book
Where did Erik buy that book?

d. Vem *har* köpt den där boken?
Who *has* bought that book?

(Platzack 1986b: 27-28)

In *yes/no*-questions (89a) and (89b), imperative sentences (89c), and in conditional clauses (89d) without a complementizer, Swedish has the finite verb in the second position, as in other Germanic languages. For example:

(89) a. *Hade* Erik verkligen köpt boken?
had Erik really bought [the] book
Had Erik really bought the book?

b. *Köpte* Erik verkligen den boken?
bought Erik really that book
Did Erik really buy that book?

c. *Köp* den där boken!
Buy that book!

d. *Köper* du den boken, så blir han glad.
buy you that book then gets he glad
If you buy that book, he will be glad.

(Platzack 1986b: 28)

In subordinate clauses with a sentence adverbial, however, the Swedish finite verb typically occupies the position of the third constituent:

(90) a. Jag frågade om Erik verkligen *hade* skrivit boken.
I asked if Erik really *had* written [the] book
I asked if Eric had really written the book.

b. Här är boken, som Erik troligen *har* skrivit.
here is [the] book that Erik probably *has* written
Here is the book that Eric has probably written.

c. Jag är säker på att Erik inte *har* skrivit den här boken.
I am sure that Erik not *has* written this book
I am sure that Erik has not written this book.

(Platzack 1986b: 28)

(91) Erik kanske *kan* svara på din fråga.
Erik maybe *can* answer on your question
Maybe Erik can answer your question.

(Platzack 1986b: 29)

As the example (91) above shows, the verb-third word order may also occur in certain main clauses, usually containing the adverb *kanske* (maybe). Occasionally, the finite verb is found in fourth position, as shown in examples (92a and 92b), or even further to the right, in the fifth position, as shown in (92c), or even in the position of the seventh constituents, as it is demonstrated in the example (92d):

(92) a. Kanske Erik verkligen *har* köpt boken.
maybe Erik really *has* bought [the] book
Maybe Eric has really bought the book.

b. Nu kanske jag *svarade* fel på den här frågan.
now maybe I *answered* wrong on this question
Now, maybe I gave the wrong answer to this question.

c. Då kanske han inte *bryr* sig om att stanna.
then maybe he not *bother* himself about to stay
Maybe he does not bother to stay, then.

d. (Jag undrar) om ju inte Kalle dock trots allt bra gärna *skulle* vilja komma.
I wonder if you-know not Kalle never-the-less after all perfectly-well might be willing to come
I wonder, you know, whether Kalle might not be willing to come after all.

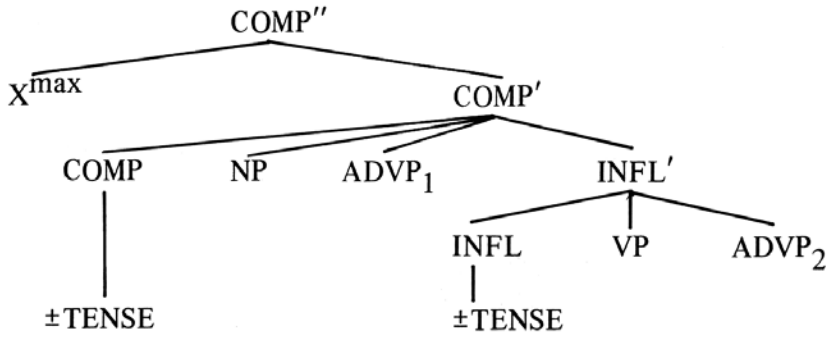
(Platzack 1986b: 29)

Naturally, examples like (92d) are rare and somewhat clumsy, but they are nevertheless perfectly well-formed from the syntactic point of view. The point here is that the language allows even such structures where finite verb is on the far left.

The examples given above clearly show that the finite verb in Swedish must take different positions in accordance to the requirements of the syntax of the language; however, unlike the situation in German and Dutch, the Swedish final verb never takes the clause-final position.

Following Platzack (1986b), the verb-second word order in Swedish can be explained by assuming that the basic sentence structure of Swedish has the following appearance:

(93)



As the diagram (93) shows, Platzak assumes that COMP is the head of a Swedish sentence. Within Government and Binding theory, the assumption that COMP is the head of S was first proposed by Bresnan (1970), who claimed that COMP is a sister to S, not a daughter of S. This hypothesis, however, remains highly controversial up to date. Holmberg (1983a) argued that, if applied it on Swedish, it would lead to a conclusion that S is a headless constituent. However, Platzak (1986b) points out that, if one would want to claim that S has a head, then COMP would be the obvious candidate for this role. Moreover, he argues that there does not seem to be any plausible reason for the assumption that INFL is the head of S in Swedish, as has been claimed for English. Heads govern maximal phrases in their complements. In Swedish, the head of a phrase typically precedes its complements; hence, canonical government is to the right in Swedish. Consequently, if S is a headed category, one would expect to find the head of S as the leftmost daughter of S. In Swedish main clauses, the subject is immediately preceded by the finite verb, but in subordinate clauses it is immediately preceded by complementizer. According to Platzak, this indicates that the position of the finite verb in Swedish main clauses is identical to the position of the complementizer in subordinate clauses. Furthermore, this position should be identical with the head of S. Since complementizers are generated under COMP, then COMP seems to be the head of S. Thus, S must be a projection of COMP, COMP'.

In addition, Platzak also assumes that COMP contains the features +/- TENSE, distinguishing finite and infinitival clauses. As the diagram (93) shows, the X^{max} position under COMP" is the focus or topic position; it is also usually the landing site for wh-words. The labels $ADVP_1$ and $ADVP_2$ indicate possible positions for adverbial phrases (realized as ADV^{max} or p^{max}). In position $ADVP_1$,

only sentence adverbials and certain content adverbials may occur. $ADVP_2$ is the position for content adverbials not being part of the complement of the verb. Adverbials which are verb complements occur under VP. Notice that there may be more than one constituent in each ADVP-position. The maximal projection of INFL, i.e. INFL', may be considered a VP marked for the distinction +/- Tense. +Tense is further specified as Present or Past. V is raised from VP to INFL in order to be tense marked. This raising takes place in the syntax.

In order to describe the different positions of the finite verb in Swedish, Platzack (1983, 1986b), argues that the verb-second phenomenon in Swedish in particular, and Germanic languages in general, is by and large a consequence of Case theory[21]. According to this theory, Case is prototypically assigned at S-structure by the head of a phrase to an adjacent NP complement (i.e. a NP governed by the head). According to the description of Swedish clause structure presented in the diagram (93), the subject NP is adjacent to and governed by COMP, the head of the clause. It is thus to be expected that the subject NP is assigned Case by COMP. However, since Case assigners must be lexically realized, COMP dominating only the tense feature is not an adequate Case assigner. Therefore, according to Platzak, only a COMP marked +Tense is a proper Case assigner in Swedish. Infinitival clauses with phonetically realized subjects are blocked by the Case filter: since COMP is marked - Tense in such cases, the subject NP is not assigned Case.

There are two ways to give lexical content to COMP:

a) A finite complementizer may be generated under COMP (the finite complementizers of Swedish are *att* (that), *som* (that used as a relative only) and *om* (if, whether). The finite complementizer thus constitutes the head of the clause.

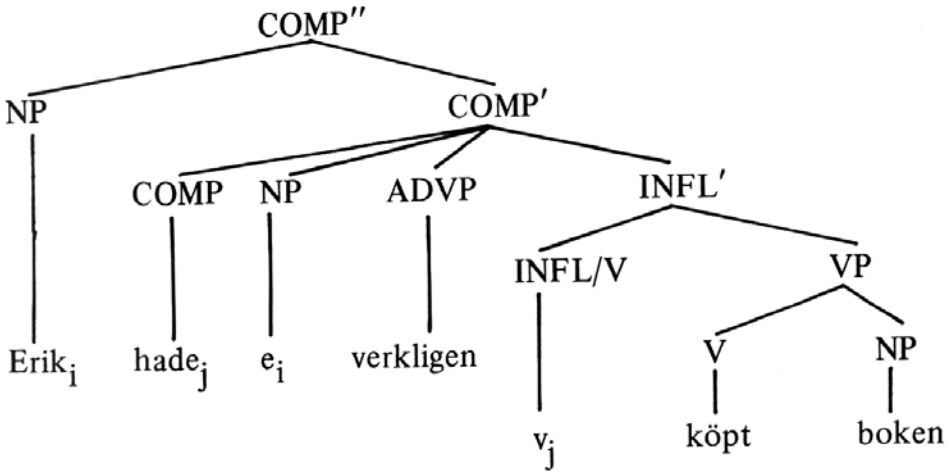
b) When no complementizer is generated under COMP, the finite verb is moved to COMP. To avoid a feature conflict, only verbs marked +Tense under INFL can move to a COMP dominating the feature +Tense.

The two ways to fill COMP automatically account for the different positions of the

[21] See Chomsky (1981) for a general discussion of this concept.

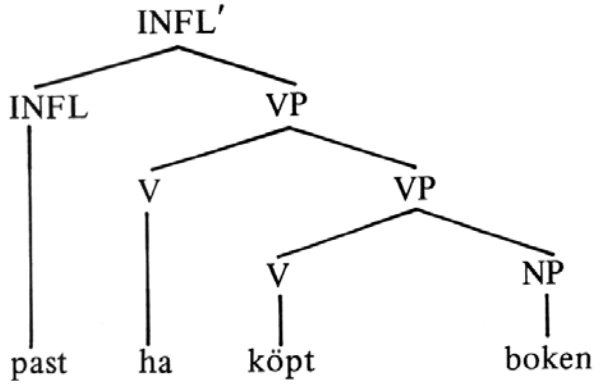
finite verb in main clauses and in subordinate clauses, as illustrated in Swedish sentences given in the examples (87-90). Here is, for example, the S-structure of (87a):

(94)



Following Thráinsson (1984), who claimed that auxiliaries take VP-complements in all Scandinavian languages. Platzak analyses INFL' of the above diagram as follows:

(95)

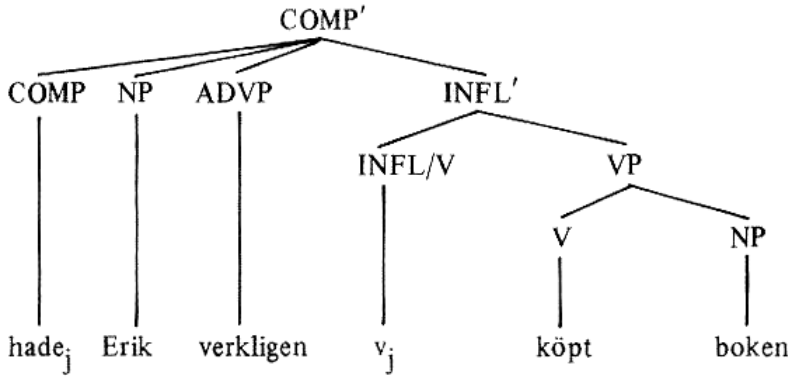


The highest verb, *ha* (have), is raised to INFL where it merges with the tense marker, thus producing the tensed verb *hade* (had). This movement is assumed to be a minor movement which does not leave a trace. Following Holmberg (1983b), Platzak postulates that projections without a head are pruned: hence, the highest VP is pruned, since it has no head after the raising of *ha* to INFL.

As indicated above, the finite verb must move to COMP when no complementizer is generated there. This movement is an instance of Move alpha: the trace of the finite verb is represented as V_j in the diagram (94). Finally, the subject NP *Erik* is moved to the X^{max} position under COMP", thus producing the intended word order of (87a).

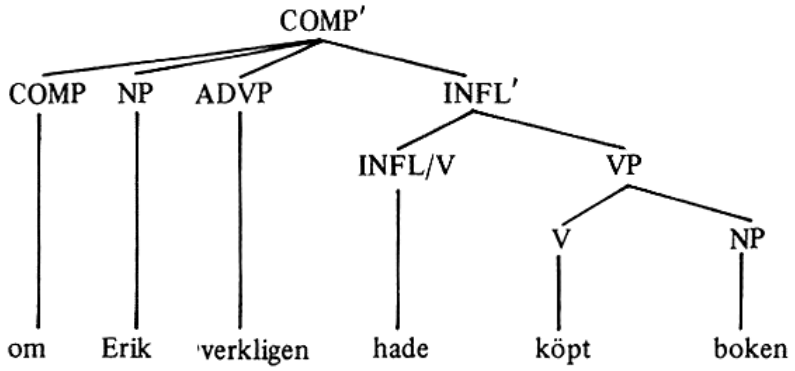
The S-structure of the sentence given in (89a) is identical to (94), with one exception, which is that the subject NP *Erik* remains in its base generated place. This is presented on the following diagram:

(96)



And the subordinate clause given in the example (90a) has the following S-structure:

(97)



The occurrence of the complementizer *om* in COMP blocks V-movement. Consequently, the finite verb has to remain in a position following the sentence adverbial in (89c), whereas it has moved to a position in front of the sentence adverbial in (94) and (95). Hence, the proposed description accounts for the

different positions of the finite verb in main and subordinate clauses of Swedish.

Given the description presented above, the structure of the Swedish sentences in (91) and (8a-c) can be explained under the assumption that the adverbial *kanske* occurs in COMP; in that case, the S-structures of these examples can be displayed as follows:

(98) a. Erik$_i$ [$_{COMP'}$ kanske e$_i$ [$_{INFL'}$ kan svara på din fråga]] (:::91)

b. [$_{COMP'}$ kanske Erik verkligen [$_{INFL'}$ har köpt boken]] (:::92a)

c. Nu [$_{COMP'}$ kanske jag [$_{INFL'}$ svarade fel på den här frågan]] (:::92b)

d. Då [$_{COMP'}$ kanske han inte [$_{INFL'}$ bryr sig om att stanna]] (::: 92c)

(Platzack 1986b: 33)

In all these cases, as it can be seen, the subject is adjacent to the adverbial *kanske*.

Since the distribution of a phrase depends on its head, Platzak's assumption that COMP is the head of S predicts that clauses which have different elements in COMP should have different distributions. The data from the language assert this: Swedish *att*-clauses and embedded questions have more or less the same distribution as ordinary NPs, Swedish *som*-clauses the distribution of Prepositional Phrases : hence, *att-clauses* occur as subject, object, object of a pre-position etc., whereas *som-clauses* occur as adverbials and as complements of nouns:

(99) a. …**att** han kommer *är* trevligt.
…**that** he comes *is* nice
…that he will come is nice.

b. Jag vet **att** han *kommer*.
I know **that** he *comes*
I know that he will come.

c. Jag är rädd för **att** du *kommer* försent.
I am afraid for **that** you *come* too-late
I am afraid you will be too late.

(100) a. Boken **som** han *hade* tänkt köpa …
the book **that** he *had* thought to-buy
The book he intended to buy …

b. Han sjunger **som** Camso *sjöng*.
he sings **like** Caruso *sang*
He sings like Caruso.

(Platzack 1986b: 35)

As the examples above show, main clauses, being headed by the finite verb, do not behave like any phrase type. And, since the finite verb must move to the COMP-position in order to give the sentence a head, if no movement takes place in a main clause, the resulting string would be headless and thus have no grammatical status.

Thus, it can be concluded that the data from Swedish in respect to the verb-second phenomenon corresponds to the data in other Germanic languages, especially to Norwegian, save a few language specific peculiarities.

4.4.6. Verb-Second in Danish

Similar to all other West Germanic and Mainland Scandinavian languages with the exception of English, the main clauses in Danish have the finite verb in the position of the second constituent as a general rule. For example:

(101) a. Jens *har* ikke læst bogen.
Jens *has* not read book-the
Jens *has* not read the book.

b. *Jens ikke *har* læst bogen.
Jens not *has* read book-the
Jens has not read the book

(102) a. Bogen *har* Jens ikke læst.
book-the *has* Jens not read
Jens has not read the book.

b. *Bogen Jens *har* ikke læst.
book-the Jens *has* not read
Jens has not read the book.

(Weerman 1989: 23)

The finite verb follows the first constituent, whether this constituent be a *wh*-element, an object, or an adverbial:

(103) a. Hvilken bog *har* Peter læst?
Which book *has* Peter read?

b. Denne bog *har* Peter læst.
this book *has* Peter read
Peter has read this book.

c. Måske *har* Peter læst denne bog.
Maybe *has* Peter read this book
Maybe Peter has read this book.

(Vikner 1995: 40)

As in other Germanic languages, topicalization causes obligatory verb movement to the COMP-position and consequently the verb-second word order. For example:

(104) a. **Denne film** *har* børnene set.
this film *have* children-the seen
The children have seen this film

b. **I går** *så* børnene filmen.
yesterday *saw* children-the the film
Yesterday the children saw the film.

(Vikner 1995: 42)

Danish, like other Mainland Scandinavian languages, has the asymmetric clause structure which attests that there is one structural position to the left of the subject in which either the complementizer or the finite verb appears. Therefore, the complementizer and the finite verb in Danish are in complementary distribution. For example:

(105) a. Manden *har* ikke *set* en bog.
man-the has not seen a book
The man has not seen a book

b. Jeg mener **at** manden ikke *har set* en bog.
I believe **that** man-the not *has* seen a book
I believe that the man has not seen the book.

c. *Jeg mener **at** manden *har* ikke *set* en bog.
I believe **that** man-the *has* not seen a book
I believe that the man has not seen a book.

d. *Manden ikke *har set* en bog.
man-the not *has* seen a book
The man has not seen a book.

(Weerman 1989: 16)

Modern Danish is classified as a language with the basic subject-verb-object word order, so the finite verb within the clause structure typically precedes its complements in both verb second (106a) and non-verb-second (106b) structures. For example:

(106) a. Jeg mener **at** manden *fik* en bog.
I believe **that** man-the *received* a book
I believe that the man received a book

b. Jeg mener **at** manden ikke *fik* en bog.
I believe **that** man-the not *received* a book
I believe that the man did not receive a book.

c. *Jeg mener **at** en bog *fik* manden.
I believe **that** a book *received* man-the
I believe that the man received a book.

(Weerman 1989: 18)

As in other Germanic languages, it is only the finite verb that can have two positions, and that the extra position — the one of the second constituent — is restricted to main clauses. If the main verb is not the main verb, it does not appear in the second position, it being reserved for the auxiliary that bears the markers of person and number agreement. In accordance with the data from other Germanic languages, the first position in the structure of Danish main clauses is not necessarily filled by the subject, and it can even be empty, as it is the case in *yes/no*-questions and imperatives. Here are the examples for main clauses:

(107) a. Peter *drikker* ofte kaffe om morgenen.
Peter *drinks* often coffee in morning-the
Peter often drinks coffee in the morning.

b. Kaffe *drikker* Peter ofte om morgenen.
coffee *drinks* Peter often in morning-the
Peter often drinks coffee in the morning.

c. Om morgenen *drikker* Peter ofte kaffe.
in morning-the *drinks* Peter often coffee
In the morning Peter often drinks coffee.

(108) a. Peter *har* ofte drukket kaffe om morgenen.
Peter *has* often drunk coffee in morning-the
Peter has often drunk coffee in the morning.

b. Kaffe *har* Peter ofte drukket om morgenen.
coffee *has* Peter often drunk in morning-the
Peter has often drunk coffee in the morning.

c. Om morgenen *har* Peter ofte drukket kaffe.
in morning-the *has* Peter often drunk coffee
In the morning Peter has often drunk coffee.

(Vikner 1995: 45)

(109) a. *Drikker* Peter ofte kaffe om morgenen?
drinks Peter often caffee in morning-the
Does Peter often drink coffee in the morning?

b. *Har* Peter ofte drukket kaffe om morgenen?
has Perer often drunk coffee in morning-the
Has Peter often drunk coffee in the morning?

(Vikner 1995: 45)

Here are some examples for embedded clauses:

(110) a. Vi ved **at** Peter ofte *drikker* kaffe om morgenen.
we know **that** Peter often *drinks* coffee in morning-the
We know that Peter often drinks coffee in the morning.

b. Vi ved **at** Peter *drikker* ofte kaffe om morgenen.
we know **that** Peter *drinks* often coffee in morning-the
We know that Peter often drinks coffee in the morning.

c. Vi ved **at** om morgenen *drikker* Peter ofte kaffe.
we know **that** in morning-the *drinks* Peter often coffee
We know that, in the morning, Peter often drinks coffee.

(111) a. Vi ved Peter ofte *har* drukket kaffe om morgenen.
we know Peter often *has* drunk coffee in morning-the
We know that Peter has often drunk coffee in the morning.

b. Vi ved **at** Peter *har* ofte drukket kaffe om morgenen.
we know **that** Peter *has* often drunk coffee in morning-the
We know that Peter has often drunk coffee in the morning.

c. Vi ved **at** om morgenen *har* Peter ofte drukket kaffe.
we know **that** in morning-the *has* Peter often drunk coffee
We know that, in the morning, Peter has often drunk coffee.

(Vikner 1995: 47)

A peculiarity of Danish is that finite verbs and complementizers are not the only elements that are allowed to fill the COMP-position, because the adverbial *mon* (I wonder) may also occur left of the subject. In this, Danish is different from all other Germanic languages except Swedish, which also have one such adverbial, *kanske* (cf. section 4.4.5.). When this adverbial element appears in the COMP-position, the movement of the finite verb to this position is blocked, as it is already filled, just as if a complementizer was present. For example:

(112) a. Hvem **mon** har set filmen?
who **I-wonder** *have* seen film-the?
I wonder who has seen the film?

b. Hvilken film **mon** børnene *har* set?
which film **I-wonder** children-the have seen
I wonder which film have the children seen?

c. **Mon** børnene *har* set filmen?
I-wonder children-the *have* seen film-the
I wonder if the children have seen the film?

d. Hvilken film **mon** *har* børnene set?
which film **I-wonder** *have* children-the seen
I wonder which film have the children seen?

(Vikner 1995: 44-45)

Vikner (1995) argues that embedded verb-second in Danish also involves CP-recursion, just like Frisian. He points out that embedded verb-second in that language is limited to the complements of bridge verbs. For example:

(113) a. Peter troede **at** den film *havde* Marie også set.
Peter thought **that** that film *had* Mary also seen
Peter thought that Mary had also seen the film.

(Vikner 1995: 72)

Negative verbs like 'doubt', 'deny' and 'regret,' and negated bridge verbs are all incompatible with embedded verb-second in Danish, as it is shown in the examples (114) and (115:

(114) a. *Jeg tvivler på **at** den film *har* Maria set.
I doubt on **that** this film *has* Maria seen
I doubt that Maria has seen this film.

b. *Peter benægtede **at** den film *havde* Maria set.
Peter denied **that** this film *had* Maria seen
Peter denied that Maria had seen this film.

c. *Peter beklagede **at** den film *havde* Maria set.
Peter regretted **that** this film *had* Maria seen
Peter regretted that Maria had seen this film.

(115) a. *Peter mente ikke **at** den film *havde* Maria set.
Peter believed not **that** this film *had* Maria seen
Peter did not believe that Maria had seen this film.

b. *Peter påstod ikke **at** den film *havde* Maria set.
Peter claimed not **that** this film *had* Maria seen
Peter did not claim that Maria had seen this film.

(Vikner 1995: 72-73)

Irrealis complements do not allow verb-second either:

(116) a. *John ville bare sige **at** Peter *havde* set mig igår.
John wanted just say **that** Peter *had* seen me yesterday
John just wanted to say that Peter had seen me yesterday.

b. *John ville bare sige **at** igår *havde* Peter set mig.
John wanted just say **that** yesterday *had* Peter seen me
John just wanted to say that Peter had seen me yesterday.

(117) a. *John ville ønske **at** Peter *havde* snakket med chefen igår.
John would wish **that** Peter *had* talked with boss-the yesterday
John would wish that Peter had talked with the boss yesterday.

b. *John ville ønske **at** igår *havde* Peter snakket med chefen.
John would wish **that** yesterday *had* Peter talked with boss-the
John would wish that, yesterday, Peter had talked with the boss.

(118) a. *John insisterer på **at** Peter *snakker* med chefen imorgen.
John insists on **that** Peter *talks* with boss-the tomorrow
John insists that Peter talks with the boss tomorrow.

b. *John insisterer på **at** imorgen *snakker* Peter med chefen.
John insists on **that** tomorrow *talks* Peter with boss-the
John insists that Peter talks with the boss tomorrow.

(119) a. *John ville foretrække **at** Peter *ville* snakke med chefen imorgen.
John would prefer **that** Peter *would* talk with the-boss tomorrow
John would prefer if Peter talked with the boss tomorrow.

b. *John ville foretrække **at** imorgen *ville* Peter snakke med chefen.
John would prefer **that** tomorrow *would* Peter talk with the-boss
John would prefer if Peter talked with the boss tomorrow.

(Vikner 1995: 74)

Embedded verb-second cannot occur in sentential subjects and adjunct clauses either. For example:

(120) a. ***At** han ikke *vil* se denne film overraskede mig.
that he not *will* see this film surprised me
That he will not see this film surprised me.

b. *At denne film vil han ikke se overraskede mig.
that this film *will* he not see surprised me
That he will not see this film surprised me.

(121) a. *Jeg går hjem **hvis** han ikke *vil* se denne film.
I go[fut.] home **if** he not *will* see this film
I will go home if he will not see this film.

b. *Jeg går hjem hvis denne film vil han ikke se
I go[fut.] home **if** this film *will* he not see
I will go home if he will not see this film.

(Vikner 1995: 75)

Finally, extraction from clauses with embedded verb-second is blocked in Danish:

(122) a. *Hvilken film sagde hun **at** i skolen *havde* børnene allerede set?

Which film said she **that** in school *had* children-the already seen

Which film did she say the children had already seen in school.

b. *Hvilken film sagde hun **at** børnene *havde* allerede set?

Which film said she **that** children-the *had* already seen

Which film did she say the children had already seen in school.

(Vikner 1995: 76)

To conclude, it seems apparent that Danish shares most of the verb-second characteristics with other verb-second Germanic languages, but, like elsewhere, in Danish too some peculiarities occur that make this phenomenon language-specific to a certain extent.

4.5. Non-Asymmetric Verb-Second Languages

Non-asymmetric verb second languages are Icelandic and Yiddish, the former belonging to the Scandinavian, and the latter to the West Germanic languages. Their notable syntactic characteristic is the symmetrical structure of all clauses, whether main or embedded, which all can have verb-second word order rather freely, regardless of the presence or absence of a complementizer in embedded structures.

These two languages are often referred to as ‘symmetric’ in literature that deals with the verb-second phenomenon; however, this claim is somewhat controversial, because in neither of the two languages the distribution of the verb-second word order in embedded clauses is not as free as the verb-second word order in main clauses. That is why a less debatable label, ‘non-asymmetric’, is adopted here.

4.5.1. Verb-Second in Icelandic

The basic arrangement of constituents in an Icelandic clause seems to comprise of the subject in the clause-initial position and the finite verb in the position that immediately follows the subject. Although such basic subject-verb-object word order occurs in many other Germanic languages, Icelandic is exceptional in that verb-second word order is generalized onto both main and embedded clauses. This fact distinguishes Icelandic in respect to all other Scandinavian languages, and makes it structurally similar to West Germanic Yiddish. For example:

(123) a. Helgi *hefur* trúlega keypt bókina.
Helgi *has* probably bought the book.

b. Jón segir **að** Helgi *hafi* trúlega keypt bokina.
Jon says that Helgi *has* probably bought the book.
(Thráinsson 1986: 171)

While the word-for-word English translation of the sentences in the example (123) does not sound strange at all, but rather perfectly grammatical, since both languages have the same basic word order, the comparison of Icelandic clause structure to clause structure of other Scandinavian or West Germanic languages shows the full scope of the syntactic difference in question. Here are the examples from Swedish (124), with the same basic word order, and German (125), with subject-object-verb basic word order:

(124) a. Sven *har* sannolikt köpt boken.
Sven *has* probably bought the book

b. Jan tror **att** Sven sannolikt *har* köpt boken.
Jan believes **that** Sven probably has bought the book
Jan believes that Sven has probably bought the book.

(125) a. Karl *hat* wahrscheinlich das Buch gekauft.
Karl *has* probably the book bought
Karl has probably bought the book.

b. Klaus glaubt **dass** Karl wahrscheinlich das Buch gekauft *hat*.
Klaus believes **that** Karl probably the book bought *has*.
Klaus believes that Karl has probably bought the book.

(Thráinsson 1986: 171)

Based on these facts, Thráinsson (1986: 171) has formulated the following Phrase-Structure rule:

(126) S → NP INFL VP ...

Here the slot for the finite verb is labeled INFL, because Thráinsson assumes that the main verb moves to the INFL-position when it is not occupied by an auxiliary verb.

A problem that immediately arises with such an analysis is how to account for the verb-second effect in this case, as this syntactic phenomenon is traditionally interpreted as the result of movement of the finite verb to the COMP-position — true, via the INFL-position, not by direct movement from the base position to it. In other words, if there is only one slot in the clause structure (S) preceding the slot occupied by the finite verb, and if this slot is filled by various types of topicalized constituents, then where is the complementizer placed in embedded clauses, since this element also evidently exists in Icelandic embedded clauses, as it is obvious from the sentence in the example (123b)? Because, even when some constituent other than the subject occupies the clause initial position, the verb still remains in the second position, and is immediately followed by the subject. Here is an example of an Icelandic embedded clause (127a) as compared to the same embedded clause in Swedish (127b):

(127) a. Ég veit að María *las* ekki bókina.
I know that Mary *read* not book-the

b. Jag vet att Maria inte *läste* boken.

I know that Mary not *read* book-the

I know that Mary did not read the book.

(Holmberg and Platzak 2005: 21)

To account for the Icelandic clause structure, a modified Phrase-Structure would therefore be needed, under the assumption that there is a special clause-initial slot that constituents of various sorts, including the subject, can be moved to and that this slot is then immediately followed by the slot for the finite verb. The idea that the S-initial position is 'derived' in this sense is usually attributed to Koster (1975) and den Besten (1981) and it has been adopted in various versions by numerous authors working on Germanic word order.

Thinking along these lines Rögnvaldsson (1984) proposed a different version of Phrase-Structure rule which takes Icelandic clause structure into account:

(128) S → XP INFL VP …

Here the XP stands for a phrase of any kind – it could also be labeled X^{max}, under the assumption that it is only maximal projections that can occur in this position (cf. Rögnvaldsson 1984). This means, of course, that the rule in the example (128) is a rule schema rather than a single Phrase Structure rule, since XP, or X^{max}, for that matter, can take different values. Obviously, the XP in the rule from the example (128) above must be a non-argument position, as it is a landing site for maximal phrases of various kinds, just like in other Germanic languages.

According to Thráinsson (1986: 172) the rule from the example (128) cannot easily account for the fact that not all clauses in Icelandic have verb-second structure. In fact, some of them demonstrate verb-first structure, and there are even rare instances of verb-third sentences. Clauses with the finite verb in the initial position, in particular, seem to be more frequent in Icelandic that in any other Germanic language where they are restricted to yes/no-questions and imperative sentences. In Icelandic, verb-initial clauses are quite common in written narratives, including newspaper articles. Although verb-first verb order seems to be more restricted in embedded clauses than in main clauses, embedded clauses with verb-first word order do occur in Icelandic. For example:

(129) a. *Koma* þeir nú að stórum helli ....

come they now to a big cave

Then they get to a big cave...

b. Hann sagði að *hefðu* þeir þá komið að stórum helli og …

he said that had they then come to a big cave and …

He said they had then come to a big cave and …

(Thráinsson 1986: 172)

Evidently, only under the assumption that the XP slot is optional could the possibility for verb-first word order be expressed syntactically. So Thráinsson proposes a modified version of the Phrase Structure rule from the example (128), which looks as follows:

(130) S → (XP) INFL NP VP …

This modified rule implies that verb-first clauses are simply the clauses with an empty XP-slot. Viewed in this light, verb-first clauses are just a special type of verb-second clauses, which means that there is no syntactic asymmetry in Icelandic between main and embedded clauses as far as verb-first word order is concerned.

The common Germanic syntactic feature known as *wh-asymmetry* exists in Icelandic as well. This syntactic phenomenon is reflects in the fact that the finite verb immediately follows the *wh*-element in *wh*-questions which are, at the same time, main clauses, but in embedded *wh*-questions the finite verb is placed after the subject, unless the *wh*-word itself has a subject role. This asymmetry can be illustrated by the following examples:

(131) a. **Hvern** *hefur* Maria kysst?

Whom *has* Mary kissed?

b. Eg veit ekki **hvern** Maria *hefur* kysst

I know not **whom** Mary *has* kissed

I do not know whom Mary has kissed.

(Thráinsson 1986: 174)

According to Trainson, there has to be an extra slot for the *wh*-element in embedded clauses, whereas in main clauses the wh-element fills the XP-position from the rule in the example (130). Hence the subject cannot show up in the preverbal XP-slot in main clause *wh*-questions such as the one in the example (131a) whereas it can in indirect embedded questions like the question in the example (131b). The traditional explanation for this *wh*-asymmetry has been that this extra position in embedded clauses which the *wh*-element can fill is none other than the COMP-position. The only problem with such an explanation, however, is its implication, when applied to Icelandic, that in this language, the COMP-position is normally not available main clauses.

Maling (1980) was among the first to point out instances of verb-third word order in Icelandic, which occurs mostly in adverbial clauses where an adverb takes place between the subject and the finite verb. For example:

(132) a. þegar <u>ég</u> **loksins** *fann* lagið ...

When <u>I</u> **finally** *found* the tune …

Maling 1980: 176-177)

According to Thráinsson (1986: 174), adverbs and adverbial prepositional phrases have considerable freedom of occurrence in Icelandic but this freedom varies from one type to another. Certain adverbials have a 'favorite' position immediately following the finite verb, indicating that there must be an optional AdvP slot in that position in the basic Phrase Structure rule given in the example (130). Therefore, to include the verb-third structures as well, the rule should be further modified for Icelandic in the following way:

(133) S → (XP) INFL NP (AdvP) VP …

This Phrase Structure rule now implies that verb-third structures in Icelandic could be explained as derived by a permutation of the AdvP around its sister constituent INFL, which is the position of the finite verb now, because in sentences like the one in the example (132) the subject has moved to the XP-position.

Although most of the cases of verb-third word order appear in adverbial clauses, structures with the finite verb in the position of the third constituent also

occur in Icelandic main clauses. For example:

(134) a. Ég *veit* **bara** ekert um það.
I *know* just nothing about it

b. Ég **bara** *veit* ekkert um það.
I **just** *know* nothing about it.

c. Ég *veit* ekkert um það **bara**.
I *know* nothing about it **just**
I just don't know anything about it.

(Thráinsson 1986: 176)

(135) a. Hann *kann* **einfaldlega** ekkert.
He *knows* **simply** nothing

b. Hann **einfaldlega** *kann* ekkert.
He **simply** *knows* nothing.

c. Hann *kann* ekkert **einfaldlega**.
He *knows* nothing **simply**
He simply knows nothing.

(Thráinsson 1986: 177)

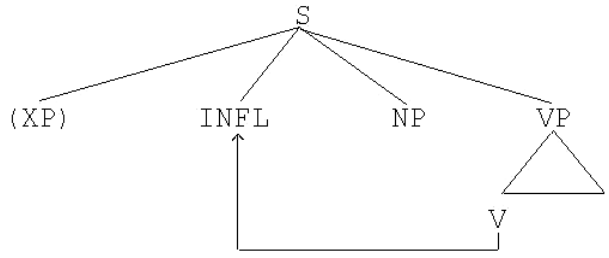
Clearly, if verb-first word order could be considered a form of verb-second order in disguise, due to the empty position of the first constituent, the same cannot be claimed for these cases of verb-third word order, which apparently exists independently of verb-second structures. The fact that Icelandic has preserved the richest inflectional paradigm of all Germanic languages may be the reason why such variations in verb position exist in the language.

Nevertheless, verb-second word order remains the general rule in Icelandic, in both main and embedded clauses. Many attempts have been made in recent generative literature to provide some kind of an explanation for the absence of

asymmetry between main and embedded clauses in Icelandic, as it does not support the traditional explanation of the verb-second effect as the result of verb movement to the COMP-position. Since there is very little difference in structure of main and embedded clauses in Icelandic, it is hard to find any relation between the finite verb position in Icelandic and different properties of COMP in main and embedded clauses. The data from Icelandic seem to suggest that, while verb movement to the COMP-position may be an important syntactic mechanism for the verb-second effect in some languages, it may not be the case in others, and Icelandic is apparently one such language. It is possible that the verb-second word order is the result of verb movement to the COMP-position in some languages, in which it consequently causes the asymmetry in structure between main and embedded clauses, but in other languages verb-second effect may be the result of verb movement to the INFL-position, as such movement would not block the verb-second effect in embedded clauses.

Based on these facts, Thráinsson (1986: 177) proposes a model of general underlying clause structure in Icelandic that is different from the model presented in the diagram (1) of Chapter 3, section 3.1. Thráinsson's model, which assumes that verb movement to the INFL-position is the most important syntactic operation in the creation of Icelandic clause structure is presented in the following diagram:

(136)



But the verb movement to the INFL-position is only a part of the verb-second account proposed by Thráinsson – the more important part of his hypothesis is the possibility of having one and only one pre-verbal XP-slot in the structure of Icelandic clauses, main and embedded alike. This position is intended both for subjects that show up in initial position- and for topicalized constituents, i.e. other constituents moved to this clause-initial focus position. The basic idea of having the same position for subjects and topicalized constituents is not new (e.g. Platzack 1986), but in many accounts of topicalization it is assumed that the topicalized

constituent lands outside the S – either in the COMP-position, which under most analyses is treated as daughter of S' and sister of S, or even outside COMP itself. In languages where topicalization is difficult or exceptional in embedded clauses, such a treatment seems motivated. But here there is again no internal motivation in Icelandic. Fronting of non-subject constituents is quite common in various types of embedded clauses, especially if the so-called 'stylistic fronting' is included. For example:

(137) a. Jón segir að **þessum hring** *hafi* Ólafur lofad Maríu.
Jon says that **this ring** *has* Olaf promised Mary
John says that Olaf has promised this ring to Mary.

b. Jón spurði hvort **þessum hring** *hefðu* þeir lofað mér.
Jon asked whether **this ring** *had* they promised me
John asked whether they had promised me this ring.

c. Jón spurði hvort **þessum hring** *hefði* einhver stolið.
Jon asked whether **this ring** *had* anbody stolen
John asked whether anybody had stolen this ring.

(Thráinsson 1986: 179)

According to Thráinsson (1986: 179), it is easier to front non-subjects in embedded questions and relatives, for instance, when the subject is indefinite or missing. Hence the sentence in the example (137c) is somewhat more natural than the sentence in the example (137b) although both would involve the same type of fronting of a non-subject under the analysis advocated here. Under any analysis where a subject can only end up in initial position after fronting, there will be no 'subject gap' created by indefinite subject post-posing in sentences like the one in (137c) prior to the fronting of the non-subject. To the extent that there is any difference in acceptability between sentences in the examples (137b) and (137c), it must be due to differences in inherent *topicality* between the subjects in the two sentences. Thus there is a greater tendency to put the subject in embedded-S-initial position like in the sentence in (137b) than the one in (137c) and that may cause a slight conflict in the sentence in (137b).

Thráinsson's suggestion that the verb movement relevant for the Icelandic verb-second effect is the movement of the finite verb to the INFL-position, which cannot be blocked by a complementizer, and that the Spec,IP position is not reserved exclusively for the nominative subject, seems rather plausible and it seems sufficient to explain the situation in Icelandic in respect to the verb second phenomenon. This view, however, that Icelandic XP-Vfin-Subject sequences should be analyzed as instances of verb movement to INFL is not uncontroversial. Vikner (1995), for one, is against it, and he argues that all cases of verb-second are always instances of verb movement to the COMP-position, so he analyses embedded verb-second in Icelandic and Yiddish as a generalized form of CP-recursion.

Whatever be the case, the fact remains that Icelandic is one Modern Scandinavian language which bears the greatest resemblance to and which still preserves many important syntactic features of Old Norse, the language which has been spoken in large parts of England during several centuries and which has an important, although not yet clearly understood role in the development and loss of the verb second in English. The verb-second data from Icelandic may, therefore, be highly relevant for the explanation of verb-second in the history of English.

4.5.2. Verb-Second in Yiddish

Yiddish is one of the Germanic languages with the basic subject-verb-object word order. In this respect, Yiddish is different from German, its nearest cognate, which has subject-object-verb order. For example:

(138) a. Er *leient* a bux inem gortn.
…, az er *leient* a bux inem gortn.
(…, that) he *is-reading* a book in-the garden

b. Er *hot* geleient dos bux
…, az *er hot* geleient dos bux.
(…, that) he *has* read the book

c. Er *git* Moisn a bux.
…, az er *git* Moisn a bux.
(…, that) he *gives* Moses a book

d. Er *hot* gegebn Moisn dos bux.
…, az er *hot* gegebn Moisn dos bux.
(…, that) he *has* given Moses the book

e. Er *iz* geven in gortn.
…, az er *iz* geven in gortn.
(…, that) that he *has* been in-the garden

(den Besten and van Walraven 1986: 112)

As these sentences in the example (138) show, however, the difference between Yiddish and German goes far beyond the basic word order. What the examples above attest is that the order of constituents in main clauses headed by subjects is not at all different from the word order in the corresponding embedded clauses headed by the complementizer *az* (that). In this respect Yiddish is quite unlike German, which has a variable position for the finite verb, depending upon the question of whether the pertinent clause is a main or embedded one. In addition, the sentences in the examples (138b), (138d) and (138e) show that Yiddish positions its verbal complex between the subject and the complements. Also in this respeet Yiddish is unlike German, because German puts the past participlein VP-final position. Apparently, the syntactic asymmetry in the structure of main and embedded clauses that is characteristic of German does not exist here, despite the fact that both languages have descended from Middle High German which had subject-object-verb word order.

Like German, and most of the Germanic languages, on the other hand, Yiddish exhibits the verb-second phenomenon. The finite verb must always take the position of the second constituent, regardless of whether the clause initial position is filled by the subject or some other, topicalized constituent. So, despite the surface subject-verb-object word order, the clause-initial position in Yiddish can be occupied by any fronted constituent, as long as it is immediately followed by the

finite verb:

(139) a. Ikh *shiki* avek vi dos bukh.
I *send* away the book

b. *Ikh **avek***shik* dos bukh.
I **away**-*send* the book

c. **Dos bukh** *shik* ikh aivek.
the book *send* I away
I sent the book away.

d. Ikh *vel* **avekshikn** dos bukh.
I *will* **away-send** the book
I will send away the book.

(Diesing 1990: 41)

The separable-prefix verb *avekshikn* in these sentences makes the movement of the finite verb readily apparent. In verb-particle combinations, the inflected part of the verb moves to the verb-second position, and the particle remains behind in the original position. In the uninflected form of the verb, the prefix and verb remain attached, as in (139d). (Diesing 1990: 42)

(140) a. Max *shikti* avek vi dos bukh.
Max *sends* away the book

b. Avrom gloybt **az** Max *shikt* avek vi dos bukh
Avrom believes **that** Max sends away the book

(Diesing 1990: 41)

However, as the sentences in the example (140) demonstrate, the verb second word order in Yiddish does not depend on whether the clause in question is main or embedded, as the verb obligatory fills the second position in both clause types. This makes Yiddish structurally similar to Icelandic, although the two languages have

never been in contact, and they do not even belong to the same group within Germanic languages. Verb-second word order is acceptable in Yiddish in a wide range of subordinate clauses (Iatridou and Kroch 1992). For example:

(141) a. Ir muzt klingen in shpitol oyb di doktershe *vilt* ir dergreykhn.
you must call in hospital if the doctor-[Fem.] *want* you reach
You must call the hospital if you want to reach the doctor.

b. Es hot undz alemen gekhidesht vos nekhtn *iz* gekumen aza groyser oylem.
it has us all-[Obl.] bewildered what yesterday *is* come such-a large audience
It surprised all of us that such a large audience came yesterday.

(Iatridou and Kroch 1992: 12)

Verb-second word order is freely found in complements of all verbs, negative or positive, irrealis or realis, in adjunct clauses, and in sentential subjects:

(142) **Verb-second under negative verbs**

a. Jonas **tsveyfelt** az morgen *vet* Miriam fri oyfshteyn.
Jonas **doubts** that tomorrow *will* Miriam early get-up
Jonas doubts that Miriam will get up early tomorrow.

b. Jonas **bedoyert** az zayn bukh *hob* ikh geleyent.
Jonas **regrets** that his book *have* I read
Jonas regrets that I have read his book.

(143) **Verb-second under a negated verb**

Ikh **meyn nit**, az morgn *zol* er kumen tsu der khasene.
I **think not** that tomorrow *should* he come to the wedding
I do not think that he should come to the wedding tomorrow.

(144) **Verb-second in an irrealis complement**

Er **fodert/bashteyt/vil** az morgn *zol* ikh geyn in krom.
he **demands/insists/wants** that tomorrow *should* I go to store

(145) **Verb-second in adverbial adjuncts**

a. Ikh vel avekgeyn oyb morgn *kumt* Moyshe.

I will away-go if tomorrow *comes* Moyshe

I will leave if Moyshe's coming tomorrow.

b. Lomir khapn a shmues oyb itster *hot* ir a bisl tsayt.

let's grab a chat if now *have* you a little time

Let's chat if you have some time now.

(146) **Verb-second in sentential subjects**

Dos vos nekhtn *iz* gekumen aza groyser oylem hot undz alemen gekhidesht.

that which yesterday *is* come such-a large audience has us all-[Obl.] bewildered

(The fact) that such a large audience came yesterday surprised all of us.

(Iatridou and Kroch 1992: 22-23)

According to Iatridou and Kroch (1992), two approaches to the above data have been pursued in recent literature. Under one (Diesing 1990; Santorini 1989), the sentences above have been treated as evidence that the landing site of the fronted verb in these languages is INFL rather than COMP, with the topic correspondingly moving to Spec,IP, as in the example (147):

(147) verb $[_{CP}\ [_{C'}$ that $[_{IP}$ topic $[_{I'}$ verb $[_{VP}$ ...t...t]]]]]

Under the other (de Haan and Weerman 1986, Vikner 1991), these sentences are taken as instances of CP-recursion, with the embedded clause verb moving to the lower C^o while therelevant complementizer occupies the upper one, as in (148):

(148) verb $[_{CP}\ [_{C'}$ that $[_{CP}$ topic $[_{C'}$ verb $[_{IP}$ ...t...t]]]]]

However, the difference between these analyses is quite subtle, given the abstract character of functional projections and the difficulty of distinguishing them from one another. If topicalization in Yiddish is movement to Spec,IP and verb-second is movement to I^o, according to the analysis given in the example (147),

then one would expect verb-second not to require special licensing in embedded contexts, nor would one expect verb-second word order to create a syntactic island. On the other hand, CP-recursion, which has been proposed in the analysis given in the example (148) has always been considered a marked phenomenon. And, since it introduces additional structure, it has the potential to add barriers to extraction. In languages where embedded verb-second depends on CP-recursion, therefore, verb-second word order might well be subject to special limitations.

The research of the verb-second phenomena has traditionally been focused on the asymmetry that is observable in most Germanic languages, and that apparently depends upon the presence or the absence of a complementizer in the structure, as this element seems to block the verb movement, thus causing the asymmetry in question. But the existence of non-asymmetric languages like Yiddish suggests the need for a general theory of verb-second which has to allow for parametric variation with respect to the possibility of the co-occurrence of verb-second and an overt complementizer. Several authors (e. g. den Besten and van Walraven 1986, Santorini 1989, Diesing 1990) have tried to develop such an account of verb-second phenomenon which could explain both the situation in asymmetric and non-asymmetric verb-second languages.

Den Besten and van Walraven (1986) find parallel between Yiddish and French in respect to syntax of the two languages. Following Emonds (1978) who suggested that French has a rule of Finite Verb Raising which puts the finite verb in the position of TENSE, they identify this process of verb raising as movement of the finite verb to the INFL-position, and the position of TENSE as the INFL-position itself. French also has a limited rule of verb movement to the COMP-position which is used to generate certain functional structureS. This rule is usually called *Subject Clitic Inversion*. Although there may be some doubt as to whether this rule may be analyzed as an instance of verb movement to the COMP-position, the phenomenon of *Subject Clitic Inversion* is reminiscent of the verb movement to the COMP-position that takes place in English in cases of subject-verb inversion, which is also used in a limited number of cases to produce certain functional structures such as questions.

According to den Besten and van Walraven, it is possible that some languages such as French and English can apply verb movement to the COMP-

position only in a limited number of cases for purely structural reasons, whereas other languages such as Yiddish have to apply that rule in full generality. Most probably this has something to do with a requirement to the effect that an independent sentence be headed by INFL. Under the assumption that a category INFL is necessary to provide certain predications with temporal reference or the like, verb movement to the INFL-position can be analyzed as what Chomsky (1981) calls the rule R. This rule can be applied only if there is no independent material to lexicalize INFL. In the latter case INFL will be suffixal in nature and thereby trigger verb-movement to the INFL-position.

Furthermore, if it is true that verb-second and verb-first languages do not analyze COMP as INFL and that INFL must always be part of the predication, all languages with a suffixal INFL will have movement of the finite verb to the INFL-position. However, this movement will be visible only if such an INFL is not adjacent to the head of Verb Phrase. Den Besten and van Walraven claim that Languages like German, Dutch and Swedish have a local, and therefore invisible, rule of verb movement to the INFL-position, whereas languages like French, Welsh and Yiddish have a non-local rule of verb movement to the INFL-position, which therefore is visible to the linguist's eye.

Thus Diesing (1990) argues that verb-second in the Germanic languages must be parameterized for the choice of landing site for the verb. In her opinion, Germanic languages can vary as to whether verb-second is a result of movement of the finite verb to the COMP-position, as is the case in German, among other languages, or of movement of the finite verb to the INFL-position, an example for which she sees in Yiddish. Such parameterization could account for the absence of main/embedded asymmetry in this language.

However, she allows the possibility that verb movement can interact with the Empty Category Principle (cf. Chomsky 1981, 1986; Rizzi 1990; Lasnik and Saito 1992), i.e. a principle which requires that empty categories be properly governed. She therefore proposes that Yiddish has an additional case of V-to-C movement of the finite verb to the COMP-position which is distinct from verb-second and is forced by the Empty Category Principle. This second type of verb movement reveals an interesting generalization, namely verb movement to the COMP-position, where it does happen in Yiddish, shows the same asymmetry as

movement of the finite verb to the COMP-position in German in respect to the presence or the absence of a lexical complementizer. According to Diesing, this generalization lends further support to the claim that verb-second in Yiddish is a result of verb movement to the INFL-position rather than to the COMP-position.

While verb-second in Yiddish does not show the same distribution as verb-second in German, movement of the finite verb to the COMP-position in direct questions from embedded clauses does. Thus, the generalization about the distribution of verb movement to the COMP-position holds across languages, while the nature of verb-second itself may vary.

4.6. Conclusion

The fact that the finite verb always tends to take the position of the second constituent in clause structure, whether the position of the first constituent is occupied by the subject or by some other topical constituent is a quintessential syntactic feature of all Germanic languages except English, where word second word order appears only in some limited contexts. The verb obligatorily takes the second position regardless of the basic word order in the language, so it is observable in both Germanic languages with subject-verb-object word order, and in languages with subject-object-verb word order.

There is, however, an important difference among Germanic languages in respect to distribution of word-second word order. While the majority of these languages display syntactic asymmetry in the structure of main versus embedded clauses, in the sense that verb-second, obligatory in main clauses, appears in embedded structures only in some strictly limited contexts, such as the construction with bridge verbs, two of the Germanic languages, Icelandic and Yiddish, freely allow word-second word order in embedded clauses as well. This important syntactic distinction between the Germanic languages has been used for typological purposes, to divide these languages into two groups: the more numerous asymmetric languages, and the two non-asymmetric languages.

Efforts have been made in literature to develop a general verb-second theory which would account for the verb-second phenomenon exhibited in both main and

embedded clauses. The traditional explanation of the verb-second effect as the result of movement of the finite verb to the COMP-position sufficiently explains the asymmetry observed in most languages, based on the fact that this verb movement is blocked if the COMP-position is not empty, as it is the case in most embedded contexts. The widespread verb-second word order in embedded clauses of Icelandic and Yiddish, on the other hand, is not easy to explain. Two schools of thought exist in respect to this problem:

a) the first one interprets all cases of verb-second word order as instances of verb movement to the COMP-position, under the assumption that there is not one, but two available COMP-positions exist in clause structure, whereas the upper one is filled with a complementizer in embedded structures, and the lower one is occupied by the finite verb; (you indented all of this last time, so I will too)

b) the second one interprets the verb-second word order in embedded contexts as an instance of movement of the finite verb to the INFL-position, allowing, at the same time, some limited movement to the COMP-position in embedded contexts as well.

The hypothesis that the verb-second effect is always the surface result of the underlying verb movement to the COMP position, however, meets with certain conceptual problems. It remains unclear, for instance, what triggers the verb movement and the subject movement in subject initial main clauses if these movements were to involve Complementizer Phrase. The only way to capture this would be to come up with a feature of COMP that requires lexicalization of C^o, and to formulate a verb-second constraint to the effect that the finite verb cannot be in the first position. But then, this hypothesis does little more than simply describe the phenomenon without offering a general explanation for it. The other hypothesis, which allows verb-second to be the result of both verb movement to COMP and to INFL, therefore, seem to be a more adequate choice for one general verb-second theory.

On closer inspection of each individual language, however, it appears that, while the generalizations in regard to verb movement hold well across languages, the nature of verb-second itself in each language shows certain variation, thus making Germanic verb-second a highly language-specific phenomenon.

CHAPTER 5

VERB-SECOND IN MODERN ENGLISH

5.1. Introduction

Among various characteristics commonly used in linguistics as a basis for typology, the order in which constituents are arranged in a language to create clause structure is the syntactic feature most frequently exploited for this purpose. Although word order is never absolutely rigid in any language, and in some languages it even appears to be completely 'free', it is generally assumed that every human language has one unmarked word order which is considered basic.

It is widely accepted in literature, both generative and traditional, that *subject-verb-object* order is the basic word order in English. Apart from this *canonical* word order, also possible and very common is *object-subject-verb* order, which is perceived as 'marked' and it is used to put the emphasis on the object of the sentence. Therefore, the majority sentences in English have the structure in which the constituents are arranged either according to the *subject-verb-object* pattern, or the *object-subject-verb* pattern. For example:

(1) I *can't see* <u>any ship</u>, but <u>the sailors</u> I *can see*.

There is, however, yet another type of word order in English, which is far less common and therefore somewhat exotic. That is verb-second word order, the most visible characteristic of which, at least on the surface, is subject-verb inversion. The fact that such an order of constituents is possible in the language

with the basic *subject-verb-object* word order is not difficult to explain, at least in generative framework: the basic word order which manifests on the surface as the structural pattern [S-V-O], is, in fact, the underlying word order that follows the pattern [X-S-V-O]. There is, in other words, at least one additional slot to the left of the subject in the underlying clause structure that can be filled up by some other constituent which is not the subject.

In embedded clauses, this position is typically filled by a complementizer, so this structural position is commonly referred to as the COMP-position. In main clauses, on the other hand, in the absence of complementizers, this position remains unfilled in unmarked structures with the basic word order. But if the finite verb moves to it, the result will be a special type of marked word order with the verb in the position of the second constituent thus preceding the subject.

The structures with verb-second word order have long been observed in English, and they are known in traditional literature as ‘inversions’. Granted, not all the cases of subject-verb inversion are necessarily the result of verb movement to the COMP-position, so the second position of the finite verb does not automatically mean that the inverted word order is the manifestation of the verb-second effect. However, it mostly is the case.

As it was presented in the section 3.3.1., verb-second word order — and therefore presumably movement of the finite verb to the COMP-position — exists in English only in certain rather limited syntactic contexts. However, when the situation in regard to the verb-second phenomenon in English is compared to the same situation in all other Germanic languages, some striking differences can readily be observed. First, the verb-second rules are not generalized in English; the main consequence of this fact reflects in the appearance of the verb-second effect only in some clearly definable situations. This is opposite to other Germanic languages where verb-second word order is obligatory in all main clauses in declarative sentences.

Thus, it is characteristic of all Germanic languages except English that the pre-posing of some topical constituent obligatory triggers the verb-second effect. The following German sentences can illustrate this:

(2) Diesen Film *haben* die Kinder gesehen.
this film *have the children* seen
The children have seen this film.

(3) Gestern sahen die Kinder den Film
yesterday *saw* the children the film
Yesterday, the children saw the film.

(Vikner 1995: 42)

In English, on the other hand, topicalization does not, in the majority of syntactic contexts, cause the finite verb to move from its base position to the left of the subject. For example:

(4) *This skirt has Jane bought.
Jane *has* bought this skirt.

(5) *Yesterday *bought* Jane this skirt.
Yesterday, Jane *bought* this skirt.

Furthermore, even in those contexts in which, due to topicalization, the finite verb does appear in the position of the second constituent in English, such word order in many cases remains optional, and, as such, is the matter of style, not an instance of grammatical constraint. For example:

(6) a. In Jane's heart *rose* sympathy for the poor.
b. In Jane's heart sympathy for the poor *rose*.
c Sympathy for the poor *rose* in Jane's heart.

In other words, the fact that both sentences in the example (6a) and (6b) are considered grammatically correct proves that the second position of the finite verb in these clause structures is not obligatory, but a matter of choice. This means that, even though English has some syntactic structures that display the verb-second effect, the verb-second constraint itself does not exist as a general rule in the grammar of the language. The consequence of this fact is that English is not

classified as a verb-second language.

Some possible explanations for the nature of the verb second effect in English shall be presented in the next section.

5.2. Syntactic Analysis of Verb-Second Structures

The fact that Modern English, unlike all other Germanic languages, is not a verb-second language does not mean that verb-second word order is completely optional in the language, nor that English is completely unrelated to other Germanic languages in this respect. There are certain syntactic contexts in English where pre-posing of a topical constituent does cause obligatory movement of the finite verb to the COMP-position, thus placing the verb to the left of the subject. This leftward movement regularly takes place in certain type of questions, such as *wh*-questions. For example:

(7) a. What *has* Jane bought?
b. *What Jane *has* bought?

(8) a. Why *has* Jane bought the skirt?
b. *Why Jane *has* bought the skirt?

The ungrammaticality of the sentences in the examples (7b) and (8b) proves that verb-second word order in these cases of topicalization is obligatory, and not the matter of style.

Verb movement to the COMP-position also takes place in some declarative sentences with topicalization, but if topicalization is absent, the finite verb remains in its base position to the right of the subject. For example:

(9) a. Never *has* Jane bought such a skirt before.
b. *Never Jane *has* bought such a skirt before.
c. Jane *has* never bought such a skirt before.

(10) a. Only in Paris *could* Jane buy such a skirt.

b. *Only in Paris Jane *could* buy such a skirt.

Jane *could* buy such a skirt only in Paris.

The ungrammatical sentences in the examples (9b) and (10b) prove that the second position for the finite verb is obligatory in these syntactic contexts as well.

In addition, in English, like in all other Germanic languages, *yes/no*-question always have the underlying structure in which the finite verb is in the COMP-position, even though in this context the finite verb does not appear in the position of the second, but in the position of the first constituent in the surface verb order. For example:

(11) a. *Has* Jane bought that skirt in Paris?

b. *Did* Jane wear that skirt yesterday?

c. *Is* that Jane's skirt?

d. *Can* Jane wear this skirt today?

Apparently, the differences between English and other Germanic languages in respect to the verb-second phenomenon do exist, and they are considerable, but they are not absolute, since some common features are clearly observable.

Syntactic analysis of verb-second sentences in English is not different from the analysis applied to similar structures in other Germanic languages. Here, too, the presence of the verb in the position of the second constituent is interpreted, in the tradition of den Besten (1983) and others, as the result of movement of the finite verb from its base position first to the INFL-position, and then to the COMP-position (cf. Chapter 3, section 3.3.). In other words, since COMP is the head of the clause, the finite verb in the second position is viewed as movement of a head. Following Chomsky (1986), it is assumed that both INFL (I) and COMP (C) are each heads which project to a maximal phrasal category. Therefore, the general underlying structure of any verb-second clause in any Germanic language including English, (which has already been presented in the diagram (1) in the section 3.1.), could be analyzed like so:

(12) $_{CP}$ [Spec $_{C'}$ [[V_i + I]$_j$ $_{IP}$ [NP $_{I'}$ [[$_{VP}$ […e_i] e_j]]]]

The Specifier of Complementizer Phrase (CP) may be filled by any phrasal category in the process of topicalization, which triggers verb movement to the INFL-position in the first step, and then to the COMP-position in the second and final step of the movement. According to the principles of Universal Grammar, heads can move only locally, to the position of the next head in the higher position, which is the reason why the finite verb cannot move directly to the COMP-position from its base, but has to move to INFL first. However, the finite verb that has reached the INFL-position, and acquired as much inflection there (V+I) as is available in the given language, cannot move to the COMP-position if it is already filled by another element, such as a complementizer, which is the case in embedded clauses. This is the syntactic explanation for one of the core features of the verb-second phenomenon — the fact that it is predominantly restricted to the structure of main clauses.

Some of this parameterization becomes clearer when some non-second languages are taken into consideration and compared to Germanic languages. Thus Modern French allows finite verbs to move to the COMP-position only in certain type questions with pronominal subjects; if the subject is realized by a full Noun Phrase, verb movement is disallowed (cf. Chapter 3, section 3.3.4.1.). For example:

(13) a. **Pourquoi** *allez*-<u>vous</u> à Paris?
why *go* <u>you</u> to Paris
Why are you going to Paris?

b. *À Paris *allez*-<u>vous</u>?
to Paris *go* <u>you</u>
Are <u>you</u> going to Paris?

(Lightfoot 1995: 32)

The sentences from the examples (13a) and (13b) can be analyzed in the following way:

(14) a. $_{CP}$ [pourquoi [all$_i$ + ez]$_j$ $_{IP}$ [vous e$_j$ $_{VP}$[e$_i$ à Paris]]]

b. *$_{CP}$ [à Paris$_k$ [all$_i$ + ez]$_j$ $_{IP}$ [vous e$_j$ $_{VP}$[e$_i$ e$_k$]]]

English, unlike French, allows finite verbs to move to the COMP-position in much wider syntactic contexts, but only as long as the finite verb in question is either *be* or *have*, or some of the modal verbs (cf. Chapter 3, section 3.3.1.). Even these verbs are allowed to move to the COMP-position only in some limited contexts, such as *wh*-questions or some cases of topicalization. Lexical verbs, on the other hand, have no ability to move to the COMP-position in Modern English. For example:

(15) a. **What** *have* they done?

b. ***What** *did* they?

(16) a. **Never** *have* they done such a thing.

b. ***Never** *did* they such a thing.

The sentences in the examples (15) and (16) can be analyzed like this:

(17) a. $_{CP}$ [what$_i$ have$_j$ $_{IP}$ [they e$_j$ $_{VP}$ [done e$_i$]]]

b. *$_{CP}$ [what [do$_i$ + ed]$_k$ $_{IP}$ [they e$_k$ $_{VP}$ [e$_j$ e$_i$]]]

(18) a. $_{CP}$ [never$_i$ have$_j$ $_{IP}$ [they e$_j$ $_{VP}$ [done such a thing]]]

b *$_{CP}$ [never [do$_i$ + ed]$_k$ $_{IP}$ [they e$_k$ $_{VP}$ [e$_j$ such a thing]]]

What these analyses show, when compared to the analyses of the French sentences in the examples (14a) and (14b) is the fact that the finite verb in French does move to the INFL-position, whereas such verb movement does not occur in English. In the absence of verb movement to INFL, English finite verbs must occur adjacent to their complements, as it is shown by the sentences in the example (19):

(19) a. Jane always reads the newspapers.

b *Jane reads always the newspapers.

French finite verbs, on the other hand, may be separated from their complements through movement to the INFL-position. For example:

(20) Elle *lit* **toujours** les journaux.
she *reads* **always** the newspapers
She always reads the newspapers.

The syntactic analysis of the English sentence in the example (21a) and the French sentence in the example (21b) shows this difference even clearer:

(21) a. she always $_{VP}$ [reads the newspapers]
b. elle lit$_i$ toujours $_{VP}$ [e$_i$ les journaux]

As these analyses show, in English, like in French, only certain clearly definable categories are allowed to occur in the position of Specifier or in the position of Complementizer Phrase. This is very different from the situation in languages such as Dutch, German, or Mainland Scandinavian, where any element may occur in these positions and require obligatory movement of the finite verb first to the INFL-position, and then to the COMP-position.

It is this apparent syntactic difference between English and French on one side, and West Germanic and Mainland Scandinavian languages on another, that led some authors to make a sharp distinction between languages in which the verb second phenomenon may occur. This distinction shall be discussed in the next section.

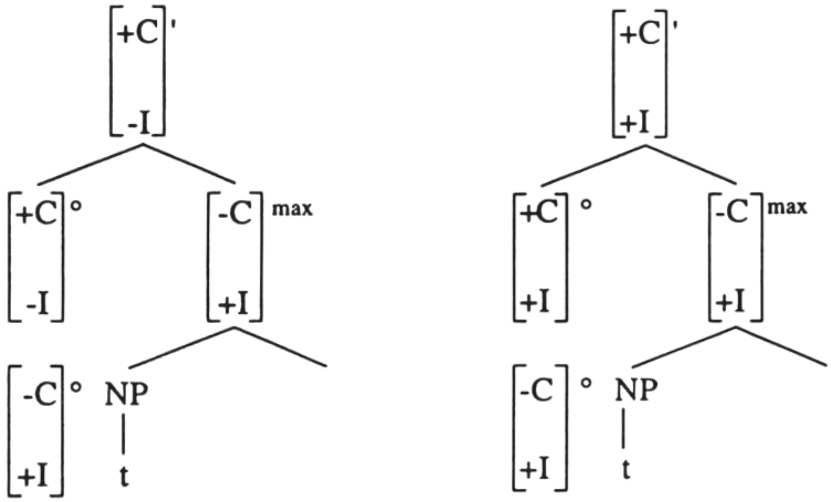
5.3. Residual Verb-Second

According to Rizzi (1990), *residual verb-second* is a restricted kind of verb-second that occurs only in questions and in constructions with topicalized negative elements. Thus, residual verb-second is the form of verb-second which takes place in non-verb-second languages, as opposed to all other Germanic languages where the verb-second rule is generalized, and which therefore exhibit *general verb-second*. Hence a distinction can be made between *general verb-second languages*,

such as Danish, Dutch, Frisian, German, Icelandic, Norwegian, Swedish or Yiddish, and *residual verb-second languages*, such as English or French.

Rizzi compares English subject-auxiliary inversion and French subject-clitic inversion with the full-scale verb-second phenomenon which determines the arrangement of constituents not only in the structure of main clauses, but even in the structure of some embedded clauses (cf. Chapter 4, section 4.3.). In his opinion, the distinction between these two forms of verb-second lies in the features of the head of Complementizer Phrase, [+C,-I] in the case of a residual verb-second construction, and in a kind of hybrid [+C,+I] in the case of full verb-second languages. Rizzi interprets the feature [+C] as 'propositional' and the feature of [+I] as 'predicational'. Thus a [+C,-I] category designates a proposition, projecting to the familiar Complementizer Phrase of non-verb-second languages and of non-verb-second clauses in verb-second languages. [-C,+I] designates a predication, projecting to Inflection Phrase, and [+C,+I] is the hybrid category characteristic of verb-second languages, being both propositional and predicational. For Rizzi this is the category of verb-second clauses in full verb-second languages. In the case of a full verb-second language, the movement of the inflected element [-C,+I] to the head of the Complementizer Phrase is obligatory, because of a universal principle that the tense specification must c-command all other [+I] categories in a given clause. These properties are presented in the diagrams below to illustrate the residual verb-second (22a) and the general verb-second (22b):

(22) a. b.



As the diagram (22b) shows, the moved element properly governs a subject trace

under the 'minimality' assumptions of Rizzi (1990), because the trace is within the immediate projection of [+I°], i.e. [+I']. In the diagram (22a), on the other hand,

> "…the moved head and the host are disjoint feature bundles, hence in no sense can the moved head be said to govern the subject trace within its (immediate) projection."
>
> (Rizzi 1990: 385)

This can explain the symmetry of subject-object extractability in full verb-second languages. In contrast, in non-verb-second languages, in which a subject trace would generally fail to be properly governed, the subjects are relatively immobile. In addition, according to Rizzi, different kinds of functional heads license different kinds of specifiers. Therefore, a [+C] head licenses an operator or trace in an A-bar chain and a [+I] head licenses a subject in the specifier position. In this way, the hybrid case [+C,+I] allows its specifier to be a *wh*-phrase or trace by virtue of being [+C] or the subject of predication by virtue of being [+I].

Rizzi explains the reason why residual verb-second exists in English by the means of his adaptation of the *wh-criterion*, originally proposed by May (1985: 17):

(23) The wh-criterion:

i. Each [+wh] X°60 must be in a spec-X° agreement relation with a wh-operator

ii. Each wh operator must be in a spec-X° agreement relation with a [+wh] X°

(Rizzi 1990: 378)

Wh-operators are all *wh*-elements in A-bar-positions. X°s with the feature [+wh] include I°. Rizzi uses this wh-criterion to explain verb-second occurrence in Modern English wh-questions such as the sentences in the examples (24) and (25):

(24) a. *__What__ Jane *has* bought?

b. __What__ *has* Jane bought?

(25) a. *__Why__ Jane *has* bought the skirt?

b. __Why__ *has* Jane bought the skirt?

As it can be seen from the examples above, not only that the *wh*-phrase is forced to move to the specifier of Complementizer Phraze in English, but also the head C^{o} must acquire the feature [+wh]. The verb-second enables this to be achieved, as long as such order of constituents is the result of movement of the finite verb to the COMP-position.

(26) a. ***Never** Jane *would* wear so short a skirt.
b. **Never** *would* Jane wear so short a skirt.

(27) a. ***Nowhere** Jane *could* find her favorite skirt.
b. **Nowhere** *could* Jane find her favorite skirt.

As far as the pre-posed negative elements are concerned, such as the clause-initial adverbs in the examples (26) and (27), Rizzi (1991: 11) assumes a similar analysis. He claims that the negative element that a negative element must be in a spec-X^{o} agreement relation with a head X^{o} with a negative feature, [+neg]. The only way the head C^{o} can acquire the feature [+neg] is through verb-second word order. In this respect, Rizzi apparently follows Pollock (1989), who also assumes that the finite verb moves through the head Neg^{o} on its way to the head I^{o}, and from there onto the head C^{o}, and that it acquires the feature [+neg] in this way.

(28) a. *Would* Jane ever wear so short a skirt?
b. *Can* Jane find her favorite skirt?

Rizzi applies the same *wh*-question criterion to the analysis of English yes/no-question as well. These questions have verb-second structures in both residual and general verb-second languages, despite the fact that the finite verb obviously appears in the clause-initial position in the surface word order. However, since the relevant structure in cases like these is the underlying structure, interrogative sentences in the example (28) are clearly verb-second structures because their finite verbs occupy the COMP-position. And, since filling this structural position is what is considered to be the essence of the verb-second effect, the appearance of the finite verb in the position of the first constituent in this case is

irrelevant for the syntactic classification of the whole structure[22].

According to Rizzi, the underlying structure of sentences like the *yes/no*-questions from the example (28) is taken to contain an empty initial *wh*-element. The original idea for assuming the existence of one such element, usually called an *empty operator*, goes back to Chomsky (1977). If the existence of an empty operator in the clause-initial position of the sentences in the example (28) is accepted, then they can be analyzed in the exactly the same way as *wh*-questions, bearing in mind the fact that the *wh*-element in them is simply invisible. Viewed in this light, the finite verbs in these *yes/no*-questions indeed occupy the position of the second constituent.

(29) a. *I don't know **what** *has* Jane bought.

b. I don't know **what** Jane *has* bought.

(30) a. *I don't know **why** *has* Jane bought that skirt.

b. I don't know **why** Jane *has* bought that skirt.

Furthermore, the [+*wh*] feature can also be used to explain why verb-second word order is not allowed in embedded questions such as the ones in the examples (29b) and (30b) — or to put the problem differently, why a lexical element cannot fill the COMP-position in embedded questions like the questions from the above examples. According to Rizzi (1990, 1991), verb-second word order is excluded in such cases because the embedded Complementizer Phrase, and thus also the head Cº, is selected by the matrix verb, i.e. the verb *know* from the main clause. In other words, the embedded head Cº must contain the feature [+wh]. The projection principle then requires that this [+wh] feature be present at all syntactic levels, that is deep structure, in surface structure, and in logical form[23]. Like all syntactic movements, verb-second takes place after deep structure and before surface

[22] After all, in the great majority of all Modern English sentences, the finite verb does occupy the position of the second constituent in the surface word order, e.g. *Jane **wears** a skirt*, or *Jane's skirt **is** too short*; but, in the underlying clause structure these finite verbs occupy their base-position, and they have not moved from it to the COMP-position, so the second position of the finite verb in these cases is not an instance of the verb-second phenomenon.

[23] Logical Form (LF) is a distinct, structural level of representation which contains all (and only) the syntactic information that is relevant for semantic interpretation. Logical Form is thus taken to be the interface between an expression, i.e. language, and its logical form in the semantic sense (that is, logical form understood as a representation of all and only the logical properties of an expression, usually in a non-ambiguous, precise logical language).

structure. Such a requirement would, therefore, exclude the situation in (29a) and (30a), where the head Cº is empty at one level and filled at another one. At deep structure the sub-categorization requirement of the matrix verb would be satisfied by a [+wh] feature of the empty Cº, and at surface structure it would be satisfied by a [+wh] feature of the finite verb in Cº. In other words, the [+wh] feature of the empty Cº would have been deleted between deep structure and surface structure, and that is something which is not allowed by the principles of Universal Grammar.

However, this account does not exclude the case in which Cº is filled at all levels in an embedded question, because in this case nothing is deleted. In complex sentences such as the one in the example (31), the sub-categorization requirement of the matrix verb, *know*, is satisfied by the [+wh] feature of *if* at all levels. For example:

(31) a. I don't know **if** Jane *has* bought that skirt.

Rizzi's explanation of the residual verb-second is, therefore, based on the assumption that the cases of verb-second which occur in residual verb-second languages are caused by a different requirement from that which causes all main clauses to have verb-second in general verb-second languages. He explains these requirements in terms of the *wh*-criterion, which presupposes that the functional head Cº may be able to acquire the feature [+*wh*].

It may be worth noting that Rizzi (1990) called the special type of verb-second which can be found in English and French 'residual' under the implicit assumption that, in the history of both languages, this phenomenon was reduced to its present state, and that in earlier stages of both languages verb-second structures occurred in far wider contexts than in the latter stages. In other words, Rizzi assumes that, viewed from the point of diachronic dimension, the grammars of English and French, and the syntax of these languages in particular, underwent a development from a verb-second grammar of Old English and Old French towards a non-verb-second grammar with only vestigial verb-second, appropriately called 'residual'.

Not everyone shares this view, however. Thus Kiparsky (1995) argues that the type of verb-second which occurs in Modern English should be taken as the

initial point of the development of the verb-second phenomenon in a language rather than the final point. He claims that:

> "*Residual verb second* ... is then the original core of the verb-second system. The Modern Germanic verb-second languages have extended the Spec-C position to Topics, and consequently generalised V-to-C° movement."
>
> (Kiparsky 1995: 141)

The historical aspects of the verb-second phenomenon in English are the subject of *Chapter 6* of this dissertation, so the syntactic problems concerning verb-second structures viewed in diachronic dimension shall be discussed in greater detail there.

5.4. Verb-Second in Embedded Clauses in English

According to Vikner (1995: 85), Modern English, similar to some asymmetric verb-second languages such as Mainland Scandinavian languages and, not surprisingly, Frisian, also exhibits limited verb-second after a complementizer. Vikner believes that certain empirical reasons exist for assuming that embedded clauses with verb-second structure involve either CP-recursion, or topicalization to Spec,IP, or a third type of analysis which Vikner calls 'ZP', where ZP indicates a maximal projection different from both IP and CP.

According to analyses of this type, there is a projection level, ZP, between CP and IP. Therefore, in a verb-second structure, the finite verb would be in Z^o, and the pre-verbal XP in Spec,ZP according to this analysis. This approach, in Vikner's opinion, avoids the disadvantages of the other two — recursion of CP is avoided and Spec,ZP is retained as reserved for the subject i.e. as an A-position — but it introduces a new and hitherto unknown projection level, ZP. Z^o corresponds to what Roberts (1993) and Cardinaletti and Roberts (1991) call $Agr1^o$, Tsimpli (1990) calls F^o (for focus), Müller and Sternefeld (1993: 485) call T^o (for topic), and Shlonsky (1992) calls $AgrC^o$ (Vikner 1995: 80).

Verb-second word order in embedded clauses in English, however, remains very limited, as it is only allowed with pre-posed negative elements if the

complementizer present in the structure is *that* or *at*. For example:

(32) a. She has often said **that** under no circumstances *would* she vote for Quayle.

b. She has often said **that** she *would* not vote for Quayle under any circumstances.

c. She has often said she *would* not vote for Quayle under any circumstances.

The verb second structure here is analyzed as follows:

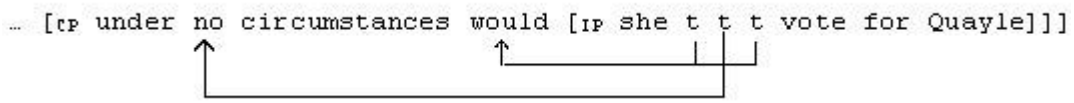
(33) a. She has often said [$_{CP}$ **that** under no circumstances *would* [$_{IP}$ she vote for Quayle.]]

b. She has often said [$_{CP}$ that [$_{IP}$ she would always vote for Gore]]

c. She has often said [$_{CP}$ [$_{IP}$ she would always vote for Gore]]

The verb movement in this case would operate as follows:

(34)



According to Vikner, if there were neither CP-recursion, nor a ZP, nor topicalization to IP-spec, in these cases, then *that/at* should not be possible with embedded verb-second, and much less would it be obligatory, as the presence of *that/at* in C^{o} would block verb-second effect. In the examples (32c) and (33c) without verb-second structure in the embedded clause, the presence of the complementizer *that* is optional.

Apart from the rather striking fact that English has embedded verb-second structures only with pre-posed negative elements, there are two phenomena which clearly show that embedded verb-second in English is less general than in Yiddish and Icelandic, which allow verb-second structures in almost all embedded contexts. One is that embedded verb-second is totally excluded in embedded questions as shown in the example (35). The other is that embedded verb-second is only possible with a subgroup of the verbs that take sentential complements, as shown by the example (36):

(35) a. *Why lived Jane in Paris?

b. Why did Jane live in Paris?

c. *I don't know **why** *lived* Jane in Paris.

d. I don't know **why** Jane *lived* in Paris.

(36) a. *John doubts that under no circumstances *will* Mary get up early

b. John doubts that Mary will get up early under any circumstances.

c. *John is sorry that under no circumstances *will* I read this book.

d. John is sorry that I *will* not read this book under any circumstances.

As embedded verb-second only occurs with a subset of the verbs that take a sentential complement, it amounts to what Vikner calls 'selection by remote control'— that is, the head C^{o} filled by *at/that* is only able to select another C^{o}, or a Z^{o}, when it is itself selected by a particular kind of matrix verb, i.e. the subset of verbs that take a sentential complement referred to above. Otherwise, as far as all C^{o}s in main clauses and the lower C^{o} in embedded clauses are concerned, C^{o} selects I^{o}. In other words, within the CP-recursion analysis, as well as within the ZP analysis, there are two kinds of *at/that*:

1. one that selects CP, or ZP — which are selected only by a subset of verbs taking complement clauses;

2. one that selects IP — which are selected by all verbs taking complement clauses.

The topicalization to IP-spec analysis is not much more attractive for languages with limited embedded verb-second like English, as it also would presuppose two kinds of *at/that*:

1. one that selects an IP with an A-bar-spat — which is selected only by a subset of verbs taking complement clauses; (ditto)

2. one selects an IP with an A-spec — which is selected by all verbs taking complement clauses.

Apparently, analyzing the verb-second structures in English embedded clauses by the means of the CP-recursion analysis is far less clear that in the case of

non-asymmetric languages such as Icelandic or Yiddish. It seems, therefore, that abandoning the hypothesis that all verb-second cases are caused by verb movement to the COMP-position, in favor of the analysis which postulates movement of the finite verb to the INFL-position as the syntactic movement relevant for embedded contexts might be a better approach.

5.5. Categorization of Verb-Second Structures

There has been several attempts to categorize the examples of verb-second structures that are possible in Modern English, but, for instances of a marked word-order with relatively low frequency, these structures remain remarkably heterogeneous and somewhat resilient to rigid classification. Two of these attempts, one proposed by Green (1980), and another by Stockwell (1984) shall be presented here.

5.5.1. Pragmatic Functions of Verb-Second

Green (1980: 598) speaks of "forty to twenty inversion structures" which she has catalogued, and expresses her puzzlement over the purpose of their existence in the language:

> When I first started working on inversions, I imagined that each inversion would have its own function, its own *raison d'etre*. Now, some years later, I find a rather large number of pragmatic functions; but they are distributed over, rather than among, the syntactic inversion types. These pragmatic functions include strictly practical solutions to problems of encoding; rhetorical functions of connection and introduction, down-playing, and foregrounding; resolution of apparent discourse-structural anomaly; and what might be called the 'Yippee function'-markedness for noticeability's sake. Some of these functions derive from the initial position of the pre-posed phrase that triggers inversion, some from the final position of the subject after inversion, and some from the re-ordering generally.
>
> (Green 1980: 598)

According to Green, there seem to be a large number of inversion rules in English — in between twenty and forty, depending on what counts as the same rule — which all result in creation of two basic structural types: [X-V-S-Y] and [X-

AUX-S-V-Y]. From generative perspective, however, there is no crucial difference between these two types, because it is always the finite verb which moves to the COMP-position, whether it be a lexical verb or an auxiliary.

Green analyses verb-second structures mostly in terms of pragmatic and functional parameters. Following Becker (1978) and Laff (1978), she claims that an important reason why constructions like the one in the example (37a) exist in language is that they allow speakers to avoid marked intonations without sacrificing intended emphasis.

(37) a. Outside *stood* a little angel.
b. A little angel *stood* outside.

(Green 1980: 582)

The sentence in the example (37b) with the basic subject-verb word order has only one intonation peak, whereas the sentence in the example (37a) with the marked verb-second word order has two — one in the pre-posed phrase, and one in the post-posed phrase. This would mean that verb-second structures provide various incidental and crucial syntactic properties available to the speakers in order to achieve a variety of rhetorical effects and pragmatic purposes.

It should be pointed out, however, that Green perceives the various and heterogeneous verb-second structures, whose functions she has so meticulously described, predominantly as a stylistic option which allows the speaker or, especially, the writer, to make the subject far longer than usual, thereby packing a much larger informational content into a sentence. Viewed in this light, the main pragmatic function of verb-second structures in modern English is communicational function. The fact that inverted subjects in verb-second structures can be long and syntactically more complex than usual means that they bear a lot of information. And because they are packed with lots of information, they are likely to contain information which is new relative to the discourse. As such, they become highly relevant for the process of communication. This may be an explanation as good as any other in regard to the reason why these highly marked syntactic structures have not disappeared from English.

Green therefore classifies verb-second structures according to the function

they supposedly perform in the language. She distinguishes five of these functions: Practical, Connective, Introductory, Emphatic and the Function of Direct Quotes.

5.5.1.1. Practical Function

One of the most notable ways in which syntax can be used for pragmatic purposes is the way it is used in broadcasting of sports events. According to Green, this is the single social contexts in which verb-second structures, or 'inversions', as she always refers to them, are used in speech with appreciable frequency. The analyses of the language of these broadcasts reveal that a broad variety of verb-second structures are used, especially due to the fact that each broadcaster seems to have his own individual style, and may tend to favor some types of structure over others. For example:

(38) a. Underneath the basket *is* Barbian.
b. Bringing the ball up *is* Marty Mestemacher.
c. High in the air to get the ball *was* Jim Brady.
d. At the line for Lanphier *will be* Shelly Tunson.
e. And in *comes* number 51.
f. Here *comes* Mestemacher with the ball for the Kahoks.

Green (1980: 584)

As the sentences in the example (38) show, the inverted, post-posed subject in all these constructions is a reference to a player — almost always a player's name. Such sentences identify a player in terms of a location or an act just performed. Inversion allows the speaker to mention the location or act first, then identify the individual located or carrying out the act.[24] When the predicate comes first, the verb-second structure gives the audience time to match up the description with a real-world orientation of entities-singling out one entity in relation to others; it then provides additional information, the name, for that item.

[24] This is helpful to the television viewers, since they don't have scorecards identifying the players by their numbers, which is all that they can see. Mentioning the player's name first, and then his location or the play he has just made, would require more concentration on their part; they would have to keep the name in mind while waiting for a description-then remember back who was where, doing what a moment before, in order to connect the image of a player with the name, which is the purpose of the identification in the first place. (Green 1980: 585)

In addition, verb-second construction enables the sportscaster himself to describe the action quickly in a situation where every second counts, so postponing reference to the name of the player to the end of the sentence allows him to begin describing what is directly observable - the ball being stolen, someone coming off the bench, and so on, while in real time he tries to remember the actual name of the player, so that he could inform about it his viewers/listeners.

5.5.1.2. Connective Function

The set of verb-second structures typically used by the writers of news stories is different than those utilized by sport announcers. For example:

(39) a. Supporting merger *were* Lachlan Blair, Mary Blair, Phillips Garman, Linda Bronston, and David Lindstrom.

b. Lachlan Blair, Mary Blair, Phillips Garman, Linda Bronston, and David Lindstrom all *supported* merger.

(40) a. Dead *were* the pilot, Robert Conduff Jr., 38, Fort Hood, Tex., Theresa's stepfather; her mother, Frances Conduff, 48, and her half-sister, Maria Frances Foster, 14.

b. The pilot, Robert Conduff Jr., 38, Fort Hood, Tex., Theresa's stepfather; her mother, Frances Conduff, 48, and her half-sister, Maria Frances Foster, 14, all *died*.

(Green 1980: 586)

What is particularly notable when the structure of the sentences in the examples (39a) and (40a) is concerned is that they contain the so-called ‘heavy’ subjects, so it might be supposed that subject-verb inversion is in this case motivated simply by euphony or balance. However, even the heaviest of subjects can still function in the clause-initial position without compromising the grammaticality of the sentence, as it is demonstrated by the sentences in the examples (39b) and (40b), so it seems apparent that achievement of some kind of phonological balance with a rather short predicate cannot be sufficient for triggering obligatory verb-second in these cases. In addition, Green (1980: 586) points out that sentences like these typically occur well within a news article, and never as an opening line. The preverbal predicate phrases in such sentences perform a connective function for the individuals or

entities to be named in the post-posed subject, indicating their relevance and importance to the events and issues that have been reported up to the point where they occur. Thus the crucial aspect of these constructions is not really the inversion, but the pre-posing of the predicate. And indeed, there are various other ways available to convey the same information using the structures with the basic word order. For example:

(41) a. Council members supporting merger were Lachlan Blair, Mary Blair, Phillips Garman, Linda Bronston, and David Lindstrom.

b. The merger plan was supported by council members Lachlan Blair, Mary Blair, Phillips Garman, Linda Bronston, and David Lindstrom.

c. The merger plan got support from council members Lachlan Blair, Mary Blair, Phillips Garman, Linda Bronston, and David Lindstrom.

(42) a. Victims of the crash were the pilot, Robert Conduff Jr., 38, Fort Hood, Tex., Theresa's stepfather; her mother, Frances Conduff, 48, and her half-sister, Maria Frances Foster, 14.

b. The crash killed the pilot, Robert Conduff Jr., 38, Fort Hood, Tex., Theresa's stepfather; her mother, Frances Conduff, 48, and her half-sister, Maria Frances Foster, 14.

c. The dead are the pilot, Robert Conduff Jr., 38, Fort Hood, Tex., Theresa's stepfather; her mother, Frances Conduff, 48, and her half-sister, Maria Frances Foster, 14.

(Green 1980: 587)

The conciseness of the verb-second constructions, however, makes them particularly attractive for news-writing. It allows the news-writer to open the sentence with the information that is already known, and then use it as a connection to the information that is new.

Of course, the connective function of inversion is not restricted to news-writing, since it can be found in more literary descriptive or expository prose. For example:

(43) a. Sprawled in the foreground *is* George Price.

b. George Price *is* sprawled in the foreground.

(44) a. Holding the stick of this four-hundred-mile-an-hour ship *is* a small firm hand.

b. A small firm hand *is* holding the stick of this four-hundred-mile-an-hour ship.

(45) a. In so emphatic, consistent, and homogeneous a consensus *was born* the useful, if quixotic institution of the professional matchmaker.

b. The useful, if quixotic institution of the professional matchmaker *was born* in so emphatic, consistent, and homogeneous a consensus.

(46) a. Stacked on shelves *were* hundreds of cast-iron horses, wagons, fire engines, banks, tin clowns, doll houses, carousels, miniature railways, and so on ad infinitum.

b. Hundreds of cast-iron horses, wagons, fire engines, banks, tin clowns, doll houses, carousels, miniature railways, and so on ad infinitum, *were* stacked on shelves.

(Green 1980: 588)

In these examples from expository and narrative prose, the constituents of the connective function are distributed more discretely among grammatical units than in the examples from news stories. An anaphoric term, such as 'this four-hundred-mile-an-hour ship' is typical for these constructions. Structures like these are found in literary prose with relatively significant frequency and, as long as they are used with the sense of measure, they can greatly contribute to expressivity and style of the text.

In contrast to the news articles, structures like these are regularly used as opening lines in literary prose in order to introduce a new topic non-aggressively, by relating them to the topics that had already been mentioned. In this way a discontinuity is avoided that might have been distracting if the subjects of these sentences had been presented at the beginning of the structure.

(47) a. Back of the Arkoffs and Irwins were William Lesser and Patrick Degan, and between them and slightly to the rear *was* Saul Panzer.

b. William Lesser and Patrick Degan *were* back of the Arkoffs and Irwins, and *Saul Panzer was* between them and slightly to the rear.

(48) a. Seated next to me *was* a sprightly oldster in a brand-new suit set off by an opulent watch chain.

b. A sprightly oldster in a brand-new suit set off by an opulent watch chain *was* seated next to me.

(Green 1980: 588)

According to Green, (1980: 583), it is tempting to suppose that the structures like these are all governed by some general pragmatic principle, such as the 'Old information first, new information last' dictum of some Prague School linguists. However, while this principle might be applied to the examples from the news articles, in these examples from the literally prose it would not do to say that the connection is the effect of an 'Old information first, new information last' distribution accomplished by inversion. In fact, there is nothing 'old' in many of the sentence-initial phrases, other than a pronoun or definite article, and in many cases there is no 'old information' at all. In cases like these, the grammatical function of re-ordering of the constituents has been exploited to achieve stylistic effects in description of the setting, in introducing a new character into the narrative, in connecting the characters to the location, and so on.

5.5.1.3. Introductory Function

This function of inverted structures is similar to the connective function that these structures display in literary prose. In its purest form, this function can be observed in the travelogue style, but it can also be exploited in order to establish setting and principles in a narrative. For example:

(49) a. In a little white house *lived* two rabbits.

b. Two rabbits *lived* in a little white house.

(50) a. Into the consulting room of a fairly mad physician, whose name I somehow remember as Lucas Membrane, *hurtled* a haggard middle-aged woman, towing her husband, a psychotic larrikin about seven feet tall.

b. A haggard middle-aged woman, towing her husband, a psychotic larrikin about seven feet tall, *hurtled* into the consulting room of a fairly mad physician, whose name I somehow remember as Lucas Membrane.

(51) a. Down the dusty Chisholm Trail into Abilene *rode* taciturn Spit Weaver, his lean brown face an enigma, his six-gun swinging idly from the pommel of Moisshe, the wonder horse.

b. Taciturn Spit Weaver *rode* down the dusty Chisholm Trail into Abilene, his lean brown face an enigma, his six-gun swinging idly from the pommel of Moisshe, the wonder horse.

(Green 1980: 589)

According to Green (1980: 590), these examples differ from those in (43-48) in that the Pre-posed Adverbial Phrases do not serve a connective function; they do not locate the Post-posed Subject Phrases with respect to anything referred to before the adverbial. Rather, they locate the referents of the subject Noun Phrases 'absolutely'.

For example, the sentence in the example (49a), which is the opening sentence of a narrative, first implies the existence of a little white house, and then introduces the two protagonists in terms of their relation to the house. In a structure like this, it is the verb which serves the connective function, and the inversion of subject and verb is dictated by pragmatic as well as syntactic considerations.

The sentence in the example (50a), which inverts the subject after a pre-posed directional rather than a locative, likewise initiates a narrative, and serves to introduce protagonists with respect to a background. What is particularly interesting about (50a) is that it is not the referent of the subject Noun Phrase, the inversion of which is exploited to introduce, but the referents of Noun Phrases which occur in modifiers. The main characters in this narrative are the husband, introduced in a phrase describing the Post-posed Subject Noun Phrase, and the physician, introduced in a similarly subordinate position in the introductory directional adverbial; the referent of the subject Noun Phrase — the haggard, middle-aged woman — does not figure further in the narrative.

The sentence in the example (51a) also begins a narrative, and does so by introducing a character into a setting described in a Pre-posed Directional Phrase. It differs from the sentence in the example (50a) in that the location is not referred to in the Pre-posed Directional Phrase by an implied existential, but by definite reference to places assumed to be familiar to the reader (the Chisholm Trail, Abilene). But the effect, in Green's opinion, is the same.

5.5.1.4. Emphatic Functions

There is no doubt that the so-called *emphatic inversion* is the most discussed, and perhaps least understood use in Modern English of verb-second structures with the verb in the position of the second constituent. If nothing else, these are the type of verb-second structures most frequently cited in linguistic literature. However, there is not yet an ultimate explanation about what it is exactly that makes them so emphatic. For example:

(52) a. Through the revolving doors *swept* Tom Pulsifer.

b. Tom Pulsifer *swept* through the revolving doors.

(53) a. Springing from its catacomb with a hoard of Kate Greenaway prints he had unearthed *came* Spitalny, hair as tumultuous as ever but powdered with silver.

b. Spitalny *came* springing from its catacomb with a hoard of Kate Greenaway prints he had unearthed, hair as tumultuous as ever but powdered with silver.

(54) a. There before her eyes *was* the red button she had been looking for.

b. The red button she had been looking for *was* there before her eyes.

(55) a. Outside *stood* a little angel.

b. A little angel *stood* outside.

(Green 1980: 594)

Constructions like the ones in the examples (52-55) seem to be what even the traditional grammarians had in mind when they have discussed inversion. Jamieson (1853), a nineteenth-century rhetorician, defines the purpose of inversion like so:

> by suspending the appearance of some capital word or circumstance, curiosity may be excited, and artfully prolonged, till the conclusion of the period discloses the mystery, and impresses the sense deeper on the mind ... All discourse addressed to the understanding seldom permits much inversion. More of it is allowed in works addressed to the imagination, and most of all in those productions which are intended to rouse and interest the passions and emotions of the heart.
>
> (Jamieson 1853: 132)

Fowler (1923), a twentieth-century grammarian, distinguishes other, non-

emphatic functions of inversion as well, such as euphonic, connective, signpost[25], negative, and exclamatory. And Gary (1975) characterizes inversion, after Pre-posed Locative and Participial Phrases generally, as indicating that an event or locative relationship is contrary to expectation. (Green 1980: 595) What all these authors have in common, in respect to their views on the emphatic function of verb-second structures is that they seem to use it as a waste-basket term for grouping very diverse syntactic structures, the function of which is difficult to determine with precision.

According to Green, the use of inverted structures, at least in some cases, must be described in terms relating to expectation, and to its intensive, suspense. She believes that the use of sentences in the examples (52-55) is best described in terms of the resolution of some apparent disorder in narrative structure. When the sentences in the examples (52a) and (52b) are concerned, the disorder in question is that the characters named by the Post-posed Subject Noun Phrase were introduced as central characters, but the text has not mentioned them for some time. These sentences bring them back into the action. In the sentence in the example (54), absence from the scene is reflected in the description of the subject — the red button she had been looking for. Green (1980: 595) states that this particular sentence is the third-to-last in the story; and although the button is the principal character in this narrative, the search for it has not been mentioned since the beginning of the story. She claims that the context is crucial for understanding the function of most cases of subject-verb inversion, including the inverted structure in the sentence from the example (55). The actual context in which this sentence occurs is as follows:

(56) a. One night there was a tap on the window. Mrs. Rabbit peeped through the window. **Outside *stood* <u>a little angel</u>**. 'Your wish is granted,' it said. 'A baby rabbit is on her way to you.'

b. One night an angel tapped at the window. 'Your wish is granted,' it said. 'A baby rabbit is on her way to you.'

(Green 1980: 595-596)

The first sentence in this example sets up a brief, and minor, anomaly in the telling

[25] By which he meant putting a non-subject *theme*, as he calls it, in initial position. (Green 1980: 595)

of the story: a significant action, tapping, is asserted, but the agent is not mentioned. Sentence (55) names an individual who could be the agent, and this element occupies the clause-final, focused position, thus implicating that it was indeed the agent, and resolving the tension created by the anomalous statement. According to Green, this is an esthetically satisfactory way to meddle with the order of events in the writing of narrative. When the sentence from the example (56a) is compared to the sentence in (56b), the obvious conclusion can be that the latter one is not only less vivid and expressive but also disconcerting in the casual mention of the angel, as if it were no less expected than, say, a moth. When the sentence from the example (56a) is compared with the sentences in the example (57a) and (57b), the difference between the resolution function and the scene-setting function becomes quite evident:

(57) a. The guest house was densely populated with ceramic, stone, and wrought-metal sculptures. There was an enormous stainless steel frog and two tiny elves in the foyer, and **outside *stood* <u>a little angel</u>**.

b. When I arrived at the Pearly Gates, St. Peter was seated at a desk in a little sentry box. **Outside *stood* <u>a little angel</u>**, intently observing the proceedings.

(Green 1980: 596)

When the context is read preceding the clause *Outside stood a little angel* in the examples (57a) and (57b), there are no expectations about the content of the sentences to follow. On the other hand, when the sentences in the example (56) are read, the reader does expect that the writer will either tell him, sooner or later, or at least enable him to infer, what it was that made the tapping.

According to Green, these inverted structures mark the resolution of apparent anomalies in discourse structure, and it is such use in marking this particular kind of joint in discourse structure that has led some writers to call them emphatic. That is, the emphatic effect is a function of the form of the discourse, i.e. the order in which information is presented, and not a function of the form of the sentence.

Resolution inversions are not the only ones which create an effect of emphasis. The clause structures exemplified below, in which the finite verb takes the position of the second constituent, also seem *emphatic*, but, in Green's opinion,

the source of this emphaticness seems to lie more in sentence structure than in discourse structure:

(58) a. Some of them are very beautiful, but most important *are* their fascinating detail and accuracy.

b. Some of them are very beautiful, but their fascinating detail and accuracy *are* most important.

(59) a. Such *was* my respect for him, that even after I switched to martinis I still ordered sweet Manhattans when Gus was behind the bar.

b. My respect for him *was* such that even after I switched to martinis I still ordered sweet Manhattans when Gus was behind the bar.

(60) a. Not since an American battleship, many years before, firing a 21-gun salute in honor of the President of France, had accidentally used real shells and blown the bejezus out of the harbor of Le Havre *had* the American Navy so royally loused up a situation.

b The American Navy *had* not so royally loused up a situation since an American battleship, many years before, firing a 21-gun salute in honor of the President of France, had accidentally used real shells and blown the bejezus out of the harbor of Le Havre.

(61) a. Rarely *did* I hear such overtones of gratitude as went into the utterance of this compound noun.

b. I rarely *heard* such overtones of gratitude as went into the utterance of this compound noun.

(62) a. No sooner *was* the door closed than the car leaped forward violently, and afterward went racing wildly along the street, narrowly missing collision with innumerable things.

b. The door *was* not closed sooner than the car leaped forward violently, and afterward went racing wildly along the street, narrowly missing collision with innumerable things.

(63) a. Expected to draw considerable interest *are* the quilts made by women of the East Bend church.

b. The quilts made by women of the East Bend church *are* expected to draw considerable interest.

(Green 1980: 596-597)

The emphaticness of these verb-second structures does not seem to reside in any disruption of expectation, except in the trivial sense of exhibiting a statistically unusual word order. Such structures, after all, are more typical of descriptive or argumentative prose than of that which narrates events, so the fact that they do not seem to signal disruptions of expected discourse structure should not be unexpected. It may be that structures like the ones presented above are perceived as emphatic precisely and exclusively because the major constituents are not in the normal, expected, canonical order. When the reader observes that the major constituents in the sentence are out of order, he/she is led to wonder why. Since the pre-posed phrase does not have a connective function, the conclusion seems inevitable that the writer must simply have wanted to call attention to the content of the sentence by calling attention to the sentence itself. This phenomenon of a marked word order necessarily bearing implicature is quite widespread across constructions and across languages (cf. Davison 1978).

5.5.1.5. Direct Quotes

As Green (1980: 590) point out, the embedding possibilities of direct quotations as objects, which is an almost entirely literary set of constructions, provide a fertile ground for investigation of the function of word order, since at least three different orders are available, as displayed in the following example:

(64) a. John *said*, 'The newspaper is late again.'
b. 'The newspaper is late again,' John *said*.
c. 'The newspaper is late again,' *said* John.

(Green 1980: 590)

The sentence in the example (64a) displays the basic word order in English, following the pattern of S-V-O[quot.]; the sentence in the example (64b) demonstrates the marked word order after the pattern of O[quot.]-S-V; finally, the sentence in the example (64c) exhibits the inverted word order with the finite verb in the second position, following the pattern O[quot.] -V-S.

In addition, it is quite common in prose text to find structures in which the

quotation object is interrupted by the other two constituents. These constructions, however, seem to behave just like pre-posed quotation forms. For example:

(65) a. 'The newspaper,' John *said*, 'is late again.'

b. 'The newspaper,' *said* John, 'is late again.'

(Green 1980: 590)

Finally, English marginally allows the clause-initial position for the finite verb in the constructions containing direct quotations as objects, but such forms, following the structural pattern of V-S-O[quot.], although rather stylized, are not considered to be particularly literary, even if, strictly speaking, they are not ungrammatical. For example:

(66) a. *Says* John: 'The newspaper is late again.'

(Green 1980: 590)

Following Hermon (1979), whose work on the distribution of forms with direct quotations embedded in objects reveals a variety of functions that can be served by variation in constituent order, Green (1980: 591) suggests that these functions relate to different levels of text structure, so it is not always possible to predict the order of constituents in such sentences. For instance, one effect of Quote-Pre-posing, such as displayed in the sentences in the examples (64b) and (64c), is to put the non-quote part of the sentence out of the way of the reader. This means that having the non-quote parts of the sentence at the end of each sentence in reporting dialog makes the dialog appear much closer to a natural conversation than it would seem if it consisted of a sequence of Speaker-Verb-Quote constructions — not only because the content of the dialog appears first, but also because the rules of supra-segmental phonology make the pre-posed-over subject and verb phonologically inconspicuous, by assigning them low stress and lowered pitch.

Thus, according to Green, when the prosodic factors such as stress and intonation are taken into consideration, then a native speaker tends to favor the sentences in the examples (67a) and (68b), and not the one in the examples (68a) and (68b):

(67) a. ‘This is very in'genious,’ Babar observes.

b. ‘This is very in'genious,’ observes Babar.

(68) a. ‘This is very in'genious,’ Babar ob'serves.

b. ‘This is very in'genious,’ observes 'Babar.

(Green 1980: 591)

Nevertheless, the sentences stressed like the ones in the examples (68a) and (68b) are possible if it is both relevant and unpredictable from the context who the speaker must be. In Green’s opinion:

> “… a case can be made that such phonological rules may be relevant even when their output is sub-vocal.[26] For instance, it may be possible to show that the interpretation of punctuation (e.g. question marks and exclamation marks), and of typographic conventions such as italics, depends on the sub-vocal application of intonation rules.”
>
> (Green 1980: 591)

On the other hand, new characters, change of scene, or other relevant facts may be introduced into a narrative in quotation frames, and in such cases it might seem unnatural to use a pre-posed quote:

(69) a. One day Babar *said* to General Cornelius, Doctor Capoulosse, and Podular, the sculptor: ‘My dear friends, we shall soon be celebrating the anniversary of the founding of Celesteville, the elephants' city...’

b. Cornelius, who is chief over all the elephants when the king is away, anxiously *sighs*, ‘I do hope they don't have any accidents.’

c. In the gardens at Celesteville, the city of the elephants, Babar *says*, ‘Yes, this is certainly a Wully-Wully. He is very gentle and quite lovable.’

(Green 1980: 591)

In fact, it seems obvious that the quotation object does generally not precede the *subject-verb* or *verb-subject* sequence whenever the non-quote part of the sentence includes anything more than the name of the speaker and the fact and/or mode of saying — and the non-quotation part can include various additional information by introducing into the structure different adverbs, coordinate verbs or clauses,

[26] Cf. Wilkenfeld 1978 for a review of work on the relevance of segmental phonology in silent reading, and a report on experiments demonstrating effects of word stress in silent reading. (Green 1980: 591)

mention of the addressee and other similar constituents. It is precisely in such cases that the frame ceases to be inconspicuous, and becomes important enough to the discourse to precede the quotation itself.

According to Green (1980: 592), the phrases providing information apparently incidental to the speech act do sound better in initial position, so mere syntactic complexity, or gross semantic baggage, does not disallow quotes to be pre-posed even in cases when the non-quote part of the sentence is syntactically complex. Clearly, the constructions with the finite verb in the second position are a better-favored option in such cases. For example:

(70) a. ‘I'm going to New Orleans!’ *exclaimed* Tom, his eyes aglow at the thought of this unhoped-for opportunity to spend the rest of the winter in a place that was not only exciting and alive, but far from the bitter cold and chill winds of Fargo.

b. Tom, his eyes aglow at the thought of this unhoped-for opportunity to spend the rest of the winter in a place that was not only exciting and alive, but far from the bitter cold and chill winds of Fargo, *exclaimed*, ‘I'm going to New Orleans!’

The fact that the post-modifier on the subject makes the subject Noun Phrase long in relation to the pre-posed quote, plus the fact that no new characters, settings, or actions are introduced in this long subject Noun Phrase, probably both contribute to the naturalness of the sentence in the example (70a) in comparison to its non-pre-posed, non-inverted, and non-extraposed counterpart (70b).

The fact remains that the choice between quotation patterns with the finite verb in second position, and the patterns without subject-verb inversion often reflects the style of individual authors. Therefore, in some literary texts only one or the other structural pattern can be found, while in other texts they are both employed in various proportions. When the texts are taken into consideration which employ both patterns, though, one point should be noted: if clause-final position of the subject, as displayed by the sentence in the example (64c), really is the position which emphasizes by focusing attention on the new information in the discourse, then it should be expected that the structural pattern of O[quot.]-V-S, with the finite verb in the position of the second constituent, should not be employed in cases where the subject is predictable. For example:

(71) a. ‘Uncle John,’ *shouted* Alexander, ‘that bag looks just like yours.’
‘Yes, it may be my bag,’ Uncle John *said*, ‘but we must be sure.’

b ‘Uncle John,’ *shouted* Alexander, ‘that bag looks just like yours.’
‘Yes, it may be my bag,’ *said* Uncle John, ‘but we must be sure.’

(Green 1980: 592)

In fact, however, such forms seem only marginally less well-formed than their non-inverted counterparts. If clause-final position is reserved for focusing on significant ‘new information’, then the occurrence of O[quot.]-S-V forms should be expected rather than of O[quot.]-V-S, when the verb of saying describes more than the fact of speaking. This is the case with the group of verbs which describes manner of speaking, such as mumbled, retorted, shouted, and the similar. There is a lot of variation in these cases. For example:

(72) a. ‘We could have another fair,’ Arthur *whispered*.
‘We could have another fair,’ *whispered* Arthur.

(73) a. ‘Meow, meow, meow,’ the kittens *protest*.
?‘Meow, meow, meow,’ *protest* the kittens.

(Green 1980: 593)

Taken out of its literary contexts, both sentences in the example (72) seem equally well-formed. The sentence with the finite verb in the second position in the example (73b), on the other hand, is on the verge of grammaticality and its counterpart in the example (73a) is much better-formed.

The reason for this difference, according to Green (1980: 593), is related to the fact that, in the example (73), the quoted sentence’s being a protest is not inferable from its form or ‘meaning’: the reader can’t know that *Meow, meow, meow*, is a protest unless the writer says so. This means that protest in the example (73) is new information which is crucial to understanding the content of the quote. None of this is the case with the sentences in the example (72), where the exact manner of speaking, clarified by the lexical meaning of the finite verb *whispered*, is not at all crucial for understanding the sentence. Indeed, the meaning of the two sentences from the example (72) would be only very slightly modified if some other

verb from the similar group is used. For example:

(74) a. 'We could have another fair,' Arthur *suggested*.

'We could have another fair,' *suggested* Arthur.

(75) a. 'Well,' the little Red Hen *asked*, 'will you help me take this wheat to the mill, Pig?'

b. ?'Well,' *asked* the Little Red Hen, 'will you help me take this wheat to the mill, Pig?'

(Green 1980: 593)

In the example (74), the fact that the quoted sentence is intended as a suggestion is inferable; hence the verb *suggest* is redundant, and out of place in the new information slot. The sentences in the example (75) illustrate this point even better: since *well* is not a question, it seems odd to have asked in the more presupposed medial, position, rather than in the equally available *new information* position illustrated by the sentence in the example (75a).

According to Green (1980: 593), this fact has important implications for the grammatical description of such constructions. If they are to be accounted for by any kind of *Niching rule* (cf. Ross 1973) in such a way that sentences like (75b) are considered ungrammatical, this rule would need to have the power to compute not only the syntactic structure of the direct quotation, but also the content of the part to precede the Niched quotation frame. The reason for this is that this rule must be able to determine whether the quoted linguistic forms preceding the quotation frame accurately and transparently represent what the inverted quotation frame says happened, i.e. whether the part preceding is what the speaker said, asked, shouted, etc. Green therefore proposes that the sentences like the one in the example (75b) should not be considered ungrammatical, but merely 'unpragmatic', i.e. "relatively ineffective in conveying what the speaker intends-or, in the plainest English, dumb," (Green 1980: 594). She concludes that when inversion with manner-of-speaking verbs results in Q-V-S sentences in which the verb is in the position of the second constituent, following the structural pattern of O[quot.]-V-S, it is acceptable and appropriate that the subject takes the clause-final position, as long as the extra content in the verb is not particularly crucial to the development of the narrative.

5.5. 2. Frontable Constituents and Verb-Second

Stockwell (1984) proposes that syntactic structures of English in which the finite verb appears in the position of the second constituent should be interpreted as resulting from two interacting rules — fronting rule and verb-second rule. To put it in his own words:

> The formalism for stating the rule is of no great concern, in this context, but it deserves a word or two. Under the Chomskyan analysis in which *do* is supplied as a dummy carrier for tense, it is possible to state the verb-second rule as requiring Tense to move alone just in case it is followed by a main verb, but to carry forward the first Auxiliary with it otherwise. But it is neater to conceive of the *do*-forms as being present to serve as the moveable tense-marked constituent. The rule then has this simple form: 'Move into second position the tense marked constituent'. Without *do* in the base, the rule has a slightly more complex form: 'Into second position move Tense when followed by Main Verb, or move Tense+ X where X is a single constituent not including Main Verb'. But of course the simpler formulation of the verb-second rule requires another rule or surface filter to delete *do* whenever at the end of a derivation the sequence *do* + MV turns up without stress (i.e. focus) on *do*. Nothing but the simplicity of rule formulation hinges on the choice between these alternatives.
>
> (Stockwell 1984: 578)

According to Stockwell, verb-second is obligatory with some frontings[27] and optional with others. In addition, some frontings disallow verb-second altogether. The verb-second rule itself is not triggered by a unified class of fronted constituents, so he makes a distinction between these constituents in regard to whether they are predicative or non-predicative. Also, he allows the possibility that fronting itself is not a single rule, or a single class of constructions. Based on these facts, he distinguishes four classes of frontable constituents in relation to the verb-second rule in Modern English. These are:

(i) Frontable constituents of a predicative content that trigger verb-second obligatorily;

(ii) Frontable constituents of a non-predicative content that trigger verb-second obligatorily;

[27] It should be noted that Stockwell (1984) uses the term fronting for the same syntactic process referred to as pre-posing of a constituent by Green (1980).

(iii) Frontable constituents that trigger verb-second optionally;

(iv) Frontable constituents that disallow verb-second.

Based on Stockwell's distinction of the four classes of constituents in a clause-initial position in relation to the verb-second rule, a survey can be made of all the types of verb-second constructions that exist in Modern English.

5.5.2.1. Class I of Frontable Constituents

The first class of frontable constituents, the constituents of a predicative content that trigger verb-second obligatorily, is typically found in clauses which contain the verb *be*, either as an auxiliary, in which case it is followed by a participle, or as a main verb, in which case it is followed by a subject complement. The sub-categorization of the constituents of this class can therefore be done on the basis of syntactic constructions which appear within them. Granted, various syntactic elements can appear in these functions, but only adjective phrases, participial clauses, and prepositional phrases obligatory trigger the verb-second effect when they are topicalized. For example:

1) Present participle + Complements/Modifiers

(76) a. **Standing for the Tories** *is* Jane Fellows.
b. ***Standing for the Tories** Jane Fellows *is*.
c. Jane Fellows *is* **standing for the Tories**.

(77) a. **Presenting the award** *was* Helen Mirren.
b. ***Presenting the award** Helen Mirren *was*.
c. Helen Mirren *was* **presenting the award**.

2) Past Participle + Complements/Modifiers

(78) a. **Painted into the scene** *is* the artist himself.
b. ***Painted into the scene** the artist himself *is*.
c. The artist himself *is* **painted into the scene**.

(79) a. **Nestled in the valley** *was* a tiny village.

b. *__Nestled in the valley__ *was* a tiny village.

c. A tiny village *was* **nestled in the valley**.

3) Adjective Phrases

(80) a. **Bleak** *are* the President's reelection chances.

b. *__Bleak__ the President's reelection chances *are*.

c. The President's reelection chances *are* **bleak**.

(81) a. **More intriguing** *were* the photographs that were revealed last week.

b. *__More intriguing__ the photographs that were revealed last week *were*.

c. The photographs that were revealed last week *were* **more intriguing**.

4) predicative Prepositional Phrases

(82) a. **Under consideration** *is* a controversial bill that would legalize marijuana.

b. *__Under consideration__ a controversial bill that would legalize marijuana *is*.

c. A controversial bill that would legalize marijuana *is* **under consideration**.

(83) a. **At stake** *is* the future of the Nation and the Party.

b. *__At stake__ the future of the Nation and the Party *is*.

d. The future of the Nation and the Party *is* **at stake**.

The ungramaticallity of the sentences in the examples (76b), (77b), (78b), (79b), (80b), (81b), (82b), and (83b) is the proof that the verb-second word order is obligatory triggered when the constituents of this class are topicalized.

5.5.2.2. Class II of Frontable Constituents

The constituents belonging to the second class do not appear as a part of the predicate in clause structure. This class therefore comprises mostly of various

adverbials which obligatorily trigger the verb-second effect when topicalized. This class of constituent also includes *wh*-words, but their categorization presents certain problems. Most of them are interrogative adverbs (e.g. *when* for time, *why* for cause, *where* for place, and so on), and, as such, they can be viewed like other adverbials that trigger verb-second effect in cases of topicalization. The nominal *wh*-words, on the other hand, are not the part of the predicate in the first place and they fill argument places like any Noun Phrase. This subclass of topicalized constituents, therefore, remains the most problematic one for categorization. Here are the examples:

1. WH-constituents

(84) a. Where *do* we go now?
b. *Where *go* we now?
c. We *go* home now.

(85) a. When *are* you getting up every day?
b. *When you *are* getting up every day?
c. You *are* getting up at noon every day.

(86) a. Who is the winner?
b. *Who the winner *is*?
c. He *is* the winner.

(87) a. What *can* Jane do?
b. *What Jane *can* do?
c. Jane *can* dance all night.

2. Negative Adverbials

(88) a. **Never in all her days** *was* Jane so humiliated.
b. ***Never in all her days** *was* Jane so humiliated.
c. Jane *was* **never** so humiliated **in all her days**.

(89) a. **Nowhere to be found** *was* Jane's favorite necklace.

b. ***Nowhere to be found** Jane's favorite necklace *was*.

c. Jane's favorite necklace *was* **nowhere to be found**.

3. Affective Adverbials

(90) a. **Only for Jane** *would* Tom lie to his mother.

b. ***Only for Jane** Tom *would* lie to his mother.

c. Tom *would* lie to his mother **only for Jane**.

(91) a. **Only in America** *could* Jane get away with such an attitude.

b. ***Only in America** Jane *could* get away with such an attitude.

c. Jane *could* get away with such an attitude **only in America**.

4. Some Comparative markers

(92) a. **So horribly** *does* Jane cook that dogs refuse to eat it.

b. ***So horribly** *cooks* Jane that dogs refuse to eat it.

c. ***So horribly** Jane *cooks* that dogs refuse to eat it.

d. Jane *cooks* **so horribly** that dogs refuse to eat it.

(93) a. **No sooner** *had* the thought come to Jane’s mind than she was blurting it out.

b. ***No sooner** the thought *had* come to Jane’s mind than she was blurting it out.

c. The thought *had* **not** come to Jane’s mind **sooner** than she was blurting it out.

The ungramaticallity of the sentences in the examples (84b), (85b), (86b), (87b), (88b), (89b), (90b), (91b), (92b), (92c), and (93b) serves as the proof that the verb-second word order is obligatory triggered when the constituents of this class are topicalized.

5.5.2.3. Class III of Frontable Constituents

Belonging to this class are two types of constituents: a) various adverbials which differ from the adverbials belonging to class II only in that, when they are topicalized, they trigger the verb-second effect only optionally and not obligatory, and b) specific type of objects — those embedding various direct quotations — which optionally trigger the verb-second effect in sentences with topicalization. For example:

1. Adverbials of Direction

(94) a. **Up the tree** *scooted* the frightened cat.
b. **Up the tree** the frightened cat *scooted*.
c. The frightened cat *scooted* **up the tree**.

(95) a. **Through the night** *echoed* the gentle melody of her song.
b. **Through the night** the gentle melody of her song *echoed*.
c. The gentle melody of her song *echoed* **through the night**.

2. Adverbials of Place

(96) a. **Under the porch** *slept* the dog.
b. **Under the porch** the dog *slept*.
c. The dog *slept* **under the porch**.

(97) a. **In the village** *stood* a magnificent church.
b. **In the village** a magnificent church *stood*.
c. A magnificent church *stood* **in the village**.

3. Adverbials of Time

(98) a. **After the war** *emerged* a new spirit of industry in America.
b. **After the war** a new spirit of industry *emerged* in America.
c. A new spirit of industry *emerged* in America **after the war**.

(99) a. **On that day** *was* born a king.

b. **On that day** a king *was* born.

c. A king *was* born **on that day**.

4. Manner Adverbials of Manner

(100) a. **Rather shyly** *did* she break the news of her engagement to Charley.

b. ***Rather shyly** *broke* she the news of her engagement to Charley.

c. **Rather shyly** she broke the news of her engagement to Charley.

d. She *broke* the news of her engagement to Charley **rather shyly**.

(101) a. **Carefully** *had* she studied the tract before speaking in front of the school.

b. **Carefully,** she *had* studied the tract before speaking in front of the school.

c. She *had* studied the tract **carefully** before speaking in front of the school.

5. Sequential Adverbs

(102) a. **Initially** *spoke* the governor to a crowd of three thousand people.

b. **Initially** the governor *spoke* to a crowd of three thousand people.

c. The governor *spoke* **initially** to a crowd of three thousand people.

(103) a. **Next** *arrived* my elderly aunt.

b. **Next** my elderly aunt *arrived*.

c. My elderly aunt *arrived* **next**.

6. Direct Quotations

(104) a. '**Tomorrow will be fine**,' *said* Pamela.

b. '**Tomorrow will be fine**,' Pamela *said*.

c. Pamela *said* **that tomorrow would be fine**,'.

(105) a. ‘**Charles is stupid**,’ *thought* Jane.

b. ‘**Charles is stupid**,’ Jane *thought*.

c. Jane *thought* **that Charles is stupid**.

The fact that the sentences in the examples (94b), (95b), (96b), (97b), (98b), (99b), (100c), (101b), (102b), (103b), (104b) and (105b) are all considered grammatical proves that the constituents of this class trigger the verb-second word order only optionally when they are moved to the clause-initial position.

5.5.2.4. Class IV of Frontable Constituents

Belonging to this class are two types of constituents: a) topicalized Noun Phrases with or without copy in their original position, and b) bare infinitives. They all apply to relation bearing constituents of the main verb – subject, direct object, indirect object, infinitival complement. For example:

1. NP-fronting without copy in situ

(106) a. **Excuses** I’*ve* had enough of. Give me some results.

b. *__Excuses__ *have* I had enough of.

c. I’*ve* had enough **excuses**.

(107) a. **Strawberries** I *am* allergic to.

b. ***Strawberries** *am* I allergic to.

c. I *am* allergic to **strawberries**.

2. NP-fronting with copy in situ

(108) a. **A bird that noisy**, I'*d* never have **it** in my home.

b. ***A bird that noisy**, *would* I never have **it** in my home.

c. I'*d* never have **a bird that noisy** in my home.

(109) a. **A story as enchanting as she told**, she *ought* to have written **it**.

b. *__A story as enchanting as she told__, *ought* she to have written **it**.

c. She *ought* to have written **a story as enchanting as she told**.

3. Bare Infinitives

(110) a. **Sing in public** I'*d* better not.

b. *__Sing in public__ *should* I better not.

c. I'*d* better not **sing in public**.

(111) a. **Drink champagne** I'*d* rather not.

b. *__Drink champagne__ *would* I rather not.

c. I'*d* rather not **drink champagne**.

The fact that the sentences in the examples (106b), (107b), (108b), (109b), (110b), and (111b) are considered ungrammatical is a solid proof that the constituents belonging to this class block the verb-second effect when they are moved to clause-initial position.

5.5.2.5. Other Cases of the Verb in the Second Position

There are certain structures, such as some expletive or comparative structures, in which the second position for the finite verb is not triggered by fronting. For example:

1. *There*-insertion

(112) a. **There**'*s* a candle in the window.

b. *__There__ a candle *is* in the window.

c. A candle *is* in the window.

d. A candle *is* **there**.

2. *It*-insertion

(113) a. **It**’*s* perfectly clear that Jane is right.

b. That Jane is right *is* perfectly clear.

c. Jane *is* right. **It** *is* perfectly clear.

d. ***It** that Jane is right *is* perfectly clear.

3. Comparative Pro-Verb

(114) a. Jane makes more than *do* three of her classmates from school.

b. Jane makes more than three of her classmates from school *do*.

In these complex sentences the second position of the finite verb is consequential due to the process of merging of two simple sentences into one. Unlike the simple sentences with referential *it* or adverbial *there*, whose topicalization does trigger verb-second, e.g. *There is a candle* versus *A candle is there*, the position of the finite verbs in complex sentences containing expletive *it* and *there* is not necessarily the result of verb movement to the COMP-position, so these are not the cases of the proper verb-second effect.

5.6. Conclusion

What can be concluded, based on this survey presented above of the examples of living verb-second structures in Modern English is that they are surprisingly diverse and heterogeneous for a rather marginal syntactic pattern. It appears that verb-second structures are obligatory mostly in syntactic contexts in which an element of the predicate is fronted, so it moves to the clause-initial position, whereas constituents outside of the predicate, such as various adverbials, trigger the verb-second effect only optionally. When the finite verb does occur in the position of the second constituent in these syntactic contexts, it seems to reflect all the relevant verb-second characteristics that result from verb movement to the COMP-position, namely verb-second word order is restricted to the main clauses, and it is incompatible with the presence of any complementizer. In this respect, the

situation in English corresponds to the situation in Germanic asymmetric verb-second languages.

Predicative Noun Phrases in English, on the other hand, apparently block verb-second effect when they move to the clause-initial position, which is polar opposite to the situation in other West Germanic languages, such as Dutch or German, where topicalization of both direct and indirect objects obligatorily triggers the verb-second effect. The only objects that are capable of triggering verb movement to the second position in English are the ones comprised of direct quotes, and even they do it only optionally. This is an important syntactic difference between English and its Germanic relatives.

In Modern English, lexical verbs simply do not possess the ability to move to the COMP-position, so no inflected lexical verb ever appears in the obligatory second position. In situations when the movement to COMP is required by grammar, *do*-support must be used, as it can be seen from the sentences in the examples (100a) and (100b). Thus the ability to move to the COMP-position in English remains the prerogative of the auxiliaries *be* and *have*, and the variety of modal verbs, just as the diverse examples given in this section confirm.

As for the nature of the verb-second phenomenon that is found in Modern English, it seems apparent that its diversity can only be the result of an earlier development, as this seems to point out at an earlier stage in the language in which verb-second structures played a much more significant role in the grammar of English. The answer to this question should, therefore be sought in the historical dimension, rather than in the synchronic one.

CHAPTER 6

VERB-SECOND IN THE HISTORY OF ENGLISH

6.1. Introduction

In comparison to languages like, say, Greek, first recorded around 1200 BC, or Iranian, whose oldest written records appear in the sixth century BC, English is not a particularly old language. Following the Venerable Bede, who marked the year 449 as the year in which began the Anglo-Saxon invasion of the part of Celtic Britain which was to become England, the English language came to existence, conventionally speaking, in the year 450. Therefore, the history of English spans across only some fifteen centuries — half as much as the history of Greek. These fifteen centuries of continuous evolution are conventionally divided in literature into three periods: the Old English period (450-1150), sometimes called the period of full inflection, the Middle English period (1150-1500), labeled as the period of reduced inflection, and the Modern English period, (from 1500 on), usually described as the period of lost inflection. Sweet (1924: 12) proposes a somewhat more detailed division into following stages:

(450 – 700)	pre-historic Old English, before the first records
(700 – 900)	early Old English or the language of Alfred
(900 – 1100)	late Old English or the language of Ælfric
(1100 – 1200)	transitional Old English or the language of Layamon
(1200 – 1300)	early Middle English or the language of *Ancrene Riwle*

(1300 – 1400)	late Middle English or the language of Chaucer
(1400 – 1500)	transitional Middle English or the language of Caxton
(1500 – 1650)	early Modern English or the language of Shakespeare
(1650 -)	late Modern English or contemporary English

This division, however, is artificial just like any other, done primarily for the sake of linguistic research, since there were no clear boundaries between any of these periods in real life. In other words, English was one and the same language in all this time, so one cannot speak of three or more different languages, such as Old English, Middle English, and Modern English, but only of three (or more) major periods in the development of the one and only English.

That having been said, the fact remains that a modern native speaker of English cannot read or understand his own language in the form it had more than a thousand years ago unless he had a special training for it. Here is the opening sentence of 'Beowulf', composed around the eight century, which can finely illustrate this point:

(1) Hwæt, We gar-Dena in geardagum þeodcyninga þrym *gefrunon*, hu ða æþelingas ellen *fremedon*![28]

lo, we spear-armed Danes[Gen. Pl] in days of yore people-kings(Gen. Pl] prowess praise[Acc. Sg] *heard*[Pret. Pl], how those princes[Nm. Pl] heroic-deeds[Acc. Pl] performed[Pret. Pl]!

Lo, We have heard praise of the prowess of the people's kings of spear-armed Danes in the old days, and what heroic deeds these princes did!

Clearly, the decline and the loss of inflective endings is the structural change that has traditionally been perceived as the most notable diachronic feature of the development of English, in accordance to the preferences of traditional linguistics, which put the focus of research on morphology. But even a superficial glance at the sentence in the example (1) shows that, apart from the evident morpho-phonological and lexical differences in respect to the Modern Language, there are also some striking differences between Old and Modern English. This difference was traditionally interpreted simply as a side-effect of the loss of inflection. Indeed, when Modern English is compared to Middle English of, say, the

[28] Taken from Klaeber. Fr. (ed.). (1936). Beowulf and the Fight at Finnsburg. New York, Heath & Co.

fifteenth century, the period when the reduction of inflection to its modern-day level was almost complete, it can be observed that the syntactic patterns in the language are very similar to those of Modern English. Here is an opening line from Mallory's *Le Morthe Darthur*, written in between 1450 and 1470, and first published in 1485 by William Caxton:

(2) Hit befel in the dayes of Vther pendragon when he was kynge of all Englond and so regned that there was a myȝty duke in Cornewaill that helde warre ageynst hym long tyme.[29]

It befell in the days of Uther Pendragon when he was king of all England, and so reigned, that there was a mighty duke in Cornwall that held war against him [for a] long time.

Regardless of the differences in spelling and pronunciation, the difference in syntax between the two versions, the Middle English original, and the Modern English 'translation' is almost non-existing. There were, of course, certain syntactic differences in the language of these two periods, but they are not in the same level with the difference that exists between Old and Modern English. So even a superficial inspection of the syntactic data in the history of English clearly shows that some significant syntactic changes as well marked the development of the language, not just morphological reduction, and that these syntactic changes apparently took place in between the Old English and the Modern English period, i.e. at a certain time during the Middle English period.

One of these syntactic changes is connected to the verb-second word order, which still exists in Modern English, but only in some restricted syntactic contexts, and which is often referred to as 'residual', implying that it represents a vestige of some former, more productive syntactic pattern. The verb-second word order in the history of English and all the syntactic characteristics relevant to this phenomenon shall, therefore, be examined in this chapter in order to throw some additional light on the true nature of the verb-second phenomenon in the Modern language.

[29] Taken from *Le Morte Darthur* by Sir Thomas Malory, Caxton, William, ca. 1422-1491, ed.; Sommer, H. Oskar (Heinrich Oskar), b. 1861, ed. London, David Nutt, 1889.

6.2. Verb-Second in Old English.

The exact status of Old English in regard to the verb-second phenomenon has been a matter of intense debate for some time now. The consensus has not yet been reached whether Old English was a proper verb-second language like the other Germanic languages, or whether the second position for the inflected verb, where it did appear, was just a narrative tendency (cf. Bean 1983) and not an obligatory grammatical rule.

Before this crucial issue is examined in greater detail, however, some other relevant questions shall be addressed, namely the problem of the dialectal structure of Old English, the correlation between Old English syntax and morphology, and the basic word order in Old English.

6.2.1. Old English Dialects

The exact dialectal situation in the Old English period will never be particularly clear, due to the evident scarcity of the documents that have been preserved from the age. Practically all Old English documents that survived the Middle Ages were carefully collected and printed during the nineteenth century, and they served as the basis for all further research and conclusions in regard to various aspect of Old English linguistic features, including the dialectal distribution.

Skeat (1911), who was among the first researchers of English dialects, summarizes the traditional view of the Old English dialectal situation as follows:

> …we already find the existence of no less than four dialects, which have been called by the names of Northumbrian, Mercian, Wessex (or Anglo-Saxon), and Kentish. These correspond, respectively, though not quite exactly, to what we may roughly call Northern, Midland, Southern, and Kentish. Whether the limits of these dialects were always the same from the earliest times, we cannot tell; probably not, when the unsettled state of the country is considered, in the days when repeated invasions of the Danes and Norsemen necessitated constant efforts to repel them. It is therefore sufficient to define the areas covered by these dialects in quite a rough way. We may regard the Northumbrian or Northern as the dialect or group of dialects spoken to the north of the river Humber, as the name implies; the Wessex or Southern, as the dialect or group of dialects spoken to the south of the river Thames; the Kentish as being peculiar to Kent; and the Mercian

> as in use in the Midland districts, chiefly to the south of the Humber and to the north of the Thames.
>
> (Skeat 1911: 10-11)

The traditional view is based on the assumption that the Old English dialects reflect old tribal divisions of Germanic people who invaded England after the middle of the fifth century. Thus, Kentish was the dialect of the Jutes, West Saxon, the dialect of Wessex, was the dialect of the Saxons, and Mercian and Northumbrian were the dialects of the Angles, by far the most numerous among the invaders. On the other hand, the majority of the preserved Old English texts were written in only one dialect – West Saxon – and whenever a phonetic, morphological or syntactic feature of 'Old English' is discussed, it goes without saying that it refers to a West Saxon feature, unless otherwise specified.

On top of this, the meticulous analyses of preserved Old English texts show that the dialectal situation was nowhere near as simple as the traditional division in four dialects presumed. Thus Brook (1963: 44) points out that it is virtually impossible to find any single linguistic feature which would be specific for only one of these four dialects. In fact, the main linguistic difference between them is not reflected in the presence or the absence of any particular linguistic feature, but in their different frequency. Although both Mercian and Northumbrian are conventionally labeled *Anglian*, only Northumbrian shows enough coherence and constancy to be truly considered an Anglian dialect. Mercian, which has high relevance as the direct ancestor of Modern Standard English, shows such phonological and grammatical diversity, that the only way to determine that a preserved text is Mercian is typically to exclude that it is written in either Northumbrian or West Saxon dialect. On top of everything else, the distribution of these varieties seems so complicated and inconsistent, that even the careful study of the preserved texts does not enable a researcher to create a clear picture of the dialectal structure of Old English and the geographical distribution of these dialects. The later infusion of Old Norse via the Danish invasions and settlement further complicated the dialectal situation and obscured already imprecise dialectal evidence. Brook, therefore, suggests that it is much safer to speak of a dialect of a particular text, than of a clearly defined geographical dialect.

Kentish, on the other hand, shows such differences in regard to all other

dialects, that it is sometimes not clear if it is a dialect of Old English or a different language. Kent was invaded and conquered first, by a tribe that was neither Angles nor Saxons but Jutes – a Germanic nation of rather uncertain origin. In fact, they are only known because Bede mentions them, but there are no other records of their origin, so they and their language still present a sort of enigma. Prokosch (1939: 29) attempts to establish an etymological connection between the Jutes, called *Ytan* in Old English, with Goths, an East Germanic people; he finds this name in the toponyms such as *Gotland*, an island in the Baltic sea, then *Götland*, a province in southern Sweden, and *Jutland*, an area in Denmark. In his opinion, the Jutes mentioned by Bede are just an orthographic variety of Proto-Germanic ethnic names **gutōz*, *gutanaz, in which the root **gut-* is just an ablaut form of Proto-Germanic root **geut-*, **gaut-*, which is attested in Old Norse *Gautar*, or Old English *Gēatas* – the people whose king was Beowulf from the poem. If Prokosch is right, then Kentish, indeed, was originally something very different from English. However, the scarcity of written records in this dialect may leave this problem open for indefinite time.

The uncertain dialectal distribution, along with the absence of clear phonological or grammatical distinction between the dialects, gave rise to a suspicion that the traditional view of the origin of Old English dialects was basically wrong. Thus Strang (1986) argues that none of the Old English dialects existed prior to the invasion, so they cannot possibly reflect the tribal division of the invaders. Despite the traditional view according to which only the members of three Germanic nations took part in the invasion – an assumption based solely on Bede and his *Historia Ecclesiastica Gentis Anglorum* – it seems apparent that not only Angles, Saxons and Jutes came in the second half of the fifth century, but also a considerable number of Frisians, Norwegians, Franks, and possibly other Germanic people, all bringing their own distinct dialects to the Island. Therefore, there never existed a single, unified Proto-English which then stratified into attested dialects; on the contrary, the various Germanic languages brought to Britain during the invasion merged during the first two centuries after it, producing the complex and inconsistent dialectal picture reflected in the preserved documents.

This hypothesis seems especially relevant for explaining the origin of West Saxon, a dialect that never existed outside of Britain. According to Strang (1986:

398), the secret of its origin is hidden in the very name of this dialect, which was rather puzzling for the researchers from the nineteenth century on, because it is not in any way related to Old Saxon, the language of the continental Saxons. She presents the possible etymological analysis of this name according to which it is derived from Old English noun *seax*, which designated a specific sort of weapon, shaped like a long knife. These knives were the weapon of choice of specific groups of warriors who joined together in order to undertake certain military operations. Such groups existed all over the Germanic lands, and it is highly probable that one such alliance was formed with the goal of conquering Britain. Although the majority of these warriors were ethnic Angles, since the linguistic basis of West Saxon is clearly Anglian, this alliance also comprised of members of numerous other ethnicities, and they all spoke their distinct dialects which later merged in Britain. After all, the West Saxons themselves never used any other name for their language but *anglisc*, even if they regularly called themselves *Saxons*. This means that the majority of West Saxons were ethnic *Angles*, and they were *Saxons* only by profession, so to speak. However, unlike the Angle migration to the northern part of England, which started several decades after the invasion began, at the very beginning of the sixth century, and which resulted in complete relocation of the entire Anglian nation across the North Sea, the Saxon invasion was relatively ethnically mixed, which reflected in the language of these people. Moreover, it seems probable that such massive migrations of families with cattle and all other possessions, which left their native Angeln completely deserted for the next eighty years, until the Danes settled there, was only undertaken after the military conquest of the formerly Celtic land had been more or less complete.

Kortland (1986), on the other hand, argues that it is wrong to formulate the problem of Old English dialects as the question of whether they first diverge in Britain or on the Continent. In his opinion, neither view is correct, since the early divergences between West Saxon and Kentish on the one hand and Anglian on the other are the result of a chronological difference between two waves of migration from the same dialectal area in northern Germany. Based mostly on various phonological evidence from all four dialects, as compared to the same features in Old Norse, Gothic and Old High German, he claims that West Saxon dialect is a variety Ingvaeonic, i.e. a variety of a postulated grouping of the West Germanic

languages that comprises Old Frisian, Old English and Old Saxon, also known as North Sea Germanic[30]. According to Kortland, West Saxon generalized Anglo-Frisian fronting and palatalization and developed early breaking. In a similar vein, Mercian second fronting is regarded as a generalization of West Saxon fronting after umlaut, under the influence of the Anglian raising of *æ* to *e*; and the same holds for Kentish raising of *æ* to *e* after umlaut.

Kortland suggests that it is necessary to make clear distinction between an earlier, Saxon, and a later, Anglian migration. Following Nielsen (1981: 265), he states that, according to the second century record by Ptolemy, the Saxons lived in present-day Holstein and appear to have been in control of the whole region between the Elbe and the Weser from the middle of the third century. They reached the Netherlands in the fourth century. The Angles, on the other hand, can hardly be separated from the present-day district of Angeln in eastern Schleswig. According to Kortland, the term *Anglian* refers to the original Saxons of Angeln, more or less in the same way as the French word *allemand* refers to the original Germans of Alemannia. Bede does not always observe the distinction between Angles and Saxons, and the eventual preference for the term *Anglian* is, in Kortland's opinion, probably due to its distinctiveness from the Continental Saxons.

Jackson (1953) presents certain historical data which can somewhat support Kortland's hypothesis. The fact remains that the traditional designation for the Germanic invaders in Celtic sources was always *Saxons*. This name was evidently established at the first stage of the invasion, which can be identified with the period from the time of Vortigern (around 450) until the battle of Mount Badon (about 500, cf. Jackson 1953: 199). There followed almost half a century of peace, the Saxons having settled in Kent and Sussex. The territory of Essex and Middlesex was largely uninhabited at that time. In the north, "the great gateway by which the Angles penetrated into the north Midlands and Yorkshire was the estuary of the Humber" (Jackson 1953: 207). Though in the Yorkshire Wolds and at York itself "archaeological finds seem to indicate a more or less unbroken continuity of occupation between the late Roman and pagan Saxon periods" (Jackson 1953: 212),

[30] Ingvaeonic is not thought of as a monolithic proto-language, but rather as a group of closely related dialects that underwent several areal changes in relative unison. It was first proposed by German linguist and philologist Friedrich Maurer (*Nordgermanen und Alemanen*, 1942), as opposed to *Istvaeonic*, which includes Dutch, Afrikaans, and Flemish, and *Irminonic*, which includes the High German languages.

there is no historical evidence for a kingdom of Deira before the second half of the sixth Century. During the latter period Deira must have gained considerable strength in view of the spectacular expansion after the battle of Catterick about the year 600 which is described in the Gododdin.

If all of the above facts are right, them perhaps Kortland does have a point when he suggests that the Saxon invasion yielded the conquest of Kent and Sussex in the fifth century, whereas the Anglian invasion can be connected with the subjugation of the north which started around the middle of the sixth century. There is no linguistic evidence for a different continental homeland, especially because the shared innovations of Anglian and Old Saxon point to geographical contiguity after the early migrations.

One way or the other, March (1866: 16) was probably on the right path even in the second half of the nineteenth century when he claimed that a very heterogeneous group of various West Germanic speeches achieved a necessary level of linguistic unity by preserving the common features, while discarding the distinctive features. And the elements that are different in various dialects are inflective endings, whereas the roots are typically the same. If this was the case in the first centuries after the invasion, than this could explain the considerable reduction of Old English inflection, in comparison to other related languages, which is notable even in the oldest preserved records.

Even more importantly for the topic of this dissertation, the specific circumstances which led to the appearance of Old English might also account for the relatively irregular syntax of this language, so inexplicably different from syntactic systems of other Germanic languages.

6.2.2. Correlation between Old English Morphology and Syntax

Although the Old English system of inflection was considerably richer than the inflection system of the modern language, it is not quite certain whether this richer system was actually fully functional, i.e. whether it was crucially needed to distinguish grammatical relations or not. This is especially notable with nominal inflection, which, in turn, correlates with the basic word order: the majority of noun declensions exhibit syncretism for nominative and accusative in both singular and

plural, so, although the pronouns still distinguished them, the subject and the direct and indirect object realized by nouns were indistinguishable in form. Thus, in the majority of sentences in which these constituents were noun phrases, the only way to distinguish the subject from the object was by their position in the clause structure. It is therefore difficult to determine the exact level of grammatical significance that inflection still had in Old English.

As far as Old English verbs were concerned, they had distinctive forms for two numbers, singular and plural, for three persons, but only in singular, two tenses, present and preterit, and three moods, indicative, subjunctive and imperative. Syncretism, to a certain extent, appears in the verbal paradigm as well, since the ending *-aþ* could be used to mark both present indicative in plural, and the second person plural imperative, while the ending *-ede* designated both preterit indicative, but also past subjunctive singular, without person distinction. In spite of that, enough distinctive endings existed to ensure that the verbal inflectional system of Old English remained fully functional. Comparatively rich verbal inflection may reflect on the syntax of the language in various ways, but there are several syntactic phenomena that are typically associated with a rich verbal paradigm, especially in respect to person/number agreement. Two of these syntactic phenomena are relevant for the verb-second word order in Old English: subject omission and verb fronting.

6.2.2.1. Subject Omission in Old English

There are various forms of subject omission, and one of the most notable is the phenomenon of *pro-drop*, also known as *null-subject*. In so-called 'pro-drop' languages, such as Italian, the syntax allows phonetically null pronominal subjects in finite clauses. It is generally assumed that, in such cases, the subject is the element *pro*, i.e. a pronoun without phonetic properties, and that this element is licensed by the verbal inflection (INFL). For example:

(3) a. Giorgio *conosce* bene Raffaella.
Giorgio *knows* well Raffaella
Giorgio knows Raffaella well.

b. [pro] *Conosce* bene Raffaella.

[pro] *knows* well Raffaella

He knows Raffaella well.

Since *pro* must always be licensed, a pro subject is licensed by morphological agreement features in regard to person and number. The omission of the subject of this type can, therefore, exist only in languages with rich person/number agreement.

Modern English is not one such language any more, as can be seen from the translation of the sentence in the example (3b). But Old English finite verbs did carry information about person and number, at least in singular, so a question can be raised whether Old English was also a pro-drop language. Even a casual research of any Old English text will readily reveal numerous cases of finite clauses with omitted subjects. For example:

(4) And þy ilcan geare *cuom* micel here on Angelcynnes lond, and wintersetl *namon* on East Englum, and þær gehorsude wurdon.

/and this same year *came* great host to Angle-kinn's land/ /and winter-quarters *took* in East Anglia/ /and there provided-with-horses *became*/

And in this same year a great host came to the land of the Anglian people, and [they] took winter-quarters in East Anglia, and they *were* there provided with horses.

(The Parker Chronicle, from Smith 1966: 24)

The example (4) presents the form of subject omission which was by far the most frequent in Old English – the so-called *conjoined subject deletion*, regularly found in long coordinative sentences typical of Old English texts. Here, the first clause has the full nominal subject, and the following independent clauses contain null subjects instead of the unaccented pronominal one, which is, albeit to a lesser extent, also possible in Modern English.

Subject omission of this type is often interpreted as a case of pro-drop, but, according to Fischer et al. (2000: 39), it has nothing to do with verbal morphology, since the identification of the subject is established under co-reference with the higher subject, such as *micel here* in the example (4). The factors of primary importance for these structures are neither morphological nor syntactic but

discourse factors, although there is also a clear syntactic restriction in that co-reference is always with the subject of the higher clause.

On the other hand, Old English had a form of subject omission typical for other Germanic languages, known as expletive pro-drop. In other words, Old English exhibits a variety of impersonal contexts characterized by the absence of the nominal subject, without simultaneous insertion of a formal subject *it*, which is obligatory in Modern English in such constructions. According to Hulk and van Kemenade (1993), this type of *pro*-drop seems to have been largely lost from the language by the end of the Middle English period. For example:

(5) þa *cwom* þær micel snaw & swa miclum *sniwde* swelce micel flys feolle.
/then *came* there heavy snow/ & /so heavily *snowed* as if much fleece fell/
Then there came heavy snow and it snowed so heavily, as if a lot of fleece were falling

(Fischer et all 2000: 39)

In sentences like the one in the example (5), the element *pro* exists only in underlying structure, where it is interpreted as the subject of the clause. In the surface structure, on the other hand, it appears as an empty category. It can, therefore, be assumed that the finite verb in these sentences does not take the position of the first, but of the second constituent, parallel to the structure of *yes/no*-questions in Modern English.

6.2.2.2. Verb Fronting in Old English

It is often assumed that languages with rich verbal inflection also have a wider range of possibilities for the position of the finite verb in clause structure, or, in other words, that these languages have a wider range of finite verb-fronting strategies. Indeed, there is no doubt that Old English had a much wider range of verb fronting strategies than Modern English. While the modern language has verb-fronting in questions and sentences with negative clause-initial element (cf. Chapter 5, section 5.4.2.), and even that only if the finite verb is at the same time an auxiliary, all finite verbs could be fronted in Old English. For example:

(6) a. **Ne** *flītt hē* ne hē ne hrīemþ.

not *disputes* he neither he not groans

He does not dispute nor he groans.

(Sweet 1882: 62)

b. **Hwÿ** *stande* gē hēr ealne dæg īdle?

why *stand* ye here all day idle

Why do you stand here idle all day?

(Sweet 1882: 64)

The option of fronting finite lexical verbs in the way showed in the example (6) was lost in the course of the early Modern English period, parallel to the rise of modal verbs in their present-day status and with the development and wide implementation of *do*-support. It is still the matter of debate whether English lost the ability for verb-fronting of this type in result to the loss of inflection endings for number and person (e.g. Roberts 1993; Lightfoot 1997; Warner 1997). However, this was not the only available verb-fronting strategy in Old English, since there was another option, particularly apparent in main clauses introduced by a topic. In the sentences in the example (7) below, it can be observed that both clauses are introduced by a topicalized prepositional phrase, and in both clauses the finite verb is fronted with respect to the position of the non-finite verb. However, the nominal subject in the sentence (7a) follows the finite verb, whereas the pronominal subject in (7b) precedes it:

(7) a. On twam þingum *hæfde* God þæs mannes sawle gegodod…

in two things *had* God the man's soul endowed

With two things had God endowed man's soul…

b. Be ðæm we *magon* suiðe swutule oncnawan ðæt …

by that we *can* very clearly perceive that …

By that, we can perceive very clearly that …

(Fischer et al. 2000: 40)

This syntactic option, that different positions within a clause structure were available for the subject depending on whether it was a pronoun or a full noun phrase, was also lost by the early Modern English period, so in Modern English fronting of this type is only possible with modal verbs and the auxiliaries *have* and *be*, like all other verb-second structures. These two types of verb fronting are the surface result of two different verb movement operations – the first type represents movement of the finite verb to the COMP-position, and the second is most likely connected to movement of the finite verb to the INFL-position. The correlation between their loss from the language and the loss of verbal inflection is apparent, but not yet fully understood. Fischer et al. (2000: 40) believes that, although the loss of rich verbal morphology was a necessary condition for the loss of verb movement, there had to exist a further triggering factor for this change, but it is not clear what it might have been. The authors leave this question open, stating that further research is needed to clarify it.

6.2.2. Basic Word Order in Old English

The fact that the decline and the loss of inflective endings is the structural change that has traditionally been perceived as the most notable diachronic feature of the development of English, corresponds to the preferences of traditional linguists, who always put the focus of their research on morphology and phonology. However, the syntax of the language was never completely neglected, even before the advent of generative grammar, and it has also been given a fair amount of attention throughout the twentieth century. Previous work on Old English syntax can be divided into three general categories:

> a) detailed descriptions of Old English syntax and word order or the history of English word order and constructions throughout various stages of the language (e.g. Andrew 1940, Ball 1991, Curme 1931, Jespersen 1909-49, Kellner 1892, Mitchell 1985, Traugott 1972, Visser 1963-73);
>
> b) descriptive and statistical studies of word order patterns for particular constructions, texts, or groups of texts (e.g. Bacquet 1962, Barrett 1953, Bean 1983, Brown 1970, Carlton 1970, Hiltunen 1983, Kohonen 1978, Pillsbury 1967, Shannon 1964, Shores 1971, Sprockel 1973); and

c) synchronic and diachronic analyses of Old English syntax formulated within various generative frameworks (e.g. Allen 1980, Canale 1978, Higgins 1991, van Kemenade 1987, Koopman 1990, Lightfoot 1974, 1980, 1991, Pintzuk 1986, Pintzuk and Kroch 1989a, Reddick 1987a, 1987b, Stockwell and Minkova 1991, Fischer et all. 2000).

The traditional view according to which the word order of Old English was free, due to the relatively rich inflection system in the language, has mostly been abandoned in the recent decades, as it became clear that this 'freedom' in arranging the constituents within the clause structure was rather relative. Old English shows strong preferences in respect to positional syntax, and these norms are not fundamentally different from the norms relevant for the modern language.

At the first glance, Old English clause structure presents what Fischer et al. (2000: 49) calls "a puzzling combination of the familiar and the alien". There are a lot of sentence patterns in Old English that look exactly like the patterns of Modern English, but there are also some which are considerably different. Closer inspection, on the other hand, reveals that there are some major differences in word order between these two stages of English, and it becomes apparent that some major syntactic change must have taken place in between the two periods.

It is now widely accepted in literature that the basic word order of Old English was subject-object-verb order, just like Modern Dutch or German, and unlike the subject-verb-object basic word order of Modern English. That having been said, the fact remains that, in the actual texts, Old English shows a great deal of variation in placing the constituents, so this basic word order can seldom be seen clearly. A significant percentage of declarative main clauses in prose texts show the subject in the initial, and the finite verb in the second position. For example:

(8) a. Se Carl *was* Hloþwiges sunu; se Hloþwig *was* Carles broþur, se *wæs* Iuþyttan feder þe Æþelwulf cyning *hæfde*, and hie *wæron* Hloþwiges suna; se Hloþwig *was* þæs Aldan Carles sunu; se Carl *was* Pippenes sunu.

that Charles *was* Louis's son/ that Louis *was* Charles's brother/ who *was* Judith's father/ whom[f] Æthelwulf king *had*/ and they *were* Louis's sons/ that Louis *was* that Old Charles's son/ that Charles *was* Pippin's son/

That Charles was the son of Louis, who was the brother of Charles, who was the father of Judith, whom king Æthelwulf married; they were sons of

Louis, who was son of Charles the Old, who was the son of Pippin.

(The Parker Chronicle, from Smith 1966: 36)

b. Þa Deniscan *ahton* welstowe gewald.
the Danes *gained* slaughter-place's possession
The Danes seized control of the battlefield.

(The Parker Chronicle, from Smith 1966: 28)

c. Healfdene *fōr* mid summum þam here on Norþhymbre.
Healfdan *went* with some [of] that host [Gn. Sg.] to Northumbria
Healfdan attacked Northumbria with a part of that army.

(The Parker Chronicle, from Smith 1966: 29)

But if the main clause is introduced by question words or negative elements, the difference in regard to Modern English becomes readily observable, since in these cases subject-verb inversion becomes a rule. This happens in Modern English as well, as it was shown in Chapter 5, but an important difference in respect to Old English is that the inversion is not restricted to auxiliaries – all Old English finite verbs take the second position preceding the subject in these syntactic contexts. For example:

(9) a. **Hwær** *eart* þū nū, gefēra?
Where *are* you now, companion?

(Sweet 1882: 86)

b. **Hūmeta** *ēodest* þū inn, and *næfdest* gieftlic rēaf?
How *go* you in, and *not-have*[2nd Sg.] wedding dress
How do you go in and you do not have the wedding gown?

(Sweet 1882: 66)

What Old English has in common with Modern English is that subject-verb inversion in such contexts does not take place in embedded clauses. For example:

(10) …þæt hie **ne** *mehton* sud-Seaxna lond utan berowan.
…that they **not** *might* southern-Saxons' land past row
…that they were unable to row past Sussex.
(The Parker Chronicle, from Smith 1966: 52)

A peculiarity of Old English is that in main clauses with topicalization inversion is not completely consistent, depending on the nature of the subject: when the subject is nominal, inversion almost always does take place, but when the subject is pronominal, it regularly remains in the pre-verbal position. While the structure of main clauses with full nominal subjects gives away the impression that Old English was a verb-second language just like Dutch or German, the structure of main clauses with pronominal subjects undermines this assumption. For example:

(11) a. With þone here *gefuhton* Osric aldorman mid Hamtunscire.
with that host *fought* Osric ealdorman with Hempshire-men
Ealdorman Osric fought against that host with the men from Hempshire.
(The Parker Chronicle, from Smith 1966: 23)

b. Forðon we *sceolan* mid ealle mod & mægene to Gode gecyrran
therefore we *shall* with all mind and power to God turn
Therefore we must turn to God with all our mind and power.
(Fischer et al. 2000: 50)

As far as the word order in embedded clauses is concerned, the predominant word order favors the verb in the clause-final position, although other positions are also possible. If topicalization does occur, it is generally not followed by subject-verb inversion. For example:

(12) a. Sē mūþa is on eastweardre Cent… **þe** wē Andred *hatað*.
that mouth is in eastward Kent… **which** we Andred *call*
That estuary is in eastern Kent… which we call Andred.
(The Parker Chronicle, from Smith 1966: 42)

b. Þā hīe ða eft ūt of Norð-Wealum *wendon* mid þære herehyðe **þe** hīe ðær genumen *hæfdon*.

then they again out of North Wales *went* with their plunder **which** they there taken *had*

Then again they moved out of North Wales with the plunder which they had taken there.

(The Parker Chronicle, from Smith 1966: 48)

c. … **gif** hit swa beon *mihte*

… **if** that so be *might*

… if that might be so

(Sweet 1882: 49)

d. … **þæt** we ealle *sculon* ænne geleafan habban

… **that** we all *shall* one faith have

… that we all must have one faith

(Fischer et al. 2000: 50)

It seems apparent, therefore, that Old English shows considerable variation between object-verb and verb-object word orders, and that, although there are structural similarities with Modern Dutch and German word order patterns on one hand, and with Modern English word order patterns on the other, the Old English situation does not parallel either one of those two structural types. Clearly, when the arrangement of constituents within the clause structure is concerned, Old English, with its rather distinct structural patterns, belongs to a category of its own.

6.2.2.1. Nuclear Positional Rule Shift in Old English

Even though subject-object-verb is considered to be the dominant underlying word order of Old English (e.g. van Kemenade 1987; Pintzuk 1991; Kiparsky 1994; Kroch and Taylor 1997; etc.), it seems apparent that the whole Old English period shows rapid and complex evolution of positional syntax. This does not mean that various word order patterns succeeded one another, but rather that the underlying syntactic rules that determine the word order were in a state of flux in

this period — and this fact was known long before the advent of generative grammar.

Fourquet (1938), who was the pioneer in the study of historical change in factors determining word order in a language, revealed the major problem concerning the diachronic study of positional syntax. According to him, the surface word order is often deceiving in the sense that plain ordering of constituents has very little relevance for the syntax of a language. Thus, both French *il vint* and German *er cam* follow the subject-verb pattern, but to assume that both languages have the same word order would be deeply wrong. The surface likeness between these two structures is irrelevant from the point of view of positional syntax, since these word order patterns must be analyzed in the contexts of the other sequential patterns with which they coexist and correlate in the two languages. If one tries to add one more constituent, say, an adverb, to these clauses, the result would be something like *hier il vint* in French, but *gestern kam er* in German. Then it becomes clear that, while the French sequence can be sufficiently described as subject-verb, in the German sequence the plain order subject-verb is not nearly as important as the crucial fact that the verb *always* occupies the second position. Therefore, these two sentences from two different languages represent two different clause types, despite the superficial similarity in the order of their constituent — while French retains the subject-verb pattern, German retains the verb in the position of the second constituent.

The conclusion that can be drawn from Fourquet's example is apparent: the diachronic study of syntax cannot be successfully pursued by describing and counting different sentence patterns as they appear in various texts. The primary goal of the research must be identification of the sentence nucleus, that structural element about which other elements can be grouped in dependant ways.

Following Fourquet, Strang (1986) attempts to determine the nuclear position rule of Old English, which directly determines the ordering of constituents in clause structure. She claims that this rule underwent a significant change in the course of the Old English period. According to her, by the end of the period, the sequence subject-verb became the nucleus of Old English clause, and it remained so throughout the Middle English period up to date, but in the earlier stages of Old English, the sentence nucleus was quite different.

As other syntactic properties, the Old English sentence nucleus was inherited from Proto-Germanic, and consequently from Proto-Indo-European. According to Meillet (1937), the nucleus of the Proto-Indo-European clause was the verb itself as the predicator, being the only obligatory constituent. Due to the rich morphology of the language, the verb carried all the relevant grammatical information concerning the subject, so this element was present in the structure only exceptionally, if it was necessary to name it precisely. The clause with the subject in its structure was therefore perceived as marked. In addition, each Proto-Indo-European verbal stem had double semantic potential in respect to transitivity, so the object was not a part of the nucleus either. Then, as now, various adverbials remain optional, thus leaving the finite verb as the sole constituent to create the nucleus of the Proto-Indo-European clause. The structure of interrogative and negative clauses did not exist as a distinct type, since questions were formed by applying a different intonation pattern to any declarative structure, whereas the negation was realized by the means of the element *ne[31]. Individual Indo-European languages show various developments in positional syntax, including the position of the finite verb: in some languages, like Greek, Latin or Old Slavic, the verb could take any given position in the clause structure, while others, like Sanskrit, placed the verb clause-finally, as opposed to the clause-initial position favored by Old Irish.

In Proto-Germanic, the clause-final position is the unmarked position for the finite verb. Any other position of the verb draws special attention to the verb itself, and consequently on the entire clause. This fact alone is enough to conclude that the nuclear positional rule of Proto-Germanic has changed in regard to Proto-Indo-European, since the finite verb can take the final position only in respect to other constituents which now also take part in creation of the sentence nucleus. And indeed, the nucleus of the proto-Germanic sentence is made of two obligatory constituents — the finite verb is grouped with the nominal element functioning as the direct object, thus forming the sequence object-verb as the nucleus of the Proto-Germanic clause. The change of the nuclear positional rule here is the consequence of the fact that Proto-Germanic verbs lost their double semantic potential in regard to transitivity. While the primary, strong verbs, inherited from Proto-Indo-European, mostly retained this potential, it did not exist with the fast-growing new

[31] This Proto-Indo-European negative element is preserved in Sanscrit *ná*, Old Slavic *ne*, and Proto-Germanic **ne*, i.e. Old English *ne* (Meillet 1965: 195).

group of secondary, weak verbs, which required an object if transitive. This development caused the adequate modification of the nuclear positional rule which was passed onto individual Germanic languages in the due course of time. In addition, Proto-Germanic developed a secondary nuclear rule, which determined the position of the object in the structure. Since there can be more than one object, their sequence was regulated by this additional positional rule, according to which the order of the nominal elements preceding the verb was: dative-genitive-accusative, i.e. the indirect object typically came before the direct object. Interrogative patterns did not exist as distinct structural types in Proto-Germanic either, and negation was realized by the means of the old **ne* placed before the finite verb. The subject is still not the integral part of the Proto-Germanic sentence nucleus, as the verbs regularly express both person and number. In cases when this constituent is explicitly named, it is positioned to the left of the nucleus, in the clause-initial position, as far from the finite verb as possible.

Early stages of Old English show the positional syntax as it was inherited from Proto-Germanic, as described above. However, the secondary positional rule gained additional importance in Old English, since the forms of nominative and accusative lost their distinctive forms with nouns, so the position of the elements was the only way to determine which nominal phrase functioned as the indirect, and which as the direct object, in all cases when these constituents were not pronominal. In fact, the syncretism of nominative and accusative could only take place in Old English because this secondary nuclear rule had already existed and regulated the positions of the subject and the object, thus making the case distinction less important. Therefore, it was easy to deduce which nominal element was the subject, and which the object even if they both had unspecified case form. The subject was always expected in the unmarked, clause-initial position where it did not draw attention to itself, yet it did provide, by its discrete presence, the necessary information in respect to number and person, making it less necessary for the finite verb to do so.

Such a constellation of the elements within the clause structure of Old English, especially the role of the subject in it, slowly but surely determined the future of the positional syntax in the language after the eighth century, straightening the path for the change in the nuclear positional rule. According to Strang (1986:

347), an additional principle for organizing the clause structure appeared in Old English in the eighth century, and it was based on the contrast between light and heavy elements of the clause structure. This new principle required that all light elements are transferred to initial position in the clause, preceding even the subject, and it was first developed for metrical and rhythmical purposes in epic poetry:

(13) a. him þā Scyld geþāt tō gescæphþīle
himself then Scyld *off-took* at destined-time
then Shyld departed at the time ordained

(Strang 1986: 347)

Rhythmically light elements in the above clause are all grouped at the beginning of the structure, leaving the heaviest element, *gescæphþīle*, in the clause-final position.

In Old English, this rhythmical weight of an element mostly depended on form-class membership: a personal pronoun is always light, whether it functions as the subject or as the object, whereas the noun would be heavy in both syntactic functions. Along the same lines, any lexical verb would be heavy, but auxiliary *be*, and all the future auxiliaries that were to appear in the languages in the centuries to come, such as *have*, *do* and various modal verbs, are light. This principle of organizing the constituents according to their rhythmical weight is an Old English innovation, as it does not exist in other Germanic languages, and it had far-reaching consequences on the development of positional syntax in English. The reason for this is that the sentences with light elements, and they were, naturally, numerous, were unable to show marking by traditional means, so they needed to develop an alternative — a new type of marking that involved putting the finite verb in the initial position. For example:

(14) a. *Wæron* ðā ærest heora lāttēowas and heretogan twēgen gebrōðra Hengest and Horsa.
were the first of their leaders and war-chiefs two brothers Hengest and Horsa
The two brothers, Hengest and Horsa, were the first of their leaders and war-chiefs.

(Algeo and Pyles 1982: 130)

b. *Niston* hie dryhten god.

not-knew they Lord God

What they were ignorant of was Lord God.

(Strang 1986: 347)

This marked position for the finite verb was exploited in Old English to draw special attention to justifying or intensive clauses, and, especially, interrogative clauses, which eventually gave rise to a distinct type of clauses in English — the interrogative ones.

According to Strang, the primary determinants in such a system of consonant ordering give great prominence for weight, but they do not include any ruling for the position of the verb *per se*. This led to the situation in which, by the end of the ninth century, the old principle of ordering constituents on the basis of their function was to a considerable extent replaced by the new principle of ordering constituents by their rhythmical weight. The position of the finite verb in a marked sentence now became the initial position, whereas in unmarked structures the position of the verb is not strict, since it depends upon the nature of the subject, i.e. whether this constituent is nominal or pronominal.

Nevertheless, at this time, the sentence nucleus still consists of object-verb sequence, and the subject is still not an integral part of it. It was, therefore, often omitted from the structure, as explained in the previous section. However, this set of events created circumstances in which the nominal elements tend to determine the position of the verb, because in the structures containing both the subject and the object, in which both elements are realized by noun phrases, these two nominal elements tend to take positions as far from each other as possible, the subject at the beginning, and the object at the end of the structure. This leaves the finite verb in the middle, in a position which tends to be both post-subjectival and pre-objectival:

(15) Hēr Ælfred cyning *gefeaht* **wid ealne here** & **hine** *geflymde*.

here Alfred king *fought* **with all host** / and / **it** *chased-away*

In this year, King Alfred fought against the entire host and put it to flight.

(Algeo and Pyles 1982: 134)

As the coordinative sentence in the above example shows, both the subject and the object in the first clause are heavy elements, so they are placed at the ends of the structure, leaving the verb in between; in contrast, the subject of the second clause, King Alfred, is not repeated, and the object is pronominal, so it precedes the verb which takes the clause final position.

Apparently, these circumstances straightened the path for the shift of the nuclear positional rule and the change of the sentence nucleus in Old English, and indeed it took place around the year 1000, when the old syntactic principles of clause structure creation inherited from Proto-Germanic were finally redefined. From the eleventh century on, the new nucleus of English clauses became the sequence subject-verb, and the basic underlying word order in English changed from subject-object-verb into the present-day subject-verb-object order. This change in syntax made the existing inflectional contrasts less relevant for the grammar of the language, so the way was open for their future disappearance from the language.

6.2.3. Verb-Second Word Order in Old English

As it was stated in the previous section, Old English clearly exhibits verb-second word order in much wider range of syntactic contexts than its modern descendant. In a significant percentage of main clauses, the finite verb immediately follows any clause-initial constituent, just like in other Germanic languages discussed in the Chapter 4. There is a variety of constituents that can take the clause-initial position in main clauses with verb-second structure, such as full nominal subjects (13), objects (14), *wh*-elements (15), and different adverbials (16), including those realized by prepositional phrases (17):

(16) **NP S - V_{finite}**

a. Earnulf cyning *gefeaht* wid daem rede here…
   Earnulf king fought with that mounted host…
   King Earnulf fought against the mounted host…
   (The Parker Chronicle, from Smith 1966: 40)

b. Sum man *fēr*de fram Hiērūsalem tō Hiēricho, and *becōm* on ðā sceaðan.

some man *went* from Jerusalem to Jericho/ and /*upon-came* on the thieves.

One man traveled from Jerusalem to Jericho and came upon the thieves.

(Algeo and Pyles 1982: 128)

(17) **O - V_{finite}**

a. **Eall þis** *aredað* se reccere swiðe ryhte.

all this *arranges* the ruler very rightly.

The ruler arranges all this very rightly.

(van Kemenade 1987: 17)

b. **Hine** *haefde* aer Offa Miercna cyning & Beorhtric Wesseaxna cyning afliemed…

him *had* earlier Offa Mercia's king and Beorhtric Wessex's king expelled…

Offa, the king of Mercia, and Beorhtric, the king of Wessex, had expelled him earlier…

(The Parker Chronicle, from Smith 1966: 18)

(18) **Wh - V_{finite}**

a. **Hwæt** *sægest* þū yrþlincg? **Hū** *begæst þū* weorc þin?

what *sayeth* thou ploughman / **how** *doth* thou work your

What do you say ploughman? How do you do your work?

(van Kemenade 1987: 111)

b. **Hwy** *wolde* God swa lytles þinges him forwyrnan?

Why *wanted* God such small thing him deny?

Why did God want to deny him such small things?

(van Kemenade 1987: 112)

(19) **Adv - V_{finite}**

a. **Þy ilcan geare** *forþferde* Karl Francna cyning.

that same year *away-passed* Charles Franks' king

The same year Charles, the king of the Franks, passed away.

(The Parker Chronicle, from Smith 1966: 38)

b. **Þonne** *beoð* eowere eagan geopenede.

then *are* your eyes opened

Then your eyes are opened.

(van Kemenade 1987: 19)

(20) **PP - V_{finite}**

a. **Of Gēata fruman** syndon Cantware and Wihtsaetan.

of Jutish origin *are* Kent-men and Wight-settlers

The people of Kent and the settlers on the Isle of Wight are of Jutish origin.

(Algeo and Pyles 1982: 130)

b. **On þæm mōrum** *eardiað* Finnas.

in those moors[Dt. Pl] *dwell* [the] Finns

The Finns inhabit those moors.

(Sweet 1882: 39)

According to van Kemenade (1997), there is evidence in Old English texts that verb-second word order was also possible in embedded clauses, although only in some restricted syntactic contexts, namely in embedded clauses containing the main verb which belongs to a small sub-class of bridge verbs. In this respect, Old English is not different from other Germanic asymmetric verb-second languages. For example:

(21) Gregorius se trahtnere cwæð þæt **forði** *wolde* drihten getrahtnian þurh hine sylfne þæt bigspel ðe ...

Gregory the interpreter said that **therefore** *wanted* God interpret through himself the parable that ...

Gregory the interpreter said that God therefore wanted to interpret through himself the parable that ...

(van Kemenade 1997:333)

Embedded verb-second can also be found in impersonal passive constructions, such as the clause in the example (19a), or in clauses containing the so-called *experiencer dative subjects*, such as the clause in the example (19b):

(22) a. ... þonne ælce dæge *beoð* manega acennede þurh hys mihte on woruld.

... when each day *are*[Pl.] many[Nm. Pl.] given-birth through his power on world.

… when many are given birth each day through his power in the world.

b. ... þæt eallum folce *sy* gedemed beforan ðe.

... that all people[Dt. Sg.] *be*[Sg.] judged before thee.

… that all the people may be judged before you.

(van Kemenade 1997: 335)

While instances of verb-second word order in main clauses in many ways parallel the situation in asymmetric Germanic languages such as Dutch or German, these cases of embedded verb-second strangely resemble similar embedded structures that exist in non-asymmetric verb second languages. Kroch and Taylor (1997) believe that instances of embedded verb-second in Old English are also similarly limited to contexts where the subject is missing or where it appears in a VP-internal position, just like it happens in Modern Icelandic and Yiddish.

On top of all this, however, there are also certain deviations from the usual verb-second pattern which are not found in other Germanic verb-second languages. Thus in clauses with topicalization, in which the clause-initial constituent is not the subject, the finite verb regularly takes the position of the second constituent, as it happens in all other Germanic languages:

(23) a. **On twam þingum** *hæfde* God þæs mannes sawle gegodod.

In two things *had* God the man's soul endowed.

God had endowed the man's soul with two things.

b. Swelcum ingeþonce *gerist* þæt...

Such a disposition *suits* that...

(van Kemenade 1987: 17)

However, as it was mentioned in the previous section, subject-verb inversion which results in the verb-second word order does not take place if the subject is pronominal, as Old English personal pronouns show a strong tendency to be placed to the left of the finite verb in all constructions. Therefore, topicalization in these cases does not produce a verb-second, but a verb-third word order pattern. For example:

(24) a. **Þas þing** we *habbaþ* be him gewritene.
These things we *have* about him written.
We have these things written about him.

b. **Forþon** *we* **sceolan** mid ealle mod & mægene to Gode gecyrran.
Therefore *we* **shall** with all mind and power to God turn.
Therefore we must turn to God with all mind and power.

c. **Be þæm** we *magon* suiðe swutule oncnawan þæt...
By that we *may* very clearly perceive that...
We may by that perceive very clearly that…

d. ***Æfter his gebede*** he *ahof* þæt cild up...
After his prayer he *lifted* the child up...

(van Kemenade 1987: 110-111)

Following the same tendency to take place to the left of the finite verb, pronominal objects can also be found in the position of the second constituent, between the subject and the verb, thus producing the verb-third order, as can be observed in the following clauses:

(25) a. God **him** *worhte* þa reaf of fellum.
God **them** *wrought* then garments of skins
Then God made them clothes of animal skin.

b. **Fela spella him** *sædon* þa Beormas, ægþer ge of hiera agnum lande...
Many stories[Od] **them**[Oi] *told* the Permians both of their own country.
The Permians told them both many stories of their own country.
(van Kemenade 1987: 114)

On the other hand, if the clause-initial element is a *wh*-word, the negative element *ne*, or the adverb *þa*, then even the pronominal subjects regularly take the position of the third constituent, following the finite verb. For example:

(26) ***wh*-element**

a. **Hwī** *sceole* wē oþres mannes niman?
why *should* we other man's take?
Why should we take what belongs to another man?
(Kroch and Taylor 1997: 302)

b. **Hū** *lomp* ēow on lade?
how *happened* you on journey
How did it happen that you are on a journey?
(Pintzuk 1991: 198)

(27) **negation *ne***

a. **Ne** *mæg* ic her leng wesan.
Not *can* I here longer be.
I cannot be here longer.
(Pintzuk 1991: 198)

b. **Ne** *sceal* he noht unalyfedes don.
not *shall* he nothing unlawful do
He shall not do anything unlawful.
(van Kemenade 1987: 111)

(28) **adverb *þa***

a. **Þa** *foron* hie mid þrim scipum ut.
then *sailed* they with three ships out
Then they sailed out on three ships.

b. **Þa** *began* he to modigenne.
then *began* he to grow proud
Then he began to grow proud.

(van Kemenade 1987: 112)

It seems apparent that *ne*, *þa*, and a *wh*-element trigger the verb-second rule in Old English in all cases, regardless of the nature of the subject.

In embedded clauses, on the other hand, the position of pronominal subject and pronominal object is not variable at all, since they regularly occur in clause-initial position, immediately after the complementizer *þæt*. For example:

(29) a. ... **þæt** hi *mihton* swa bealdlice Godes geleafan bodian.
... **that** they *could* so boldly God's faith preach
... that they could preach God's faith so boldly.

b. ... **þæt** he Saul ne *dorste* ofslean.
... **that** he Saul not *dared* murder.
... that he did not dare to murder Saul.

(van Kemenade 1987: 59)

Based on these facts, the distribution of pronominal subjects in respect to the verb second word order in Old English could be summed up in the following way:

(30) **Main clauses**

a. $XP - S_{pronominal} - V_{finite}$ ...

b. *$XP - V_{finite} - S_{pronominal}$ ...

(31) a. **Main clauses**

wh/*ne*/*þa*/*þonne* – V_{finite} – $S_{pronominal}$ ...

b. **wh*/*ne*/*þa*/*þonne* – $S_{pronominal}$ – V_{finite} ...

(32) **Embedded clauses**

a. Complementizer – $S_{pronominal}$ – ...

b. * $S_{pronominal}$ – Complementizer – ...

What the sentences in the above examples clearly show is the fact that the verb-second pattern in Old English is violated whenever the subject of the clause is a personal pronoun, which has a strong tendency to take the position to the left of the finite verb, i.e. to precede it. Because of this, subject-verb inversion, and, consequently, the verb-second word order, only occurs if the subject is realized by a noun phrase. On top of this, even the pronominal object, whether direct or indirect, can often violate the verb-second pattern, since this constituent also tents to take the pre-verbal position, thus pushing the finite verb further to the right, resulting in the verb-third word order, as shown in the example (25). All this makes the verb-situation in Old English rather complex, and distinct in regard to all other Germanic languages.

6.2.3.1. Verb-Second in Old English Coordinative Clauses

Some authors (e.g. Mitchell 1985, Koopman 1995, Fischer et al. 2000) suggest that the clear picture about word order in Old English, whether it be the basic underlying word order or the verb-second word order, can never be accurate unless a distinction is made between two types of main clauses in the language. The fact remains that Old English is only preserved in written form, and the syntax of all preserved written texts in any of the Old English dialects exhibits a specific writing style characterized by a large number of coordinate main clauses simply attached to one another by the means of the conjunction *ond/and*. The syntactic features of coordinate main clauses, however, are not identical to the features that can be found in non-coordinate clauses. Therefore, as it is often pointed out, treating coordinate clauses as if they were any other main clauses would be rather misleading and it

would produce inaccurate results in any analysis.

Thus it seems necessary to distinguish coordinate main clauses as the third distinctive type of Old English clauses, on top of embedded clauses and non-coordinate main clauses. According to Koopman (1995), non-coordinate main clauses generally have the verb-second structure of the type that is similar to corresponding structures in related Germanic languages. Coordinate main clauses, on the other hand, exhibit subject-verb inversion, and consequential verb-second word order, only in a rather small percentage of cases. The great majority of coordinate main clauses does not have verb-second word order even in constructions with topicalization, which happens only exceptionally with non-coordinate main clauses. The usual position of the subject in these structures is clause-initial — that is, in those cases when the subject is present, considering the fact that the subject omission occurs in coordinate clauses far more frequently than in any other type of Old English clauses. As far as the finite verb is concerned, the most frequent position of this element is clause-final, and such word order is usually associated with subordinated clauses in the language. For example:

(33) a. Hēr *fōr* se ilca here innan Mierce to Snotengaham & þær wintersetl *namon*.

here went this same host into Mercia to Nottingham / and / there winter-quarters took.

In this year the same host went into Mercia to Nottingham and there took winter-quarters.

(The Parker Chronicle, from Smith 1966: 25)

b. Þa *ongeat* se cyning þæt & he on þa duru *eode* & þa unheanlice hine *werede*.

then *perceived* the king that / and / he on the door *went* / and / then nobly himself *defended*

Then the king perceived this and he went to the door and then nobly defended himself.

(Fischer et al. 2000: 53)

Both initial clauses in the example (33) show subject-verb inversion characteristic of the Old English main clauses, i.e. they have the verb-second word

order as it is expected for main clauses of a Germanic language. The second main clause in the example (33a), on the other hand, just as the second and the third main clause in the example (33b), do not exhibit the verb-second phenomenon, as they have their finite verbs in clause-final positions. In addition, only the medial clause in the example (33b) also has the subject present in the structure, whereas both final clauses in the examples (33a) and (33b) omit this sentence element. As these coordinate sentences clearly show, the syntactic structure of these two types of main clauses in Old English is significantly different, and the verb-second effect occurs regularly only in non-coordinate main clauses, while the main clauses attached to other clauses by the means of coordinate conjunction display the structure parallel to the structure of subordinate clauses.

6.2.4. Syntactic Analyses of the Old English Verb-Second Structures

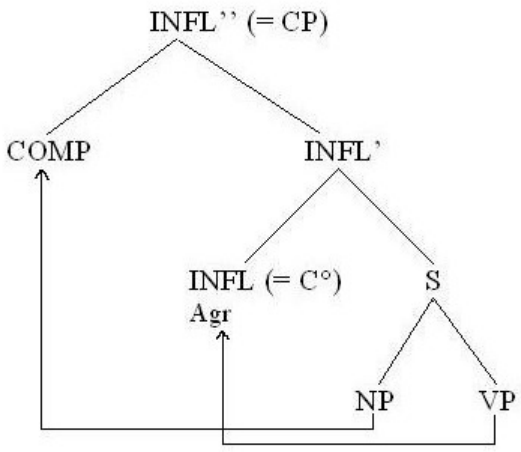
The proper characterization of Old English syntax in general, and the status of the verb-second rule in particular, have been a matter of great debate. Due to the large amount of complex variation in its surface word order, some scholars, like Bean (1983), suggested that verb-second was not a robust syntactic rule in Old English, but just a narrative tendency. On the other hand, many other authors (e.g. van Kemenade 1987, Pintzuk 1991, Kroch and Taylor 1997, Fischer et al. 2000, Haeberli 2002, etc.) have shown in their studies that the Old English verb-second structures were highly rule governed. Nevertheless, the exact nature of the verb-second rule in Old English remains open to discussion, as the various analyses of verb-second in Old English interpret this phenomenon in several different ways.

What all these analyses have in common is that they all interpret the verb-second effect in Old English main clauses as the surface result of movement of the finite verb to the COMP-position, in the same way this phenomenon is interpreted in other Germanic languages. In that respect, Old English is not any different than other related languages. Various opinions diverge especially in respect to the exact nature of verb-second in embedded clauses on one hand, and on the significance of the Old English verb-third word order for the verb-second phenomenon in on the other.

6.2.4.1. Van Kemenade (1987, 1997)

According to van Kemenade (1987) the standard explanations of the verb-second phenomenon in languages like German and Dutch can be mainly carried over to verb-second in Old English. Following Platzack (1983) and Koopman (1984), she assumes that the position of the INFL node in any verb-second language is in COMP and that the trigger for the finite verb to move to a higher position is the condition that INFL must be lexicalized by either the finite verb or the complementizer. In this system, COMP is the landing position for topicalized phrases. However, van Kemenade claims that topicalization and verb-second are independent processes, because movement of the finite verb to the COMP-position, and its consequent landing in the position of the second constituent, is obligatory, whereas the fronting of a topicalized element is optional and when it does take place, it happens for pragmatic and/or stylistic reasons. Based on these assumptions, she proposes the underlying structure for Old English clauses which can be presented in the following diagram:

(34)



When this proposed structure is applied to actual Old English sentences, such as the ones in the example (35), the analysis would look as presented in the example (36):

(35) a. Ælc riht *sculon* gehadode men lufian
each right *shall* monastic men love
Monastic men must love each person equally.

(Sweet 1882: 36)

b. *Hæfde* se cyning his fierd on tu tonumen.

had that king his army in two divided

The king had divided his army in two.

(The Parker Chronicle, from Smith 1966: 43)

(36) a. [$_{COMP}$ ælc riht $_j$] [$_{INFL}$ sculon $_i$] [$_S$ gehadode men t $_j$ lufian t $_i$]

b. [$_{INFL}$ hæfde $_i$] [$_S$ se cyning his fierd on tu tonumen t $_i$]

As it can be seen from the syntactic analyses given in the example (36), in the sentence in the example (35a), verb seconding has applied to front the auxiliary verb *sculon* to INFL, and the accusative complement *ælc riht* has been topicalized. In the sentence in the example (35b), verb seconding has applied to front the auxiliary *hæfde* to INFL, and no constituent has been topicalized.

Platzack (1983) and Koopman (1984) defined the obligatory nature of lexicalized INFL in terms of case theory. Based on their views, van Kemenade concludes that lexicalization of INFL/C° is obligatory because nominative case is assigned only by a lexical head. Thus, it is lexicalized either by the finite verb or by a complementizer. Van Kemenade further claims that the position of the finite verb and the complementizer has properties which make it eligible for cliticization of weak subject pronouns. She illustrates this claim with these examples from her native Dutch:

(37) a. **Dat** gisteren hij Jan het boek *heeft* gegeven …

That yesterday he Jan the book *has* given …

b. **Dat**-ie gisteren Jan het boek *heeft* gegeven …

That-he yesterday Jan the book *has* given …

c. ***Dat** gisteren ie Jan het boek *heeft* gegeven …

That yesterday he Jan the book *has* given …

That he has given the book to Jan yesterday …

(van Kemenade 1987: 50)

As it can be seen from the sentences in the example (37), the non-clitic

subject pronoun *hij* (he) can be separated from COMP, whereas the clitic subject pronoun *ie* (he) has to be adjacent to the complementizer *dat* (that). According to van Kemenade, this is evidence that *ie* is cliticised onto COMP, and that it is also phonologically reduced and assimilated to COMP. Following Borer (1983) and Aoun (1985), van Kemenade claims that clitic pronouns are manifestations of case properties and that, as such, they absorb the relevant case features of their governing head, so they must be associated with their case-assigner.

Van Kemenade applies these observations to Old English. She assumes that not only in the cases of the verb-second order, but also in the cases of the verb-third orders, the finite verb moves to the position of INFL/C°. She derives the order XP – $S_{pronominal}$ – V_{finite} by cliticization of the pronominal subject to the left of INFL/C°. However, in verb-second clauses in which any one of the elements *wh-*/*ne*/*þa*/*þonne* occupies the position of the first constituent, subject clitics appear on the right of the finite verb, whereas in all other syntactic contexts they appear on the left of the finite verb. Van Kemenade explains this difference by assuming that, when an operator (*wh-*/*ne*/*þa*/*þonne*) moves to the COMP-position, both COMP and INFL behave as one constituent, i.e. they are co-indexed with each other. In these cases, cliticization to the left of the finite verb is blocked and clitics can only cliticize to the right of INFL.

In embedded clauses, on the other hand, INFL contains a base-generated complementizer, and any apparent verb fronting is derived by verb projection raising and/or post-position. Verb raising moves infinitival or participial complements of auxiliary verbs either to the left or to the right of the auxiliary. In the analysis of van Kemenade, these complements are full clauses, and verb raising has the additional effect of clause union, destroying the S structure of the complement. The order of the inflected verb and the main verb may be permuted by verb raising, but the process does not move verbs out of the highest VP:

(38) a. … þæt <u>se byrnwiga</u> bugan *sceolde*
… that <u>the mailed-warrior</u> fail *shall*
… that the mailed warrior must fail

(Beowulf 2918, from Klaeber, 1936)

b. … þæt <u>nan mann</u> ne *mihte* ða meniu geriman

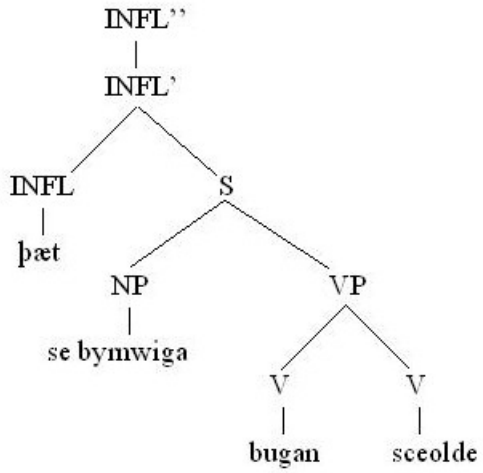
… that <u>no man</u> not *could* the multitude count

… that no man could count the multitude

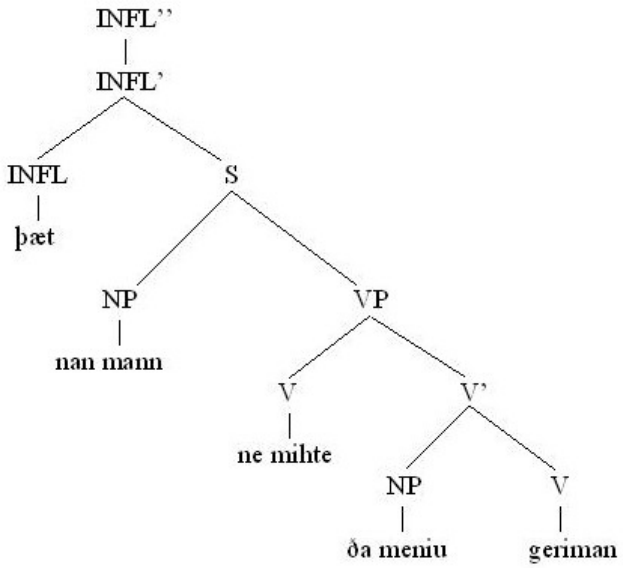
(van Kemenade 1987: 83)

In the embedded clause in the example (38a), verb raising attaches the infinitival verb to the left of the auxiliary, whereas in the clause in the example (38b), the position of the auxiliary verb is derived not by verb fronting but by verb projection raising, with attachment of the verb projection to the right of the auxiliary. Presented in a tree-diagram, the syntactic analyses of these embedded clauses would look as follows:

(39a)



(39b)



Verb raising affects only the infinitival or participial complements of auxiliary verbs, and therefore cannot apply in subordinate clauses with inflected main verbs. Since van Kemenade's analysis does not permit leftward verb movement in subordinate clauses, any post-verbal constituents in these clauses must be derived by extraposition. According to van Kemenade, extraposition in Old English moves any maximal projection rightward from its base-generated position within the VP and adjoins it to the right periphery of VP. For example:

(40) … þæt se winsele *wiðhæfde* heaþodeorum
… that the wine-hall *withstood* brave-ones
… that the wine-hall withstood the brave ones

(van Kemenade 1987: 98)

Van Kemenade accounts for the obligatory occurrence of the pronominal subject to the right of the complementizer in Old English embedded clauses by assuming that INFL has different properties when it is lexicalized by a complementizer. Because of that, the position of the clitic depends on the element which moves to the position of INFL/C°, i.e. whether it is the finite verb or a complementizer. Van Kemenade presents the distribution of clitic positions as follows:

(41) a. [INFL'' [COMP Topic] cl - INFL] => Verb-second
V_{finite}

b. [INFL'' [COMP wh/*ne*/*þa*/*þonne*] INFL - cl] => Verb-second
V_{finite}

c. [INFL'' [COMP INFL - cl]]
that

(van Kemenade 1987: 139)

Under the assumption that clitics represent a case-feature of their governing head which is adjoined to that head, van Kemenade claims that such clitics have exactly the same function as inflectional morphology — the relevant properties of a head are encoded morphologically on that head in the form of a case affix. In this way, she assumes that cliticization in Old English is related to the presence of the Old English case-system. Apparently, van Kemenade makes an attempt to account

for the verb-second structures found in Old English by drawing an analogy to standard analyses of the other Germanic verb-second languages (cf. Chapter 4). In her opinion, Old English clearly belongs to asymmetric verb-second languages, which, of course, excludes the verb-second word order from the majority of embedded clauses in which verb movement to the COMP-position is blocked by complementizer. Van Kemenade (1997) argues that apparent verb-second word order in Old English embedded clauses only occurs in constructions which have no external argument, such as clauses containing passives, or the experiencer dative subjects. For example:

(42) a. … þonne ælce dæge *bēoð* manega ācennede þurh hys mihte on woruld.
… when each day *are* many[Nm.] given-birth through his power on world
… when many are born each day through his power in the world.

b. … gif us ne *lyst* þæra ærrena yfela þe wē ær *worhton.*
… if us[Dt.] not *pleases* the earlier evils[Gn.] / that we earlier *wrought*
… if the former evils that we wrought before do not please us.

(van Kemenade 1997: 335)

Van Kemenade argues that these cases do not constitute valid examples of verb-second in subordinate clauses — since they do not have an external argument, they cannot be used as evidence for the presence of the verb-second constraint in Old English subordinate clauses.

The Old English clauses with the verb-third word order have been addressed by van Kemenade's analysis as well – she analyzes them as deviations from the verb-second word order caused by the position of both pronominal subject and pronominal object, under the assumption that these elements in Old English had the status of clitics which have to be associated with a case-assigning head, and therefore attach to the left of INFL/C°. She explains the fact that clitics cannot occur between the operator and the finite verb in those structures which contain any of the elements *wh-*/*ne*/*þa*/*þonne* in clause-initial position as the result of the status of operators. In her opinion, the operators, being co-indexed with INFL, behave as one projection in these cases.

The main problem with van Kemenade's analysis seems to be that it has to assume a number of additional rules to be able to explain the Old English data in regard to both verb-second and verb-third structures. Moreover, as Tomaselli (1995) notes, adjunction of clitics to the left of C° is not attested in any of the modern verb-second languages. This somewhat undermines van Kemenade's analysis, considering the fact that she makes an explicit attempt to account for Old English verb-second structures on the grounds of their similarities to the modern Germanic verb-second languages. Since van Kemenade proposes two distinct processes affecting the position of the inflected verb in matrix and subordinate clauses – verb-seconding versus verb raising – the frequency of verb-medial word order in matrix clauses and in subordinate clauses is unrelated in her analysis.

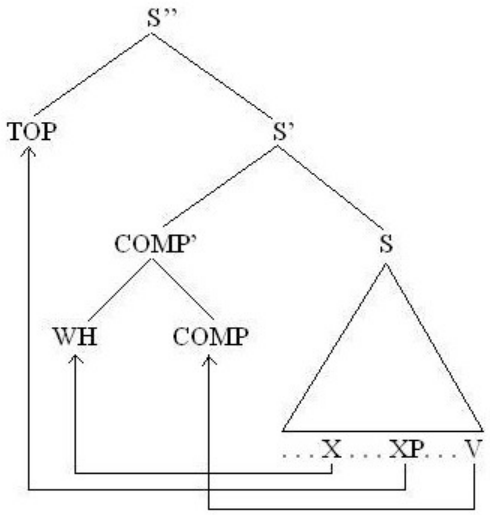
However, Pintzuk (1991) shows that, when other factors influencing the position of the inflected verb are taken into account, these two frequencies increase at the same rate during the Old English period, supporting the hypothesis that they are reflexes of the same phenomenon: an increase in the frequency of INFL-medial phrase structure.

According to Fuss (1998), another problem for van Kemenade's analysis is posed by the existence of those verb-third orders which allow two XPs in front of the finite verb, whereas van Kemenade assumes only one landing-site for XPs preceding the finite verb. Therefore, the occurrence of these orders in Old English, which are not found in any of the modern verb-second languages, may be taken as an argument against the structural similarities between Old English and modern Germanic languages as assumed by van Kemenade.

6.2.4.2. Kiparsky (1995)

Based on the presumption that the general underlying clause structure in Old English followed subject-object-verb word order pattern, Kiparsky (1995) proposes a clause structure model for the older Germanic languages in general, and for Old English in particular somewhat different than the structure proposed by van Kemenade. It can be presented in the following diagram:

(43)



According to Kiparsky (1995: 1), there are three distinct landing sites for constituents fronted from base-generated positions within the basic clause structure (S) in any old Germanic language, and these are: TOP for maximal projection topics, WH for *wh*-elements, and COMP for fronted inflected verbs. The Germanic clause structure he proposes is practically the same as the structure suggested for Proto-Indo-European by Hale (1989), although there is one small, but significant difference – in Hale's model, the position of the second constituent, which corresponds to the COMP'-position in Kiparsky's model, does not contain a complementizer, and therefore it is non-branching. Kiparsky explains that the proposed restructuring of COMP as a reflex of the change from adjoined to embedded subordinate clause structure in Proto-Germanic, and that the rise of the verb-second phenomenon is itself a reflex of the restructuring of COMP.

When compared to the clause-structure model proposed by van Kemenade, Kiparsky's model specifies different landing sites for topics and *wh*-elements, which is a small, but relevant difference, as it determines the position of clitics. As far as the analysis of the well-known asymmetry between main and embedded clauses in Germanic languages, the two analyses are in accordance with each other. They both interpret the appearance of the verb-second word order in Old English embedded clauses as the result of processes other that verb movement to the COMP-position, because both models postulate the position of base-generated complementizers as the same as the position for fronted inflected verbs, which is INFL in van Kemenade's analysis, and COMP in Kiparsky's.

According to Kiparsky, the nodes of TOP, COMP, and WH are all optional in Old English, and when they are generated in the base, they must be lexically realized at S-structure, since S-structures with empty terminal nodes that are not properly governed are ruled out by the Empty Category Principle of Universal Grammar. Kiparsky claims that, although all the configurations of these nodes are possible in theory, the configurations TOP-WH-COMP-S, TOP-WH-S, and WH-S never occur in Old English either in main or in embedded clauses; the configurations TOP-COMP-S, TOP-S, and S appear only in main clauses, whereas the configurations WH-COMP-S, and COMP-S are attested in both main and embedded clauses in Old English.

The configuration TOP-COMP-S is characteristic of Old English verb-second main clauses. For example:

(44) $[_{TOP}$ ælc riht $_j]$ $[_{COMP}$ sculon $_i]$ $[_S$ gehadode men t $_j$ lufian t $_i]$
each right *shall* <u>monastic men</u> love
Monastic men must love each person equally.

(Sweet 1882: 36)

The configuration in TOP-S is characteristic of Old English coordinate verb-final main clauses with a topicalized constituent. For example:

(45) & $[_{TOP}$ wiþ þone here$_j$ $]$ $[_S$ se cyning friþ t$_j$ nam $]$
and with that army <u>the king</u> peace *made*
and the king made peace with that army…

(The Parker Chronicle, from Smith 1966: 47)

The configuration S is characteristic of Old English verb-final main clauses with no topic. For example:

(46) $[_S$ se manfulla gast þa Martine gehyrsumode]
<u>the evil spirit</u> then Martin *obeyed*
The evil spirit then obeyed Martin.

(Pintzuk 1991: 52)

The configuration WH-COMP-S appears in Old English main clauses which have certain elements in clause-initial position such as *wh*-elements, or certain adverbs like *þa/þonne* (then) and *ne* (not). This configuration also appears in Old English embedded relative clauses introduced by the relative element *þe*. For example:

(47) a. [$_{WH}$ hwilcne oþerne sige$_j$] [$_{COMP}$ sceolde$_i$] [$_S$ ure drihten t$_j$ syllan t$_i$]…
what other victory *should* <u>our Lord</u> give
What other victory should our Lord give … ?

(Sweet 1882: 38)

b. [$_{WH}$ þa$_j$] [$_{COMP}$ angan$_i$] [$_S$ Thomas his spæce t$_j$ t$_i$]
then *began* <u>Thomas</u> his speech
Then Thomas began his speech …

(Algeo and Pyles 1982: 131)

c. … [$_{WH}$ þam$_j$] [$_{COMP}$ pe] [$_S$ God swa micle heanesse t$_j$ worldgeþingða forgifen hafað]
… whom <u>that God</u> so great excellence worldly-affairs forgiven *has*
… whom God, with such great excellence, has forgiven for worldly affairs.

(Sweet 1882: 34)

The configuration COMP-S is characteristic of Old English verb-initial declarative main clauses, *yes/no*-questions, and questions introduced by *hwæþer*. The same configuration is attested in embedded clauses with the finite verb in the final position. For example:

(48) a. [$_{COMP}$ hæfde$_i$] [$_S$ se cyning his fierd on tu tonumen t$_i$]
had <u>that king</u> his army in two divided
The king had divided his army in two.

(The Parker Chronicle, from Smith 1966: 43)

b. hwæt la [$_{COMP}$ ne mæg$_i$] [$_S$ se Ælmihtiga Wealdend þurhteon t_i þæt …]
what lo not may the Almighty Ruler act so-that …
Lo, may not the Almighty Ruler act so that … ?

(Algeo and Pyles 1982: 135)

c. [$_{COMP}$ hwæðer] [$_S$ ic mote lybban oðþæt …]
whether I may live until …
May I live until … ?

(Sweet 1882: 39)

d. … [$_{COMP}$ þæt] [$_S$ se byrnwiga bugan sceolde]
… that the mailed-warrior fall *shall*
… that the mailed warrior must fall.

(Beowulf 2918, from Klaeber, 1936)

According to Kiparsky, clauses can function as arguments and modifiers only when they are headed by a complementizer. Since the COMP nodes in subordinate clauses are obligatorily filled by complementizers in the deep structure, and since the COMP node is the landing site for inflected verbs fronted by verb-seconding, Kiparsky draws the conclusion that verb-second word order is not possible in embedded clauses. The only exceptions to this constraint are *þæt*-clauses, because they may have two COMP nodes, with the higher COMP filled by the complementizer and the lower COMP by the finite verb. In this way, Kiparsky accounts for embedded verb-second word order attested in Old English. In addition, Kiparsky claims that topicalization is possible in Old English only in declarative main clauses and, marginally, in asserted that-clauses, which is also the case in modern verb-second languages like Dutch or German. This, however, is not true for all Germanic languages, since topicalization is obligatory in Icelandic and Yiddish in all clauses, both main and embedded. Although Kiparsky argues that the question of topicalization is not crucial for his hypothesis, the fact remains that the data from Icelandic and Yiddish also compromise some of his other claims, such as that WH and TOP are separate constituents, or that TOP must always precede WH.

As far as the leftward movement of pronominal subjects and objects is

concerned, Kiparsky analyzes them as instances of phonological cliticization to the right of the first constituent of the sentence, i.e. the phonological attachment to the topmost node S'', and not as a syntactic movement. Thus unstressed pronouns appear in three different positions:

a) between the TOP node and the rest of the clause in clauses with topics;

b) between the inflected verb in the COMP-position and the rest of the clause, i.e. after COMP', in *wh*-questions and *yes/no*-questions, verb-initial clauses, and clauses with certain adverbs in clause-initial position;

c) immediately after the complementizer, i.e. again after COMP', in subordinate clauses.

Here are some examples that illustrate these pronominal positions within the clause structure model proposed by Kiparsky:

(49) a. [$_{TOP}$ hiora untrymnesse] <u>he</u> [$_{COMP'}$ sceal] [$_{S}$ ðrowian on his heortan]..
their weakness <u>he</u> *shall* atone in his heart…
He shall atone in his heart for their weakness…

b. … [$_{COMP'}$ þa sticode] <u>him</u> [$_{S}$ mon þa eagan ut]…
… then *stuck* <u>him</u> one the eyes out…
… then they gouged his eyes out …

c. … [$_{COMP'}$ þæt] <u>hiene</u> [$_{S}$ mon wolde mid þæm ilcan wrence beþridian]
… that <u>him</u> one *would* with the same strategy overpower
… that one would overpower him with the same strategy.

(Kiparsky 1995: 17)

Unlike the analysis proposed by van Kemenade (1987), Kiparsky's model allows the generation of verb-final main clauses, and it also provides a simpler description of the position of unstressed pronominal subjects and objects. In addition, his proposal of two different landing sites for *wh*-elements and topics in Old English main clauses is compatible with the situation in Modern English, where direct *wh*-questions have a different word order from clauses with topicalized constituents.

The most interesting part of Kiparsky's hypothesis, however, is his explanation of the change from Indo-European to Proto-Germanic and the rise of the verb-second constraint in Germanic languages. Kiparsky (1995) argues that the rise of movement of the finite verb to the COMP-position in Germanic is just one of several reflexes of the introduction of complementizers, which itself is just one of several reflexes of the shift from adjoined to embedded clause structure[32]. Viewed in this light, the verb-second phenomenon, which is considered a quintessential feature of Germanic syntax, turns out to be only the final stage of a complex causal chain of syntactic innovations. According to Kiparsky, this is the last of the major Germanic syntactic innovations, chronologically speaking, which finalized the divergence of Germanic from Indo-European. The shift from adjunction to embedding, as well as the associated rise of the C° slot with its indeclinable subordinating complementizer, are, in his opinion, pan-Germanic and most likely Proto-Germanic syntactic features. Movement of the finite verb to the COMP-position, on the other hand, and the consequential verb-second effect, belongs in a group of innovations that are absent from Gothic, and probably from the earliest Scandinavian of the Runic inscriptions, and which begin to spread shortly before the historical period, with language-specific variations, throughout the rest of the Germanic family.

As far as Old English is concerned, Kiparsky claims that the apparent optionality of verb-second in this language actually presents the last stage in this syntactic evolution. He believes that the elimination of the variation between Complementizer Phrase and S in main clauses homogenization went in two opposite directions. In English, the possibility of a main clause Complementizer Phrase was eliminated, resulting in the loss of verb-second, and, concurrently, of main clauses with overt complementizers. In the other Germanic languages, the Complementizer Phrase became obligatory in main clauses, resulting in fixed verb-second word order. According to this hypothesis, the diversity of Old English word order is not an innovation, but rather an archaic trait still preserved in this language.

[32] Based on the evidence from Hittite, Sanskrit, and Old Latin, it is generally accepted (e.g. Haudry 1973, Watkins 1976, Lehmann 1980, Holland 1984) that finite subordinate clauses in Proto-Indo-European were not embedded, but adjoined, so they were not internal constituents of sentences in argument or modifier positions at any level of structure, but were rather positioned at their right or left periphery, though there was a rich system of nominalized forms with infinitival and participial function which were deployed in argument and modifier position. (Kiparsky 1995: 155)

The same can be said for the Old English treatment of pronominal clitics and the structure of its relative clauses — they, too, present the last vestiges of a former state in Germanic grammar, not something that first appeared in Old English.

Kiparsky's view on the true nature of the verb-second phenomenon in Old English has some far reaching consequences for the explanation of the verb-second effect that still exists in Modern English. If Kiparsky's hypothesis is right, then the inherited distinction between the TOP and WH landing sites is not only preserved in Old English but ultimately lies behind the Modern English 'residual' verb second system as well. The other Germanic verb-second languages have innovated by effectively collapsing the two positions. Therefore, English should be considered syntactically the most conservative of all the modern Germanic languages, one that still attests the Indo-European roots of Germanic syntax.

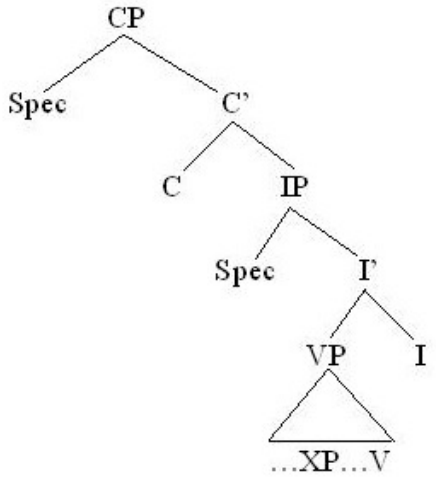
6.2.4.3. Pintzuk (1991)

Pintzuk (1991) suggests that Old English can be regarded as a verb-second language only in a rather special sense, because, according to her analysis, the verb-second word order in the language is not the surface effect of movement of the finite verb to the COMP-position, as proposed by the standard analysis, but of movement of the inflected verb to the clause-medial INFL-position in both main and subordinate clauses. As Pintzuk points out, the verb-second effect is not a consistent phenomenon in Old English simply because the underlying position of INFL varies. Nor is the inflected verb necessarily the second constituent in verb-second clauses, since clitics are positioned either before or after the topic and thus before the inflected verb in the clause-medial INFL-position. She argues that, during the Old English period, synchronic variation in syntactic structure existed in the usage of individual speakers. In addition, she claims that the distribution of particles, pronominal objects, and one-syllable adverbs in subordinate clauses, together with the low estimated frequency of verb raising, supports her hypothesis according to which embedded clauses are base-generated with either INFL-medial or INFL-final phrase structure, and the inflected verb obligatorily moves to the INFL-position. The surface position of the inflected verb is therefore a reflex of the underlying position of INFL.

Old English main clauses exhibit the same structural variation. The position of clitic pronouns and adverbs demonstrates that in the general case, verb fronting in main clauses, like verb fronting in embedded clauses, is movement of the inflected verb to the clause-medial INFL-position. In a small group of exceptional main clauses, the verb further moves from the INFL-position to the COMP-position. Post-position of noun phrases and prepositional phrases, and the cliticization of pronouns and adverbs, interact with topicalization and verb movement to INFL and to COMP to derive the surface word orders found in Old English clauses.

Pintzuk's claim that Old English exhibits verb-second word order in a variety of subordinate clauses directly opposes the view of van Kemenade (1987) and Kiparsky (1995), since it analyzes Old English as syntactically rather different from asymmetric verb-second languages such as German and Dutch. This significant difference leads Pintzuk to postulate that Old English is a non-asymmetric language just like Icelandic and Yiddish. According to the standard analysis, all clauses are uniformly INFL-final, and therefore exhibit object-verb word order in the base, with obligatory movement of the highest verb to the INFL-position to receive tense. Verb-second is, therefore, the effect of movement of the finite verb from INFL to COMP, whereas topicalization is movement to Spec,CP. The underlying clause structure resulting from this standard analysis can be presented in the following diagram:

(50)



Both topicalization and verb-second are optional in Old English main clauses. Following Kiparsky (1995), Pintzuk assumes that, under the standard analysis, main clauses without topics simply lack a Spec,CP node, and that verb-final main clauses lack a COMP node. For example:

(51) a. $[_{CP}\ [_{C}\ wæs_i]\ [_{IP}$ se fruma þus awriten $t_i\ [_{I}\ t_i\ ]\ ]\ ]$
was <u>the beginning</u> thus written
The beginning was written as follows …

b. $[_{CP}\ [_{IP}$ se manfulla gast þa Martine $t_i\ [_{I}$ gehyrsumode$_i\ ]\ ]\ ]$
<u>the evil spirit</u> then Martin *obeyed*
The evil spirit then obeyed Martin.

(Pintzuk 1991: 68)

Topicalization is not possible in subordinate clauses, which have the same structure as main clauses, with the complementizer base-generated in COMP. For example:

(52) a. … $[_{CP}\ [_{C}$ þa $]\ [_{IP}$ apollonius afaren $t_i\ [_{I}$ wæs$_i\ ]\ ]\ ]$
… when <u>Apollonius</u> gone *was*
… when Apollonius had gone.

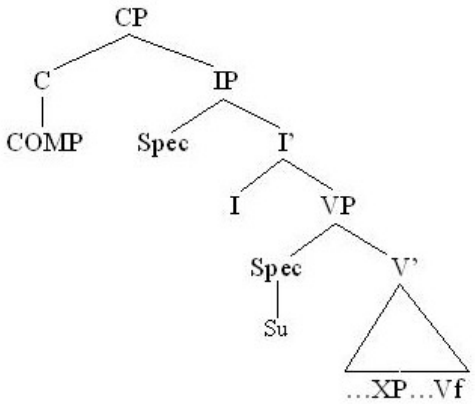
b. $[_{CP}\ [_{C}$ swa$]\ [_{IP}$ þa oþre ham $t_i\ [_{I}$ comon$_i]\ ]\ ]$
as <u>the other</u> home *came*
as the other (force) came home

(Pintzuk 1991: 70)

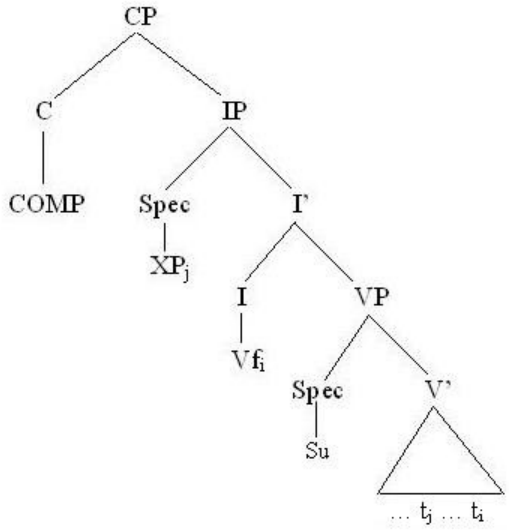
Pintzuk points out that the assumption of uniform INFL-final structure ensures not only that the underlying structure of all subordinate clauses is the same, regardless of their surface word order, but also that the derived structure of all subordinate clauses is unambiguous. And the assumption that verb-second is movement to COMP entails that the surface position of the inflected verb is derived by different processes in main and subordinate clauses in Old English — verb-second takes place in main clauses, whereas verb raising or post-position takes place in subordinate clauses.

Pintzuk then presents a counter-proposal, which completely diverges from the standard analysis as presented above. She challenges the hypothesis of uniform INFL-final structure by offering the so-called double-base hypothesis, according to which the variation in the position of the finite verb in Old English subordinate clauses reflects variation in the underlying position of INFL, i.e. the variation between clause-medial versus clause-final INFL. The difference between these two underlying positions in both deep and surface clause structure can be presented in the following diagrams:

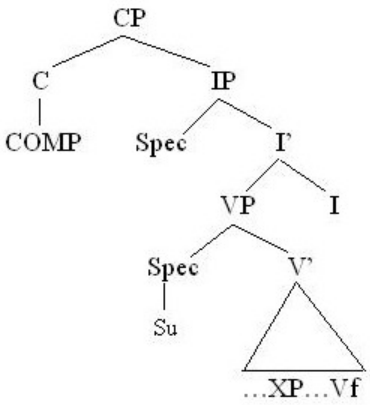
(53) a. INFL-medial d-structure



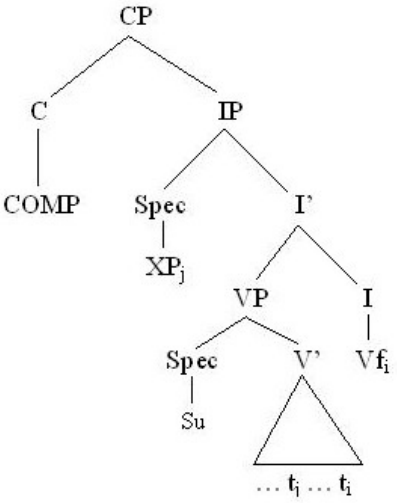
b. INFL-medial s-structure



(54) a. INFL-final d-structure



b. INFL-final s-structure



Under the most radical version of the single base hypothesis, there can be no variation at all in the phrase structure of a language, either at the level of the individual or at the level of the speech community. During a period of syntactic change, all language learners abduce the same grammar. According to this hypothesis, all Old English subordinate clauses must be INFL-medial in the base; clauses with apparently INFL-final structure are derived by leftward movement across INFL. For example:

(55) … swa þa oþre$_j$ ham$_k$ [$_I$ comon$_i$] t$_j$ t$_k$ t$_i$

… as the others home came …

… as the others came home …

(Pintzuk 1991: 126)

The less radical version of the single base hypothesis permits variation in phrase structure at the level of the speech community, but not at the level of the individual speaker. According to this view, language learners abduce a single grammar. During a period of syntactic change, some language learners abduce the old grammar while others abduce a new one; change progresses as more and more language learners abduce the new grammar.

Pintzuk, on the other hand, argues that the distribution of particles in Old English subordinate clauses is a solid proof against a uniform INFL-medial analysis in both radical and less radical versions. Particles do not scramble in West Germanic languages (cf. den Besten and Rutten 1989, for Modern Dutch, Santorini 1992, for early Yiddish). In particular, they do not scramble leftward in Old English: in clauses with infinitival or participial main verbs, pre-verbal particles remain in their base-generated position immediately before the verb. For example:

(56) a. … þret heo *wolde* þa baan **up adon** þara Cristes þeowa …

… that she *would* the bones **up take** (of) the Christ's servants …

… that she would take up the bones of the servants of Christ …

(Pintzuk 1991: 126)

According to Pintzuk, if all apparently INFL-final clauses were derived from INFL-medial phrase structure by leftward movement across INFL, then it

could be expected that particles always appear post-verbally in subordinate clauses with inflected main verbs, since they do not scramble leftward. Yet it is not the case in Old English. Based on this evidence, Pintzuk draws the conclusion that both INFL-medial and INFL-final phrase structure were available as grammatical options for individual speakers of Old English.

In order to explain the verb-third effect that arises when the subject is a personal pronoun, Pintzuk proposes that pronouns in Old English are IP clitics, which means that they attach at the border between Complementizer Phraze and Inflection Phrase. She also postulates the existence of a rule which results in the order found in sentences like the one in the example (25). In respect to the placement of clitics she proposes a special phonological rule to post-pose clitics, moving them to the right of the first phrasal constituent, as they would otherwise occur clause-initially in her system. However, such movement was never attested in any of the West Germanic languages.

As it can be seen from everything said above, Pintzuk's analysis is based on assumptions radically different than those employed by van Kemende (1987) and Kiparsky (1995), namely that Old English was a non-asymmetric verb-second language similar to Icelandic and Yiddish, and different from Dutch and German. Therefore, the verb-second word order is the result of the movement of the finite verb to the INFL-position. The finite verb moves to the COMP-position only in main clauses which have an operator, such as *wh*-element or the adverbs *ne, þa* or *þonne*, in which cases the operator moves to Spec,CP.

6.2.4.4. Kroch and Taylor (1997)

Kroch and Taylor (1997) propose an analysis of Old English clause structure, which is, in fact, a revision of Pintzuk's (1991) analysis. Although they largely support Pintzuk's claims, these two authors raise a number of concerns with her proposal. Primarily, they take issue with the phonological rule that is needed to derive the surface XP – $S_{pronominal}$ – V_{finite} word order. Their main argument is that:

> …the special clitic movement rule needed by Pintzuk to account for the placement of pronouns between topic and verb in verb-second clauses has no counterpart elsewhere among the Germanic languages

and does not have clear theoretical justification.
(Kroch and Taylor 1997: 305).

In order to remedy Pintzuk's inconsistencies, Kroch and Taylor propose that, in Old English main clauses, the topic first moves to Spec,IP, but then goes on to land in Spec,CP. Under these syntactic circumstances, it becomes unnecessary to propose a special phonological rule that moves the clitic from the Wackernagel position at the CP/IP border, as it is the case in Modern German.

Kroch and Taylor do, however, support Pintzuk's claim that the topic moves only to Spec,IP in subordinate clauses. The main objection that they have in regard to Pintzuk's hypothesis is connected to her claim that there was no asymmetry in old English in regard to the presence of the verb-second word order in main and embedded clauses. In their opinion, she did not explain why the verb-second order occurs in Old English embedded clauses only in limited contexts, and not in general syntactic context, as it is the case in other non-asymmetric languages, namely in Icelandic and Yiddish. Kroch and Taylor (1997: 307) point out that Pintzuk's analysis fails to account for a striking generalization made from data presented in van Kemenade (1997): rather than being relatively productive – as Pintzuk's theory predicts – verb-second word order with a non-subject topic in subordinate clauses is possible only in cases where the nominative subject is absent or is licensed to appear in a position other than Spec,IP, as in passive sentences or in sentences with experiencer dative subjects (cf. example (42)). Thus, according to Kroch and Taylor, Spec,IP is available for topics only when the subject does not have to be there.

Kroch & Taylor suggest an analysis of Old English according to which verb movement on one hand, and XP movement on another, head for different functional projections, i.e. that in an Old English verb-second clause, the finite verb moves to the INFL-position, and the topic moves to Spec,CP. Thus, clitic pronouns can move to the IP/CP boundary and the correct word order will result without having to propose a special clitic-inversion rule. The reason why Kroch and Taylor propose a different landing site of the topic is that, in their opinion, Old English, at least in respect to the verb-second phenomenon, seems to be a hybrid between asymmetric languages, in which the verb-second word order results from movement of the finite verb to the COMP-position, and non-asymmetric languages, in which the second

position for the finite verb is the consequence of and movement to the INFL-position. Thus, in Old English, the finite verb moves as it does in other non-asymmetric verb-second languages, such as Modern Icelandic and Yiddish, while the topic moves in the way that parallels the situation in symmetric verb-second languages, such as Dutch, German, and Mainland Scandinavian languages.

Kroch and Taylor argue that both C° and Spec,IP must remain empty in Old English main clauses. With respect to C°, they assume that Old English reserves this position for verbs with special V-features, which means that ordinary indicative verbs do not belong in that position. Following Chomsky (1993, 1995) they claim that these verbs only have weak features and therefore movement to C° takes place only at the Logical Form. In contexts like interrogative clauses, on the other hand, the feature of the verb is strong, and thus it moves to C° to check an operator feature, such as a *wh*- element. According to Kroch and Taylor, in both cases the finite verb will occur in C° at the Logical Form, and that is why the topic has to be in Spec,CP to be properly licensed. The motivation for the assumption that topics have to be in Spec,CP is that from a cross-linguistic perspective, topics are always the leftmost elements of their clauses because they are "the surface 'subjects' of the clause's topmost predication level" (Heycock 1994). In embedded clauses, the position of the topic seems to vary between Spec,IP and Spec,CP which depends, according to Kroch and Taylor, on the language, the dialect and sentence type.

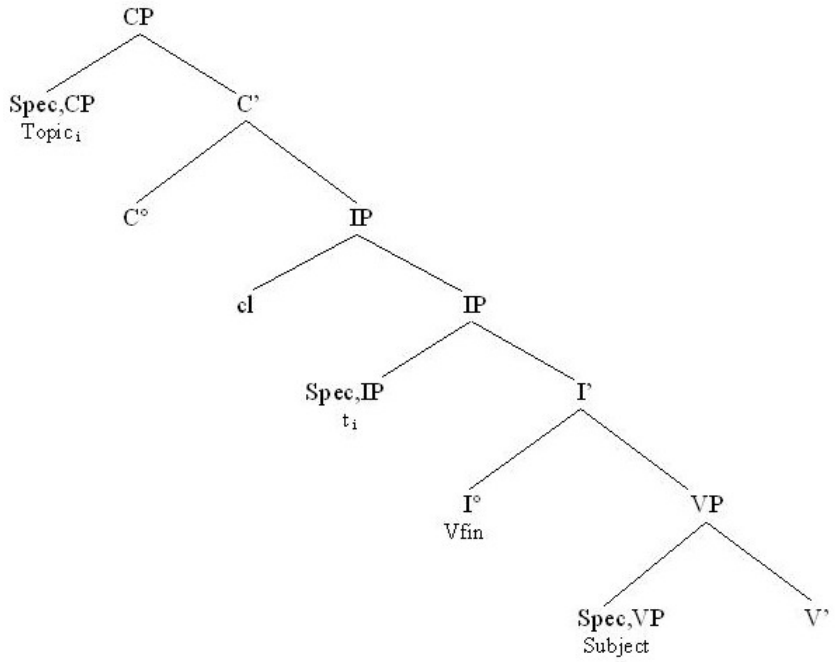
However, neither the analysis proposed by Pintzuk (1991), nor its revision suggested by Kroch and Taylor (1997) explain why the subject is not required to move to Spec,IP in order to check case and Extended Projection Principle features in main clauses. Or, to put it differently, if the subject is not required to move to Spec,IP in main clauses, why does it have to raise in embedded clauses?

Kroch and Taylor attempt to solve these problems by suggesting that the essence of the verb-second constraint is the establishment of a Spec/head relationship between the topic and the verb. Therefore, if the verb only moves to the INFL-position, and does not perform the full movement to COMP, it is then imperative that the topic occupy the specifier position of IP.[33] Since the topic or its

[33] Since there also exists a model which does not view the INFL node as unified, but as consisting of two other nodes, AgrS and T, Kroch and Taylor allow the possibility that the finite verb moves only to AgrS. (Kroch and Taylor 1997: 319).

trace is in Spec,IP, the subject cannot move there. In order to satisfy the Principle of Full Interpretation (cf. Chomsky 1986; 1993), it must check the finite agreement features in another way. According to Kroch and Taylor, this is accomplished through the incorporation of a null expletive which is co-indexed with the subject into the feature complex of Iº. This expletive checks the active inflectional and Extended Projection Principle features in Iº, making it unnecessary for the subject to move into Spec,IP. In embedded clauses, the movement of the subject to Spec,IP is not driven by inflectional or Extended Projection Principle considerations — it is, in fact, due to the topicalization that is necessary to satisfy the verb-second constraint. This checking mechanism implies that Spec,IP is freed up for a topic which can then move into that position. This is only possible, however, if the subject NP itself does not move to Spec,IP in order to check the relevant features. This configuration can be illustrated in the following diagram:

(57)



Although this scenario addresses the theoretical problem of the licensing of the subject inside the VP, Kroch and Taylor (1997: 309) note that:

> …since the licensing of topics in main and subordinate clauses is identical, we are now without a simple syntactic explanation for the greatly reduced range of topicalizations in subordinate as opposed to matrix clauses.
>
> (Kroch and Taylor 1997: 309)

Nevertheless, they suggest that this restriction may, in fact, not have a syntactic nature to begin with, but a pragmatic one. They claim that due to information structure considerations, the subject will be topicalized as much as possible in embedded clauses, the only exceptions to this being the cases where there seems to be no subject. Although it is impossible, in the absence of native speakers, to verify this hypothesis for Old English, Kroch and Taylor believe that evidence from Icelandic and Yiddish suggests that this generalization holds at least in living non-asymmetric verb-second languages. It could, therefore, be assumed with caution that it would be valid for Old English as well.

As far as the verb-third word order in Old English is concerned, Kroch and Taylor argue that it takes place when the topic moves to Spec,CP, the clitic pronoun to the left periphery of IP and the finite verb to I°. In clauses which contain an operator, namely in *wh*-questions in which the functional head C° contains [+wh], the finite verb moves to the COMP-position by crossing the clitic. In Kroch and Taylor's analysis, therefore, clitic pronouns do not require a special phonological treatment, as given by Pintzuk's hypothesis. Under all the assumptions presented above, verb-second and verb-third structures in Old English, such as exhibited by the sentences in the examples (58a) and (58b) respectively, should be analyzed in the way presented in (59):

(58) a. Hwī *sceole* wē oþres mannes niman?
why *should* we other man's take
Why should we take what belongs to another man?

b. Ælc yfel he *mæg* don.
each evil he *may* do
He can do any evil.

(Kroch and Taylor 1997: 302)

(59) a. [CP Op [C' [C $[_{+Op,\ +V}]$° + [I°+V°]$_i$ [IP cl [IP [I' t_i [VP ...]]]]]]

b. [CP Topic [C' [C° [IP cl [IP [I' [I°+V°] [VP ...]]]]]]

For Kroch and Taylor, these verb-third structures are cases of adjunction to

CP to the left of the specifier. The reason why CP-adjunction is less restricted in Old English than in any of the modern Germanic languages lies in the connection between the functional projection in which the verb-second word order is realized, and in the possibility of adjoining an element to exactly this functional projection. According to Kroch and Taylor, in a language like German there is the restriction that adjunction to CP is not possible because verb-second is realized in that functional projection, whereas in Old English adjunction to CP is possible but not allowed in IP because verb-second is realized in IP.

It can be concluded, therefore, that the analysis proposed by Kroch and Taylor relatively successfully explains the word order in Old English in respect to the position of the finite verb. The advantage of their hypothesis is that it can account for certain Old English syntactic features, such as, for example, the clause-final position of the finite verb in embedded clauses, which are left unaccounted for by other authors. In fact, a combination of Pintzuk's double-base hypothesis and the analysis of Kroch and Taylor as given above might even explain the clause-final position of the finite verb in main clauses, by employing the analogy between verb-final main clauses and the verb-second main clauses, considering that both types of clauses have the same structure in the syntactic model proposed by Kroch and Taylor, the only difference being that in the former case INFL is head-final whereas in the latter case INFL is head-initial. In addition, Kroch and Taylor's analysis avoid the problems in accounting for verb-third orders due to the placement of clitic pronouns because the canonical position for clitics is the IP/CP boundary between the topic in Spec,CP and the finite verb in I°, and thus their position follows from the general assumptions of the hypothesis.

Furthermore, even the occurrence of the verb-second word order is accounted for by assuming that the finite verb is able to move to C° only in clauses with an operator in Spec,CP, because C° contains strong features which attract the verb. In this way, Kroch and Taylor show a clear connection between Old English and Modern English — in both periods, verb-second is only allowed if there is an operator in Spec,CP. In consequence, Modern English still makes the distinction between interrogative and declarative main clauses. If the syntactic situation in respect to the verb-second word order in these two periods of English is viewed in this light, then the apparent conclusion arises that the only real difference between

Old English and Modern English, as far as the verb-second phenomenon is concerned, is that the modern language has lost the syntactic symmetry between main and embedded clauses. As far as the verb-second effect in the main clauses is concerned, there are no substantial structural differences between Old English and Modern English. The main problem with their analysis, however, is connected to the fact that they analyze clauses in which two XPs precede the finite verb as cases of CP-adjunction. But Rizzi (1995) and McCloskey (1996) have shown that there is a general ban on CP-adjunction, thus making Kroch and Taylor's analysis highly debatable.

6.2.4.5. Analyses by Other Authors

Word order in Old English had been a subject of numerous syntactic studies in the last decades, and a significant number of them deals with the verb-second word order in the language. The major hypotheses discussed above are just a tip of the iceberg, so to speak, since the verb-second phenomenon appears to be one of the most attractive topics in the present-day syntactic research. Nevertheless, it must be noted that not all authors share the view that, unlike Modern English, Old English should be considered a verb-second language in the same way as other Germanic languages.

In her study of the development of word order patterns in Old English, based on the data from the Anglo-Saxon Chronicle and other Old English texts, Bean (1983) proposes a claim, following authors like Smith (1893), McKnight (1897), Saitz (1955), Carlton (1959), and others, that Old English was not a verb-second language at all, and that apparent instances of the verb second word order in the language are not the result of any syntactic constraint, but due to narrative style.

Haukenes (2004), who investigated some pragmatic aspects of word order developments in English and Scandinavian languages, also questions the status of Old English as a verb-second language, claiming that verb-second patterns in the language are rather inconsistent. In her analysis, based on the data from both Modern English and Norwegian, and from the history of these languages, she also suggests that certain Modern English syntactic features connected to the verb-second phenomenon, like negative inversion or restrictions on the type of subject in

verb-second structures, are not directly descended from Old English, but represent later developments. Her major claim is that, when subject-verb-object word order became grammaticalized in English, verb-second word order came to encode pragmatic information.

Swan (1994), who also contrasted the data from Old English and Old Norse, claims that, unlike Old Norse, Old English was not a true verb-second language, but that Old English grammar includes several concurrent word-order options.

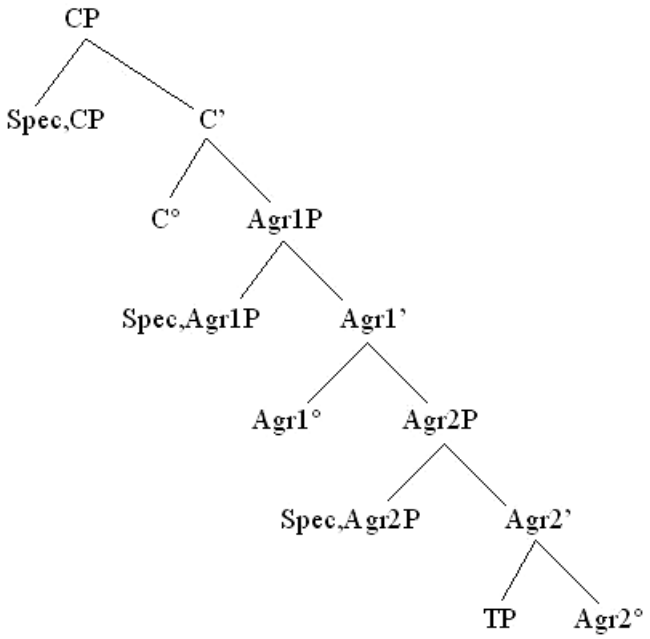
Koopman (1997), in his study of topicalization in Old English and its effects, allows the possibility that Old English had some properties of a verb-second language, but he claims that the verb-second effect was much less strong in Old English than in Dutch or German, due to the fact that any constituent can be topicalized in Old English, like in other West Germanic languages, different constituents cause varying frequencies of inversion in Old English.

The majority of authors, however, consider Old English a proper verb-second language, and the focus of the debate is on the true nature of this phenomenon in the language. The most notable are Cardinaletti and Roberts (1991), Fischer et al. (2000) and Haeberli (2002), and their proposals shall briefly be presented here.

Cardinaletti and Roberts (1991) analyze Old English in an attempt to give a consistent explanation for the second position of verbs and clitics in the Germanic and earlier Romance languages. Following Pollock (1989) and Chomsky (1991) they propose a split-INFL structure with an additional functional projection, Agr1P, between CP and Agr2P, which is the highest projection of the INFL complex. Agr1P and Agr2P instantiate different values of the head-parameter: Agr1P is head-initial whereas Agr2P is head-final in West Germanic. Agr1° is the head which assigns nominative case whereas Agr2° contains verbal inflection. Cardinaletti and Roberts assume that the presence of Agr1P in a system depends on whether a language has or does not have a morphological case-system. Therefore, languages may vary with respect to how nominative case is assigned: either under government or via Spec-head agreement. Moreover, they claim that it is possible in a language to have both options. Under these assumptions, there are different subject positions available: in languages where nominative case is assigned only under government

of Agr1°, the subject always has to occur in Spec,Agr2P. In languages, on the other hand, where nominative case is assigned under Spec-head agreement, the subject has to be in Spec,Agr1P. Languages which allow both options have two subject positions available, either Spec,Agr1P or Spec,Agr2P. The structure Cardinaletti and Roberts suggest for Old English can be presented in the following diagram:

(60)



According to Cardinaletti and Roberts, verb-second word order in non-asymmetric verb-second languages is not generated in the C-system but in the Agr-system. Thus, the position of the topicalised XP is Spec,Agr1P and the position of the subject is Spec,Agr2P. This leads to an asymmetry between subject-initial clauses and clauses with a topicalised XP: in the former case the subject occurs in Spec,Agr2P and the finite verb in Agr2°, and in the latter case the topicalised XP moves up to Spec,Agr1P and the finite verb occurs in Agr1°. Verb movement occurs only in a restricted set of contexts like questions, imperatives and conditional clauses which all involve an operator in Spec,CP.

They account for the verb-third word order in Old English by assuming that the finite verb moves to Agr1° where it forms a complex head with the clitic and the specifier of Agr1P serves as the position for topicalized XPs, just like Modern Icelandic. As far as the clauses with wh-elements or adverbs *ne*, *þa* and *þonne* in clause-initial position are concerned, in which clitics cannot occur to the left of the

finite verb, Cardinaletti and Roberts claim that the finite verb directly moves to C° by skipping Agr1°. Under these assumptions, verb-second and verb-third structures in Old English, like ones in the example (61), should be analyzed as in (62):

(61) a. **Hwæt** *sægest* þu, yrþlincg?
what *say* you ploughman
What do you say, plowman?

b. Fela spella **him** *sædon* þa Beormas...
many stories **him** *told* the Permians...
The Permians told him many stories.

(van Kemenade 1987: 114)

(62) a. [Agr1P Top [Agr1' [Agr1° cl + Vfin] [Agr2P Subj. [Agr2' [TP ...] [Agr2° t]]]]]

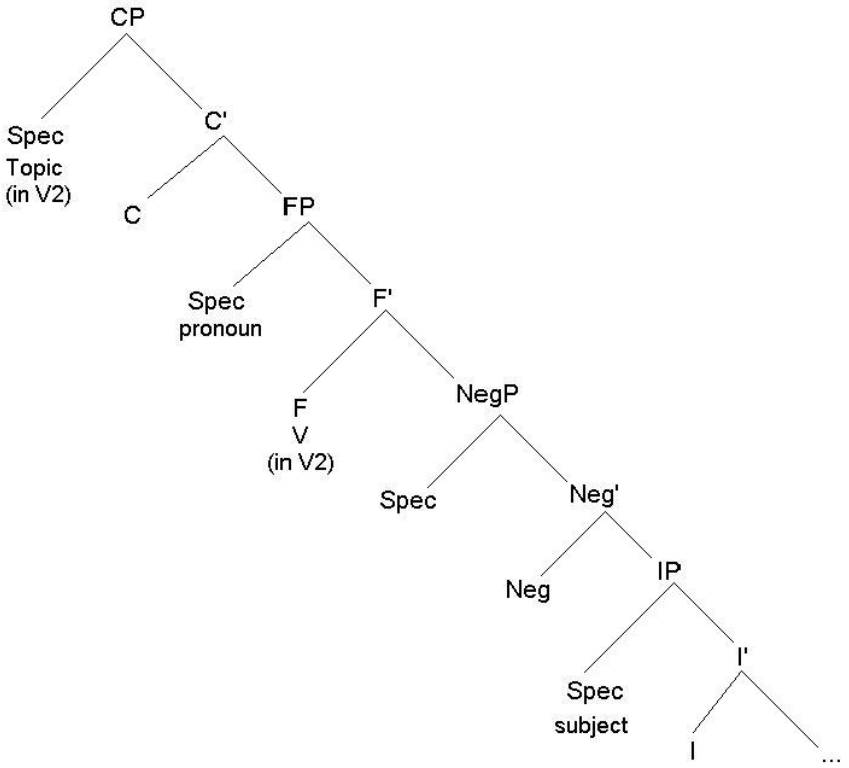
[CP wh/*ne*/*þa*/*þonne* [C' [C° Vfin] [Agr1P [Agr1' [Agr1° cl [Agr2P Subj. [Agr2' [TP ...] [Agr2° t]]]]]

Apparently, Cardinaletti and Roberts suggest that Old English has the same structure as Modern Icelandic: the C-system is only activated when the clause contains an operator (*wh*-/*ne*/*þa*/*þonne*) which moves up to Spec,CP. Then the finite verb moves as far as C°. Other V2 orders, however, are generated in the Agr-system. However, the fact remains that Modern Icelandic shows general embedded verb-second, and if both languages should function in the same way, then the same symmetry of the verb-second word order should be found in Old English. But that is not the case –Old English allows verb-second in embedded clauses only in limited contexts. This is the most striking problem with the analysis proposed by Cardinaletti and Roberts.

Fischer et al. (2000) revise the analysis proposed by Van Kemenade (1987, 1997), mostly in regard to the treatment of pronouns in Old English. The authors propose that Old English pronouns are Germanic-style weak pronouns and not clitics, as claimed by Pintzuk (1991), Kroch and Taylor (1997), Van Kemenade (1987; 1997), and Cardinaletti and Roberts (1991). Following Koopman (1997), they claim that these pronouns are housed in the specifier of a functional projection (FP) that is below C, but above IP and the high negation phrase. In main clauses,

the topic moves to Spec,CP and the verb moves to the head of FP to join the pronouns. Based on Fischer et al. (2000: 126), the proposed clause structure for Old English could be presented like so:

(63)



Treating the pronouns as independent syntactic objects rather than as clitics allows Fischer et al. (2000) to account for the fact that pronouns appear after the verb in verb-second structures such as *wh*-questions. In these cases, the verb raises past the pronouns to C yielding the WH-V-Pro order. In this way, the author avoids the necessity of proposing an extra rule concerning the direction of cliticization, such as the rule proposed by van Kemenade (1987; 1997). The rest of their analysis is in accordance to van Kemenade's who is, after all, one of the authors in Fischer et al. (2000).

Haeberli (2002) has a very similar proposal to the one made in Fischer et al. (2000). The clause structure he proposes for Old English is the same, the only difference being that what Fischer et al. (2000) call FP, Haeberli calls AgrP. He proposes that subjects below AgrP are licensed by an empty expletive in Spec, AgrP. In his opinion, the fact that Old English subjects have different positions

depending on whether they were nominal or pronominal, together with the fact that various word order patterns attested in Old English correspond to the patterns found in Modern English much more than to the patterns found in any other modern Germanic language strongly suggests that English was not truly comparable to other Germanic verb-second languages in any stage of its history. Moreover, verb-second word order was not entirely systematic in Old English even with non-pronominal subjects. Haeberli shows that in Old English clauses with a topic and a full nominal subject the finite verb regularly occurs in the position of the third, rather than in the position of the second constituent. The frequency of occurrence of the verb-third structures seems to coincide with the frequency of occurrence of these structures in Middle English as determined by Kroch and Taylor. Haeberli argues that these verb-third structures are cases where there is no empty expletive which could license the subject and therefore it has to stay in a low position in the clause. The parallelism between Haeberli's findings from Old English and Kroch and Taylor's findings from Early Middle English strongly suggest that Kroch and Taylor's analysis of these data seems to be on the right track.

In conclusion, it might be said that the analyses given by van Kemenade (1987, 1997), Fischer et al. (2000) and Haeberli (2002) seem to be best able to account, in a relatively straightforward manner, for the various word order patterns attested in Old English. These hypotheses agree in that Old English embedded clauses did not allow the verb-second word order, and that in main clauses the topicalized element moved to Spec,CP, the only difference being in respect to the landing site of the finite verb, which was C for van Kemenade, F for Fischer et al. and Agr for Haeberly, but the difference is mostly terminological. The analyses proposed by Kiparsky (1995), Pintzuk (1991) and Kroch and Taylor (1997), on the other hand, treat Old English as a non-asymmetric verb-second language which allows the verb-second word order in both main and embedded clauses. The finite verb in these analyses lands in the INFL-position, not in COMP, which accounts for the embedded verb-second. The difference is in the landing site of the topicalized constituent: according to Pintzuk, it ends in Spec,IP, and according to Kroch and Taylor it only passes through Spec,IP on its way to Spec,CP. In addition, this group of hypotheses preserves the establishment of a local Spec/head relationship between the topic and the verb – a relationship that is lost in the former group of hypotheses

due to the addition of the extra functional projection needed to account for the distribution of pronouns. And yet, this Spec/head relationship is generally considered the motivation for the verb-second effect. Apparently, a completely satisfactory analysis of the verb-second phenomenon in Old English has not yet been presented, so this issue can still be considered open for discussion.

6.3. Verb Second in Middle English

The verb-second word order patterns that were characteristic of Old English continued to be dominant deep into the Middle English period. However, in comparison to more than seven hundred years of Old English, the time span that covers the period known as Middle English is relatively brief, as it lasted for only about three or three and a half centuries. Yet it is a period of great linguistic importance because a number of changes in the lexicon, in phonology, morphology and, indeed, in syntax took place within this portion of the late Middle Ages — changes that shaped English into what it is today: a highly analytic language with vestigial inflection and an enormously large vocabulary.

What seems particularly relevant in regard to the verb-second structures in Middle English is that the language apparently developed a great deal of dialectal differences in the verb-second constraint, especially in respect to the behavior of pronouns in the role of subjects and objects. In the next section, the dialectal situation in Middle English shall briefly be presented.

6.3.1. Middle English Dialects

Apart from being a period of deep linguistic changes, Middle English was also the period in which England did not belong to the English: the French-speaking Normans imposed their own language onto the country with such a force that only the mysterious ways of history saved English from being completely replaced by the language of the invaders in the way Irish was replaced by English in the neighboring island. The direct consequence of this state of affairs was that, unlike Old English, Middle English had no written standard, so it is quite difficult to trace all the changes from this period, as they took place at different times within

different dialects in a rather chaotic way. It is therefore very hard for a linguist to locate the exactly 'right' data in a mass of Middle English texts preserved which would provide evidence in regard to whether a certain pattern existed in the given period or not, and if it did, how and from what direction it spread. Whereas Old English was, more often than not, simply synonymous with West Saxon, Middle English cannot, in the similar way, be connected to any of its recorded dialects, and it remains an umbrella-term for them all. The political developments after the Norman Conquest led to the rapid decline of the West Saxon written standard, and in a relatively short time any of the numerous local varieties of English became just as significant as any other, i.e. equally overshadowed by French. The continuations of the Peterborough Chronicle are claimed to be the earliest surviving Middle English texts because they give the first direct evidence of the changes in the English language which had taken place by 1150. The entries for the years up to 1121 are all written in the same hand and clearly adhere to the West Saxon standard. The two continuations, however, which record events from 1122 to 1131 and from 1132 to 1154 clearly show a language different from the West Saxon Old English. It is generally assumed that the two continuations reflect the current usage of English at that time and area, i.e. the East Midlands dialect of English. Although the scribes would have tried to write standard Old English, they apparently did not know it well enough to do so. Therefore, they wrote as they spoke.

And the way they spoke bears clear trace of a foreign influence other than French — that of Old Norse.

6.3.1.1. Old Norse Influence on English

Peterborough was located within the Danelaw, the part of England in which the law of the Danes held sway, and which comprised of the Kingdoms of Northumbria and East Anglia, and the lands of the 'Five Boroughs' of Leicester, Nottingham, Derby, Stamford and Lincoln. The Viking invasions began in the eighth century, and they reached a pinnacle in the eleventh century when Cnut, king of Denmark, obtained the throne of England, then conquered Norway, and thus from his English capital ruled the greater part of the Scandinavian world. These events resulted in the large number of Scandinavians who permanently settled in

England over the centuries, thus bringing Old English in direct contact with another Germanic verb-second language – Old Norse. This contact situation has long been underestimated in respect to the exact scope and depth of Scandinavian linguistic influence. However, as de Haas (2004) shows, the fact that, in Middle English, even certain Old Norse function words, such as personal pronouns *she* or *they*, or auxiliary verb forms like *are*, or even some inflective endings, like *–s*$_1$, became part of the English language along with hundreds of lexical loan words from Old Norse, indicates that this influence was so deep that it, perhaps, reached the point of creolization.

Most of the new inhabitants were Danes, although there were also extensive Norwegian settlements in the Northwest, especially in Cumbria. The presence of a large Scandinavian element in the population is not only evident from place names, more than 1400 of which are preserved up to date, but also from peculiarities of manorial organization, local government, legal procedure and the like. This implies that the invaders stayed in England and took part in everyday life. In addition, as medieval records show, the Scandinavian patronym *–son* became widespread in the districts where these settlements took place, so the conditions were apparently favorable for an extensive Scandinavian linguistic influence on the English language. The close kinship that evidently existed between the invaders and the natives doubtless facilitated not only genetic, but also linguistic amalgamation between them. At the time when the English kings tried to reestablish their control over the Danelaw they tried to find a way that enabled the mixed population to live together. According to Trips (2001: 30), evidence exists that the Scandinavians mainly adapted to English life. This impression is derived from a study of early English institutions because there it says that, despite certain native customs that the Danes continued to keep, they assimilated to most of the ways of English life, so they were gradually absorbed into the general mass of the English population.

There are some reliable phonological criteria by which it is possible to recognize Scandinavian loan words. One is the difference in the development of certain sounds in North Germanic and West Germanic. First, there is the development of the sound cluster [sk]: Old Norse retained it, whereas in Old English it was palatalized to [š] in the prehistoric period. Thus, words like *ship*, *fish* and *shall* are clearly of English origin, while words like *sky*, *skin*, *skirt*, *skill*, *skull*,

or *whisk* are loan words from Old Norse. Similarly, the retention of the plosives [k] and [g] in initial and final position is taken to be a certain indication of Scandinavian origin. Therefore, words like *kid*, *dike*, *get*, *give*, *gild* and *egg* are clearly borrowed. And second, the Germanic diphthong [ai] becomes [a] in Old English and then [o] in Modern English, but in Scandinavian this diphthong became [ei] or [e]. Thus, *aye*, *nay*, *hale* and *swain* are clearly of Scandinavian origin. The differences in the way the sounds changed led to situations in Middle English where Scandinavian forms like *geit* and *gait* existed beside the Old English forms *gat* and *got*. In Modern English *goat,* the native word, has survived. Sometimes both the English and the Scandinavian word were retained with a difference in meaning as the following pairs of words show: *whole − hale*, *from − fro*, *skirt – shirt*, *craft − skill*, *sick − ill*, etc.

Observations in regard to the field of life in which the loan words occurred are also indicative of the close linguistic and cultural contacts between the two communities. The earliest Old Norse loan words occur in Old English texts, but they are rare and sporadic, due to the fact that the great majority of the preserved Old English texts were written in West Saxon, a dialect that was not exposed to direct Scandinavian influence. Consequently, the examples like *cnearr* (small warship), *scegþ* (vessel), *liþ* (fleet), *dreng* (warrior) or *batswegen* (boatman) bring associations of sea-roving invaders, not of friendly neighbors. In late Old English, words like *law* or *outlaw* appear, which clearly indicates the change in social and administrative circumstances in the field. In fact, almost the entire semantic field that covered legal terms used to be of Scandinavian origin at the end of the Old English period, but it was soon completely replaced by French terminology (Baugh and Cable 1996).

However, the utmost and rather striking evidence of the close and intense relationship between the two languages is reflected in the fact that not only lexical, but also grammatical Old Norse loan words found their way into English. Such elements are transferred from one language to another only exceptionally. The pronouns *they*, *their* and *them* as well as *both* and *same* are of Scandinavian origin. The preposition *till* was widely used in the sense of *to*, and *fro* which was also used in the sense of *from* survives in the Modern English *to* and *fro*. The Scandinavian use of *at* as infinitive marker ‘to’ still lives in the English *ado* (at-do) and was more

widely used in this construction in Middle English. The adverbs *aloft*, *athwart*, *aye* (ever) and *seemly* all come from Old Norse. The present plural *are* of the verb *be* was also borrowed. Thus, *we aron* was the usual Old English form in the North, whereas the West Saxon expression was *we syndon*. Moreover, the third person singular verbal ending *-s* and the participial ending *-and* which correspond to *-end* and *-ind* in the Midlands and the South have also been attributed to Scandinavian influence. Only bilingual people mix grammatical elements in this way. It is then not a surprise that certain syntactic patterns, including the verb-second ones, characteristic for Old Norse, are also found in Middle English. All this clearly indicates that the contact between the two languages was closer, more intense and deeper-reaching than any other linguistic contact in the history of the English language.

6.3.1.2. Geographical Distribution of Middle English Dialects

The four main dialects of Old English, West Saxon, Kentish, Mercian and Northumbrian continued to exist in the same dialectal areas in Middle English, although the Mercian Midlands showed so many differences between the eastern and western parts of this area that a differentiation between the two became necessary to acknowledge the situation in the field. There are, therefore, five main dialects of Middle English, and those are: Southern, Kentish, East Midlands, West Midlands and Northern. So the geographical distribution of Middle English dialects mostly corresponds to the geographical distribution of Old English dialects, with the only difference that instead of one Mercian dialect now existed two distinct varieties, the eastern and the western one.

The East Midlands, part of the West Midlands, and the Northern area were heavily influenced by Old Norse, as they were spoken in the area of Danelaw. According to Freeborn (1992), however, this influence was not equally spread: by comparing the forms of the third person plural pronouns in texts from different areas, it can be concluded that the influence was by far the strongest in the North, and it gradually decreased southwards. Comparing the examples from the different dialectal areas shows that there were no uniform forms for the third person plural pronouns. In the North, all three forms borrowed from Old Norse − *they*, *their*, *them* − replaced the Old English ones; in the South and in the Kentish dialect the Old

English forms *hi(e)*, *hem/ham*, *here/hare* remained in use much longer, and in the Midlands *they* was used, but still with the objective and possessive forms *hem* and *hire*. The variation of the old forms and new forms of the third person plural pronouns in the different Middle English dialects give a good picture of how innovations in the North gradually spread to the Midlands and to the South.

In Middle English, as it is still the case up to date, the dialects of Scotland and the North of England, which stem from the Northumbrian dialects of Old English, were markedly different from dialects of the South, especially in respect to the lexicon and grammar. The Northern dialect, which used to be the purest form of Anglian found in Britain, was the variety that underwent the heaviest phonological, lexical, and grammatical influence of Old Norse.

The East Midlands area used to lie within the heart of Danelaw. The area where this dialect was spoken extends from the Humber down to the Thames, which implies that South-eastern regions are included as well as North-eastern ones. Trips (2001: 38) notes that texts from the North-east Midlands behave differently from texts from the South-east Midlands in respect to the scope of the Old Norse influence – the 'Land of Five Boroughs', i.e. the area of Stamford, Lincoln, Derby, Leicester and Nottingham, which was most densely settled by the Scandinavians, shows the Old Norse influence in vocabulary, morphology, and in syntax to a much greater extent than other East Midlands areas.

Unlike the East Midlands, however, West Midlands was not part of the Danelaw. Consequently, the influence of Old Norse in this dialect is far less notable, and the texts written in it mostly show a mixture of Old English and innovative patterns. Also, these syntactic patterns that are attributed to the Scandinavian influence are somewhat different than those found in the East. This may be explained by the fact that, unlike the East Midlands, which was invaded and conquered by Danes, the Old Norse influence in the West Midland came predominantly from Norwegians, who invaded this area from Ireland, where they had settled in far greater numbers. Therefore, the Old Norse influence in this dialect is not even of the same origin as the influence in the East Midlands, although it must be emphasized that both the Norwegian and Danish variety of Old Norse on one hand, and Old English on another, were so similar, being genetically closely related, that, according to an Icelandic saga of the eleventh century "there was at

that time the same tongue in England as in Norway and Denmark" (Freeborn 1992: 30).

Finally, the Southern and the Kentish dialects were mostly spared from any Scandinavian influence, and they still preserved their pure Old English nature deep into the Middle English period. Kentish, which was peculiar even in the Old English period, remained an isolated dialect in Middle English as well, and eventually died out. As far as the Southern dialect is concerned, the clear influence on phonology, lexis and grammar that can be attributed to Old Norse actually came much later, long after the printing became widespread, and mostly from Standard English. However, it still preserves many archaic Old English features that are not found elsewhere. For instance, the forms of the verb *be*, such as *be*, *beest*, and *beth*, completely replaced the earlier Old English forms derived from the verb *eom* by 1250. When the forms *am*, *art* and *are* came from the North latter in the Middle Ages, they began to be used as the forms of present of the substantive verb, while the local forms *be*, *beest*, and *beth*, came to denote the future tense of this verb. These archaic forms of the verb *be* are still the living elements of the dialects in the South of England, only they are now considered non-standard.

6.3.2. Basic Word Order in Middle English

As was shown in section 6.2.2.1, in the period shortly before the Norman Conquest, Old English was completing an important syntactic change, the shift in nuclear positional rule, according to which, the clause structure was organized around the object-verb nucleus inherited from Proto-Germanic. The principles of clause structure were now redefined, and the new sentence nucleus appeared, comprising of the subject-verb-object sequence. Thus, for the first time in the history of English, the subject entered the sentence nucleus as its integral part. In a way, this change of the nuclear positional rule marked a shift in the entire grammatical system of English, because the new positional syntax which was thus developed took away from morphology most of the relevance for expressing the relevant grammatical relations within the clause structure. The presence of the subject as an obligatory element of clause structure made the person and number agreement expressed by the means of verbal inflection quite redundant, and it

straightened the path for its disappearance from the language. It is not surprising, therefore, that even the earliest Middle English texts show dramatic reduction of inflection. Here is an extract from the Peterborough Chronicle, from the entry for the year 1154, mentioned in the section 6.3.1.:

(64) I ne can ne i ne mai tellen all þe wunder ne alle þe pines ð hi diden wreccemen
I ne can ne I ne may tell all the horrors ne all the pains that they caused wretchedmen
on þis land. 7 ð lastede þa .xix. wintre wile Stephne was king 7 æure it was
in this land. & that lasted the 19 winters while Stephen was king& ever it was
uuerse 7 uuerse. þa was corn dære. 7 flec 7 cæse 7 butere. for nan ne wæs o þe
worse & worse. then was corn dear. & flesh & cheese & butter. for none ne was in the
land. Wreccemen sturuen of hungær. war sæ me tilede, þe erthe ne bar nan
land. Wretched-men died of hunger. where so one tilled. the earth ne bore no
corn. for þe land was al fordon. mid suilce dædes. 7 hi sæden openlice ð crist
corn. for the land was all ruined. with such deeds. & they said openly that christ
slep 7 his halechen. Suilc 7 mare þanne we cunnen sæin. we þolenden .xix.
slept & his saints. Such & more than we can say. we suffered 19
wintre for ure sinnes.
winters for our sins

(The Peterborough Chronicle, from Whitelock 1954)

This sample of Early Middle English already shows the striking loss of inflection easily observable at the first glance. For instance, only a century before this entry, Middle English expressions like *wreccemen* would have been written *wreccum manum*, and *on þis land* would have been *on þissum lande* in Old English. Even word order changes can be observed in this small example from the Peterborough Chronicle: in the Middle English version the complement *king* follows the copula *was* in *...wile Stephne <u>was king</u>* ... ; in Old English, this sentence would have been: *...hwile þe Stephne <u>cyning wæs</u>...*, with the finite verb in the clause-final position. On the other hand, as it can be seen from the sentence *þa was corn dære*, "grain was expensive then", verb-second word order did not disappear from the language. But then again, verb-second word order is, in principle, independent from the order of the object and the verb as such, and in English,

object-verb word order declined earlier than the verb-second word order.

However, object-verb word order did not completely disappear from Middle English overnight. Even though this order was very frequent in Old English, especially in embedded clauses with pronominal objects, in Middle English, the correlation of this order and the clause type disappeared, and object-verb order was gradually becoming less and less common, to become rather rare by the end of the Middle English period, when its frequency fell to barely 1% in prose and 6% in verse (Fischer et al. 2000: 82).

The position of verbal particles also changed in Middle English. In Old English, these elements were usually pre-verbal, but in the course of the Middle English period they gradually came to be restricted to post-verbal position:

(65) a. Trystrames *sterte* **up**, and kylde that mon.
Tristram *started* **up** and killed that man
Tristram suddenly came up and killed that man.

b. sir Raynold *gan* **up** sterte with his hede all blody.
Sir Raynold *began* **up** start with his head all bloody
With his head all bloody, Sir Raynold suddenly moved up.

(Fischer et al. 2000: 82)

However, these elements are occasionally found in their old, pre-verbal position until the end of the fifteenth century. Since post-verbal position of particles, along with the post-verbal position of pronominal objects, are considered the most important diagnostics for underlying verb-object word order, it is apparent that this variable distribution of these elements shows the final stage of what Pintzuk (1991) called *grammars in competition*, referring to the fact that, during the gradual syntactic change from the basic object-verb to verb-object word order, both patterns existed side by side in English for a long time, the former being on a steady decline, and the latter on the continuous rise.

Other important Middle English syntactic changes, such as the change in the way of expressing negation or the rise of the *do*-support have already been discussed in detail in sections 3.2.3.1.1. and 3.2.3.1.2. respectively.

6.3.4. Syntactic Analyses of the Middle English Verb-Second Structures

As Fischer et al. (2000: 68) point out, one of the many consequences of lesser degree of standardization of written language in Middle English is reflected in the fact that the syntax of Middle English is characterized by significantly greater variability than the syntax of Old English. The preserved Middle English texts, therefore, exhibit much more regional, social and stylistic variation than anything found on the Old English material. Even Chaucer himself complained at the time of the "gret diversité in Englissh and in writing of oure tonge" (Troilus, 5.1793-4).

This *gret diversité* is indeed notable with Middle English verb-second structures as well. The dialectal differences in this respect first developed particularly concerning the position of pronominal subjects and objects. The Southern and West Midlands dialects preserved the verb-second word order patterns that were characteristic of Old English deep into the Middle English period, so they exhibit subject-verb inversion when the subject is realized by a noun phrase, but not when it is a pronoun, in which cases the verb-third order was the usual arrangement of the constituents. The Northern and North-eastern texts, on the other hand, began to show inversion with all types of subjects quite early, in fact at the very beginning of the Middle English period. For example:

(66) a. Oþir labur *sal* þai do.
other labour *shall* they do
They must do other labour.

(van Kemenade 1997: 15)

Van Kemenade (1987, 1997), who was among the first to note the syntactic difference between the Northern and the Southern dialects, analyzes verb movement in both Old and Middle English in basically the same way, with the finite verb in the COMP-position. In her opinion this syntactic patterns continues deep into the fourteenth century. As far as the evident difference between the dialects in the position of pronominal and nominal subjects and objects, van Kemenade attributes it to a loss of a clitic position in the North which remained available in the South.

Kroch and Taylor (1997), on the other hand, point out that such approach is

rather simplistic, and it does not explain the increase in inversion of full nominal subjects with adverbs and adjunct prepositional phrases which is also attested in the Northern dialects at the same time as the change concerning inversions with pronouns. Here are some examples that can illustrate the difference in verb position with two types of subjects in Middle English:

(67) **$O_{nominal} - V_{finite} - S_{nominal}$**

a. Ðese hali mihte *forleas* Dauið kyng ...
This holy power *lost* David King ...
King David lost this holy power …

$PP_{adjunct} - V_{finite} - S_{nominal}$

b. Bi þis wildernesse *wende* ure lauerdes folc …
by this wilderness *turns* our Lady's folk …
Our Lady's people turn by this wilderness …

(68) **$O_{nominal} - S_{pronominal} - V_{finite}$**

a. Ðas sibsumnesse he brohte mid him fram heuene to ierðe.
this brotherly-love he *brought* with him from heaven to earth
He brought this peace with him from heaven to earth.

$PP_{adjunct} - S_{pronominal} - V_{finite}$

b. On alle wise he *fandeð* hu he *muge* gode weorkes letten.
On all wise he *finds* how he *may* good works hinder.
He finds on all wise how he may hinder good works.

(69) **$Adv - V_{finite} - S_{nominal}$**

a. Þenne *flið* his ferd ananas dude olofernes.
then *flees* his army anon as did Holofernes
Then his army flees anon, as did Holofernes's one.

b. Nu *seið* sum mann: 'Scal ic luuige ðane euele mann?'

now *says* some man / Shall I love the evil man

One man now says: "Shall I love the evil man?"

(70) **Adv – $S_{pronominal}$ – V_{finite}**

a. Þenne ha *seruið* wel þe ancre hare lauedi hwenne ha noteð ham alle inhire saule neode.

Then she *serves* well the anchor, her lady, when she notes them all in their soul's need.

b. Ðar ðu *luge*, ðu lease dieuel.

There you *lied*, you false devil.

(Trips 2001: 284-285)

Kroch and Taylor (1997) investigated seven Early Midlands texts: *Ancrene Riwle, Hali Meiðhad, The Lambeth Homilies, Sawles Warde, St. Katherine, The Trinity Homilies,* and *Vices and Virtues*. They explain that these texts have been grouped together because they show no difference in their verb-second syntax. The results of their quantitative research are presented in Table 1, which shows the position of nominal and pronominal subjects when the pre-posed element is 1) a DP/PP/Adj. complement, 2) *þa*/*then*, 3) now[34], 4) a PP adjunct, 5) any other adverb:

	nominal subjects			**pronominal subjects**		
pre-posed element	number inverted	number uninverted	% inverted	number inverted	number uninverted	% inverted
DP compl.	50	4	93	4	84	5
PP compl.	12	4	75	0	11	0
Adj.compl.	20	1	95	7	14	33
a/then	37	2	95	26	10	72
now	12	1	92	8	22	27
PP adjunct	56	19	75	2	99	2
any other adverb	79	59	57	1	181	1

Table 1: V2 in seven early Midlands texts (from Kroch and Taylor 1997)

The results presented here indicate that in the corpus exhibits the syntactic patterns directly inherited from Old English. Thus, the topicalization of complements generally triggers subject-verb inversion with nominal subjects, but

[34] In Old English *nū* sometimes behaved exactly like *þa*, i.e., both elements triggered verb-second effect. That is the reason why they are both included in the following tables.

almost never with pronominal subjects. Clause-initial *þa* and *then*, on the other hand, trigger inversion with both nominal and pronominal subjects, although it does not happen as regularly with pronominal subjects as it was the case in Old English. According to Kroch and Taylor, this is the sign that the temporal adverbs were losing their special status.

When the results presented by Kroch and Taylor are compared to the results of a similar quantitative study of Old English performed by Haeberli (1999), shown in the Table 2, it seems apparent that, as far as the Southenr Middle English dialects are concerned, the verb-second syntax has not undergone any substantial changes in regard to the Old English period.

	nominal subjects		
Pre-posed element	number inverted	number uninverted	% inverted
DP complement	52	11	17,5
PP complement	2	2	50
Adjective	18	0	0
a/ onne/nu	318	19	5,6
PP adjunct	92	38	29,2
any other adverb	150	47	23,9

Table 2: Subject-verb inversion in ten Old English texts (Haeberli 1999: 383)

Northern texts, on the other hand, exhibit the type of verb-second syntax clearly distinct from the old mixture of verb-second and verb-third orders registered in the South. According to Kroch and Taylor, the type of verb-second grammar found in the dialects from the North exhibits the Old Norse and not the Old English type of verb-second. However, they note that numerous texts show a mixture of sentences with the verb-second order and of those without it, which indicates that there was a competition between the verb-second grammar and the non-verb-second grammar in the language in these areas. Here are some examples that illustrate the syntactic situation in the Northern Middle English dialects:

(71) **$O_{nominal} - V_{finite} - S_{nominal}$**

a. Þis gylder *layes* <u>oure enmy</u> to take us wiþ.
this tribute *lays* <u>our enemy</u> to take us with.
Our enemy lays this tribute to take with us.

b. Þis medlid liffe shewith oure Lorde in hym silfe.
this moderate life *shows* our Lord in himself
Our Lord shows this moderate life on his own example.

(72) **$PP_{adjunct}$ – V_{finite} – $S_{nominal}$**

a. In þus many maners *touches* þe ymage of dremes men when þai slepe.
in thus many manners *touches* the image of dreams men when they sleep
The image of dreams touches men when they sleep in thus many manners.

b. With herte *takes* false crystyn men it in vayne...
With heart *takes* false Christian man it in vain...
False Christian man takes it with heart in vain …

(73) **Adv – V_{finite} – $S_{nominal}$**

a. Thus *said* þe prophete in þe persone of oure Lorde.
Thus *said* the prophet in the person of our Lord.

b. Forþi *says* þe wyse man, þat many besynes folowes dremes.
Further *says* the wise man that many follow dreams
The wise man further says that many follow dreams.

(74) **Adv – $S_{nominal}$ – V_{finite}**

a. Thare-fore Ihesu *es* noghte fundene in reches bot in pouerte ...
Therefore Jesus *is* not found in riches but in poverty ...

b. Thane the prioure *said* till hym…
Then the prior *said* to him…

(75) **$PP_{adjunct}$ – $S_{nominal}$ – V_{finite}**

At the last gret sorowe of herte *ouercome* his scheme, ...
At the last great sorrow of heart *overcame* his shame ...

(Trips 2001: 289-290)

As the sentences with verb-third word order in the examples (74) and (75) show, even in the Northern dialects topicalized adverbials sometimes failed to trigger the verb-second effect. Variations in the position of the finite verb in clauses with topicalized adverbials are even more notable with pronominal subjects:

(76) a. Þen þai *wene* þat þai *may* do what so *þair hert es* sett on.

Then they *believe* that they *may* do what so their heart *is* set on.

b. Þen he *gyves* hymself till þaime in swetnes and delyte in byrnyng of luf, and in joy and melody.

Then he *gives* himself to them in sweetness and delight in burning of love, and in joy and melody.

c. Now I *write* a sang of lufe, þat þou *sal* delyte in when þow *ert* lufand Jhesu Criste.

Now I *write* a song of love that thou *shall* delight in when thou *are* loving Jesus Christ.

(77) a. Than *sall* þou dispose the for to pray or for to thynke som gude thoghte.

Then *shall* thou dispose thee for to pray or for to think some good thought.

b. Þan *enters* þou into þe toþer degre of lufe.

Then *enters thou* into the other degree of love.

c. Now *may* þou see þat þai wer foles, and fowle glotons.

Now *may* thou see that they were fooles and foul gluttons.

As can be seen from the above examples, clause-initial adverbs trigger the verb-second effect in the Northern Middle English dialects rather inconsistently. This is a clear divergence with the Old English situation in which adverbs like *þa*, *þonne*, or *nu* regularly triggered subject-verb inversion in structures containing both nominal and pronominal subjects. Kroch and Taylor (1997: 312) take this fact as evidence that the Northern Middle English shows two grammars in competition: one grammar of the Old English type which requires subject-verb inversion after adverbs like *þa*, *þonne*, or *nu*, and one grammar which deviated from the Old

English patterns because it does not require inversion in this context. Clearly, this could be observed as a shift towards the grammar of Modern English, in which the non-verb-second grammar prevails.

Further support for a difference between the Northern and Southern dialects comes from the language mixture found in later Middle English texts which are on the way to losing the verb-second pattern. Kroch, Taylor and Ringe (2000) made a comparison of two manuscripts of the text called the *Mirror of St.Edmund* in respect to the verb-second patterns found in them. The first of them, known as the Vernon manuscript, is a fourteenth century translation into Southern Middle English of a thirteenth century Latin text which was originally written by the canonised Edmund Rich, Archbishop of Canterbury in the reign of Henry III. The second, known as as the Thornton manuscript, is the translation of the same Latin original which dates from the fifteenth century, and is written in Northern variety. The frequencies of subject-verb inversion by topic type are given in the following tables:

	full subject DPs			**pronominal subjects**		
preposed element	number inverted	number uninverted	% inverted	number inverted	number uninverted	% inverted
DP compl.	12	1	92	5	13	28
PP compl.	24	5	83	9	41	18
Adj.compl.	14	0	100	0	1	0
then	6	2	75	13	13	50
now	3	0	100	5	9	36
PP adjunct						
adverbs	20	5	80	4	41	9

Table 4: verb-second in the Vernon manuscript of the *Mirror of St. Edmund* (Kroch, Taylor and Ringe 2000: 16)

	nomilan subjects			**pronominal subjects**		
pre-posed element	number inverted	number uninverted	% inverted	number inverted	number uninverted	% inverted
DP compl.	8	0	100	16	9	64
PP compl.	21	3	88	48	21	70
Adj.compl.	10	0	100	2	6	25
then	6	1	86	24	23	51
now	4	0	100	14	3	82
PP adjunct						
adverbs	20	5	80	35	26	57

Table 3: verb-second in the Thornton manuscript of the *Mirror of St. Edmund* (Kroch, Taylor and Ringe 2000: 16)

The results of this quantitative research presented by Kroch, Taylor and Ringe (2000) indicate a high degree of variability in the position of finite verbs with pronominal subjects. Moreover, the Northern varieties of Middle English show clear deviations from the Old English verb-second patterns, mainly in respect to the nature of the subject: of the two verb-second clause patterns attested in Middle English, XP – V_{finite} – $S_{nominal}$, and XP – V_{finite} – $S_{pronominal}$, only the former is inherited from Old English, while the latter is the Northern Middle English innovation. As far as the verb-third clause structures are concerned, both XP – $S_{nominal}$ – V_{finite}, and XP – $S_{pronominal}$ – V_{finite} patterns which are attested in Middle English also existed in Old English. The only change here is the change in their frequency, which was on the rise.

According to Kroch and Taylor (1997), the difference in verb-second patterns that exists between the Northern and the Southern texts can be analyzed in two ways. One possible analysis is proposed by van Kemenade (1987), who claims that the status of pronominal subjects had changed in the North, i.e. that pronominal subjects did not behave like clitics of the Old English kind but rather like pronouns of Modern English, which behave more or less the same as nominal subjects. This means that Northern pronouns have lost their clitic-like status. Support for this analysis comes from the fact that the pronoun *they* of Scandinavian origin was first borrowed in the Northern dialect and then its use gradually spread to the Southern areas. Thus, the borrowing could have changed the syntactic character of the entire pronominal system. Kroch and Taylor point out, however, that the status of pronominal subjects did not change only in the Northern dialect, but also in the Southern dialect. In fact, it also changed in non-verb-second contexts.

In addition, there are some Northern texts, such as the *Prose Rule of St. Benet*, where there is nearly categorical inversion of nominal subjects and finite verbs in structures with adverbs or adjunct prepositional phrases in clause-initial position. This pattern cannot be explained by the change of the pronominal system as the source of the differences in the verb-second patterns of the Northern and Southern text, since the verb-second patterns in this text are completely independent from the status of pronominal subjects. Another problem with van Kemenade's analysis is that evidence has been found in Northern texts of the clitics of the Old

English type. Kroch and Taylor demonstrate this with examples which show stylistic fronting:

(78) a. Þat **erin** *hauis*, herkins wat þe haly spirt sais in haly writ.
whoever **ears** *has* harkens what the holy spirit says in Holy Writ
Whoever has ears harkens what the holy spirit says in Holy Writ.

b. Bot yef it **sua** *bi-tide*, þat any falle in mis-trouz; þan sal scho pray gerne to god.
But if *it* **so** *betide* that any fall in mistruth then she shall pray earnestly to God.

c. Yef yt **sua** *may* be, alle sal lie in a hus, þat ilkain wite of oþir.
If it **so** *may* be all shall lie in a house that each know of (the) other.

(Kroch and Taylor 1997: 314-315)

In (78a) the nominal object has undergone stylistic fronting. It will be shown in chapter 7 in detail that stylistic fronting is possible only when there is a subject-gap. The examples in (78b) and (78c) might also be analysed as stylistic fronting as long as the pronominal subject is analysed as a clitic, in which case the assumption that Northern pronouns had lost their clitic-like status becomes impossible.

Another approach to this problem, proposed by Kroch and Taylor (1997), attributes the difference between Northern and Southern verb-second structures to the difference between verb movement to the INFL-position, and verb movement to the COMP-position. Thus, the verb-second grammar found in the *Prose Rule of St. Benet* is of the asymmetric type that is found in languages like Dutch and German, which also exhibit categorical subject-verb inversion of both nominal and pronominal subjects in contexts with clause-initial prepositional phrase adjuncts or adverbs. Therefore, the Northern texts that exhibit such verb-second pattern must have a grammar different from the grammar of Old English and of Southern Middle English, in which the topicalization of prepositional phrase adjuncts and adverbs does not trigger the verb-second effect, resulting in the verb-third word order instead.

In the situation where Old English and the Southern and Western Middle English dialects show the continuation of non-asymmetric verb-second syntax similar to the patterns found in Modern Icelandic and Yiddish, and the Northern and Eastern Middle English dialects show asymmetric verb-second syntax characteristic of most West Germanic and Mainland Scandinavian languages, the question arises of how and under what circumstances such a striking structural difference could have been developed in the language. However, when the fact is taken into consideration that the Northern dialects with asymmetric verb-second syntax were spoken in the area included into Danelaw, i.e. the area with a significant concentration of both native and bilingual speakers of Old Norse – a Mainland Scandinavian asymmetric verb-second language – the most plausible answer to the above question would be that the asymmetric type of verb-second grammar appeared in Middle English as the result of the linguistic contact with Old Norse, a contact which has affected English more profoundly than any other linguistic contact in its history. (cf. the section 6.3.1.1.)

According to Eyþórsson (1995), Old Norse consistently exhibited the verb-second phenomenon in the same way as it is exhibited by all Modern Scandinavian languages except Icelandic. As it is shown in the examples from *Poetic Edda* below, the finite verb consistently occurs in the second position after *wh*-elements and topicalised constituents:

(79) a. Hvat *hyggr* þú brúði bendo …?
What *thinks* thou bride point
What do you think that the woman has meant ...?

b. Hverso *snúnoðo* yðr konor yðrar?
How *turned-to* you women yours?
How did you win the love of your women?

c. Hljóðs *bið* ec allar helgar kindir.
Silence *ask* I all holy beings.
I ask all holy beings for silence.

d. Voll *lézk* ycr oc mundo gefa víðrar Gnitaheiðar.
Field *said* you and would give wide Gnitaheiðar.
You said that he would give you the field of the wide Gnitaheiðr.

e. Þrymr *sat* á haugi, þursa dróttinn.
Thrymr *sat* on mound giants lord.
Thrymr sat on the mound, the lord of the giants.

(Eythórsson 1995: 248-250)

Verb-second word order in the sentences from example (79) appears only in main clauses, as expected in an asymmetric verb-second language in which the verb-second effect is the result of movement of the finite verb to the COMP-position. The assumption that the Northern and Eastern Middle English dialects borrowed this syntactic operation from Old Norse, along with so many other phonetic, lexical, and grammatical elements that were borrowed from the same source, seems plausible and highly probable under the circumstances.

Viewed in this light, the situation with subject clitics in Northern and Eastern Middle English dialects becomes easily explainable, since the finite verb in a main clause would always move to the COMP-position over the IP/CP boundary, which is the position of clitics, and, consequently, it would always appear to the left of the subject, be the subject a clitic or not. In this way, not only this syntactic change, but also other cases of borrowing from Old Norse attested to in Middle English, can be attributed to the imperfect second language acquisition of English by the Scandinavian settlers and their descendents. As a side effect, the mass of bilingual Scandinavian speakers quickened the morphological simplification of English in accordance to the observation made by March (1866: 16) in regard to the origin of Old English itself, about the linguistic unity which is achieved by preserving the features common to the two languages, and simply discarding the distinctive ones. In this way, there were in Danelaw two groups of speakers of English — the English themselves, whose grammar naturally followed the non-asymmetric Old English syntactic patterns, and the Scandinavians, whose grammar reflected the imperfect second-language acquisition, and which, among other imperfections, followed the symmetric syntactic patterns of their first language, Old

Norse. In this situation, the new language learner, i.e. the new-born children in this area, who were acquiring English as their first language, were exposed to two different verb-second grammars, one in which the finite verb moves to the INFL-position, the other in which the finite verb moves to the COMP-position. The crucial fact here is that the finite verb in the imperfect asymmetric verb-second grammar moves to the position higher than the position which it occupies in the native English grammar. For a new language learner, such a movement provides more robust linguistic evidence than the movement to INFL, so it is far more probable that, if faced with two options, the learner would opt for the movement to COMP, and make this operation a part of the grammar he/she is in the process of creating. In this way, it was easy for an alien syntactic pattern to penetrate the native language and becomes the integral part of its grammar. In the South, where the new language learners were not exposed to linguistic evidence from two different grammars, the Old English non-asymmetric verb-second grammar continued to be passed onto the new generations of speakers without any disturbance for much longer, until the Southerners themselves came into close contact with the speakers of the Northern variety, now with permanently deviated syntax, but also with the prestige status of a standard language.

6.4. The Decline of Verb-Second in the History of English

As demonstrated in the previous section, those varieties of Middle English that were exposed to direct Scandinavian influence diverged from the Old English verb-second patterns and evolved towards the asymmetric verb-second syntax that existed in Old Norse. The East Midlands dialect, the variety spoken in and around the city of London, and also the variety in which Chaucer and other significant authors of the age wrote their works, eventually became the prestigious variety which served as the basis for Standard English.

However, in the late fourteenth and early fifteenth century, the verb-second word order in Middle English exhibited a sharp decline. By that time, the earlier discrepancy in the position of nominal versus pronominal subjects in regard to the finite verb had already been lost from the language, and a rapid decrease in the frequency of subject-verb inversion took place.

According to Fischer et al. (2000: 132), the first texts to show this striking decline in verb-second are the prose writings of Richard Rolle, a mystical writer who wrote in the Yorkshire dialect in the mid-fourteenth century. For example:

(80) a. Thare-fore Ihesu *es* noghte funden in reches.
Therefore Jesus *is* not found in riches.
(Rolle, 5.8. cited in Fischer et al. 2000: 133)

b. Sothely þe ryghtwyse *sekys* þe Ioye and …
Truly the righteous *seeks* the joy and …
(Rolle, 4.24. cited in Fischer et al. 2000: 133)

Soon after, in the writings of John Wycliffe, created in Oxfordshire in the last quarter of the fourteenth century, the same absence of the word-second word order appears again:

(81) a. And by þis same skyle hope and sorwe *schulle* iugen us.
And by this same skill hope and sorrow *shall* judge us.
(Wycliffe, Sermon 372.97, from Fischer et al. 2000: 133)

b. bi song *the fend lettiþ* men to studie
by song the devil *prevents* men from studying
(Wycliffe, Feigned Cont. Life 112, cited in Fischer et al. 2000: 133)

During the fifteenth century, inversion of the nominal subject and the finite verb, and, apparently, movement of the finite verb to the COMP-position as the syntactic operation behind the inversion, experienced a further decline, but they never disappeared from the language. In a general survey of inversion in sentences with the adverbs *then*, *now*, *there*, *here*, *so*, *yet* and *therefore* in the position of the first constituent, Jacobsson (1951) estimates that, in the late fourteenth century, between eighty-five and ninety per cent of the sentences exhibit inversion; around the middle of the fifteenth century, the percentage of the inverted word orders in such syntactic contexts drops to twenty-eight to thirty-nine, and, at the end of the fifteenth century, further declines to only ten per cent and lower. Jacobsson's

quantitative analysis was later confirmed by the findings of Schmidt (1980).

What is somewhat unexpected, on the other hand, are the figures that Jacobsson presents for the percentage of inverted word orders in topic-initial sentences from the sixteenth century corpus: the lowest percentage of inversion in this period is barely three per cent, but the highest figure Jacobsson recorded is eighty-five percent, with most of the analyzed texts showing the percentage of inversion that ranges anywhere in between these limits. Such surprising variation in verb-second word order can be interpreted in just one plausible way – the verb-second phenomenon exhibited here has little, if anything, to do with grammatical constraint, but rather reflects the stylistic preference of each individual author. That means that the verb-second word order in these syntactic contexts actually ceased to be a grammatical phenomenon. Finally, Jacobsson's figures for the seventeenth century, which mostly fall far below ten percent, indicate that the verb-second word order in declarative main clauses with topicalized adverbs was a marginal syntactic phenomenon on the verge of disappearing. Clearly, Jacobsson's quantitative analysis indicates that movement of the finite verb to the COMP-position suddenly and sharply declined in the fifteenth century, then it experienced a brief revival in the sixteenth century, possibly as a stylistic feature, until it underwent the final decline from the seventeenth century on.

Bækken (2000, 2002, 2005) confirms Jacobsson's findings. He reports a very radical decrease in the seventeenth century of subject-verb inversion in declarative main clauses with one or more initial elements other than the subject. He suggests that the situation concerning the word order in seventeenth-century English was in many respects unsettled, and the stabilization of the verb-third order with the corresponding decline of the verb-second word order emerges as a rather erratic process, progressing in uneven stages with considerable variation not only between authors and text categories, but also between different syntactic structures and individual lexical elements. According to Bækken, a number of features appear to have played a role in deciding the overall organization of information in a clause, and it is difficult to tell what may have been the decisive factor in the change.

What seems to be the most striking characteristic of the seventeenth century word order is its apparent fluctuation, with a notable wave-like development of the verb-second order over time. This indicates that the demise of the verb-second word

order in Early Modern English, and the eventual stabilization of the verb-second order that took place by the end of the seventeenth century, was not an even unidirectional process where one pattern increases at the expense of the other. On the contrary, this development is marked by periods in which the process appears to have been halted and even reversed (Bækken 2005: 533). Apparently, at the end of the Early Modern English period, word order began to be governed by a complex interplay of syntactic and pragmatic factors – a situation which is still evident in the language, especially when the verb-second word order is concerned (cf. Chapter 5, section 5.4.1.). According to Bækken, syntactic and pragmatic factors work together in the great majority of sentences in order to achieve the pragmatically most appropriate order. This may indicate a stylistic difference between the two word orders, and it may reflect the fact that certain text types are conservative, thus preserving the old pattern. This is especially visible in religious prose, which tends to favor the more archaic verb-second patterns. Thus, the final stages of the verb-second word order, in Bækken's opinion, should be placed deep into the Early Modern English period.

Bækken (2000) also points out that the type of adverbial in the clause-initial position had a significant impact on the frequency of the verb-second word order in seventeenth century English. He registered highly divergent inversion rates in clauses with three different types of adverbials: while certain non-sentence adverbials frequently trigger inversion of subject and finite verb, this order is extremely rare following initial sentence adverbials and discourse adverbials. The latter are perceived as clause-external elements and, as such, they are disjunctive. Bækken claims that there is a close connection between disjunctive clause-initial and the absence of the subject-verb inversion. Structures with initial non-sentence adverbials vary considerably in the extent to which they allow inversion to take place. The rate is highest following single adverbs, whereas initial sub-clauses, whether finite or non-finite, are most typically followed by the verb-third word order. In addition, Bækken states that the inversion rates are significantly higher than the average with intransitive verbs. And among intransitive verbs, verbs of appearance or existence are in a majority in inverted structures. A major function of these verbs is to introduce a new subject on the scene, and the use of inversion makes it possible to structure the message so that the new element occurs post-

verbally, thus conforming to the normal distribution of given and new information as well as the heaviness principle. In contrast to intransitive verbs, transitive verbs typically occur in partially inverted structures in which such word order serves to maintain the connection between a transitive verb and its object. Clearly, the choice between the verb-second and verb-third word orders became less determined by the grammar of the language, and more by pragmatic considerations.

To make things more complicated, some authors, like Stockwell (1984) or Brinton and Stein (1995), suggest that a number of new verb-second triggers have been introduced in the period between Middle English and Modern English. They consist of fronted participial adjective and prepositional phrases and locative directional and temporal adverb phrases. According to Brinton and Stein (1995: 39-40), they all trigger the verb-second word order in constructions with copula and full verb and can be associated with a functionalization of a focusing strategy, either locally or at the level of discourse.

However, as Fischer et al. (2000: 134) points out, neither one of the quantitative analyses available in literature makes a distinction between finite lexical verbs and pre-modals. Considering the fact that Modern English modals, along with the auxiliaries *be* and *have*, are the only verbs still capable of moving to the COMP-position, this distinction may be crucial for the explanation of the decline of verb-second in English. The authors suggest that, in order for the problem of the verb-second decline in the period from the fifteenth to the seventeenth century, an extensive quantitative analysis of a substantial corpus would be necessary with special attention to a distinction between lexical finite verbs and modals and other auxiliaries, which were still in the process of making in the fifteenth century.

In the absence of such extensive quantitative analysis, however, there are a number of accounts available in literature for the loss of the verb-second constraint in English. Thus van Kemenade (1987) first attempts to explain it as a result of a change in the position of INFL. According to her, in the structure of Old and Early Middle English, INFL is located outside the sentential node S. As such, in order to be licensed it must be lexicalized either by a complementizer or by the verb-second movement. In late Middle English, there is a change in the underlying syntactic structure of the language, and INFL moves inside the S node, where it is located

after the subject position. In this way, this change in the underlying phrase structure caused the disappearance of the verb-second word order from late Middle English.

In a latter analysis, van Kemenade (1997: 349) addresses the asymmetry between pronominal and nominal subject as the factor which vitally contributed to the loss of verb second order. In earlier stages of the language, pronominal subjects behaved like weak pronouns, but in late Middle English this special behavior was lost. When the distinction between the two types of subject in respect to the position of the finite verb disappeared from the language, the immediate syntactic consequence was that fronting of XP to Spec,CP ceased to be accompanied by verb movement to INFL and COMP. Once the pronominal subjects, which used to trigger the verb-third word order, began to behave in the same way as nominal subjects, which used to trigger the verb-second word order, the vital contrast between these two word orders was obliterated. Because of this, the new generations of language learners had no positive evidence for the existence of movement of the finite verb to the COMP-position in the grammar, so they would fail to acquire the verb-second constraint, which inevitably led to its decline and disappearance in favor of the verb-third option. However, Rissanen (1994, 1999) shows that nominal and pronominal subjects occupy different positions in regard to the negation element even at the time when inversion of nominal subjects in topic-initial constructions began to rapidly decline, thus obscuring the evidence for verb-second in the grammar. In fact, this positional discrepancy continued to exist until deep into the seventeenth century, when the verb-second word order was already reduced to a marginal phenomenon, so the loss of verb-second cannot be caused by the loss of asymmetry between the two types of subject.

Haeberli (2000) attributes the loss of verb-second word order to the loss of empty expletives, and ultimately to the change in the verbal morphology. Following Hulk and van Kemenade (1995), he claims that the loss of verb second and the loss of expletive *pro*-drop coincide in the history of English. Various constructions which have been analyzed as involving empty expletives undergo changes at the same time when the frequency of verb-second structures decreases. Thus, impersonal constructions that existed in Old English constructions began to disappear in Middle English (cf. Allen 1995: 290). Furthermore, the frequency of the use of the overt expletive *there* in existential constructions rises rapidly after the

EME period (cf. Breivik 1990). On top of this, as Haeberli points out, [*adjective + to-infinitive*] constructions often occur without an overt nominal subject in both Old English and early Middle English, but their frequency steadily dropped throughout the Middle English period and instead an overt expletive subject starts being used (cf. van der Wurff 1990: 101). All these facts are solid proof, according to Haeberli, that the loss of verb-second word order in English coincides with the loss of empty expletives.

According to Haeberli, empty expletives are only licensed if singular present tense forms are distinguished from the infinitive. The erosion of the infinitive ending in late Middle English caused the first person singular to be identical to the infinitive. The empty expletive could no longer appear in Spec,Agr; therefore, post verbal subjects could no longer be licensed. Thus, Haeberli proposes that the loss of verb-second in the history of English is a consequence of the loss of the licensing of empty expletives. Non-pronominal subjects in Old English and early Middle English can occur in the lower one of two subject positions in the inflectional domain and this lower subject position is below the inflectional head to which the finite verb moves in contexts of non-operator fronting. Fronting of a non-operator therefore can create verb-second word orders. Haeberli argues that non-pronominal subjects in Old English and early Middle English can remain in a lower subject position because the higher subject position is occupied by an empty expletive. Verb-second word orders with fronted non-operators in Old English and early Middle English therefore depend on the licensing of non-overt expletives. Once empty expletives start being lost, verb-second word orders with fronted non-operators also start disappearing because the subject then has to move to the highest subject position and thus precedes rather than follows the finite verb, thereby giving rise to verb-third word orders. And since the loss of empty expletives is itself caused by the reduction of verbal inflection in Middle English, verb-second decline would thus be one of the many side-efects of the simplification of English inflectional morphology.

The most elaborate account of the loss of verb-second in late Middle English is the one given by Kroch and Taylor (1997) and Kroch, Taylor and Ringe (2000). According to these authors, the verb-second constraint was lost as the result of linguistic contact between the speakers of the Southern Middle English dialects,

and the speakers of the Northern Middle English dialects. The Southern dialect were characterized by an Old English type of verb-second system with a contrast between pronominal and non-pronominal subjects whereas the Northern dialects exhibit a regular verb-second pattern occurring with both types of subjects, since their verb-second grammar deviated from its Old English predecessor due to the linguistic contact with Old Norse.

These authors develop a complex scenario of language contact and grammar competition in an attempt to apply the model of an earlier syntactic change – that of Northern dialects in contact with Old Norse, which left numerous and documentable traces in the language (cf. section 6.3.1.1.) – onto this new situation where those varieties of English already altered by the contact with Scandinavian, now affected the Southern varieties in the same way, resulting in the change of the old syntactic patterns. In other words, according to Kroch and Taylor and Kroch, Taylor and Ringe, the loss of verb-second was a result of contact between the asymmetric verb-second grammar of northern speakers and the non-asymmetric verb-second grammar of southern speakers. Since, in the North, both pronominal and nominal subjects invert with non-subject topics, when northerners heard southerners say a sentence with a pre-verbal pronoun, they would conclude that the sentence comes from a non-verb-second grammar. The northerners would then acquire this non-verb-second grammar, which would begin to compete with their original verb-second grammar. In the situation where the 'non-verb-second' parameter setting is the typologically less marked than the verb-second parameter setting, the northern grammar which favored the verb-third orders would have an advantage in the grammar competition, and would therefore spread at the expense of the verb-second grammars of the South.

Although this proposal is not any less plausible that the hypothesis of earlier Scandinavian influence in the area of Danelaw, its main disadvantage is that, on the basis of the data that are available, it is relatively difficult to find clear empirical evidence for or against such a scenario, which, however, remains possible and even probable considering the sociolinguistic situation of England in the fourteenth and the fifteenth centuries.

6.5. Conclusion

One apparent conclusion that can be drawn from everything said in this chapter is the fact that the verb-second phenomenon that existed in the history of English was a syntactic phenomenon far more complex than verb-second in any other Germanic verb-second language. The nature of this phenomenon in Old English shows characteristics that can be found in both asymmetric and non-asymmetric Germanic verb-second languages today, so it cannot be easily classified as the member of either group. Chances are, although it is not easy to prove this assertion, that Old English was, in respect to the verb-second phenomenon, the most conservative member of the Germanic group of languages, and that it preserved almost the exact syntactic set of condition which existed in Proto-Germanic, and which were the starting point for the development of both asymmetric and non-asymmetric verb-second syntax in all other Germanic languages as they are found today.

It is also clear that this syntactic phenomenon in Old English was notably different than it is in the modern language — although not radically different. This verb-second syntactic system underwent certain changes during the Middle English period which led to establishing of the verb-second effect in the form that still exists to date. Doubtless, a very important, maybe even crucial factor in this process of syntactic change was the linguistic contact of English and Old Norse, a contact that took place in the Old English period, but which only becomes visible to researchers in the Middle English period, because the majority of the preserved Old English documents were written in West Saxon, the literary standard of the age, which, however, remained unaffected by this linguistic contact. But this contact had clearly caused a division in Middle English, as far as the verb-second grammar is concerned, into the Southern and Western dialects that inherited this syntactic phenomenon directly from Old English, and the Northern and Eastern dialects which diverged from the Old English type of verb-second and exhibit the type borrowed from Old Norse, an asymmetric verb-second language.

Towards the end of the Middle English period, the verb-second phenomenon in English exhibited a relatively abrupt and sharp decline, under circumstances that are not yet clearly understood due to the absence of an extensive quantitative analysis which would offer sufficient amount of accurate data for a

possible ultimate explanation of it. There are, however, numerous syntactic analyses of the limited corpora presented in literature, which attempt to explain the cause and mechanisms of this syntactic change. Still, what these various analyses of the loss of the verb-second word order in the history of English show most notably is not the exact way in which this syntactic phenomenon disappeared from English grammar, but a number of different ways in which this disappearance was logically possible from the point of view of the syntactic system of the language. However, while many different developments are possible in theory, it is certain that only one did take place in reality of the language history, only, at this stage it seems impossible to draw an ultimate conclusion in regard to which exact syntactic scenario it was. Fischer et al. are probably right when they conclude that the situation in respect to the state of the verb-second syntax at the end of the Middle English and the beginning of the early Modern English period "… leaves a somewhat confusing picture – there is a lot left to investigate here, and even then, the precise picture may well remain hidden by the mists of time" (Fischer et al. 2000: 132).

CHAPTER 7

CONCLUDING REMARKS

This dissertation presents an attempt to examine the verb-second phenomenon in English. The syntactic phenomenon in question has been investigated in two dimensions: synchronically, whereby the data from Modern English are inspected in the context of other Germanic languages, and diachronically, where the data from Modern English are examined in the contexts of Old and Middle English.

It is generally considered in literature that the verb-second word order, otherwise quite an exceptional syntactic feature among the Indo-European languages, is a quintessential Germanic syntactic phenomenon — with the exception of Modern English, which is taken to exhibit only the 'residual' verb-second phenomenon. The implication here is that there is one unified Germanic verb-second constraint, and that English somehow does not fit in. However, a closer inspection of the data from both Western and Northern Germanic languages shows that there seems to be various distributional differences between the verb-second phenomena in various languages: sometimes the verb-second effect is not triggered by all fronted constituents, but only by some; sometimes the phenomenon is only restricted to certain types of clauses; sometimes it is the result of different underlying syntactic operations. In other words, what the data from different languages which exhibit the verb-second word order show is that verb-second is a highly language-specific syntactic phenomenon. Apart from the major difference between the verb-second languages in respect to the types of clauses which allow

the second position for the finite verb, each language also has certain peculiarities in regard to this phenomenon which are not found in related languages. Viewed in this light, English is simply considerably more peculiar than other languages of the Germanic group, but it is not fundamentally different in the way, say, Serbian or Greek syntax differs from the syntax of Dutch or Icelandic.

Granted, significant differences are notable here, most of all the fact that, while other Germanic languages tend to have the finite verb in the position of the second constituent obligatorily, in the majority of their sentences, English seems to favor the verb-third word order in the majority of sentences. Thus, predicative noun phrases in English almost always block the verb-second effect when they move to the clause-initial position, triggering the verb-third word order instead, whereas in Dutch or German topicalization of both direct and indirect objects obligatorily triggers the verb-second effect. Also, in many contexts where English allows the verb-second word order, it is often only optional and, as such, the matter of style governed by pragmatic reasons, not a grammatical constraint. Nevertheless, English has certain clearly definable syntactic contexts in which the second position of the finite verb is a grammatical requirement. Moreover, in these contexts, the verb-second word order is the result of the underlying movement of the finite verb to the COMP-position, which limits the verb-second phenomenon to the main clauses only, just like in asymmetric Germanic verb-second languages. And yet, in certain very limited syntactic contexts, English also allows the verb-second word order in embedded clauses as well. All these facts fit in well with the conclusion about the language-specific character of this phenomenon. Apparently, although certain very significant differences do exist in the respect to the verb-second phenomenon between English and all other verb-second languages, these differences are more quantitative than they are qualitative. They are more the reflection of the fact that the English lexical verbs have lost the ability to move to the COMP-position than the reflection of fundamental differences between the two syntactic systems as such. This made the second position in English more or less reserved for the modals and the auxiliaries *be* and *have*, but this restriction does not change the nature of the verb-second phenomenon in the language. It is clear that the difference between, say, German, which has the finite verb in the second position in practically *all* main clauses, and English, which has the finite verb in the second position only in *some*

main clauses, but where, in both languages, the verb-second word order is the result of the verb movement to COMP, does not even stand in the same dimension as the difference between German and, say, Yiddish, which has the finite verb in *all* clauses, both main and embedded, and where the verb-second word order is the surface result of the verb movement to INFL – an underlying syntactic operation for which it is almost impossible to determine whether it exists in German, but which does occur in limited contexts in English.

Therefore, the fact that the verb-second phenomenon, as it is exhibited in English, is different in respect to the same phenomenon in other Germanic languages 'goes with the territory', so to speak. Much more important seems to be the question of whether this phenomenon in English is 'residual' in the sense, as claimed by Rizzi (1990), that the syntactic system of Modern English exhibits the vestigial form of verb-second as the historical remnant of a former syntactic system which was much more similar to that of other Germanic languages.

The investigation of the verb-second phenomenon in Old English indeed shows that the verb-second word order in the history of English appeared in wider syntactic contexts than it is the case in the modern language. However, a closer inspection of verb-second in Old English shows that this syntactic phenomenon was far more complex there than was ever recorded in any other Germanic language, living or extinct. In other words, if, concerning the verb-second phenomenon, Modern English is peculiar in this respect to other Germanic languages, Old English was even more so – at least the Modern English verb-second instances are clearly asymmetric, whereas Old English seems to be standing somewhere in between asymmetric and non-asymmetric verb-second languages, belonging to a sub-class of its own. Also, unlike the modern Germanic languages – but exactly like Modern English – Old English also allowed numerous and diverse instances of the non-verb-second word order. Moreover, although various accounts for the loss of verb-second in English exist in literature, the fact remains, that verb-second word order in English is not at all 'lost' in the sense that it ceased to exist. On the contrary, Modern English still allows, and sometimes demands, verb-second word order in diverse and heterogeneous syntactic contexts. It therefore seems necessary to clearly define what exactly was lost in the history of English in respect to the verb-second phenomenon, and what was retained.

Old English had two different syntactic contexts in which verb-second occurred: the first context involves a fronted operator which triggers the verb-second word order, and the second context involves a fronted non-operator which also triggers the verb-second effect. Since Modern English still requires the finite verb to take the position immediately after this fronted operator, i.e. the position of the second constituent, e.g. *Whom will you meet?* versus **Whom you will meet?*, it is clear that this form of verb-second was never lost in English. The only difference in regard to Old English is, again, the fact that lexical verbs of Modern English lost the ability to move to the COMP-position, so they cannot be fronted any more, but this restriction is the consequence of a more general development affecting the movement properties of main verbs rather than a substantial change concerning the verb-second syntax of the language.

This leaves the second syntactic context, the one in which a non-operator is fronted, as the main candidate for the 'loss of verb-second' in the history of English. And, indeed, this type of verb-second is what was lost in the course of the language history, because Modern English equivalents of the Old English structures of this type would be ungrammatical even if an auxiliary would follow the fronted non-operator, e.g. *Hine haefde aer Offa Miercna cyning & Beorhtric Wesseaxna cyning afliemed* (The Parker Chronicle, from Smith 1966: 18) versus **Him had earlier Offa Mercia's king and Beorhtric Wessex's king expelled*.

However, does this mean that the verb-second constraint is lost in English at all? If Old English is closely examined in regard to this 'lost' verb-second type, it becomes clear that it never had the force of a grammatical constraint to begin with. When Old English is compared to Modern Germanic verb-second languages, one striking difference is immediately observable: in Modern Germanic languages, virtually all main clauses, declarative, interrogative, negative and imperative, with rare exceptions, require the finite verb to take the position of the second constituent. Nothing even remotely similar was ever attested in Old English. Moreover, genuine verb-second orders with fronted non-operators generally occurred in Old English only with non-pronominal subjects. If the subject is pronominal, however, it tends to precede the finite verb, thereby giving rise to the verb-third word order rather to the verb-second one. Nothing like this was ever attested in any other Germanic language, in their modern stages, or in their history. And even when the subject is

nominal and when the non-operator is fronted, Old English still allows verb-third word order in a number of cases, so even such syntactic contexts occasionally fail to trigger verb-second. In fact, when the Old English word order is concerned, the only modern Germanic language with which this language truly corresponds is none other than Modern English itself. Apparently, the loss of this second type of verb-second, in which the non-operator was fronted and the subject was non-pronominal, did not cause tremendous changes in the surface word order of the language. The first type of verb-second that is triggered by a fronted operator, was obligatory in Old English as it still is in Modern English, and it has always been present in the language. But the second type, the type that was lost, was always more or less optional, as the language always had an alternative for it that was grammatical. By losing it, English did not really lose its verb-second nature, simply because it apparently never had a verb-second nature entirely comparable to other Germanic verb-second languages, either asymmetric or non-asymmetric. In respect to the verb-second phenomenon, English was something *else* from the very beginning.

Viewed in this light, then, the verb second phenomenon in Modern English can hardly be considered 'residual' – something clearly was lost, but the syntactic essence of the phenomenon that existed in Old English is still there in Modern English. In fact, it seems apparent that what was lost was allowed to be lost precisely because it was non-essential to the syntax of the language. Therefore, the root of the syntactic differences that evidently exist between English and other Germanic languages should be sought in the stage where these syntactic differences must have originated – and that is Proto-Germanic. Following this line of reasoning, the hypothesis proposed by Kiparsky (1995) seems to be pointing in the right direction: according to Kiparsky, the syntactic situation in Old English, taking the middle-ground in between asymmetry and non-asymmetry, preserves the original, Proto-Germanic verb-second grammar; this state of the verb-second phenomenon reflects a historical Germanic verb-second core, a starting point from which all other Germanic languages further developed their verb-second grammars in one or the other direction, while English, being the most conservative Germanic language in this respect in its earliest stage, still remains the most conservative — and hence inevitably notably different – in respect to its Germanic relatives. Viewed in this

light, the state of the verb-second phenomenon in Modern English, i.e. movement of the finite verb to the COMP-position when triggered by an operator in clause-initial position, still preserves the vivid picture of how the whole verb-second story began in the Germanic branch of the Indo-European family.

The sharp decline in the frequency of the verb-second word order at the end of the Middle English period, on the other hand, is indisputable, but difficult to fully explain. If English did not truly lose its Old-English verb-second nature, it surely greatly reduced it on the eve of the Modern period. What seems apparent is that the verb-second word order – or the subject-verb inversion, as the phenomenon has traditionally been perceived – actually shifted from being a grammatical constraint to being a stylistic option governed by pragmatic reasons. This was a very gradual syntactic change, as the decline in frequency of the verb-second structures began in the fourteenth century, but it stabilized in the present day levels only towards the end of the seventeenth century. Doubtless, even in late Middle English the subject-verb inversion became the matter of style in all contexts where it still is today, but the wave-like nature of the fluctuations in use of these structures remains puzzling and insufficiently explained. There were various attempts to explain the decline of verb-second in English by the inter-linguistic factors, but none of them seems to be particularly convincing. Clearly, the key for the explanation of this decline should be sought in two places: in the process of language acquisition, and, consequently, in linguistic contacts.

The explanations that are focused on the first language acquisition as the locus of this syntactic change attempt to determine the exact factors which led to the loss of sufficient evidence for the verb-second grammar in the linguistic material that surrounded the new language learners, which resulted in constructing grammars in which the verb-third word order became favored, and the verb-second one just an option. And the most probable scenario for obscuring the verb-second evidence in this way seems to be the existence of two alternative grammars in competition due to linguistic contacts that were never scarce in the history of English. The drawback of such an explanation for the decline of the verb-second word order in English lies in the fact that, in the absence of the direct evidence, it is not possible to prove any contact hypothesis without the shadow of a doubt – which also makes it very hard to prove them wrong either. In other words, every

explanation of a linguistic phenomenon that is based on the linguistic contact as the ultimate cause of change remains more or less speculative.

On the other hand, it cannot be coincidental that, whenever the verb-second phenomenon exists, some form of the linguistic contact situation is always around it. Wherever it appeared in historical times, for example in non-Indo-European Estonian, or in Slavic Sorbian, it is explained by linguistic contact – in the case of these two languages, by the contact with German. And Proto-Germanic itself, which most certainly did not inherit the verb-second property from Proto-Indo-European, is being linked, although somewhat controversially, to the Semitic language of Carthage, whose colonies supposedly existed along the coasts of the North Sea, thus linguistically affecting the western languages, namely Germanic and Celtic. And indeed, Celtic languages such as Irish, Welsh, Cornish and Breton, which are now generally verb-first languages, were all verb-second languages in their earlier historical stages. If these attested Celtic languages had the verb-second syntax, then it is highly probable that most, if not all other Celtic languages, which were spoken from Asia Minor to the Atlantic coast, were also verb-second languages. Can it be coincidental then, that, although Latin itself did not have any verb-second property, languages like French, Spanish, Portuguese and northern Italian dialects all were verb-second languages in the Middle Ages, considering the fact that the great majority of their speakers were originally Romanized Celts whose native languages were replaced by Latin? The verb-second phenomenon was particularly notable in Old French, the language which assimilated first the Frankish invaders, and later the Viking Normans, thus additionally coming into close contact with other verb-second languages. Finally, the beginning of the decline of the verb-second phenomenon in English, which was first registered soon after an earth-shattering event that radically changed the Medieval society – the Black Death epidemics – strangely coincides with the time when the verb-second phenomenon began to decline in Middle French and Middle Welsh, languages with which Middle English was in very close contact at the time. Can it be coincidental that the decline of the verb-second phenomenon affected all three languages at the same time independently of each other? Or was their close contact a significant factor in this process?

There are many questions of this kind, and, in the absence of extensive

cross-linguistic diachronic research, most of them remain unanswered so far, so the possible answers could only be speculated about. But even in the absence of definite answers, the fact that these questions can be asked seem to be presenting sufficient proof for the assumptions that linguistic contacts play a certain role in the development of the verb-second phenomenon, and that this external aspect of language history should not be neglected in any investigation.

Verb-second proves to be an extremely complex and highly language-specific syntactic phenomenon. Although much is revealed about its true nature, about the underlying syntactic operations behind it, and about it emergence and loss in diachronic perspective, numerous questions still remain unaccounted for, and further researches are necessary in several directions. It seems clear, however, that no research should be particularly insightful unless the phenomenon is investigated in both synchronic and diachronic dimension on one hand, and unless both inter-linguistic and extra-linguistic factors are taken into consideration. Only such complex approaches to this complex issue can lead to the path of ultimate explanation of the verb-second phenomenon, in English, or in any other language.

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