STUDIA PHILOLOGICA JYVÄSKYLÄENSIA 13

RAIJA MARKKANEN

TENSE AND ASPECT IN ENGLISH AND FINNISH A CONTRASTIVE STUDY

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PREFACE

This is an attempt to clarify some of the problems connected with tense-usage and expressions of aspect in English and Finnish. As a contrastive study it is connected with the Jyväskylä Finnish-English Contrastive Project. The initial idea of a contrastive analysis of this area was, however, born in my mind during my two years of study in the Linguistics Department of the University of Manchester, where I received my initial training in linguistics. I therefore thank the British Council for giving me an award and thus enabling me to pursue a programme of graduate studies at the University of Manchester.

I wish to thank Professors Kalevi Wiik and Kari Sajavaara for reading an earlier version of this study and suggesting alterations. Professor Sajavaara has also read the manuscript of the present version together with Dr Orvokki Heinämäki. I am very grateful to both of them for pointing out errors and for their invaluable comments.

My gratitude also goes to the Emil Aaltonen Foundation for giving me a grant in 1977 and to the Publications Committee of the University of Jyväskylä for publishing this thesis in their Studia Philologica Jyväskyläensia. I also wish to thank Mr Graham Dulwich, B.A., for revising the language of the manuscript and Miss Helena Annala for typing it. I am also grateful to the colleagues, students and friends who, knowingly or unknowingly, have provided me with material for the study.

Finally, I owe a great debt of gratitude to my family and friends, without whose support and firm belief in me the writing of this would never have been possible.

I wish to dedicate this to the memory of my parents.

Jyväskylä October, 1979

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1. INTRODUCTION

1.1. General Considerations

The problem of 'false friendship' ie. words and expressions that are superficially, often etymologically, related to each other in two languages, but whose meanings may differ widely, is acknowledged in lexical contrastive studies. The term 'false friends' could equally well be extended to the area of grammatical contrasts as well. The fact that there are grammatical categories and constructions that superficially correspond to each other in two languages causes as much difficulty as words that are alike in form but differ in meaning. Grammatical 'false friendship' can be exemplified by a syntactic phenomenon such as negation, whose basic function is the same and which might even be realized by similar means in two languages, eg. by a negating word, but which, when considered more closely, might show differences in its function in the languages. Similarly, a system of tenses might exist in two languages, with the same number of members, and the tenses might even be formed in a similar way, eg. by morphological means and/or by means of auxiliary and main verb combinations. Nevertheless, these similar tense-systems might exhibit differences in the ways they function in the languages. This can be regarded as parallel to the 'false friendship' between pairs of words which might be etymologically related in two languages and show similarity of form, but reveal different shades of meaning when considered more closely.

It was the realization of the existence of a 'false friendship' between the tense-systems of English and Finnish that gave rise to the thought of a contrastive analysis of this particular area. Every Finnish teacher of English and every advanced Finnish learner of English knows that, in spite of the apparent similarity, the tense-systems of these two languages show differences that cause difficulties and errors that persist even at an advanced level of learning. Both languages can be said to have the same number of tense forms, of which two, the present tense and the past tense, are distinguished by morphological marking, and the other two, the present perfect and the past perfect, are formed

by combining an auxiliary and a participle form of the main verb. In addition, there is a great deal of similarity in the way these tenses are used but also enough cases of differences to warrant a deeper analysis and comparison of their functions. Neither language has a future tense, in the same sense that they have the tenses mentioned above. Both have different ways of denoting futurity, which show a great deal of difference in the meanings that they express in addition to merely denoting the time-relation.

The expressions of futurity lead us to another consideration, which again is equally true of lexis and grammar, namely that a supposedly similar lexical or grammatical area may reveal a different distribution of the items covering the area in the two languages. Lexis is abundant with examples of this: the same conceptual area may be covered by one single term in one of the languages, in the other by two or more (eg. Finnish odottaa vs. English wait and expect; Finnish lainata vs. English borrow and lend). Examples are easy to find within the area of grammar as well: for example, the expressions of futurity in English and Finnish, although they express the same time-relation, denote different additional meanings (as will be seen in 4.3.) and thus can be said to divide the same conceptual area differently. Or, to take another example, Finnish, as will be shown later, can be said to have the category of progressive, which, however, only partly covers the conceptual area that is covered by the progressive in English. This would seem to indicate that there is a difference in the conceptualization of these areas between the speakers of English and Finnish. Dirven (1976:2) refers to the same phenomenon:

Although basically the same phenomena occur and the same experiences are suffered in all cultures, it is astonishing that all cultures organize these impressions and experiences into slightly or radically different concepts, as we experience the effect in their languages. They derive these concepts from fundamentally similar facts but abstract only certain aspects of these facts, usually in different combinations and with different accentuations.

Accepting this does not mean accepting the strong Whorfian hypothesis about people who speak different languages representing different 'world-views'. It simply means that, although the same basic concept, such as futurity, exists in two languages, it may be divided differently, which is then reflected in the languages in expressions that do not totally correspond to each other. For foreign language learning this means that the L_2 learner has to learn to make distinctions where no distinctions are made in his mother tongue or to reorder his former distinctions. Dirven (1976) suggests that contrastive linguistics should, in addition to pure linguistic descriptions, also attempt to discover the strategies which a native learner uses when 'conceptualizing the perceptions accompanying the use' of linguistic items. The discovery of these strategies requires, however, much more psycholinguistic research of language acquisition and language processing than is available at present (cf. Sajavaara and Lehtonen 1979). Therefore, all that a contrastive analyst can do at present is to attempt 'a refined semantic analysis of a given construction', without yet being able to take into account the perceptual strategies accompanying the use of these constructions, which, according to Dirven, would be the 'crowning task' of contrastive analysis.

1.2. Theoretical vs. Applied Contrastive Analysis

The problem whether contrastive analysis should be extended to an analysis of the perceptual strategies that accompany the use of linguistic constructions is naturally connected with the aims set for the analysis. It has been common to see its contribution to language teaching as the sole purpose of contrastive analysis. Consequently, for many people the justification for all contrastive research depends

Carroll (1963:12) presents the idea of the 'developmental hypothesis of linguistic relativity' and expresses the opinion that, 'insofar as languages differ in the ways they encode objective experience, language users tend to sort out and distinguish experiences differently according to the categories provided by their respective languages. These cognitions will tend to have certain effects on behaviour.'

on its usefulness for foreign language teaching. Undoubtedly, this is due to the fact that contrastive studies were initiated to serve this particular purpose, beginning with Fries' (1945:9) famous claim that the most effective materials for foreign language teaching were 'those based upon a scientific description of the language to be learned, carefully compared with a parallel description of the native language of the learner'. Since then, however, error analysis has shown that only a part of the foreign language learner's errors could be explained through interference from the mother tongue, and interlanguage studies have begun to describe language learning as a process through various stages towards a 'complete' command of the foreign language, stages which could be analysed without any reference to the learner's mother tongue. This has meant that contrastive analysis has found itself on the defensive. Thus, a considerable change has taken place since the late sixties, when Politzer (1967) could write that 'perhaps the least questioned application for linguistics (to language teaching) is the contribution of contrastive linguistics'. Contrastive analysis has also been blamed either for being too abstract for the purposes of language teaching or else for having produced results which are so commonplace that every language teacher knows them from experience (cf. Sajavaara 1977)

The complaint about contrastive analysis having been both too abstract and having produced commonplace results is at least partly due to the fact that, when attempting a complete contrastive analysis of some area of the structure of two languages, the analyst has to be theoretical, while some of the results of a complete analysis might already be known to foreign language teachers. A solution to the problem would be to acknowledge a distinction between theoretical and applied contrastive studies. Within the Polish-English contrastive project this is done by Fisiak (1973), who further classifies both theoretical an applied studies into general and specific. Each of these four types has its own aims. The general theoretical studies aim at constructing an adequate model for the comparison of two languages, while the specific theoretical ones aim at an exhaustive account of the similarities and

Richards and Sampson (1974) report that 'George (1971) found that one-third of the deviant sentences from second language learners could be attributed to language transfer, a figure similar to that given by Lance (1969) and Brudhiprabha (1972)'.

differences between a given pair of languages. General applied studies work on a model, like the general theoretical ones, but the model is for the comparison of two languages for a specific purpose. If the specific purpose is pedagogical, the aim is to develop a model for the prediction of interference and for building up hierarchies of difficulties. Specific applied studies utilize the findings of specific theoretical studies and those of general applied studies for the purposes of preparing teaching materials, tests, and the choice of teaching strategies.

Theoretical contrastive studies need no more justification than any other type of theoretical linguistic analysis. Their aim is, in simple terms, the same as that of theoretical linguistic analysis in general, ie. 'to explain the link between the form of speaker's utterances and the message those utterances carry' (Bouton 1976:145), with the difference that in contrastive studies there are always at least two languages whose ways of expressing messages are being described and compared. Theoretical contrastive studies have an important role to play in a central area of the development of linguistic theory, ie. the search for linguistic universals. Only by comparing languages can we postulate and verify the existence of universals. This in itself is a justification for theoretical contrastive studies. In addition, it is a phenomenon noticed by those carrying out contrastive analysis that a comparison of two languages reveals in the languages features that might otherwise have remained unnoticed. Thus, contrastive analysis has a contribution to make to the study of the individual languages under comparison. Consequently, this type of analysis has its interest and justification even apart from the usefulness of contrastive linguistics in explaining language learning processes - or explaining translation processes, which has also been mentioned as one possible application of the results of contrastive analysis.

Although the initial idea for the present contrastive study came about from the observation of a practical problem connected with the teaching of English to Finnish learners, the writer has proceeded far from such practical aims. The main objective of the present study is to give an account, and a theoretical comparison, of the expressions of time and aspect in English and Finnish, concentrating in particular on the use of tenses. It seems that this has to be done before attempting to solve any practical learning problems that might be due to interference from the learners' mother tongue. The theoretical

contrastive statements constitute the basis for applications of contrastive studies to psycholinguistic studies of interference, to the explanation of errors, and to the theory of second language learning. (cf. Zabrocki 1976)

1.3. Method

Theoretical contrastive studies, like any other type of linguistic analysis, presupposes a careful consideration of the linguistic model to be chosen as the basis of the analysis. The choice of the items to be compared in the two languages is also closely connected with the choice of the model. Nevertheless, contrastive analysis is not dependent on any particular model. 'As far as models are concerned it simply requires a uniform framework of comparison' (Nickel 1971:6). This implies that some information will be revealed whichever linguistic model is chosen as the basis for the analysis, provided that the same model is systematically used in the description of both languages. It also suggests that the same problem could be approached from different angles, using different linguistic models. Thus, contrastive analysis can be eclectic as far as linguistic theory is concerned, and for each individual study the theory that seems to yield the most promising results of the problems involved can be chosen. In principle this means the choice of the 'most adequate' of existing theories, ie. the one that 'can explain more facts' than other theories (cf. Fisiak, Lipinska-Grzegorek and Zabrocki 1978).

The first contrastive studies used structural grammar as their model. In the late 1960's the transformational-generative model began to be advocated as the most suitable one for the comparison of languages, although the advocators remained 'open-minded towards analysis using models other than TG' (Nickel 1971:4). The main advantage of a generative model for contrastive analysis over other models is that it assumes the existence of deep structure, which showed that many structural differences between languages were only superficial. Another advantage offered by generative grammar is the positing of universals, without which contrastive analysis would result in 'a list of contrasting paradigms and autonomous descriptive statements with no interrelating of the languages

being contrasted' (Di Pietro 1971:4). The possibility of a universal base gave a natural starting point for the comparison of languages, a tertium comparationis. It was easy to start from a common base shared by the two languages and look for similarities and differences in the ways the two languages related this to the often very different surface structures. Consequently, the rules that lead from the deep to the surface structure became crucial in TG-based contrastive analyses.

The rapid developments within the transformational-generative theory, particularly the new ideas concerning the nature of deep stucture, caused new problems for contrastive analysis. It soon became obvious that the idea of base as represented by the Chomskyan 1965 version was not suitable for contrastive analysis. This syntactic deep structure was found to be 'a very shallow and specific language dependent level of analysis' (Lipinska 1975:48). As Corder (1973:240-243) points out, it is not difficult to find examples in which identical deep derivation in two languages hides a semantic difference, or, vice versa, examples in which identical meanings in two languages require different deep structures, if analysed according to the principles of the 'classical' model. The problems caused by these developments within transformational-generative grammar as regards contrastive analysis can be described in Bouton's (1976:151) words:

From a theoretical point of view, the mutual incompatibility (of deep structure conditions and the universal base) stems from the fact that the deep structure conditions were developed within the descriptive theory of the late 1960's (Chomsky, 1965; Lakoff, 1968; Fillmore, 1968; and Perlmutter, 1968) and were designed in the process of establishing grammars of individual languages for the most part. The universal base, on the other hand, applies to a multitude of divergent languages and is even today only vaguely defined. As a result, the two concepts, the deep structure conditions and the universal base, were not developed as integral parts of a cohesive theory. That they are not compatible is not surprising.

The problem, then, is that the universal base cannot allow the conditions developed for the deep structures of individual languages. It thus became obvious that a syntax-based deep structure could not be used as the tertium comparationis in contrastive analysis. Nevertheless, such a common basis was needed, and investigators began to look for it at a more abstract level, the level of messages since 'the possibility of expressing the same meaning in different languages can be reasonably safely assumed (Lipinska 1975:48).

Krzeszowski (1974) also presents the view that the shared base in contrastive analysis should be semantic in nature, that it should consist of *identical input structures'. Consequently, the theory adopted 'should be such that it would assign identical input structures to equivalent sentences in any two languages'. To fulfil this requirement, the semantic input structure should be category-neutral, ie. not include categories such as NP, VP, tense, modal etc., which are neither universal nor semantic categories. Instead, Krzeszowski suggests a model for contrastive generative grammar which consists of five levels: (i) the semantic level on input structure (semantic representations); (ii) a categorial level, at which major grammatical categories (NP, VP, adjective, tense etc.) are assigned to 'various portions of the semantic representations'; (iii) the level of syntactic transformations, at which the major grammatical categories are arranged in the order they appear in actual sentences and minor categories (prepositions, auxiliaries, adverbs) are introduced; (iv) the lexical level, at which lexical items are inserted from the dictionary; (v) a post-lexical level, at which transformations arrange minor syntactic categories, add inflectional endings to words, and introduce word-boundaries. The difference between a sentence in L; and one in L; arises somewhere in their derivation between the indentical input level and the different surface levels. According to Krzeszowski, contrastive analysis should aim at finding the level at which the first diversification takes place in the derivations of equivalent sentences in the two languages. The lower the level of the first diversification, ie. the closer to the surface it takes place, the greater the similarity between the languages, ie. the more the rules used in the derivation of the equivalent sentences are identical. This postulate, says Krzeszowski (1974:18), 'may prompt research strategies for constructing hierarchies of difficulties in the process of second language acquisition, eg. it may clarify some problems involved in

negative and positive transfer', which seems to indicate that he believes in the psychological validity of the model. Furthermore, the grammar should be a text-grammar because there are grammatical phenomena that cannot be explained without a reference to contextual factors. According to Krzeszowski (1974), the base should consist of roles, 'primitive axiomatic notions', such as Agent, Patient, Resident, and Loci (from Locus, at Locus, and to Locus), which are represented in the form of 'configurations and subconfigurations as inputs to the derivations'.

It is easy to agree with Krzeszowski's requirement that the base should be semantic and that the input structures should not contain any grammatical categories because these are not necessarily universal nor even shared by the two languages. This would mean, for instance, that the category 'tense' could not occur in the input structure, but, instead, the notion of 'time' should be present in the base in one form or another. The rest of Krzeszowski's highly abstract and complicated model is difficult to apply to the practical problem of contrasting languages. His theoretically very logical model of five levels is difficult to follow in the actual description of the derivation of sentences and, it is particularly difficult to decide at which level the first diversification really occurs between the equivalent sentences of two languages. Krzeszowski himself refers to difficulties when discussing the English PP tenses (tense forms containing past participle forms) and their Polish equivalents. Thus, although Krzeszowski's theory is no doubt a laudable attempt at a systematization of contrastive analysis, its application to the solution of individual contrastive problems may turn out to be quite difficult. Van Buren's (1976:315) doubts about its applicability are worth repeating here:

Now, there can be no quarrel with this type in principle if only because of its immense heuristic potential. There is no better way of discovering new facts than by formalising your hypotheses in a rigorous comprehensive framework. The question is, can it really be done? Is it perhaps, and always will be, a 'pseudo-procedure'? That is, a procedure that looks fine on paper but which, in practice, can never achieve its objectives. And if that is the case, what is the real difference between it and the muddling-through procedures of yesteryear? ... However, the great virtue of Mr. Krzeszowski's book is that it reminds one again of

the appalling immensity of the contrastive analyst's task. That is, if contrastive analysis is to achieve some sort of systematic status.

What has been said above points towards a semantically based model of description in contrastive analysis, a model in which the starting point consists of semantic concepts. For the present study, this means the semantic concepts of 'time' and 'aspect'. It is also obvious that the grammatical categories needed for the expression of these concepts in the surface structure will have to be accounted for and compared in the two languages. However, the description of their actual derivation and a comparison of these derivations is often less significant than an analysis of the reasons that lead to the choice of a particular surface expression, reasons which are often pragmatic. This is particularly true in view of the fact that, as was pointed out above, there is a great similarity in the tense-systems of English and Finnish.

As far as the grammatical model is concerned, the basic assumption in the present study is that there are universal time-relations and aspectual distinctions, which are semantic concepts. It is important to discover and compare the grammatical categories that are involved in their realization in the two languages to be compared. Where more than one way of realizing a particular temporal relation or aspectual distinction is available, an interpretation of the possible semantic differences between the alternatives is needed. It then has to be considered whether the same distinctions are made in the other language. If the expressions seem to correspond to each other semantically, possible differences in the contexts in which they can occur must be considered. The analysis thus starts from semantic concepts but then moves to the surface, attempting to interpret the expressions of time and aspect and the possible restrictions in their use. The procedure is eclectic in that it takes advantage of explanations of time and aspect given on the basis of all available linguistic theories. The method thus completely lacks the systematization of Krzeszowski's model. The aim of the analysis is a relatively non-technical description without any formalization of the results within a particular theory or model.

1.4. Equivalence

One of the first problems facing a contrastive analyst is the question of equivalence, since it is crucial in the choice of the items to be compared. The most common method used in finding comparable items has been translation, ie. those linguistic items that can be considered as translations of each other are comparable. Translational equivalence is, however, a vague concept and needs a more precise definition for the purposes of contrastive analysis.

Catford (1965) suggests a formal procedure for discovering translational equivalents. The procedure consists of tests carried out with the help of a bilingual speaker. Catford's definition for equivalence is that a text or a portion of a text in $L_{\rm i}$ is equivalent with a text or a portion of a text in L; if it changes when the L; text/portion of a text is changed. This can be found out empirically through a commutation test administered to a bilingual speaker. In addition to this empirical definition of equivalence, Catford also suggests a theoretical one. Crucial to this definition is the concept of substance: substance has to be the same for the equivalent items. At the phonological level this means phonic substance, and at the lexical and grammatical levels it means situation substance¹, ie. at least some of the situational features that affect the choice of the linguistic items used have to be the same for an L_i and L_i text/portion of text to be equivalent. This definition emphasizes the importance of the situation on finding translation equivalents. But it still leaves the concept of equivalence too vague for the purposes of contrastive analysis. Sentences like John ruined that chair and Veljeni rikkoi tuon huonekalun (My brother broke that piece of furniture) might be translations of each other in some situation, because 'they speak about the same thing'. They would

Catford's use of the term 'substance' can be clarified through a quotation (Catford 1965:2-3): 'Language then is an activity which may be said to impinge on the world at large at two ends. On the one hand, it is manifested in specific kinds of overt behaviour (e.g. vocal movements); on the other hand, it is heleted to specific objects, events, etc. in the situation. Both of these - vocal movements, and actual events, etc. - are outside of language itself. They are extralinguistic events. They are the phonic substance in which vocal activity is manifested, and the situation (or situation substance) to which this activity is related.'

still be 'too far' from each other to solve the problem of what to compare in them.

The aims of contrastive analysis have to be considered before any decision can be made on the problem of equivalence. If the purpose is seen as the measurement of structural equivalence between the two languages, the items compared should be structurally as close to each other as possible. This would exclude sentences which are as far from each other as John ruined that chair and Veljeni rikkoi tuon huonekalun. Marton (1968) has worked out a systematization of equivalence for contrastive analysis within the transformational generative model. His basis for equivalence is sameness of syntactic function: '... the equivalent of a given word or phrase in a sentence will be that word or phrase in the equivalent sentence in a different language which has the same syntactic function' (Marton 1968:55). Marton thus connects equivalence with the concept of formal correspondence or identity of structure. Krzeszowski (1974) gives the name 'congruence' to the combination of these two concepts. Roughly defined, two sentences are congruent if they consist of an identical number of equivalent items in the same order. The condition of an identical order of elements 'will most probably be easier to meet in the kernels of the two languages than in their transforms of a more complex kind' (Marton 1968:57). This means that two basic strings in two different languages can be considered as congruent if they result in congruent kernel sentences, ie. there can be congruent basic strings. When these have been established the analysis can proceed to a comparison of transformational rules in the two languages. Marton defines as identical those transformations which 'operate on two congruent structures in the same way and consequently result in congruent transforms'. Transformations can also be similar, and not identical, if they are of the same nature but differ in details of performance and do not result in mutually congruent transforms. Marton's suggestion seems to be, then, that we should compare sentences that are not only equivalent but also congruent ie. have formal correspondence. Congruence should be, however, sought in the basic strings that result in congruent kernels rather than in the final outputs in the surface structure, which might be results of different transformations. If this

interpretation is correct, those sentences that have identical underlying basic strings should be contrasted¹. Since, however, the type of transformational-generative grammar that forms the frame-work for Marton's suggestions is not suitable for the purposes of contrastive analysis, as shown in the previous chapter, his requirement for formal correspondence cannot be accepted.

Krzeszowski (1974) also makes a contribution to the theoretical discussion of equivalence. He provisionally regards as equivalent such sentences as are 'the closest approximations to grammatical wordfor-word translations and their paraphrases' (Krzeszowski 1974:181), decided upon by a competent bilingual. To justify the restriction of the comparable sentences in this way, he considers the various ways in which sentences can be associated with each other across languages. He distinguishes seven types of association: (i) The first is practical association, which means that sentences are associated 'on the basis of their referential congruity', because they speak about the same thing, like the above mentioned sentences John ruined that chair and Veljeni rikkoi tuon huonekalun. (ii) In the second type, called potential equivalence, the two sentences have identical semantic inputs and, if referential congruence is also established, they become translations of each other. (iii) Latent equivalence is a stronger variant of potential equivalence, which means that the two sentences display semantico-syntactic and lexical congruity without necessarily displaying referential congruity. (iv) If there is lexical congruity but no semantico-syntactic or referential congruity, we have the relation of accidental (v) Textual equivalence exists between sentences which have referential and semantico-syntactic congruity but not lexical congruity. (vi) Quasiassociation is, in its turn, a stronger form of accidental association and holds between sentences which have both referential and lexical but no semantico-syntactic congruity; like accidental association, this may be a result of faulty competence. (vii) Finally, there is the relation of ideal equivalence, which means that there is lexical, semantico-syntactic and referential congruity between the sentences. Only those types of association that show semantic congruity - this term apparently refers to identical/congruous semantic inputs - can be given

In actual fact Marton does not suggest this. His aim is to define terms such as 'same' and 'similar' within the transformational framework. But this conclusion can be drawn on the basis of his discussion.

the name of equivalence, ie. potential equivalence, latent equivalence, textual equivalence, and ideal equivalence all include the requirement of semantico-syntactic congruity. The above mentioned closest approximations to word-for-word translations are in the relation of 'ideal equivalence', while their paraphrases are in the relation of 'textual equivalence'. In his own theory of contrastive generative grammar Krzeszowski is concerned only with 'ideally and textually equivalent sentences and not with sentences that display other types of equivalence or association' (Krzeszowski 1974:186).

In practice Krzeszowski's suggestion means that contrastive analysis should not compare any sentences that might be translations of each other in a particular situation, but should compare sentences which a bilingual speaker will consider to be as close as possible to word-for-word translations. They must have identical semantic inputs but also show some degree of structural similarity. This requirement can, however, cause difficulties, as Krzeszowski himself admits. In English-Polish contrastive analysis, for instance, the English sentences containing the past participle form, 'PP tenses', 'present the investigator with an extremely difficult problem concerning the selection of equivalent sentences'. The reason is that Polish does not have PP tenses. The problem is whether the investigator should conclude that the English PP tenses have no equivalents in Polish. This would, however, make the translation of English sentences containing PP tenses into Polish impossible. The semantic input that underlies the English PP tenses is expressed through other surface categories in Polish, such as 'certain adverbials as well as perfective, imperfective, and iterative forms of verbs'. Thus, the semantic inputs which in English are realized through sentences with tenses containing the past participle form are in Polish expressed through sentences which contain 'diffused' overt signals of 'a much more heterogeneous nature than in English'. In cases like these, the translator has to 'resort to his knowledge of external facts accompanying the production of relevant texts'. Therefore Krzeszowski has to admit that his model for a contrastive generative grammar fails to find 'pairs of equivalent sentences across languages but will have to confine its operations to listing all those alternative proposals which in certain concrete and specific communicational contexts could become translations' (Krzeszowski 1974:206). There are, in other words, phenomena which his model, even though it is a text-grammar, cannot deal with because they are explainable only through the entire context in which the utterances occur.

It seems that Krzeszowski's scheme is too ambitious, or his objective to high, when he tries to account for referential equivalence as well as lexical and semantico-syntactic equivalence by one and the same theory (cf. van Buren 1976:314). He himself admits that it is impossible to achieve his aim completely. Thus, the contrastive analyst is still faced with the problem of how to interpret equivalence. In the case of time and aspect in English and Finnish the analyst is faced with a similar problem as the one Krzeszowski describes between English PP tenses and their Polish equivalents. This is particularly true with aspect: 'diffused overt signals' in one language sometimes correspond to structurally clear overt signals in the other. Consequently, the concept of equivalence cannot contain any strict requirement of structural correspondence.

In the present study the problem of equivalence has been solved as follows: sentences that can be considered translations of each other by a competent bilingual, provided that they can be judged to have identical underlying time-relations and aspectual distinctions, are equivalent. The main concern will be the closest approximations to word-for-word translations and their paraphrases, but where no structural correspondence is possible mere referential congruity will be accepted as sufficient. The only concern as far as the identity of the semantic inputs is concerned is the identity of the time-relations and aspectual distinctions. What other possible connotations the expressions of time-relations and aspectual distinctions carry will also be considered but their identity is not required.

1.5 Data

The contrastive analyst needs two sets of data, one in each of the languages under comparison. The data for linguistics normally consists of sentences and non-sentences, which can be acquired either by resorting to a corpus or by creating them by a manipulation of sentences. The choice between these two ways of acquiring the data depends on the aims of the analysis.

As translation equivalence has generally been the basis on which the choice of the items to be compared is made, translations of texts have been the source of data in contrastive analyses which have chosen to use a corpus. Some extensive contrastive projects have been based on corpora. For example, the Serbo-Croatian-English contrastive project opted for a corpus, which consisted of an extensive English corpus (the Brown corpus) and its translation into Serbo-Croatian, although the original idea had been to have two corpora, one English and the other Serbo-Croatian, with their translations into the other language (see Filipovic 1971). In practice, the use of an extensive corpus, or two corpora, and its/ their reliable translations is difficult for an individual research worker. What the individual contrastive analysts can do, and have mostly done if they have wanted to base their analyses on a corpus, is to use written texts and their available translations into the other language. This practice has its drawbacks. It is difficult to find an extensive corpus which is reliable and representative of different types of language use. Spoken language is usually ignored; dialogue in plays and novels, which may sometimes be used, is not natural speech. Moreover, literary language - the sources have been in most cases novels and plays - has its own aims and values, which are not necessarily those of 'normal' language usage. In addition, there is often the problem of the translator having been too 'free' in the translation for the purposes of the contrastive analyst. He may have aimed at a 'dynamic' translation, ie, at producing the same effect in the reader as did the original text (cf. Nida 1964). He may have arrived at sentences that are structurally so far from the original ones that the contrastive analyst cannot use them, ie. too far from 'closest approximations to word-for-word translations'.

The alternative to the corpus-based approach to data is the creation of data by the analyst. Van Buren (1974) describes a practical procedure for the creation of data for contrastive analysis, a procedure which begins with the analyst making up 'one or more simple sentences in the first language and their translation equivalents in the second language'. On the basis of these, a list of sentences and non-sentences relevant to the area under investigation can be created. After this it is possible to 'state the problems which emerge from the data! The analyst then looks for alternative ways of expressing the same meaning, ie. 'synonymous expressions with different structural properties'. In this way the

analyst gradually builds up both the data in the two languages and the problems connected with the area to be analysed. The analyst has to rely on his own competence as a bilingual. He can, of course, use native speakers of both languages to check his own intuitions. The data gathered in this way can naturally be complemented with material taken from grammars and other treatises dealing with the problems involved in the analysis.

If the task of the analyst is to discover and compare the distribution of, for example, a grammatical category in the two languages, it is obvious that an extensive corpus representing as varied a usage as possible is essential. If, however, the aim is, as in the present study, to discover the ways in which a semantic concept is realized in the two languages, the creation of the data by the analyst provides a natural starting point. With these considerations in mind, the latter approach to data was adopted for the present study. For the creation of the data it was assumed that the shared basis in the two languages contains timerelations and aspectual distinctions which are semantic in nature. The data was created by making up equivalent sentences in both languages, containing the various time-relations and aspectual distinctions, by looking for alternative ways of expressing the same time-relation or aspectual distinction and by supplementing this data with material taken from grammars of both languages and other sources dealing with time-relations and aspects. Translations into the other language were used when material was taken from the last type of sources. any relevant material heard in spoken English or Finnish or found in texts in both languages was also used, as well as the material collected for the Jyväskylä Finnish-English Contrastive Project¹. The writer's own intuition as a bilingual speaker was used as a criterion, but native speakers of both languages were also used to check the intuitions.

The Jyväskylä Finnish-English Contrastive Project has collected a set of equivalent sentences from English texts, both fiction and non-fiction, and their Finnish translations as well as translated examples in two grammars of English (Quirk et al. 1972 and Sinclair 1972). The total number of equivalent sentences is about 30,000. Some of this material has been used also by the present writer and will be quoted as examples in the present thesis. The source of the examples used will, however, not be indicated.

1.6. Summary

The basic assumptions for the present study can be summarized as follows:

- 1. Purely theoretical contrastive analyses can contribute to the development of linguistic theory in general, to the search for linguistic universals and, particularly, to the knowledge about the structure of the languages being compared. The results of theoretical comparison of languages may turn out to be of use in language teaching, but this is not a necessary prerequisite for the justification of this type of analysis.
- 2. Contrastive analysis is not dependent on any particular grammatical theory, but the most profitable model for the area to be investigated should be chosen. Since time and aspect are semantic concepts which can be realized in different ways in languages, a semantically based model is the most suitable one for dealing with the problems involved in a comparison of their expression in two languages.
- 3. Thus, the model should be semantically based, but it is very difficult to make the description systematic in the sense that it would move from one level to another, from the common semantic input to the different surface structures. It is the often 'diffused' nature of the overt signals of these semantic concepts, particularly of aspect, that makes impossible the application of the systematic model of description suggested by Krzeszowski. In the present study an attempt is made to describe the categories needed for the expression of time and aspect in English and Finnish, the criteria that determine their choice, and the differences between alternative expressions for one and the same semantic input.
- 4. In contrastive analysis, mere referential equivalence is not enough, and some type of semantico-syntactic equivalence is needed. In practice this means that, in the first place, the analyst has to look for the closest word-for-word translations and then for their paraphrases.
- 5. Creation of data by the analyst seems the most suitable approach to data in a contrastive analysis of the type represented by the present thesis, ie. one which aims at describing the general laws governing the expressions of semantic concepts, and not at a classification of material. However, the data created by the analyst should and will in this thesis be complemented by material drawn from other sources.

One of the basic assumptions made in the introduction was that the method best suited for the type of contrastive analysis envisaged here is one that begins from a semantic basis, one that assumes the existence of identical semantic representations for the two languages. A further assumption is that the semantic representations of English and Finnish sentences contain the concepts of time and aspect. The only requirement for the identity of the semantic inputs here is that the underlying time-relations and aspectual distinctions are the same in both languages.

It is true, as for example Miller and Johnson-Laird (1976) point out, that information related to time can be expressed through all major grammatical categories. In both English and Finnish, there are nouns with temporal meanings (day/päivä, month/kuukausi, week/viikko), verbs such as precede/edeltää, follow/seurata, adjectives and adverbs referring to time (former/edellinen, latter/jälkimmäinen, often/usein, soon/pian), and prepositions, postpositions, and conjunctions with temporal meanings (before/ennen, ennen kuin, after/jälkeen, sen jälkeen kun). In both languages, however, the primary way of relating what is talked about temporally to the moment of speaking is tense. Tense as the expression of time-relations is therefore the centre of interest in the present study. Other expressions of temporal relations will be considered in relation to tenses.

Time, and particularly tense as an expression of time, being the primary concern, aspect is considered in relation to time. Therefore, only those aspectual distinctions that have this effect will be taken into account. As will be seen later, expressions of time are intricately connected with aspectual distinctions, although in principle a difference can easily be made between expressions of time and expressions of aspect. As pointed out above, tense relates the process¹, ie. the event, state, activity etc., expressed in the sentence to the moment of speaking, whereas aspect is independent of such temporal relations and has to do with distinctions such as states vs. changes between states.

Following Halliday (1967) and Huddleston (1969), the term 'process' will be used in this study as a cover term for what are usually called events and states or activities and states. Contrary to the everyday use of the term, 'process' is here 'neutral as between dynamic and static' (Huddleston 1969:779).

2.1. Theories of Time and Tense

Grammarians have traditionally not been concerned with time but with its manifestations in language. In both English and Finnish grammars tenses and time-adverbials have been focused on, with the main emphasis on the former. It is natural that tense has been discussed within the framework of the general linguistic theory that the grammarians have accepted. The view of time and tense presented in traditional grammars can be exemplified by the treatment of the subject by Jespersen. Jespersen (1924:39) proposes a twofold approach to grammar:

... we may start from without or from within; in the first part (0-1) we take a form as given and then inquire into its meaning or function; in the second part (I-0) we invert the process and take the meaning or function and ask how that is expressed in form.

In accordance with this principle, Jespersen starts from tense-forms and goes on to inquire into their meanings and functions. But before this, he defines tense-forms as the formal expressions of time in the verb (1931:1). For him time is a universal concept which can be expressed as a straight line on which any point can be marked as the present moment. What comes to the left of this point is past, and what comes to the right is future. In addition, there are subordinate times, which can be described as before-past and after-past, beforefuture and after-future. This subordinate division is based on the assumption that one can take a point in the past or a point in the future as an orientation point and look from either retrospectively or prospectively. The result is a system of seven possible time-relations. From this logical division of time Jespersen then proceeds to see how many of the possible time-relations have corresponding tense-forms in English. According to Jespersen there are only two tenses proper in English, the present and the preterite, because only these two show tense-distinction in the morphological form of the verb. But in addition to these tenses proper there are two 'tense-phrases' (the perfect and the pluperfect), expanded tenses and expanded tense-phrases (formed with the auxiliary be and the suffix -ing). There is no future tense

or tense-phrase in English because in phrases like shall/will write neither the form not the function has the same fixity as, for example, in the phrase have written. Having established the tense-forms, tensephrases and expanded tenses, Jespersen first proceeds to describe their use, then describes the tense-distinctions in what he calls 'verbids' (infinitive, participles, imperative) and finally describes the functions of shall and will, not only in expressions of time-relations but in their other functions as well. After this Jespersen adds a brief notional survey, in which he starts from the logical time-division mentioned above and investigates the ways in which the different time-relations are expressed in English. This he does in terms of the already established tense-forms and tense-phrases, occasionally referring to other possibilities but limiting the discussion to 'time-indicating by means of verbal forms', not taking up, for example, the role of time specifiers. The same principle - defining tense as the formal expression of time in the verb, establishing these formal expressions and then inquiring into their functions - have been followed by other traditional grammarians of English, such as H.E. Palmer, Poutsma, Kruisinga, Curme, and Zandvoort, with slightly differing results for the actual tense-forms. Most of them admit that, strictly speaking, there are only two tenses in English as far as the form in concerned, yet it is possible to find more tenses on the basis of the notion of time.

Poutsma (1926) for example establishes three 'primary tenses' (the present, preterite and future tenses) and four 'secondary' ones (ante-preterite, post-preterite, ante-future, post-future), a system like Jespersen's division of time. He next describes the formation of the tenses, among which the post-future has no special form, and then proceeds to discuss the ways these forms are used.

Curme (1931) presents a system of four 'absolute tenses' (present, past, present perfect, and future), which express time relations from the standpoint of the moment of speaking, and two 'relative tenses' (past perfect and future perfect), which express time relatively to the preceding absolute tenses. For Curme, too, there are actually only two tense-forms; the others are combinations of other verb-forms, each of which contains a present or a past tense form.

For Zandvoort (1972), tense is a term that covers two verbal forms (past and present) and two verbal groups (perfect and future), whose

main function it is to denote the time of an action. Past, present and future are named after the time-sphere they usually indicate; the perfect tense is mostly a special case of the present, the past perfect presents a shifting back into the past consisting of partly the past tense and partly the present perfect. Zandvoort classifies the tenses further according to their different aspects of meaning, giving them names such as 'natural present', 'iterative present', 'actual present', 'continuative perfect', 'resultative perfect' and so on.

H.E. Palmer (1924) develops an interesting system of 'tenses' in which he combines other semantic features with temporal relations, such as modality, aspect, which is either accomplishment or activity, and what he calls 'time-reference', which is either direct (ie. contemprary with the time in mind) or perfect (anterior to the time in mind). These combinations give the following 'tenses': 1. present direct accomplishment (simple present tense in more usual terms), 2. past direct accomplishment (simple past tense), 3. modal direct accomplishment (modal auxiliaries + infinitive). 4. present perfect accomplishment (present perfect), 5: past perfect accomplishment (pluperfect), 6. modal perfect accomplishment (future perfect), 7. present direct activity, 8. past direct activity, 9. modal direct activity, 10. present perfect activity, 11. past perfect activity, 12. modal perfect activity (activity refers to what is normally known as the progressive). It is obvious that for Palmer, tense is much more than an expression of time.

Traditional Finnish grammars treat tense in very much the same way. Tense is defined as the finite form of the verb whose meaning contains a reference to the time of occurrence of the process and to its relation to the moment of speaking or some other definite moment (see for example Penttilä 1963:213). Then the actual tense-forms are established and analysed as to form, and finally their functions are described. The grammarians do not, however, entirely agree as to the number of tense forms. Kettunen and Vaula (1934) refer to four tenses, two simple and two compound ones. The same terminology is used by Setälä (1926). Nykysuomen käsikirja (1977) defines tense as the expressions of the time of the action from the speaker's point of view. The writers also divide tenses into simple and compound ones but, in addition to the present perfect and the pluperfect they consider it possible to include in the

compound tenses "the compound present" (olla + 1st participle), which refers to the future, and "the compound imperfect" (past tense of olla + 1st participle), which refers to a future in the past.

Penttilä (1963) differs from the other grammarians in that he acknowledges only two tenses proper (the present and the imperfect). In addition to these there are, however, what he calls'word combinations' (saneliitto), whose function is the expression of the time of the action and which therefore can be classified under the heading 'tense', ie. the perfect and the pluperfect. Penttilä also gives the fullest account of the functions of the tense-forms. The various functions are given names according to the special meanings attached to them, for the present tense for example these are: actual present, habitual present, present of exaggeration, praesens historicum, praesens reference, praesens auctoris, and neutral/general present. Tense thus has other meanings than just the expression of the time of the action or its relation to the moment of speaking or some definite point in time.

Ikola, who also gives a full account of the Finnish tense system, also defines tenses as grammatical categories in connection with which we think of both form and meaning (Ikola 1961:81). As morphological categories they are easy to define but the other side of the coin, their function, is a more complicated matter. The forms which he includes in tenses are the same as in Nykysuomen käsikirja, ie. present, imperfect, perfect, pluperfect, compound present and compound imperfect. Ikola discusses their functions in terms of an intricate abstract system of time-relations.

In traditional grammars tense is, as the above examples have shown, regarded from two points of view: from the point of view of meaning and from that of form. This dual approach leads to certain contradictions as to the membership of the category. In both English and Finnish the membership is limited to only two if tense is taken as a morphological category. From the point of meaning it is, however, possible to get a greater membership for the category in both languages.

If there is no total agreement about the membership of the category of tense within the traditional approach, there is no doubt about it within the structural theory: tense can only be defined morphologically. Thus English has only two tenses, the present and the past. The present tense has the marker $\{s\}$ in the third person singular, otherwise it is unmarked, and the past tense is marked by the morpheme $\{d\}$. For F.R. Palmer (1965), for example, tense is one of the four categories exhibited in what he

calls the 'primary pattern' of the simple verb phrase (containing only the full verb and the auxiliaries be, have and do). Tense can enter into combinations with the other categories, which are the progressive/non-progressive category, aspect (perfect/non-perfect), and voice. In a later version Palmer (1974) calls the progressive/non-progressive category 'aspect' and the perfect/non-perfect category 'phase'. Each of these categories includes a binary opposition and has a formal feature that marks the verb for that category; if the feature is missing, the verb is unmarked for that category. Every occurrence of the primary pattern contains one member of each of the four categories, ie. it is either present or past in tense, either progressive or non-progressive, perfect or non-perfect, active or passive. This gives a system according to which the sixteen forms of the primary pattern can be arranged in two sets of eight in four different ways.

Having set this pattern Palmer proceeds to discuss the use of the four categories. As mentioned above, the category of tense is restricted to the opposition past versus present and is morphologically marked. This category, according to Palmer, is used in three functions: (i) to mark purely temporal relations, (ii) in the sequence of tenses of reported speech, and (iii) to mark unreality in conditional clauses and wishes. Within this view of tense there is no room for a future tense. The phrase that is given this name in traditional grammars (shall/will + infinitive) is included in Palmer's secondary pattern, which is an extension of the primary pattern with the inclusion of modal auxiliaries. The four categories mentioned above are still present in the secondary pattern; tense is now marked in the modal auxiliary but is still either present or past, although reference might be to the future.

Joos (1964) has a basically similar approach, although his categories are different from Palmer's. Joos' 'schema' of the finite verb exhibits six categories as against Palmer's four: tense, assertion, phase, aspect, voice, and function. Each category has a marked and an unmarked member. In the category of tense the opposition is between unmarked 'actual' and marked 'remote' (the marker is -D), in the assertion category the opposition is between unmarked 'factual' and marked 'relative' (the marker is will, shall, may, can, must etc.), in the category of aspect the pair is generic and temporary (the latter marked by be -N), and in

the category of function the opposition is between 'propredicates' and verbs.

In the structuralist view tense is thus strictly a morphological category, which in English has only two members, the present and the past. Views vary only as to whether both should be regarded as marked or one as marked and the other as unmarked. Both members of the category have various uses. Quirk, Greenbaum, Leech and Svartvik (1972:85) for example list the following uses for the simple present tense: present without reference to specific time, instantaneous simple present, simple present with future time reference, and simple present with past time reference (cf. some of the traditional grammars). Some structuralists also draw attention to the important role of time-specifiers, which the traditional grammarians neglect. Ota (1963) discusses the collocation of tense forms and time adverbs. Crystal (1966) draws attention to the close relationship between tenses and time-specifiers and maintains that in as many as 75% of cases the time-specifier is obligatory for an unambiguous expression of time-relations in English.

Among Finnish grammarians Siro (1964) comes closest to the structuralist view. He says in his introduction to Suomen kielen lauseoppi that, like natural sciences syntax does not discuss the nature of the objects of its analysis but is satisfied with the relationships between them. According to this view, syntax is not concerned with the meanings of words or word-combinations but is satisfied with describing the units of speech and the relationships between these units. In his own description of Finnish syntax, however, he also uses semantic definitions for illustrative purposes, though formal definitions are the decisive ones (Siro 1964:6). Siro gives no exact definiton for tense, but describes the functions of tenses as expressions of time-relations and distinguishes the following tenses: present, imperfect, perfect, pluperfect, combined present, and combined past. Thus, his concept of tense does not differ from the traditional view. On strictly formal lines it would be possible to see in Finnish, too, only the present/past distinction seen in English by the structuralists. In Finnish, too, the perfect and the pluperfect consist of the present and past forms of the verb olla

In Joos' (1964:65-66) terminology a 'propredicate' is an auxiliary used alone to avoid the repetition of an auxiliary + a full verb + complements and modifiers.

and a participle form of the main verb.

There is no general agreement about the nature of tense within the generative theory. Chomsky (1965:42) saw tense as an obligatory expansion of the node Auxiliary, as can be seen in his formula: Aux→Tense (Modal) (Perfect) (Progressive). A sentence thus obligatorily contains a tense and may contain a modal auxiliary, the perfect, and the progressive, the elements having to appear in the order given in the formula. Tense is seen in terms of the opposition present versus past. There is no mention of the future; will and shall are realizations of the feature Modal. Both the Perfect and the Progressive are called 'aspect'.

There have been other suggestions as to the treatment of tense within the generative theory. Among these is Kiparsky's (1968) suggestion that tense is an underlying adverb, synonymous with, for example, now, then, at some future time. He makes this suggestion for Indo-European, in which tense was a separate constituent, not a feature of another constituent. He does not claim that this constituent analysis is applicable to modern Indo-European languages, in which the analysis of tense as a separate constituent 'imposes on the language a pseudo-agglutinative character which cannot be justified on phonological grounds' (Kiparsky 1968:44).

Huddleston (1969) suggests that tense should be treated as a verb, as an obligatory part of the underlying structure, and it would take the sentence containing the main verb as its complement. He also distinguishes between the association of tense with some element and the location of the tense-marker, ie. between a deep tense and a surface tense (Huddleston 1969:781). Deep tense has a ternary system (present, past, and future), whereas surface tense has a binary system (present and past). Deep tense is not only marked by surface tense but also by temporal specifiers, temporal clauses, and by the class of the next higher werb. Furthermore, Huddleston suggests that the present perfect in English involves two tense-selections, one past, the other present. This is needed to account for the occurrence of present time-specifiers with the present perfect. Similarly, the pluperfect involves two tenseselections, both past in this case. In addition the progressive forms are seen by Huddleston as consisting of two tense-selections. Thus, for example, I'm reading involves two present tenses, I was reading a past and a present tense, I'm reading a paper tomorrow a future and a present tense.

McCawley (1971) combines both the above views. He sees tense as a verb in the underlying structure but also as having a meaning like 'prior to' for the past tense, thus being pronominalization of a time-adverb. For cases like Max was tired last night, which have both a time-adverb and a tense-form in them, McCawley suggests a reduplication rule which adds a pronominal copy for every time-adverb (McCawly 1971:111). McCawly also treats all occurrences of have in English as underlying past tenses, the reason being that in certain cases the distinction between the past, the present perfect, and the past perfect is neutralized in favour of have.

Lakoff (1970) shows convincingly that none of the theories described above is adequate in explaining all the phenomena that occur in connection with tense-usage. In the generative theories of tense described above, as well as in the traditional and structuralist ones, there is only one primary factor in tense-choice: the time of occurrence of the act described in relation to the time of utterance. A secondary factor which is normally taken into account is what is traditionally called 'sequence of tenses'; this is described by generative grammarians as the influence of the time of occurrence of higher verbs on the superficial tense of the lower verbs. These factors are not, however, enough to explain, for example, the occurrence of 'false' tenses, ie. uses of tense-forms which seem to be contradictory to the time of occurrence of the action described and which are not explainable through any sequenceof-tenses rule. By this Lakoff means cases like that of a shopkeeper saying to a customer inspecting some apples: Those will be three for a dollar. Equally unsatisfactory in Lakoff's opinion is the explanation of the present perfect through 'current-relevance' - a term used by Palmer (1965) and McCawley (1971) - because there is no definition for it nor any description of when something can have 'current relevance' and when it cannot. An adequate theory of tense has to take into account a lot more than just the actual time of occurrence of the act described and its relation to the moment of speaking, or as Lakoff puts it (1970:848):

Such a theory will have to take cognizance of elements that some have considered extralinguistic: assumptions made by speakers concerning the relationship between the actual time of the speech-act and that of the event in the physical universe, and the perception by the speaker of the temporal gap between event and speech.

There have been suggestions that other things should be taken into consideration in the treatment of tense and not just the actual time of occurrence and its relation to the moment of speaking. One such suggestion was made by Bull (1960). The basic idea is that one can look at events in three ways: by experience and contemplation, by looking back retrospectively and by anticipation. This is done from an 'axis of orientation'. The experiencing of any event can become an axis of orientation, the point present (PP) according to which all other events are oriented. The point present, however, is a fleeting moment. As soon as an event has taken place, it moves backward in time and becomes a retrospective point (RP), from which it is again possible to contemplate time in three different ways. In the same way there is an axis of orientation in the future, an anticipated point (AP), and again it is possible to look at events in three different ways from this point. There is also a fourth axis of orientation (RAP), which represents events that are recalled at PP as having been anticipated at RP. Thus, there is a prime point of orientation, the speaker's present and other points or axes of orientation that either precede or follow the PP. Events are either simultaneous with the axis or happen before or after the axis. The system is an open one: there are infinite possibilities of adding new axes to it, but Bull says that it is highly unlikely that the number of axes ever exceeds four.

Before Bull, Reichenbach (1947) pointed out that tense-choice does not only reflect the relation of the point of event of the action described and the point of speech. In addition to these two points the speaker also uses a third point, the point of reference (cf. Bull's point of orientation). Thus, in the sentence Peter had gone the point of event is the time when Peter went; the point of reference is a time between this point and the point of speech. In individual sentences the actual time of the point of reference is often left vague but is usually given by the context. In a narrative for example the point of reference might be given as an exact date and some events might be related as occurring at this point, others as occurring before it. This point of reference can be simultaneous with, prior to or posterior to the point of speech. The point of event in its turn can be simultaneous with, prior or posterior to the point of reference. This gives a set on nine 'fundamental possibilities' but does not exhaust all possibilities. We could further consider the relation of the point of event to the point of speech.

But this relation does not really matter, because the decisive relations are those between the point of speech and the point of reference, and between the point of event and the point of reference. The following list gives Reichenbach's final system of time-relations. E= point of event, R=point of reference, S=point of speech. In the description of time-relations, the commas indicate that the points are cotemporal. A line between the symbols indicates that the points are separated from each other in time.

1. E - R - S	Anterior past
2. E,R - S	Simple past
3. R - E - S R - S,E R - S - E	Posterior past
4. E - S,R	Anterior present
5. S,R,E	Simple present
6. S,R - E	Posterior present
7. S - E - R S,E - R E - S - R	Anterior future
8. S - R,E	Simple future
9. S - R - E	Posterior future

The same three-point system is used by Wiik (1976) in his explanation of the meanings of Finnish tenses. According to Wiik, people show at least two tendencies in time-relations, regardless of their mother tongue: the tendency to compare the times of events, ie. to see them as simultaneous or with one anterior or posterior to the other, and the tendency to relate events to the point of speech. In addition to these, he sees, at least in Finnish, the tendency to consider an event not from the point of speech but from another point, ie. the point of reference. (Siro 1964 also uses the same system and the same terminology).

Both English and Finnish have thus been seen as having a system of nine fundamental time-relations underlying their tense usage. Below is a list of these relations and their most common expressions in English and Finnish (cf. Reichenbach 1947 and Wiik 1976).

3. R - E - S	would leave	oli lähtevä/lähti
4. E - S,R	has left	on lähtenyt
5. S,R,S	leaves	lähtee
6. S,R - E	will leave	on lähtevä/lähtee
7. S - E - R	will have left	on lähtenyt
8. S - R,E	will leave	on lähtevä/lähtee
9. S - R - E	will leave	on lähtevä/lähtee

What the above list shows is that neither language has special expressions for all time-relations and both languages use the same expressions for 6.8 and 9.

Wiik also discusses the derivation of the tenses from the abstract time-relations. Following the view presented in generative semantics, he sees a performative sentence uppermost in the deep structure of every utterance and the time-relations represented as separate sentences. He comes to the conclusion that the order of these deep structure sentences is the following: below the uppermost sentence, ie. the performative sentence, is the sentence giving the point of reference and below this is the sentence that gives the point of event. In other words, the speaker first determines the relation of the point of reference to the point of speech and then determines the point of event to the point of reference. Apparently the same deep structure explanation could be applied to English as well. The transformations needed for obtaining the surface structure would be partly different.

This shows that there is quite a lot of similarity between English and Finnish tense-systems. What the above system does not explain, however, is that the expressions of time-relations mentioned above do not always allow the interpretation given above (cf. Lakoff's 'false tenses'), or, to express it the other way round, the time-relations have alternative expressions. Moreover, it does not explain the role of time-adverbs, which set restrictions on the interpretation of the above expressions. These points can be illustrated by the following English sentences, in which the present tense is used but has a different interpretation in each case, owing to the time-adverbs used:

- (1) John always picks up the blond one.
- (2) Right now, John picks up the blond one.

- (3) Last night, John picks up the blond one.
- (4) Tomorrow night, John picks up the blond one.

In (3), for example, the point of reference is in the past and so is the point of event and yet the present tense is used. A similar discrepancy exists in the following English and Finnish sentences, in which both the point of reference and the point of event are in the present and yet the tense is the past tense:

- (5) Did you want me? Yes, I hoped you would give me a hand with the painting.
- (6) Oliko siellä rouva Peltonen tavattavissa? (Was Mrs. Peltonen there?; asked on the phone)

Something else in addition to the three points is needed to explain phenomena like these. There seems to be a fourth point, the speaker's point of view that should be taken into consideration. This point of view can also be simultaneous with, prior to or posterior to the point of speech. In most cases it falls together with the point of reference, but if it is different, it overrules the influence of the points of reference and event. Thus, between the performative sentence and the sentence containing the point of reference there is an additional sentence, something like:'I look from the point of view X'.

Another point the above system does not explain is why the speaker chooses a certain point of reference. He cannot choose the point of event but he can choose his point of reference. Thus, for example, a past event has a past point of occurrence, but the speaker has the choice of using either the moment of speaking or a point in the past as his point of reference, ie. in both English and Finnish he has the choice of using either the past tense or the present perfect. Wiik (1976:144) points out that the speaker's presuppositions are decisive in the choice of the point of reference. We ought therefore to try and investigate what these presuppositions are and whether they are the same in English and Finnish.

In what follows it will be assumed that the above system of nine fundamental time-relations exists in both English and Finnish. It will also be assumed that the three-point system does not explain all cases that occur or give a correct explanation of all tense-usage. However, cases in which the speaker's point of view is different from the point of reference will be treated as exceptions to the rule that the point of reference and the point of view are usually identical.

The fact that the point of event can be simultaneous with, prior to or posterior to the point of speech divides the time-relations into three distinct types, which correspond to the traditional division of time into the present, past and future time-sphere. Doubts have been expressed about the suitability of the tripartite division of time to the treatment of temporal distinctions and their expressions in language. These doubts have been based upon the tense-systems of various languages, which seem to suggest that a better division would be a division into past vs. non-past or into present vs. non-present. For example, the past vs. non-past division would describe the English tense-system more adequately because 'it is only in contexts of immediate report or commentary that the English non-past tense, without an accompanying adverb of time, is used to locate a situation in the present' (Lyons 1977:678). The doubts have also been supported partly by the view that futurity could not be placed on a par with presentness and pastness, because futurity is never a purely temporal concept; we cannot speak about the future with the same conviction we can speak about the present or the past.

However, it is obvious that people have the tendency to think of time in terms of the tripartite division: we live in the present, remember the past and plan the future. Among philosophers it seems to be usual to talk about two quite different ways of conceiving time: the dynamic way, according to which events are past, present and future and are continually changing, and the static way, according to which events are in a permanent order. Thus, an event is first future, then becomes present and then past, but its actual occurrence always remains the same. (cf. Gale 1968 on the arguments of philosophers) When applied to linguistic reality, this means that the events talked about have their absolute dates/times of occurrence, but the speaker subjectively relates them to his present moment, the moment

Reichenbach's term 'point of event' can be criticized. Sentences do not always denote events. It is illogical to say that, for instance, a state has an event point. However, as the system is useful for the explanation of temporal relations, the term 'point of event' has been accepted and used in the present study.

of speaking. This subjective time is part of deixis, ie. 'the location and identification of persons, events, processes and activities being talked about, or referred to, in relation to the spatio-temporal context created and sustained by the act of utterance and the participation in it, typically, of a single speaker and at least one addressee' (Lyons 1977:637). The context/situation is egocentric, ie. the speaker relates everything to his here-and-now, which is determined 'by the place of the speaker and the moment of utterance' (Lyons 1977:638). It is obvious that from the speaker's point of view his own subjective time is more important than the absolute time of events. This is supported by the fact that children normally master the deictic system in terms of tenses and deictic time-adverbs before they master the absolute system in terms of calendar-time and clock-time (cf. Lyons 1977:679).

As the spatio-temporal orientation is essential from the speaker's point of view, it can be expected to be universal and thus find some expression in all human languages. Whorf, however, claims that the Hopi Indians do not seem to have a concept of time comparable with ours, that their language contains 'no reference to time either explicit or implicit' (Whorf 1956:57). Instead events for them are either objective (observable) or subjective (not observable), ie. they express modal but not temporal distinctions (cf. Lyons 1977:816). This does not mean, however, that the Hopis do not have any sense of time, only that they experience it differently. In fact, time and modality often intersect, which is seen particularly clearly in expressions of futurity in those languages that have a tense-system. For the purposes of the present thesis we do not have to establish time as a universal concept. Suffice it to say that it is a concept that finds expression in both English and Finnish. Moreover, it can be assumed that in these languages the tripartite division of time into past, present and future holds good even though the tense-systems do not reflect this perfectly (neither language has a future tense as such). But both languages have temporal specifiers, ie. time-adverbs, that reflect the division into three: yesterday/eilen, today/tänään and tomorrow/huomenna. Although the role of time-specifiers is important in expressions of temporal relations, the following analysis will concentrate on the function of tenses and will consider time-specifiers only when they seem to affect the interpretation of tenses.

There is one more problem connected with the notion of time: even though we conceive of and talk about time as something continuously flowing - any moment that we choose to call 'present' is gone, is past in a split second and what we now call 'future' is present and then past, again in a split second - we still talk about some events as 'timeless' as if time had stopped flowing. This is the case of the so-called 'timeless or eternal truths'. Lyons (1977:680) makes a distinction between timeless and omnitemporal propositions. The former comprise events 'for which the question of time-reference (whether deictic or non-deictic) simply does not arise, in other words, events which are somehow outside time altogether. Examples of such events are the eternal truths of mathematics and theology. An omnitemporal proposition is time-bound but temporally unrestricted; examples are general truths like 'Corruption starts from the top'. It is true that there are statements that are so generic as to make a change of time-reference impossible: for example, The albatross was a big bird last year sounds ridiculous. Making a distinction between truly timeless events and omnitemporal ones, however, is often very difficult. Moreover, if it were decided that there are sentences which are outside time, not temporally related to the speaker's now, there would first have to be a choice between timeless and time-bound sentences as distinct sentence types (cf. van Buren 1974:301). To avoid this difficulty and complication the timeless statements will be treated as part of the speaker's present time-sphere (cf. p. 95).

In what follows, then, the tripartite division of time into past, present and future will be the srarting point and will work as the basic division for the whole study. It could be said that the relation of the speaker's point of event to the point of speech gives the basic division: the point of event is simultaneous with the point of speech = present time-sphere, it is earlier than the point of speech = past time-sphere, and it is later than the point of speech = future time-sphere. This being the starting point, the influence of the reference point on these relations will be considered as well as the final outputs, ie. the actual expressions of these relations in English and Finnish. An attempt will also be made to explain what causes the choice of a particular reference point. The study begins with simple sentences and tries to explain the expressions of time-relations in them, and then proceeds to see how these function in complex sentences. The context will, however, be taken into account throughout.

2.2. Temporal Specifiers

As mentioned above, temporal specifiers play an important role in the expression of time-relations. They, too, could be classified according to the tripartite division of time into specifiers that refer to the present time-sphere, those that refer to the past and those that refer to the future, eg. today, yesterday, tomorrow. There are, however, specifiers that can refer to more than one timesphere: for example on Tuesday and for two years could refer either to the past or to the future. Equally important from the point of view of temporal relations is the division of specifiers into those that denote a point and those that denote a period of time. (1969:108) defines this opposition as a +period /-period system, in which the former refers to a section of the continuum of time and the latter to a point on the continuum. According to this system, specifiers like in April, in the morning or last Friday are T+period because they have duration, and only specifiers of the type at 8 o'clok are -period. It could, however, be argued that specifiers like last Friday are normally conceived of as points rather than periods, that the real +period specifiers would be those of the type of for two years, a whole week, which specify the length of a period but do not identify a point on the continuum of time.

In this study a distinction will be made between specifiers that denote a point (including 'points' that have duration) and those that denote a period of time. Among the latter type a further distinction can made between those in which both the beginning and the end of the period is specified (eg. for two years) and those for which only either the beginning (eg. since 1970) or the end (eg. until Sunday) is specified. A third group, on a par with point and period specifiers, are frequency specifiers, which can be either definite like every month or indefinite like always, never. The distinction between point and period (or length) specifiers is, however, the most important one for a discussion of time-relations.

The connection between tense and time-specifier is such that they normally match temporally, ie. refer to the same time-sphere. There seem to be two opposite views of the nature of this matching of tenses and time-specifiers. According to one view (see eg. Chomsky 1965) tense is primary and time-specifiers are matched to it. The other view is that

time-specification is primary and tense is a copy of it, a pronominalization of time-adverbs, according to McCawley (1971). The problem is, however, that tense and time-specifier do not always match, as is seen in sentences like Last might. John picks up the blond one. Rather, the interpretation of such a sentence is a result of the combination of tense and time-specifier. Consequently, it is difficult to say which is primary. The problem in this study is not to decide which determines the choice of the other but to work out how their combinations reflect the underlying time-relations. Braroe (1974) seems to be correct, however, in maintaining that 'If a sentence has a reading with a certain adverb it does not mean that the sentence can have that meaning without the adverb. It is not the case that the sentence is ambiguous and that the time adverb simply focuses on one reading thereby resolving the ambiguity. Rather, the time adverb adds meaning that was not there before', which indicates that tenses cannot be simply copies of time-adverbs. Moreover, we can agree with Hornstein (1977) that time-adverbs modify the point of reference or the point of event, but not the point of speech.

2.3. Theories of Aspect

Speakers are not only interested in the location of processes in time but also in their 'temporal distribution or contour' (Hockett's 1958 definition of aspect). As pointed out above, the expressions of time and aspect are intricately involved with each other, although it is possible to make a clear theoretical distinction between the two concepts. The intricacy of the involvement is clearly seen in the fact that some English grammarians have called the progressive forms of the verb 'expanded tenses', while others have called them 'aspect'. Similarly, the have + past participle constructions have been given the names of 'perfect tenses' or 'compound tenses' on the one hand and been called 'aspect' on the other. Weinrich (1964:14) expresses this close relationship by the formula Zeit + Aspekt = Tempus.

Aspect is a concept about which there is very little agreement among linguists. On the one hand, the term 'aspect' has been used for purely surface structure phenomena, such as the English progressive and perfect forms (see eg. Palmer 1965 and 1974, Joos 1964, Quirk et al. 1972). On the other hand, aspect has been defined on purely notional terms. Jespersen (1924:286-289) sees aspect as consisting of different phenomena, notional distinctions, which he classifies into

- (i) the tempo-distinction between the agrist and the imperfect
- (ii) the distinction between conclusive and non-conclusive verbs
- (iii) the distinction between durative and permanent
- (iv) the distinction between stability and change
- (v) the distinction between finished and unfinished
- (vi) the distinction between what takes place once and repeated action
- (vii) the distinction according to the implication and non-implication of a result.

Of these seven distinctions, (iii) and (iv) find formal expression in the English verb, in the difference between the simple and the expanded tenses, while the others are connected with certain types of verbs. Curme (1931:376-378) also defines aspect on a notional basis as an indicator of the character of the action and divides it into durative aspect (usually expressed in English through the progressive form), point-action aspect (expressed mainly through different types of verbs), terminate aspect (associated with the simple form as against the progressive), and iterative aspect.

A third, totally different attitude towards the concept of aspect is taken by those who, like Zandwoort (1970:124), deny the existence of aspect in languages like English. The reason for this attitude is the claim that the nature of aspect in Slavonic languages should be taken as an absolute standard. Since aspect in Slavonic languages finds its expression through morphological changes in the verb - nearly every verb constitutes a doublet, one member being imperfective, the other perfective - and since there is nothing comparable to this in English, there is no aspect in English. Klein (1974) takes a similar line, and, in his mainly terminological discussion of tense, aspect and 'Aktionsart' restricts the term 'aspect' to a morphological category only, whereas the term 'Aktionsart' is used of a lexicosemantic category.

In Finnish no surface form or structure has ever been given the name 'aspect'. The 1915 Committee on Grammar (Kielioppikomitea) decided that 'aspect' was to be used as a term to refer to whether the activity was to be presented as continuing ('kursiivinen') or limited in duration ('terminatiivinen'). This was to be kept distinct from 'aktionsart' ('tekemisen laatu'), which referred to such distinctions in the nature of the activity as inchoativeness and frequency. Following this decision Ikola (1961) discusses the aspect of the verb, which he considers important when dealing with the use of tenses. He also divides aspect into durative and terminate. The former means that the action is presented as in progress, the latter that the action is limited in duration. Within the terminate aspect Ikola distinguishes two subcategories: momentaneous-terminate ('punktuaalis-terminatiivinen') and linear-terminate ('lineaaris-terminatiivinen'). The former refers to an action which in itself is limited and thus cannot be limited temporally through a durational adverb (eg. Mies tappoi koiran/The man killed the dog, Poika juoksi kotiin/The boy ran home). The latter refers to an action which in itself is not limited but can be limited through, for example, a time-specifier denoting a period of time (eg. Sotaa kesti kaksi vuotta/ The war went on for two years). The aspect, Ikola concludes, has no morphological manifestations in Finnish, nor is it connected with any particular verbs or derivational types, but many verbs can be used with both a terminate and a durative meaning. Siro (1964:82) uses the same division and definitions, although he does not use the term 'aspect' but talks about 'certain characteristics of the verb'.

The above discussion has contained examples of three basically different attitudes to aspect. There is the view that the term 'aspect' can be given to certain verb forms or verbal constructions. There is the extreme view that the term should not be used when referring to languages like English and Finnish, in which there is no morphological form of the verb that could be given this name, because the Slavonic aspect has to be taken as an absolute standard. Finally, there is the view that aspect is a notional category, a view giving greatly diverse results because very different notions can be included in such a category.

The aspectual distinction made in Slavonic languages, in which the term originates, is perfective vs. imperfective. Comrie (1976:3) suggests as a general definition of aspects that they are 'different ways of viewing the internal temporal constituency of a situation'. According to this definition, the perfective aspect presents the situation as a single unanalysable whole with a beginning and an end, whereas the imperfective aspect refers to a portion of the situation without any reference to its beginning or end, and the perfective aspect views the situation from the outside, whereas the imperfective aspect looks at it from the inside (cf. Comrie 1976, Heger 1974). There are other ways in which the perfective-imperfective opposition has been defined. One of these is a definition of perfective forms as indicating short duration and imperfective forms as indicating long duration. Comrie (1976) shows that this definition is inadequate because both perfective and imperfective forms can refer to the same length of time. Equally inadequate, according to Comrie, is the view that the opposition is one between limited and limitless duration because again both perfective and imperfective forms can be used to describe the duration of an hour, ten years etc. Thus, for example, in French both the past definite il regna trente and and the imperfect il régnait trente ans are possible with the same durational adverbial. Neither is the description of perfective aspect as an indicator of a completed action adequate. 'The perfective does indeed denote a complete situation with beginning, middle, and end. The use of 'completed', however, puts too much emphasis on the termination of the situation, whereas the use of the perfective puts no more emphasis, necessarily, on the end of the situation than on any other part of the situation, rather all parts of the situation are presented as a single whole.' (Comrie 1976:18)

There is no reason why the view should be accepted that the concept 'aspect' exists only in languages in which the perfective/imperfective opposition is expressed by morphological means, no reason why 'non-systematic ways of expressing aspects in one language would not be comparable with systematic formal categories in another' (Gross 1974:7). If the concept of deep and surface structure is accepted, it is possible to regard the morphological system as a manifestation of a deep distinction that is expressed in other languages for example by syntactic means (cf. Verkuyl 1972:IX). Verkuyl shows that in the grammars of languages such as English (and Dutch) we have to account for the phenomenon that in the following pairs of sentences, those marked (a) are acceptable and those marked (b) are not:

- (1a) She walked for hours.
- (1b) ★She walked a kilometre for hours.
- (2a) The hunter stayed in the hut for a week.
- (2b) *The hunter reached the mountain top for a week.

There is a reading of (1b) which makes it acceptable. Verkuyl refers to this by saying, 'For example, (1b) can be used to express that the event ... took place several times during a certain period having the duration of some hours' (Verkuyl 1972:2). The sentence is, however, not acceptable if it refers to a single completed event of walking a kilometre. The difference between the (a) and (b) sentences is that the former allow a durational adverbial whereas the latter do not. The same restriction applies to the corresponding Finnish sentences:

- (3a) Hän käveli tuntikausia.
- (3a') Hän käveli (yhtä) kilometriä tuntikausia.
- (3b) ★Hän käveli kilometrin tuntikausia.
- (4a) Metsästäjä oleskeli mökissä viikon.
- (4b) *Metsästäjä pääsi vuoren huipulle viikon.

The difference between sentences that allow the addition of a durational adverb and those that do not is obviously that in the former the process itself is not limited in duration and therefore a limit can be put on it by a durational adverb, whereas in the latter the process itself is limited and therefore can no longer be limited through the addition of a durational adverb. This contradicts Comrie's view that the perfective/imperfective opposition is not one between limited and limitless duration.

On the other hand, Dahl and Karlsson (1976) claim that sentences containing perfective aspect do not allow durational advervials of the type for two hours but that there are, at least in Russian, verbs formed with the prefix po- (eg. poguljat 'take a walk') which behave 'eccentrically in allowing durational adverbs' (Dahl and Karlsson 1976:7).

At any rate, it is obvious that the distinction between the sentences marked (a) and those marked (b) in (1)-(5) is syntactically significant in both English and Finnish. It was characterized above as the distinction between limited and limitless duration. This characterization does not contradict the definition of the opposition perfective vs. imperfective referred to above, in which the perfective aspect sees the situation as a single whole, or looks at it from the outside, whereas the imperfective aspect refers only to a part of the situation, or looks at it from the inside. When a speaker looks at a situation from the outside, he naturally sees all of it, and also sees it as limited in duration. But when he views it from the inside, he is capable of seeing only a part of it, and thus also sees it as limitless in its duration. The problem is, however, that definitions like these are impressionistic and, as such, too vague to be used as criteria when deciding when aspect is perfective and when imperfective, ie. to characterize the difference between eg. She walked and She worked a mile or between He stayed in the hut and He reached the mountain top. A clearer way of seeing the distinction is in terms of states and transitions between states (see eg. Dowty 1972, Heinämäki 1974, Dahl 1974). The starting point is a state, as von Wright (1963) suggests in his discussion of the logic of change. When a proposition describes a 'state of affairs', or describes a situation, a person or a thing at any given moment, the proposition refers to a state, as eg. in The door is open. A proposition can also describe what is going on at a given moment (eg. It is raining), which von Wright calls a process. Processes are like states in that they, too, describe a 'state of affairs'. Between two successive states there is an event, a transition from one state to another (eg. The door opened refers to an event, the transition from the state of being closed to the state of being open). An event can also be a transition from a state to a process or a transition from a process to a state, ie. the beginning of a process or the end of a process. The possibility also exists that an event is a change from one phase of the same process to another, eg. from slower to quicker. States and processes have duration since they describe a 'state of affairs'.

they correspond to the above definition of imperfective aspect as looking at a situation from the inside. Events, being transitions between states or states and processes, have no duration, ie. are perfective.

With the addition of the idea of causation two more concepts can be developed: acts and activities. Man can intentionally cause a Change, a transition from one state to another; this intentional bringing about of an event can be called an act (eg. John opened the door). A process can also be brought about intentionally, in which case we have an activity, eg. John played the piano. This system thus gives five concepts: state, process, event, act, and activity, among which states, processes and activities have duration, ie. are imperfective, and events and acts are perfective, ie. have no duration. This division, however, leaves out cases like reading a book, writing a letter etc., which have duration but which also lead to a Change from one state (that of not having been read or written) to another (that of having been read or written).

Vendler's (1967) classification of verbs accounts for this type as well.

Vendler classifies verbs - actually they are verbs and their complements in many cases - into four semantic categories according to a 'time-schemata'. The groups that his time-schemata gives are:

- (i) activities, such as 'running', 'pushing a cart', which are processes going on in time and which call for periods of time that are not unique or definite
- (ii) accomplishments, such as 'running a mile', 'drawing a circle', which imply the notion of unique and definite time periods
- (iii) achievements, such as 'reaching the top', 'noticing', which involve unique and definite time instants
- (iv) states, such as 'knowing something', 'loving somebody', which involve time instants in an indefinite and non-unique sense.

This means that it is possible to ask For how long did he run/push the cart? but not *How long did it take to run/push the cart?. It is possible to ask How long did it take to draw a circle?, whereas For how long did he draw the circle? is 'somewhat queer'. Similarly, it is possible to ask For how long did he love her? but not *For how long did he notice it? Thus, activities and states, on the one hand, and accomplishments and achievements, on the other, have something in common as far as their temporal properties are concerned. But there are other properties that distinguish activities from states and accomplishments from achievements. There is a feature shared by activities and accomplishments: they are

both processes going on in time, consisting of successive phases. Vendler (1967:99) describes this feature with reference to the difference between activities and states as follows:

Indeed, the man who is running lifts up his right leg one moment, drops it the next, then lifts the other leg, drops it and so on. But although it can be true of a subject that he knows something at a given moment or for a certain period, knowing and its kin are not processes going on in time. It may be the case that I know geography now, but this does not mean that the process of knowing geography is going on at present consisting of phases succeeding one another in time.

A consequence of this distinction is that in English only activities and not states generally allow the use of the progressive. A further distinction between states and activities is that only the latter can occur in imperative sentences and pseudo-cleft sentences (Run! is possible but not *Know the truth!, What he did was to run is possible but not *What he did was to know the truth). A feature that sets accomplishments clearly apart from activities, although they are like activities in that they progress in time, is that they have 'a set terminal point', which has to be reached. Consequently, only accomplishments can occur as complements of finish: it makes sense to say They finished building a house but not for example They finished running. On the other hand, accomplishments do not occur as complements of stop: They stopped building a house means that they never completed the task, and thus we do not have an accomplishment but an activity. Accomplishments thus have duration but also have a definite terminal point, which has to be reached for the process to qualify as an accomplishment. The temporal properties of Vendler's four types of 'verbs' can be summarized in the form of a table:

Table 1.

	states	activities	accomplishments	achievements
time specif. of type for + period	+	+	-	-
time specif. of type in + period	-	- , - ,	+	+
have duration	+	+	· +	<u>-</u> ·
progress in time	-	+ .	+	-
occur as comple- ments of finish	-	-	+	-
occur as complements of stop	+	+	-	-

Compared with von Wright's categories, Vendler's states correspond to von Wright's states; activities include both processes and activities in von Wright's terminology, achievements include both events and acts. Vendler's accomplishments have no counterpart in von Wright's terminology; they would be included in events and acts since they, too, denote a transition from one state to another.

A difficulty with the Vendlerian division is that verbs or verbs and their complements do not always belong exclusively to one category but can be interpreted as belonging to more than one, depending on their context. Vendler himself is aware of this and points out that for example the verb think is used in two different senses in sentences like He is thinking of Jones (activity) and He thinks that Jones is a rascal (state). In spite of this difficulty Vendler's division helps in recognizing aspects: states and activities are imperfective, accomplishments and achievements perfective. 1

There have been other attempts to classify verbs according to their temporal-aspectual properties, usually under the heading 'Aktionsart'. It is easy to keep the two concepts, aspect and Aktionsart apart in

Another problem connected with the above division is that, as pointed out previously, the categories do not involve verbs alone but often verbs and their complements. Thus, in (5) the verb ran denotes an activity, but in (6) the same verb with a noun phrase expressing destination denotes an accomplishment.

- (5) He ran fast/in the street. Hän juoksi nopeasti/kadulla.
- (6) He ran to the street/home. Hän juoksi kadulle/kotiin.

Verkuy1 (1972) shows that as a matter of fact aspects are compositional in nature, at least in English and Dutch, and that they are not a matter of the verb, neither a morphological category nor an inherent feature of the verb, but involve ingredients such as the verb, prepositional phrases, noun phrases and measure phrases. Verkuy1's theory is therefore worth investigating in more detail.

Slavonic languages, in which aspect is a grammatical category marked morphologically and Aktionsart refers to the division of verbs into meaning groups according to their semantic properties (cf. Andersson 1974:11). But in languages which do not have the grammatical category of aspect the two concepts are impossible to distinguish, and using both concepts thus leads to confusing classifications. Deutschbein's definitions of these concepts provide a good example of this (Deutschbein 1920, Deutschbein In his view, aspects are subjective ways of looking at events ('subjektive Anschaungsformen'), and Aktionsarten are related to objective, external events ('beziehen sich auf objektive äussere Vorgänge'). The aspects are divided into temporal, with a further division into perfective, introspective and prospective, and modal aspect. The area of Aktionsarten is divided into temporal, consecutive, intentional, and intensive, each of these being further subcategorized. These notional categories of aspect and Aktionsart find their expression, in English at least, partly through the same linguistic forms. Particularly interesting is that other writers include Deutschbein's Aktionsarten in aspects (see eg. Curme 1931).

2.3.1. Verkuyl's Arguments for the Compositional Nature of Aspects

Verkuyl concentrates on the durative vs. non-durative opposition because he sees it as the basic distinction underlying more elaborate ones. However, he makes a further distinction within the non-durative aspect into momentanous and terminate (cf. Vendler's achievements and accomplishments). As the feature distinguishing the durative from the non-durative aspect Verkuyl takes the compatibility of the former with durational adverbials of the type for two hours. The compatibility with questions of the type For how long? can also be used as a test for the durative/non-durative, or imperfective/perfective opposition. Thus, for example *He killed the pig for two hours and * For how long did he kill the pig? are both unacceptable. The terminate and the momentaneous aspects differ in their compatibility with temporal adverbs of the type in a day. * He hit the dog in a day is, according to Verkuyl, impossible, whereas He wrote the article in a day is possible. As was seen in connection with Vendler's classification momentaneous verbs, ie. achievements are also possible with a time-adverb of the type in a day (eg. He found it in a day). Verkuyl is thus not correct in assuming the contrary. The difference between achievements and accomplishments (Verkuyl's momentaneous and terminate aspects) is in Vendler's words:

When I say that it took me an hour to write a letter (which is an accomplishment), I imply that the writing of the letter went on during that hour. This is not the case with achievements. Even if one says that it took him three hours to reach the summit, one does not mean that the 'reaching' of the summit went on during those hours. Obviously it took three hours of climbing to reach the top.

As pointed out above, however, Verkuyl concentrates on the durative vs. non-durative (imperfective vs. perfective) distinction. He first shows that this opposition is not a matter of the verb alone, a view accepted for example in Chomskyan (1965) grammar. Within this type of grammar selection is allowed only between lexical categories. A prepositional phrase like for a week is not a lexical category and there is therefore no way within this theory of showing that there is a selectional relationship between verbs and the whole prepositional phrase. The

decisive factor in the selectional relationship is the feature [+duration]. This feature, however, cannot be a feature of the noun only but has to belong to the whole phrase, since we can have durational phrases like since 6 o'clock, in which the noun is momentaneous, not durational. Verkuyl comes to the conclusion that adverbials expressing duration should be placed in the base in a different way to that suggested in Chomsky's theory. He supports this argument by the do so -replacement (Lakoff and Ross 1966), according to which, in a sentence like John worked on the problem for eight hours and I did so for only two hours, do so occurs as a result of a transformation which substitutes do so for the VP occurring in the former of the conjoined sentences (work on the problem). This means that the durational adverbial is outside the VP and consequently should be under a node higher than VP, and thus 'it is the VP as a whole which selectionally relates to these Adverbials' (Verkuyl 1972:17). Furthermore, Verkuyl (1972:28) objects to Chomsky's idea of treating nouns and verbs differently, ie. the inherent specification of nouns but the context-sensitive specification of verbs, which 'leads to descriptive inadequacy'. Instead, Verkuyl turns to Gruber's (1967) idea of the base component, especially to his principle of polycategorial lexical attachment. According to Gruber, verbs should also be subcategorized inherently. Thus, verbs could be inherently categorized as durative and non-durative (and non-durative further categorized as terminate and momentaneous). The compatibility of verbs and temporal adverbials could then be said to depend on both having or not having the feature | +durative |. This, however, is unsatisfactory since 'there are reasons to assume that there are no Durative or Nondurative Verbs' (Verkuyl 1972:39). There are some verbs which, if subcategorized inherently, would be [tdurative] (eg. walk) but cannot have this feature when combined for example with a directional phrase (walk home). The same applies to 'pseudo-transitive' verbs, ie. verbs that can occur with or without an object: without an object they are |+durative|, with a singular object non-durative, with a plural object durative. Consider the following examples:

- (7) They ate for hours.
- (8) *They ate a sandwich for hours.
- (9) They ate sandwiches for hours.

Often it is not only the fact that the object is singular that accounts for the durativeness but the fact that the object denotes an unspecified quantity:

- (10) *The mouse ate the cheese for weeks.
- (11) The mouse ate cheese for weeks.

Verkuyl comes to the conclusion that the aspects are composed of verbal subcategories and nominal categories which contain quantificational information. He develops 'schemes' for the aspects. The scheme for the imperfective aspect is:

The main point proved by this is that the aspects are not unanalysable categories inherently belonging to verbs.

Verkuyl further shows that the subject and the indirect object can also contribute to the composition of the aspects. With some verbs, eg. die, a subject expressing an unspecified quantity of X can make the aspect imperfective, thus for example in (12).

(12) For months patients died of jaundice.

Similarly, an indirect object expressing an unspecified quantity can make the aspect imperfective, as in (13).

- (13) For an hour Den Uyl handed out the Labour Party badge to congress-goers.
- cf.(14) *For an hour Den Uyl handed out the Labour Party badge to a /the congress-goer.

Verkuyl then concludes that it is those constituents that belong to the nucleus of the sentence, a nucleus consisting of a 'relatively simple pattern of subject-verb-object-indirect object- prepositional object or subject-copula-predicate nominal' (Seuren 1969:112), that are involved in the composition of the aspects, because it is these that are involved in determining the compatibility with durational adverbs.

It is obvious that aspect cannot be a matter of the verb alone but at least the noun-phrases belonging to the nucleus of the sentence have to be taken into consideration. That this applies also to Finnish can be seen in the following equivalents of (7)-(14):

- (15) He söivät tuntikausia.
- (16) *He söivät voileivän tuntikausia.
- (17) He söivät voileipiä/voileipää tuntikausia.
- (18) *Hiiri söi juuston tuntikausia.
- (19) Hiiri söi juustoa tuntikausia.
- (20) *Tunnin ajan Den Uyl ojensi työväenpuolueen merkin kongressiin menijälle.
- (21) *Tunnin ajan Den Uyl ojensi työväenpuolueen merkin kongressiin menijöille.
- (22) Tunnin ajan Den Uyl ojensi työväenpuolueen merkkiä/merkkejä kongressiin menijöille.

The fact that Finnish allows a sentence like He söivät voileipää tuntikausia (with a partitive singular object NP) as well as (22) Den Uyl ojensi työväenpuolueen merkkiä (partitive singular object NP) but does not allow (21) Den Uyl ojensi työväenpuolueen merkin kongressiin menijöille (with a direct object NP in accusative singular and an indirect object NP in the plural) means that there are some differences between English and Finnish in this area. These differences will be discussed later. It does not, however, alter the fact that the NP's in the nucleus of the sentence have to be taken into account when dealing with aspectual distinctions in Finnish. 1

Andersson (1972), when discussing what he calls the perfective and imperfective Aktionsart in German, also sees as essential for its realization not only the verb itself but 'die Kontextlänge Subjekt + Prädikat + eine Ergänzung (Zeitangaben im weiten Sinne ausgenommen)', which corresponds to the nucleus of the sentence. According to Andersson, verbs can be divided into three types: (i) those that normally denote perfectiveness within the nucleus (Andersson's term is 'Grenzbezogenheit'), (ii) verbs which normally denote imperfectiveness within the nucleus ('Nichtgrenzbezogenheit'), and (iii) those verbs whose perfectiveness or imperfectiveness depends on the other constituents of the nucleus.

2.3.2. Aspect in the Present Study

In the present study aspect is taken to mean the opposition imperfective vs. perfective. Aspect is imperfective in a sentence which describes a 'state of affairs', ie. denotes either a state or an activity. Aspect is perfective in a sentence which describes a change, a transition from one state to another, from a state to a process, from a process to a state, ie. denotes either an achievement or an accomplishment. States and activities have duration, achievements do not. Accomplishments have duration but also have a definite terminal point which has to be reached. Furthermore, it will be assumed that aspect is imperfective in negative sentences, ie. that every sentence is durative when negated (cf. Verkuyl 1972). This is seen in that sentences which do not allow a durative adverbial when affirmative allow one when negated:

- (23) *We found the error for two days. *Löysimme virheen kaksi päivää.
- (24) We did not find the error for two days. Emme löytäneet virhettä kahteen päivään.

That there are problems in treating negative sentences as being imperfective in aspect is shown by Heinämäki (1974), who shows that negated sentences do not behave like ordinary imperfective ones. An indication of this is seen in the Finnish sentence in (24), which shows that the adverbial in the negated sentence does not take the same form as the adverbial in ordinary imperfective sentences (kahteen päivään vs. kaksi päivää). However, the effects of negation would give a completely new direction to the discussion and take it too far from the original theme of time and aspect that it will be omitted in the present analysis.

In the present study it will also be assumed that aspect is not a matter of the verb alone. Aspect can be included in the meaning of the verb, but in many cases it is the verb together with the NP's belonging to the nucleus of the sentence that express the aspectual distinction. Thus, aspect is a matter of the nucleus of the sentence, unlike temporal relations, which are a matter of the sentence as a whole. However, as pointed out previously, there is a close connection between aspectual and temporal distinctions. In the following discussion expressions of aspectual distinctions in English and Finnish will be covered first, using the Vendlerian classification as a theoretical basis. References

will be made to them in a later discussion of tenses, which will form the main focus of interest in the analysis.

3. EXPRESSIONS OF ASPECT

3.1. States and Activities

States and activities are durative by their very nature, and they have no limit as such, no definite end or beginning. Thus, sentences

referring to states and activities cannot contain objects that denote a specified quantity nor measure phrases nor phrases denoting destination. If there is an object it has to be [-total]. If there is an adverb of place it has to denote location, not destination. In (1)-(3) the processes are activities, in (4)-(6) they are states.

- (1) Bob played/was playing the piano last night. Bob soitti pianoa eilen illalla.
- (2) What does John do/is John doing? Mitä John tekee?
- (3) I walked/was walking on the beach this morning. Minä kävelin rannalla tänä aamuna.
- (4) They lived/were living in London last year. He asuivat Lontoossa viime vuonna.
- (5) I feel/am feeling fine. Voin mainiosti.
- (6) My knee hurts/is hurting. Polyeani särkee.

As the examples show, both the progressive and the non-progressive forms are possible in the English sentences. Thus, the progressive form cannot be said to be an indicator of aspectual difference in this case if aspect

is defined as above. The difference of meaning between sentences with the progressive and those without it is not easily explainable. The interpretation is partly connected with time-reference. If in the case of activities the time is the present, as in (2) above, the difference lies in the fact that without the progressive the sentence is generic in time-reference, while with the progressive it refers to the moment of speaking, ie. in the former case the interpretation of (2) is 'What does John do generally, for a living?', while in the latter case it is 'What is John engaged in doing at this very moment?'. There is thus a difference in the span of time referred to.

This leads to the general problem of the interpretation of the English progressive, on which there seems to be very little agreement. As has been mentioned before, it has been called 'aspect', and the difference between the progressive forms and the 'simple' forms has been seen as an aspectual one. But the meaning of this 'aspect' has not been easy to define since it seems to have not one but several meanings. Most writers on the subject have defined a basic meaning for the progressive and then distinguished several 'subsidiary' meanings. Of all the basic meanings attributed to the progressive that of duration is the most common. Thus, for example, Palmer (1965 and 1974) says that the progressive denotes activity that goes on through a period of time, activity with duration. Others use definitions like 'action in progress' (Zandyoort 1972) or say that it expresses 'a temporal frame encompassing something else' (Jespersen 1931:178). Whichever 'basic' meaning is adopted, there always remain special cases which have to be explained through secondary meanings. None of the 'basic' meanings mentioned above explain for example the meaning of the progressive in a sentence like She is always breaking things, which some call the 'emotional' use of the progressive, or cases like I am leaving, in which the progressive refers to the future. Imperfectivity has also been included in the secondary meanings, ie. the progressive has been seen as suggesting that the activity is unfinished (cf. Palmer 1974). Among the 'basic' meanings are also temporariness and subjectivity as opposed to the objectivity of the simple form (see also Scheffer 1975).

Of all the meanings listed above temporariness seems to be the most suitable one for an explanation of (2) above. Similarly, it explains the difference between the following pairs of sentences:

- (7) Bob plays the piano.Bob is playing the piano.
- (8) He walks in a strange way.
 He is walking in a strange way.

In the first member of each pair the sentence is a generic statement, in the second member a specific one. The same difference could also be described as a difference in time-reference: in the former reference is to a general/relative present, in the latter to an absolute present (cf. p. 95). The same applies to those few cases in which the progressive occurs with verbs denoting states, as in (4)-(6) above. States differ from activities in that, unlike activities, they do not consist of successive phases (cf. Vendler 1967:99). Generally speaking, verbs denoting states are not compatible with the progressive, apart from some exceptional cases. According to Anderson (1971), the feature [+ergative] can in some cases overrule the feature [+stative] and thus make the progressive possible, as in (9).

(9) Egbert is being cautious.

Anderson (1971:40) defines ergativeness as meaning that the subject of the verb is the initiator of the action. Thus Egbert read the book has the feature [+ergative], whereas Egbert knew the truth and Egbert sneezed are [-ergative]. This can be tested by placing the verbs in imperative sentences: [-ergative] verbs are not possible in imperative sentences but [+ergative] verbs are. Thus *Know the truth! and *Sneeze! are ungrammatical but Be cautious! is grammatical and thus [+ergative]. The test for ergativeness gives negative results in the case of sentences (4)-(6): Live in London (for a while)! might be possible, but *Feel fine! and *Hurt! certainly are not. This means that, contrary to Anderson's view, there are [+stative] verbs which are [-ergative] and yet compatible with the progressive.

The difference, if any, in meaning between pairs of sentences like those in (4)-(6) is between a permanent state and a temporary one (cf. Leech 1971:16). This is clear in the case of (4) They lived in London/They were living in London; in the latter sentence living in London was obviously temporary (They were living in London in those days). In the other two pairs the difference is not equally clear; the sentences I feel fine and I am feeling fine, My knee hurts and My knee is hurting

seem to be free variants. But even in these, if there is a difference it is one of a more general and more temporary time-reference.

The main point in this discussion is, however, that the progressive is not needed for the expression of imperfective aspect in the case of activities and states since verbs denoting these are inherently imperfective. Thus, the progressive is free to denote other meaning distinctions. With verbs that denote states and activities the progressive expresses temporariness or shorter duration as against the permanence or longer duration of the non-progressive forms.

Chafe (1970) maintains that a sentence like (7) above (Bob is playing the piano) could also have a generic interpretation. According to him, 'in the nongeneric case the speaker is reporting on Bob's ongoing act. The alternative generic meaning can be appreciated if we think of this sentence as an answer to the question 'What is Bob doing these days'?' (Chafe 1970:175). Whether Bob is playing the piano can be called truly generic like Bob plays the piano need not concern us here. What is important is that when the progressive is used the duration is temporary if compared with Bob plays the piano, which is truly generic. In both cases the aspect is imperfective. The only cases in which verbs denoting activities and states can be perfective are when the verbs refer to the beginning of the activity or state, ie. have an inchoative meaning (cf. (p. 75).

The meaning of the progressive is different when time-reference is not present, when it is either past or future. Consider (10)-(11).

- (10) Bob played the piano last night.

 Bob was playing the piano last night.
- (11) Greetje walked on the beach yesterday.

 Greetje was walking on the beach yesterday.

Again the aspect is imperfective in both cases. The progressive is not needed for the expression of aspect and is therefore used for some other purpose. It does not necessarily now suggest temporariness. At least in some cases Jespersen's 'temporal frame' is a suitable explanation. It is very clearly so when there are two simultaneous processes; one process functions as a temporal frame for the other (cf. p.136), as in (12) and (13).

- (12) Bob was playing the piano when I walked in.
- (13) It was snowing last night when I came home.

As the examples (1)-(6) at the beginning of this chapter show, Finnish normally has only one surface possibility when the process referred to is an activity or state. As mentioned before, the object has to be of the type 'indefinite quantity', which leads in Finnish to the choice of partitive: thus for example Bob soitti pianoa. Similarly in (14) and (15), the object is in the partitive.

- (14) Jussi ajaa autoa.

 John drives/is driving the/a car.
- (15) Pekka rakasti Liisaa. Pekka loved Liisa.

Accordingly, it is contradictory that the following sentences have [+total] accusative objects:

- (16) Minä tiedän vastauksen ongelmaasi. I know the answer to your problem.
- (17) Tunnen tämän kaupungin hyvin. I know this town well.
- (18) He omistavat tuon talon. They own that house.
- (19) He ymmärsivät vaikeutemme. They understood our difficulties.
- (20) Hän uskoo kaiken, mitä hänelle sanoo. He believes everything you tell him.

The processes are all states and thus inherently imperfective in aspect. Why, then, is the object in the accusative case? Most of the above verbs can also occur with a [-total], ie. a partitive object in slightly different contexts; in some contexts the [-total] object is the rule, as in (21) and (22), in which the object is a pronoun or some other word referring to a person. 1

The partitive object is normally considered to be the result of three different rules (see eg. Denison 1957): (i) it occurs in semantically negative sentences; (ii) it occurs in semantically positive sentences if only an indefinite part of the total concept of the object is involved (eg. Ostin uusia kirjoja/I bought some new books) or in Siro's (1964:76) terms 'if the object is divisible and denotes indefinite quantitative species'; (iii) it occurs if the action expressed by the verb is irresultative (eg. Mies ampui karhua/The man shot at the bear as opposed to Mies ampui karhun/The man shot the bear dead). Dalh and Karlsson (1976) describe the same in terms of a hierarchical model in which negation is the highest decisive factor: if a sentence is negative, the object is partitive and other oppositions are neutralized.

- (21) He ymmärtävät meitä/*meidät. They understand us.
- (22) Hän uskoo vain äitiään/ Marjaa. He only believes his mother/Marja.

A [-total] object is also possible with *tuntea* and *omistaa* as in (23)-(24).

- (23) Tunnen tätä kaupunkia/ hänen ystäviään. I know some of this town/ some of his friends.
- (24) He omistavat metsää ja peltoja.

 own some forest and some fields.

The processes of 'knowing' and owning' do not change with the change of the object from [+total] to [-total]. The only difference is that in the sentences with the [-total] object the process does not comprise all of the concept of the object, which it does when the object is [+total] It is natural that in (18) the object is [+total] because people normally own a whole house, whereas it is normal to own only some forest and fields as in (24). In (19) the understanding comprises all our difficulties or certain difficulties, but in (21) understanding people does not necessarily concern their total personalities, only perhaps their behaviour or what they say in certain situations. The [-total] vs. [+total] object opposition is thus not due to an underlying aspectual difference. The processes remain states regardless of the form of the object, and aspect thus also remains imperfective. The object is not

Next comes the aspectual opposition imperfective/perfective. If the aspect is imperfective, the object is partitive. If the aspect is perfective, the form of the object depends on the opposition definite/indefinite quantity: if a definite quantity is referred to, the object is in the accusative; if an indefinite quantity is meant, it is in the partitive. Thus, whenever, the aspect is imperfective, the object must be in the partitive case.

1) These cases are an exception to Dahl and Karlsson's rule concerning object marking in Finnish: an imperfective aspect does not invariably cause the object to be in the partitive case.

needed for the expression of aspectual distinctions and is thus free to denote other distinctions. This is true only in the case of some verbs denoting states and not, to my knowledge, with any verbs denoting activities.

The sentences in (1)-(6) showed only one surface possibility when the process is an activity or a state. However, this does not necessarily have to be the case. As (25)-(27) illustrate, there is another possibility in the case of activities.

- (25) Äiti on laittamassa päivällistä. Mother is cooking dinner.
- (26) Lapset ovat poimimassa marjoja. The children are picking berries.
- (27) Olin kuuntelemassa musiikkia/mietiskelemässä. I was listening to music/meditating.

This second alternative is the construction often the inessive case of the 3rd infinitive, which will below be called the progressive, for lack of a better term, because it in many cases corresponds to the English progressive. All the sentences in (25)-(27) could be answers to questions with where, such as Where is mother?/Where are the children?/ Where were you? Thus, the inessive case is found in this construction in its normal function, which is to identify 'the location or the spatial orientation of the state or action identified by the verb' (Fillmore 1968:25). Thus, when the speaker utters (25) the listener knows, in addition to the fact that mother is involved in the process of cooking dinner, the additional fact that she is in the place where cooking usually takes place; in (26) the listener knows that the children are perhaps in a nearby forest; in (27) that the speaker had been in a place where he usually listens to music or meditates. The speaker thus presupposes that there is a place where the activity normally takes place. The idea of location is not necessarily always present, as is seen in (28):

(28) Äiti ei voi nyt lähteä mukaan, hän on laittamassa päivällistä.

Mother cannot come with us now, she is cooking dinner.

This sentence simply states that mother cannot come now because **s**he is otherwise occupied, without referring to her being in any particular place.

In this case the sentence with the progressive and the one without it (hän laittaa päivällistä) are free variants.

There are activity-verbs which are incompatible with the progressive, for example, the verbs in (29)-(31).

- (29) Tyttö nauraa/itkee. ★on nauramassa/itkemässä The girl is laughing/crying.
- (30) Hampaani kalisevat/*vovat kalisemassa.
 My teeth are chattering.
- (31) Hän haukottelee/jauhaa purukumia/kaivelee hampaitaan.
 *on haukottelemassa/ jauhamassa purukumia/kaivelemassa hampaitaan.
 He is yawning/chewing gum/picking his teeth.

These activities differ from the previous ones in that there is no location in which they would typically take place, as there are for activities like cooking, listening to music, or meditating. But there are contexts in which even these verbs are compatible with the progressive. Consider for example (32).

(32) Vauva oli itkemässä, kun tulimme kotiin.
""e baby was crying when we came home.

here the use of the progressive makes the sentence unambiguous: without it the sentence would be ambiguous. It would either refer to two simultaneous or to two consecutive processes (Vauva itki, kun tulimme kotiin). With the progressive, reference is unambiguously made to two simultaneous processes. A similar explanation applies to (33), which allows two interpretations without the progressive.

(33) Me söimme päivällistä klo 7. We had/were having dinner at 7.

The sentence can be interpreted as meaning either 'we started eating dinner at 7' or 'we were in the process of eating dinner at 7', ie. without the progressive and with a definite point of time the sentence can denote the beginning of an activity (cf. p.75). If the progressive is used there is no possibility for ambiguity but the sentence refers to an activity in progress at the point in time indicated:

(33b) Olimme syömässä päivällistä klo 7. We were having dinner at 7. Consider also sentences (34)-(35).

- (34a) Kynttilät ovat jo palamassa/palavat jo. The candles are already burning.
- (34b) Kynttilät palavat kauniisti. ★ovat palamassa kauniisti. The candles burn/are burning nicely.
- (35) Kahvi on kiehumassa. Coffee is being made.

In (34a) and (35) the emphasis is on the fact that the activities have been started, ie. someone has lit the candles or has put the kettle on. In (34b) the progressive is not possible because the sentence is generic, by referring to the general quality of the candles, the fact that they burn nicely.

The situation with the Finnish progressive is thus the same as with the English progressive in the sense that neither is needed for the expression of imperfective aspect when the process is an activity or a state. The distinctions that they denote are, however, different. In most cases the English progressive denotes temporariness, while the Finnish progressive does not. The Finnish progressive, in its turn, has the connotation of locality, which is not a part of the meaning of the English progressive. But they can both be used to denote simultaneity of two processes and/or the fact that an activity is in progress at a certain point in time and not beginning at that mement. The Finnish progressive cannot occur with verbs denoting states as the English progressive can in some cases when temporariness of the state is implied (They were Living in London/They Lived in London).

3.2. Achievements

Achievements are momentaneous, have no extension in time and mark a change from one state to another, from a state to an activity, ie. the beginning of an activity, or from an activity to a state, ie. the end of an activity. Consider (36)-(38).

- (36) I woke up at 7 this morning. Heräsin seitsemältä tänä aamuna.
- (37) The old man died last night. Vanha mies kuoli viime yönä.
- (38) They reached the mountain top a few minutes ago. He saavuttivat vuoren huipun muutama minuutti sitten.

These events have no existence outside the moment at which they occur. It is easy to see why they can be described as transitions from one state to another: in (36) I was in the state of sleeping until a change occurred at 7, after which I was in the state of being awake. Similarly, in (37) the old man was alive until the moment he died, after which he was in the state of being dead. Even in (38) a parallel explanation is possible: the mountain top changed from the state of not having been reached to the state of having been reached by them.

Occurrences of achievements involve points of time, not periods, in Vendler's terms they involve 'unique and definite time instants'. The point in time can be specified as in (36)-(38) above but it does not have to be indicated. The fact that the process itself is momentaneous makes it obvious that it involves a point of time. This point can fall within any of the three time-spheres: the speaker's present, past or future. If it falls within the speaker's present, it is identical with the point of speech. There are very few processes that can be perfective in aspect with the event time being identical with the point of speech. These processes are limited mainly to the so called performatives, processes which have 'no existence apart from the predication' and are 'identical with it' (Hatcher 1951:267), ie. the speaker performs the act by uttering the words. This is the case in (39)-(40).

- (39) I declare the meeting closed. Julistan kokouksen päättyneeksi.
- (40) I pronounce you man and wife.
 Julistan teidät mieheksi ja vaimoksi.

Although achievements by their very nature can only be perfective in aspect, there are some obviously achievement verbs that in English can occur with the progressive form, which is normally possible only if the aspect is imperfective. Consider (41)-(43).

- (41) The old man is dying/was dying.
- (42) The plane is landing/was landing.
- (43) The train is arriving/was arriving.

'Dying', 'landing', 'arriving' are typical achievements. Yet, the above sentences seem to refer to processes that are going on at a point in time, and the aspect would then be imperfective. The only explanation is that reference in these sentences is not to the actual transition from one state to another but to the approach towards that transition. This is clearly seen in the most natural Finnish equivalent of (41):

(44) Vanha mies on kuolemaisillaan. (The old man is about to die.)

The same holds good in (45):

(45) Mies oli hukkumaisillaan. (The man was drowning/about to drown.)

If we analyse the above verbs as referring to the approach towards the transition and not to the transition itself, the verbs are no longer achievement verbs but have to be classified as denoting activities and are thus imperfective in aspect.

An alternative translation for The old man is dying is Vanha mies tekee kuolemaa, the literal meaning of which is 'The old man makes death'. This alternative clearly denotes the approach towards a transition. The construction is, however, not possible with all verbs of this type. Thus, it is not possible to have * Juna tekee saapumista for The train is arriving, whereas it is possible to say Juna tekee lähtöä 'The train is leaving'.

In Finnish, the progressive is possible with some of these verbs, as is seen in (46)-(48).

- (46) Lentokone laskeutuu/on laskeutumassa. The plane is landing.
- (47) Juna saapui/oli saapumassa. The train was arriving.
- (48) Uusi tähti on syntymässä. A new star is being born.

On the other hand, the progressive is not possible in (49)-(51), which contain verbs that are comparable with those in (46)-(48).

- (49) * Vanha mies oli kuolemassa. The old man was dying.
- (50) *Mies oli hukkumassa. The man was drowning.
- (51) *Bussi on pysähtymässä. The bus is stopping.

In these cases the approach towards the transition has to be expressed through a different construction: Vanha mies oli kuolemaisillaan/The old man was about to die, Mies oli hukkumaisillaan/The man was about to drown, Bussi oli pysähtymäisillään/The bus was about to stop. An explanation for this discrepancy could be that it is easier to see processes like landing, arriving or the birth of a new popstar as having duration than dying, drowning or stopping, which are experienced as momentary. When the progressive is possible, it is often difficult to say whether the meaning of the construction is to be about to or whether it denotes the imperfective aspect and thus development towards the transition. This is clearly seen in sentences that have objects: if the aspect is imperfective, the object should be [-total], ie. in the partitive case; if the aspect is perfective, the object is [+total], ie. in the accusative. Nevertheless, the progressive occurs with both types of object in connection with these achievement verbs. Consider (52) and (53), which both occurred in the same radio programme (1.11.1978).

- (52) Työterveyslaitos on aloittamassa laajaa suomalaisten pituuden mittausta.
- (53) Työterveyslaitos on aloittamassa suomalaisten pituuden mittauksen.

In (52) the object is in the partitive and that is a sign of the aspect

being imperfective. Thus, the sentence can be interpreted as 'The work and health institute is starting/making preparations for a extensive measurement of the height of Finns'. In (53) the object is in the accusative, and so the aspect is perfective and the interpretation of the sentence 'The work and health institute is about to start an extensive measurement of the height of Finns'. A similar difference in aspect and interpretation exists between (54) and (55), the former having an object in the partitive, the latter an object in the accusative (both heard on the radio in December 1978).

- (54) Valuutta-asiantuntijat ovat päättämässä kokoustaan Brysselissä. The currency experts are finishing their meeting in Brussels.
- (55) Näillä hetkillä ensimmäiset joukot ovat saamassa käskyn marssia.

 At this moment the first troops are about to get the order to march.

In some cases the progressive construction does not contain the inessive case of the 3rd infinitive but the inessive of a deverbal noun ending in the suffix $-o/\ddot{o}$ from the verb stem. Thus, for example olla menossa/tulossa/lähdössä instead of olla menemässä/tulemassa/lähtemässä:

- (56) Laiva on tulossa satamaan.

 The boat is coming to the harbour.
- (57) Laiva on lähdössä satamasta. The boat is leaving the harbour.

It is again noteworthy that these constructions often do not refer to the process of coming/leaving/going being in progress at a given moment but to the fact that these processes are going to take place or are intended, as in (58)-(60).

- (58) Oletko sinä tulossa tänä iltana?
 Are you coming tonight/do you intend to come?
- (59) Minä olen menossa niihin juhliin lauantaina. I am going/intend to go to the party on Saturday.
- (60) Vieraat ovat lähdössä.

 The guests are leaving/intend to leave/are about to leave.

In other words, these expressions come very close to expressions of future in some cases, as does the English progressive, and it is difficult to distinguish this future reference from the approach towards the transition from one state to another which has been discussed here.

There is another case in which a basically achievement verb can occur in a sentence in which the aspect is clearly imperfective. Compare the sentences in (61) with those in (62).

- (61) I woke up at seven yesterday. Heräsin seitsemältä eilen.
- (62) I woke up at seven for two weeks. Heräsin seitsemältä kahden viikon ajan.

In (61) the event is unique, in (62) it is frequentative, it is repeated. The frequentative reading makes the aspect imperfective as is shown by the fact that (62) allows a durational adverb. A similar difference exists between (63) and (64), which are Verkuyl's (1972) examples.

- (63) The guillotine fell with a thud that made me shudder.
- (64) For hours the guillotine fell with a thud that made me shudder every time.

It is the durational adverbial that makes the frequency reading possible (this reading is possible even without the frequency adverb every time). The frequentative reading seems to be possible even when there is an object NP of the type 'specified quantity'. Thus, not only (65) but also (66) and (67) would allow the addition of a durational adverb.

- (65) John met interesting blondes on the beach (all summer).
- (66) John met an interesting blonde on the beach (all summer).
- (67) John met two interesting blondes on the beach (all summer).

This means, then, that Verkuyl's scheme for imperfective aspect (p.56) does not apply to all cases: sentences with a frequentative reading form an exception to his rule.

In Finnish a similar interpretation is possible, with the difference, however, that a [-total] object normally occurs in sentences which have the frequentative reading and thus imperfective aspect:

(68) Jussi tapasi mielenkiintoisen vaaleaverikön rannalla *koko kesän. ([+total] object and one occurrence)

- (69) Jussi tapasi mielenkiintoista vaaleaverikköä rannalla koko kesän. ([-total] object in singular, frequentative reading)
- (70) Jussi tapasi mielenkiintoisia vaaleaverikköjä rannalla koko kesän. ([-total] object in plural, frequentative reading)

It should be noticed, however, that a singular partitive object is not possible with most achievement verbs. Thus, for example (71) is unaccetable.

(71) *John löysi virhettä kaksi tuntia.
*John detected an error for two hours.

But (72) is acceptable.

(72) Me möimme taloa kaksi kuukautta. *We sold the house for two months.

Actually (72) does not necessarily imply that we sold the house but that we spent two months trying to sell it. What this means is that these basically achievement verbs that can occur with a singular [-total] object no longer denote an achievement when occurring with it, but denote activities and can thus also be imperfective in aspect.

In both languages an indefinite plural subject can also make the frequentative reading of an achievement verb possible:

- (73) People have been dying of that disease for years. Ihmisiä on kuollut siihen tautiin vuosikausia.
- (74) Tourists have found that little village for years.

 Turistit ovat löytäneet sen pienen kylän jo vuosikausia.

It is noteworthy that in the Finnish sentence in (74) the subject is in the nominative plural although in (73) it is in the partitive. A partitive subject is possible in Finnish if the verb is intransitive and denotes the existence or change of a state (which is the case with achievement verbs) (cf. Penttilä 1963:623). Thus, the partitive subject is not possible in (74), which has a transitive verb: *Turisteja on löytänyt sen pienen kylän. However, the subject in (74) does not denote a definite number of tourists even though it is in the nominative.

In English, an indefinite plural indirect object also makes the frequentative reading of an achievement possible, as in the following example of Verkuyl's (1972), which was already quoted earlier (p.56).

(75) Den Uyl handed the party badge to congress-goers for hours.

This again means that aspect can be imperfective as is seen by the fact that the above sentence allows the addition of a durational adverb. This, however, is not possible in the corresponding Finnish sentence; an indefinite plural indirect object is not acceptable unless the direct object is also indefinite plural:

(76) * Den Uyl ojensi puoluemerkin kongressiin menijöille tuntikausia.

Den Uyl ojensi puoluemerkkejä kongressiin menijöille tuntikausia.

- (76) with a singular object in the partitive would be possible:
 - (76a) Den Uyl ojensi puoluemerkkiä kongressiin menijöille tuntikausia.

This, however, would change the meaning of the sentence: (76a) means that Den Uyl tried to make the congress-goers take the badge but did not succeed, which means that the process is not an achievement any more (cf. Me möimme taloa above). It is possible, however, to find contexts in which a [+total] singular direct object and a plural indirect object have a frequentative reading also in Finnish. Consider (77).

(77) Vuosikausia minä lähetin joulukortin ystävilleni. For years I sent a Christmas card to my friends.

Yet, in most cases the frequentative reading in Finnish requires a plural direct object, as in (78).

(78) Tyttö möi vappukukkia ohikulkijoille koko päivän. The girl sold first of May flowers to passers-by for the whole day.

*Tyttö möi vappukukan ohikulkijoille koko päivän.

There is one more special case to be dealt with in connection with achievements. This case concerns verbs that are basically durative, ie. are normally either activities or states but lose this feature in certain contexts. Consider (79)-(81).

(79) Now I know it. Nyt tiedän sen.

- (80) Then suddenly I remembered the name. Sitten yhtäkkiä muistin nimen.
- (81) We had dinner at 7 last night. Söimme päivällistä klo 19 eilen illalla.

It is obvious that (79) and (80) do not refer to the states of 'knowing' and 'remembering' but to the beginnings of these states, ie. achievements that have no duration. Like achievements they involve a definite point in time, which at least has to be implied if not expressed. In (81) the situation is a little different: the sentence refers to an activity and is ambiguous as to whether the speaker means that the activity was going on at the point in the past or whether he means that the activity began at that point. (If the progressive is used, there is no ambiguity, see p.66). If the meaning is inchoative, the process is comparable with achievements and the aspect is perfective.

Sentences containing verbs denoting achievements are normally perfective in aspect, because achievements are momentaneous. As we have seen, achievement verbs are also compatible with the imperfective aspect in both languages if the achievement is repeated. This frequentative reading is possible in both languages if (i) there is a durational or frequentative adverbial, (ii) there is an object NP denoting an indefinite quantity in the plural (in Finnish also in the singular in some cases), (iii) in English an indirect object NP having the same features also causes a frequentative reading; in Finnish this is not usually possible, (iv) if there is a subject denoting an indefinite quantity in the plural (or again in the singular in Finnish, cf. Metsää kaatui kahden tunnin ajan/literally 'Of the forest fell for two hours').

Verbs can thus have different readings in different contexts. In both languages there are verbs that are basically achievement verbs but can, and often do, particularly in English, denote an approach towards a transition from one state to another, rather than the transition itself, and are then to be considered activity verbs rather than achievement verbs. There are also verbs that are basically states and activities but can, if a point of time is implied or expressed, denote the beginnings of these states or activities and are then comparable with achievement verbs and perfective in aspect.

Both languages also have pairs of verbs/verbal phrases in which the same basic verb stem occurs alone in one, with an additional morpheme in the other, and which denote an activity in one case and an achievement in the other. Thus English has pairs such as sit and sit down, cry and cry out. In Finnish this additional morpheme often occurs in the form of a derivational affix. In some cases the original stem denotes an activity and the additional affix makes it denote an achievement, in others the change is from an achievement to an activity. Thus Finnish has pairs like the following:

Activity istua ('sit') nauraa ('laugh') huutaa ('cry, shout') hypellä ('keep jumping') nyökytellä ('keep nodding') Achievement istahtaa ('sit down') naurahtaa ('give a laugh') huudahtaa ('cry out') hypätä ('jump once') nyökytellä ('keep nodding')

There are even sets of three verbs, such as huutaa - huudahtaa - huudahdella ('cry - cry out - keep crying out'), in which the first member denotes an activity, the second an achievement, and the third again an activity (or repeated achievements).

3.3. Accomplishments

Accomplishments require unique and definite time periods, not instants like achievements. They thus have duration like activities and states, but differ from these in that they have a definite end towards which they develop. If this end is reached, we have an accomplishment; if the set terminal point is not reached, we do not have an accomplishment but an activity. Since the set terminal point has to be reached for a process to qualify as an accomplishment, this also means that accomplishments always mean a change from one 'state of affairs' to another and the aspect is thus perfective. (82)-(83) contain accomplishments and are thus perfective in aspect.

- (82) They built a house last year. He rakensivat talon viime vuonna.
- (83) John drove the car into the garage a moment ago. John ajoi auton talliin hetki sitten.

In (82) there was no house until the task of building one was completed, ie. a change from one state to another took place. In (83) the car was not in the garage until John had driven it there, ie. again there was a change from one state to another. In (84) and (85), however, the definite end was not yet reached, the process was going on at a certain point in time and the aspect is thus imperfective.

- (84) They were building a house last year. He rakensivat taloa viime vuonna.
- (85) John was driving the car into the garage a moment ago. Hetki sitten John ajoi autoa talliin.

The processes in (84) and (85) are not accomplishments but activities. As these examples indicate, the perfective vs. imperfective, or accomplishment vs. activity, opposition finds its expression through the progressive in English and through the +total - -total object distinction in Finnish. This is the case when, as in the above examples, we have a verb and an object NP which denotes a definite quantity. If, however, the object NP denotes an indefinite quantity, the progressive is not necessary in English for the expression of the imperfective aspect. Consider (86).

(86) They build/built houses. He rakentavat/rakensivat taloja.

The aspect is imperfective without the progressive and the processes are activities. If we add the progressive to the English sentence in (86) (They are building/were building houses), the only difference is that the time-reference changes from generic to temporary. If we add the progressive to the Finnish sentence (He ovat/olivat rakentamassa taloja), the sentence gets the connotation of location of the subject (cf. discussion on activities in 3.2.). The object NP in (86) is plural, but it can naturally also be singular and still denote an indefinite quantity, in which case the process is again an activity, as in (87).

(87) The mouse ate cheese for weeks. Hiiri söi juustoa viikkokausia.

In English this distinctly differs from (88), in which the singular NP refers to a definite quantity and the process is thus an accomplishment.

(88) The mouse ate the/a cheese *for weeks.

In (88) the aspect is perfective, as seen by the fact that the addition of a durational adverb is impossible. If the aspect is imperfective, the progressive is used, as in (89).

(89) The mouse was eating the/a cheese.

In Finnish we have an ambiguity here:

(90) Hiiri söi juustoa.

The mouse ate cheese/was eating the/a cheese.

(90) can either refer to the fact that the mouse ate some cheese or that the process of eating a/the definite piece of cheese was going on at a point in time. In both cases, however, the process is an activity and the aspect is imperfective, because no definite 'destination' is reached. It could of course be argued that the 'destination' is reached because the aim was to eat only some of the cheese, ie. it could be argued that the aspect is perfective even when the object NP denotes an indefinite quantity. In that case, the corresponding English sentence The mouse ate cheese would also be ambiguous. This would, however, be splitting hairs, and it can be concluded that in both cases the aspect is imperfective.

In the cases discussed above it has been an object NP of the type 'definite quantity' that has made the process an accomplishment. A similar effect has an NP or a prepositional phrase expressing destination: a verb that alone denotes an activity becomes an accomplishment when occurring together with such a phrase. Compare (91) and (92).

- (91) She walked on the beach for two hours. Hän käveli rannalla kaksi tuntia.
- (92) She walked to the beach ★for two hours. Hän käveli rannalle *kaksi tuntia.

The addition of a phrase expressing location in (91) does not change the fact that walk denotes an activity, but the addition of a phrase of destination in (92) makes the process of walking an accomplishment. The same applies to the Finnish sentences, in which the idea of location is expressed, in this case, through the adessive case of the NP, and the idea of destination through the allative case. The aspect is imporfective in (91) but perfective in the sentences in (92). The English sentence in (92) could be made imperfective by adding the progressive

(She was walking to the beach when she fell), in which case the process is an activity and not an accomplishment. In the corresponding Finnish sentence imperfectiveness could in this case be expressed either by using the progressive or by adding an adverb that expresses that the process was in progress at a certain moment:

(92a) She was walking to the beach (when she fell). Hän oli kävelemässä rannalle (kun hän kaatui). Hän käveli parhaillaan rannalle (kun hän kaatui).

A measure phrase also has the same effect on a verb which by itself expresses an activity:

(93) She walked a mile. Hän käveli kilometrin.

These processes have a definite end, a fulfilment towards which they progress in time, just as has 'walking to the beach'. They are therefore accomplishments, and the aspect is perfective. This type of verb phrase, however, does not sound natural with the progressive, ie. an imperfective aspect and activity reading is rare in connection with them. Thus, sentences in (94) are strange, if not totally unacceptable.

(94)? She was walking a mile when I met her. ? Hän oli kävelemässä kilometriä, kun tapasin hänet.

However, contexts can be found in which the progressive is possible:

- (95) Poika oli juoksemassa vasta ensimmäistä kilometriä, kun toiset olivat jo maalissa.

 The boy was only running the first mile when the others had already reached the goal.
- (96) Mieto oli hiihtämässä viittäkymmentä kilometriä, kun hän sai krampin. Mieto was skiing fifty kilometres when he got cramp.

Verb phrases which consist of verb and a measure phrase like a *lot/pal-jon* are even stranger with the progressive, at least in Finnish:

(97) She cried/read a lot in those days. Hän itki/luki paljon niihin aikoihin.

She was crying/reading a lot in those days. **Hän oli itkemässä/lukemassa paljon niihin aikoihin.

According to Verkuyl's theory this last mentioned type would differ

from the other verb + measure phrase cases. One of the tests which Verkuyl uses to determine the upper bound of the aspects is the pseudocleft sentence test. This he does at a point where he can safely state that 'those constituents which are located 'higher' than Durational Adverbials will not be involved in the relationship between Durational Adverbials and constituents to which the labels 'Durative' and 'Nondurative' can be assigned' (Verkuyl 1972:99). It seems to Verkuyl that we have to decide what constitutes an event-S, ie. determine the underlying structure of action sentences (= sentences containing non-statives). It is this S that functions as the upper bound of the aspects. The pseudo-cleft sentence with its paradigm What + Aux + X + do, be + Verb + Y is used to determine the S. 'The referent of the S whose surface structural reflection occurs as Verb + Y in this paradigm can be said to constitute an event-unit. However, the constituents that belong to Y can vary. Consequently it is necessary to determine 'minimal event'. This 'minimal event' seems to be the same as the nucleus in symbolic logic. The nucleus 'conforms to a relatively simple pattern of subject-verb-object-indirect object-prepositional object or subjectcopula-predicate nominal' (Seuren 1969:112). Operators such as Time, existential and universal quantifiers, and modal operators are outside the nucleus and must be introduced into it by transformations. degree of cohesion between the Verb (originating in the nucleus) and Adverbials of Time (incorporated into the nucleus) cannot be as strong as the degree of cohesion between constituents dominated by the node Nucleus in the deep structure' (Verkuyl 1972:174). From this it follows that only those constituents that are included in the nucleus can be involved in the composition of the aspects.

Applied to the above sentences with measure phrases the pseudo-cleft sentence test shows that measure phrases like a mile/kilometrin and paljon/a lot behave differently. It is possible to say What she did a lot was to cry/Mitä hän teki paljon oli itkeminen, whereas it is not possible to say *What she did a mile was to walk/Mitä hän teki kilometrin oli käveleminen. Thus a lot/paljon behave like durational adverbs, eg. tunnin/for an howr: Mitä hän teki tunnin oli käveleminen/What she did for an howr was to walk. If this is accepted as a criterion, measure phrases like a lot/paljon do not make an activity verb an accomplishment and the aspect perfective. The processes in (94) are activities with an imperfective aspect. Consequently it must be concluded

that the measure phrases that combine with activity verbs to denote accomplishments must be of the type 'specific quantity'. On the other hand, these combinations behave like accomplishments in allowing the addition of a temporal adverb of the type 'in a year':

(98) She read a lot in a year. Hän luki paljon vuodessa.

The issue, although interesting, is not important here since both English and Finnish behave similarly in this respect.

For a process to be an accomplishment it has to have a definite end towards which it progresses, ie. goes on in time. As has been seen, this definite end, or goal, can be expressed, in both English and Finnish, in terms of an object which denotes a definite quantity, a phrase that expresses destination, or a measure phrase. The idea of destination can, at least in Finnish, also be included in the verb itself: this is the case with verbs like parantua/get well, viiletä/get cool, valmistautua/get ready, lämmetä/get warm, warmer, for which the English equivalents are combinations of verb and adjective. In these cases the processes can be described as gradual developments of states rather than changes from one state to another. Since these processes are accomplishments, the aspect is perfective in sentences in which they occur. However, the aspect can be made imperfective and the processes changed from accomplishments to activities by adding the progressive in both Finnish and English. In (99)-(101) the a-sentences are perfective, the b-sentences imperfective.

- (99a) Annan jalka parani. Anna's leg got better.
- (99b) Annan jalka oli paranemassa. Anna's leg was getting better.
- (100a) Ilma viileni. The weather got cool/cooler.
- (100b) Ilma oli viilenemässä. The weather was getting cool/cooler.
- (101a) Sauna lämpesi. The sauna got hot/was heated.
- (101b) Sauna oli lämpiämässä. The sauna was getting hot/was being heated.

In these cases the progressive is necessary also in Finnish for the expression of the imperfective aspect because there is no object which

could indicate the perfectiveness or imperfectiveness. This is also true of other verb phrases which do not contain an object NP and denote an accomplishment. The aspect is made imperfective and the verb phrases denote activities in (102) and (103).

- (102) Asiasta on kehittymässä riita. The matter is developing into a dispute.
- (103) Poika oli juoksemassa kotiin. The boy was running home.

Another possible way of expressing the imperfective aspect in Finnish is again the use of an adverbial emphasising the fact that the process is going on at a certain point in time, for example parhaillaan, juuri. However, sentences like (99)-(100) sound strange with these adverbs, or at least the sentences with the progressive sound more natural. Thus (104) and (105) are rather odd.

- (104) Ilma viileni parhaillaan.
- (105) Asiasta kehittyy parhaillaan riita.

Like achievements, accomplishments can be repeated, can be frequentative. In that case, as was the case with achievements, the individual accomplishments are completed but the whole series of repeated accomplishments is not, and thus the aspect is imperfective. This is the case in the following sentences:

- (106) Pyöräilin töihin joka päivä noihin aikoihin. I cycled to work every day those days.
- (107) Kirjoitin hänelle joka viikko (vuoden ajan). I wrote to him every week (for a year).

That the aspect is imperfective is proved by the fact that the sentences allow the addition of a durational adverb.

3.4. Summary of Points of Contrast

The starting point for the treatment of aspect was the opposition of perfectiveness and imperfectiveness. This language-independent conceptual dichotomy was defined as referring to whether the speaker describes a state of affairs or whether he speaks about a transition between two states of affairs. In the former case the process has duration and the aspect is imperfective. In the latter case the process is either momentaneous or has duration but ends in a definite goal or destination. Processes thus have certain temporal features on the basis of which it is possible to classify them into four groups: states, which are durative, activities, which are durative but consist of successive phases, achievements, which are momentaneous, and accomplishments, which have duration but go on in time towards a definite goal. These groups are connected with aspect so that achievements and accomplishments are perfective, states and activities imperfective. Whether the process is semelfactive or frequentative also has a bearing on the aspectual distinction: a repeated chain of achievements or accomplishments is imperfective in aspect even though the individual processes are perfective.

The perfective/imperfective opposition is not a matter of the verb alone in either English or Finnish, but the aspects are compositional in nature. The constituents of the sentence that participate in the compositions of the aspects are those that belong to the nucleus of the sentence. Adverbs of time, including durational adverbs, are outside the nucleus. Compatibility with durational adverbs was used as a syntactic device in deciding whether the aspect was perfective or imperfective: the perfective aspect is incompatible with durational adverbs, whereas the imperfective aspect is possible with them.

The division of processes into achievements, activities, states, and accomplishments is not always connected with the meaning of verbs alone. Thus, achievements can be expressed in English through a verb alone (die, drown, arrive), a verb + an object denoting a definite quantity (find an error), a verb + direct object + indirect object (hand the party badge to a congress-goer), a verb + particle (sit down). In Finnish the situation is very much the same: the only differences are that in Finnish the object denoting a definite quantity has a special form on the surface, the accusative case; another minor difference is

that where the achievement is expressed in English through a verb + particle Finnish has a special suffix indicating achievement as opposed to the activity denoted by the stem (istahtaa/istua).

In both languages the change of any one of the NP's ie. the direct object, indirect object or subject, to one that denotes an indefinite quantity in the plural allows the frequentative reading of an achievement verb and makes the aspect imperfective, eg. He found errors for an hour/Hän löysi virheitä tunnin ajan, He handed the party badge to congress-goers for an hour/ Hän ojensi puoluemerkkiä/-ejä vierailijoille tunnin ajan, Tourists have found this little village for years/ Turistit ovat löytäneet tämän pienen kylän jo vuosikausia. It is noteworthy, however, that in Finnish, if the indirect object denotes an indefinite quantity, the direct object also normally denotes an indefinite quantity. In Finnish, it is also possible for some achievement verbs to occur with a -total object in the singular and then be imperfective in aspect (John tapasi vaaleaverikköä koko kesän). The problem of interpretation created by cases like these can be overcome by saying that the processes in these sentences are not achievements but activities.

It is also possible in both languages for a verb which basically denotes an activity or state to have an achievement reading when it is combined with a point of time. Reference is then made to the beginning of that activity or state (Now I see it/Nyt minä näen sen) We had dinner at seven/Söimme päivällistä seitsemältä) and the aspect is perfective.

Activities and states are expressed through the verb alone (cry, laugh, run, sing/itkeä, nauraa, juosta, laulaa; rakastaa, vihata/love, hate) or verb + an object denoting an indefinite quantity (syödä juustoa/eat cheese, juoda olutta/drink beer). Activities and states are inherently imperfective, and there is thus no need for any particular surface form in either language for the expression of the imperfective aspect. Consequently, the surface forms/constructions that otherwise denote the imperfective aspect are now free to denote other distinctions. Thus the English progressive can denote a temporary activity or in some cases even a temporary state, or a 'temporal frame' for another process. The same applies to what has here been called the progressive in Finnish: in the case of those activities with which it can be found it denotes location or emphasizes simultaneity with another process or simultaneity with a point of time (Kello seitsemän olimme syömässä päivällistä/

At seven o'clock we were having dinner). Similarly, the object in Finnish is free to denote other distinctions as it is not needed for the expression of aspectual difference. Thus, with some states the [-total] object denotes that only a part of the total concept of the object is involved, whereas the [+total] object denotes that the whole concept of the object is involved (Tunnen tämän kaupungin/Tunnen tätä kaupunkia). With activities the object is always [-total] ie. in the partitive case, since the object has to be of the type 'indefinite quantity'.

As accomplishments involve reaching a goal or destination but also have duration, these processes can be seen in the middle of their duration before the goal is reached. It is therefore natural that the same verbs or verb phrases can denote both the accomplishment and the activity that progresses towards the goal, ie. there are verbs/verb phrases that vary between expressing an accomplishment and an activity. In the latter case, however, English requires the use of the progressive and thus the progressive here denotes the imperfective aspect. Finnish employs the [+total] - [-total] object dichotomy provided there is an object in the sentence. In the surface structure this means using the accusative case when aspect is perfective, ie. when the process is an accomplishment, and the partitive case when aspect is imperfective, ie. when the process is an activity. When there is no object in the sentence, the aspectual distinction has to be expressed by other means: by using the progressive or employing an adverb that denotes simultaneity with a point in time (juuri, parhaillaan).

When an accomplishment finds its expression through a verb and its object, the object has to denote a definite quantity. If the expression of an accomplishment involves the use of an adverbial of place, this has to denote destination, not location. If the accomplishment is expressed in terms of a verb and a measure phrase, the measure phrase again has to denote a definite quantity. These conditions apply to both languages. Finnish has some verbs formed from an adjective and a derivational suffix (viileä/cool - viiletä/get cool, cooler) denoting accomplishments whose English equivalents consist of a verb and an adjective.

On the whole, the similarities seem to be greater than the differences between English and Finnish in the area of expressions of aspectual distinctions. This is no doubt due to the fact that, for the most part, the aspectual distinctions are included in the meaning of the verbs/verbs

and their complements and there is thus no need for any grammatical category for their expression. There are differences between the two languages, however. The most crucial one is the fact that in Finnish the object plays an important role in denoting aspectual distinctions, while this does not occur in English. As was pointed out above (p. 16), Krzeszowski (1974) suggests that we can 'measure' the degree of difference and similarity between two languages according to the level at which the first diversification takes place in the derivational histories of equivalent sentences: the lower the level of the first diversification, the greater the similarity. The expressions of aspectual distinctions are a good case against the application of the model or, at least, they illustrate the difficulties in its application. For example, in some cases English expresses the imperfective aspect through the progressive and Finnish often uses the object in the partitive for the same purpose. The first diversification thus takes place at the categorial level, although it is not certain whether the progressive can be included in 'major grammatical categories'. However, its choice cannot be left beyond the level of transformations because it is here that the minor categories such as auxiliaries are introduced and, for this to be achieved, the category progressive must have been chosen previously. In Finnish the choice between [+total] and [-total] object would presumably have to take place at this level as well. When the progressive is chosen in Finnish for the expression of the imperfective aspect, the diversification takes place later. It could therefore be concluded that the difference between English and Finnish is greater when Finnish denotes the imperfective/perfective aspect through the object than when it does this through the choice of the progressive for the imperfective aspect.

A problem caused by Krzeszowski's system is that of the requirement of either an NP denoting definite quantity or an NP denoting an indefinite quantity. In the case of objects this leads in Finnish to the choice of the accusative in the former case and to the partitive in the latter. In English this distinction is often made in terms of articles: no article for indefinite quantity, and an article for definite quantity (cheese/the cheese, read books/read a book, read the book, read the books). The insertion of case endings would take place at the post-lexical level, but where would the articles be chosen?

Are they 'minor' grammatical categories or is their insertion left to the post-lexical level?

When the adverbials of place are significant in the expressions of aspect there are often nouns with case endings in Finnish where English has a prepositional phrase. According to Krzeszowski (1974:138), the prepositional phrase is a category chosen at the categorial level. Case endings are inserted at the post-lexical level, but where are the cases themselves chosen? Another problematic case, although a minor one since it concerns only a few individual instances is processes which are expressed in English through a verb plus a particle but in Finnish through a verb stem plus a suffix. Are these both a matter of the lexical level?

Krzeszowski's system of levels poses too many problems to be adequately applied to a 'measurement' of similarity and difference, at least in complicated phenomena like the aspects, which are represented in the surface structure by 'diffused' overt signals. It can be concluded, even without applying any system of levels, that the difference between English and Finnish is greatest in instances in which English uses the progressive and Finnish the partitive object to denote the imperfective aspect, and that there is great similarity when both languages use the progressive, although both languages form this category differently. It is also easy to observe that, when the adverbials of place are involved in the expressions of aspect, the difference is not very great, even if English uses a prepositional phrase and Finnish a certain case of the noun.

In both English and Finnish the progressive is only needed for the expression of the imperfective aspect when the verb or verb phrase would otherwise denote an accomplishment and the aspect would then be perfective. Therefore, it is impossible to agree with Hirtle, who (as quoted by Scheffer 1975:39) says that 'the basic function of the (English) progressive is to express imperfectivity'. On the contrary, it is easy to agree with Comrie's (1976:38) opinion that 'there are several idiosyncrasies in the use of the English Progressive that seem, at least in the present state of research, to militate against a general meaning being able to account for every single use of this form'. What can be said with certainty is that, in sentences which contain the progressive, the aspect is imperfective but in many cases the imperfectiveness is inherent in the process itself and the progressive is

thus free to denote other connotations. As has been pointed out above, these other connotations include: (i) Temporariness as against the genericity or unlimited duration of the simple form. This applies also to those few state verbs with which the progressive is possible. (ii) Simultaneity with another process or a given point of time, which is implied by Jespersen's 'time-frame theory'. This means that simultaneous with the process on which interest is focused there is another process that forms a background to it. (iii) Emphasis on the continuity of the process beyond a certain point in time, particularly with the present perfect (cf. p.128). (iv) Persistence of a process, with an emotional colouring of anger or annoyance (You are for ever forgetting to wash you hands). In this case the progressive is possible even with achievements (You are always finding fault in whatever I do), but then the achievement is repeated and it is the chain of the repeated achievements whose continuity is emphasized with 'a tone of irritation or amused disparagement' (Leech 1971:29)

¹There is an interesting suggestion by Goldsmith and Woisetschlaeger (1976) towards an explanation of the differences between the English progressive and non-progressive forms in terms of 'structural' and 'phenomenal' descriptions of the world. When using the non-progressive forms the speaker describes the structural properties of the situation, and when using the progressive forms he/she describes the phenomenal properties. The structural properties are those which, when changed, change the whole situation; all others are phenomenal properties. Thus, the difference between sentences like The engine doesn't smoke anymore and The engine isn't smoking anymore can be explained in the following way: 'Suppose your car has been smoking a lot recently and, knowing a lot about automobiles, you decide to repair it yourself. You pinpoint the source of the trouble in a defective hose, and you replace it. You can now confidentially assert, 'The engine doesn't smoke anymore'. To say, 'The engine isn't smoking anymore', you would certainly have to start the engine first, and your comment would be just an observation, rather than a claim about it being repaired. 'This view of the differences explains away such contradictory meanings of the progressive as 'limited duration' (The statue is standing in the center of the town) and 'ceaseless persistence' (The earth is turning on its axis). The writers also claim that the same explanation applies to the case in which the progressive is usually said to add an emotional colouring, as the emotional colouring follows from the original semantic contrast; so does the difference between the simple present and the progressive present in sentences which refer to the future. As an explanation this view has the beauty of being general enough to apply to all cases. But it is too much of a generalization to be able to explain how a language-learner, particularly a foreign language learner internalizes the difference between the progressive and non-progressive forms, which is apparently what they purport to do since they say that 'within generative grammar, the central problem of linguistics has become the

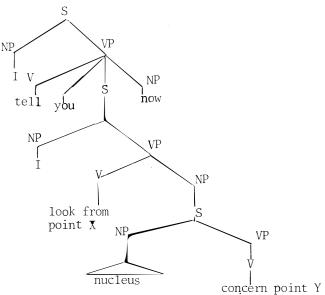
The Finnish progressive is comparable with the English one in that it also denotes the imperfective aspect in a few cases only but it is needed less often because Finnish has other possibilities, notably the object, for this purpose. Unlike the English progressive, the Finnish progressive is never possible with states. Thus, it cannot denote a temporary state and neither does it denote temporariness with activities. Instead, it often denotes a location of activities. Furthermore, it is not possible with all activities, ie. the type of activites which cannot have any special location typical of them. But even with this type the progressive is possible if its function is to emphasize simultaneity with another process, which is again a function parallel with the English progressive. Like the English progressive, the Finnish progressive can have 'a tone of irritation or amused disparagement' as in Me suomalaiset olemme aina valittamassa syrjäistä asemaamme/We Finns are always complaining about the remote location of our country (Suomen Kuvalehti 7.12.1978). The Finnish progressive again differs from its English counterpart in that with achievements it has the connotation of 'to be about to do something' rather than 'to be approaching towards a transition from one state to another', which is what the English progressive seems to denote in these cases. Thus, the progressives have parallel meanings without being identical in all their functions. There is good reason to adopt the same view of the Finnish progressive that Comrie (1976:39) adopts towards the English progressive: '... it may well be that English is developing from a restricted use of the Progressive, always with progressive meaning, to this more extended meaning range, the present anomalies representing a midway stage between these two points'. Thus, it can be concluded that the progressives in these two languages are similar in that, in certain cases, they denote the imperfective aspect but this is not their only function. They can denote other meanings if the aspect is signified by other means. However, the aspect is normally imperfective when the progressive occurs in a sentence.

determination of precisely how a language-learner generalizes to an internalized grammer on the basis of the data heard about him or her'.

Similarly, the object in Finnish is free to denote other meanings if the imperfective aspect is expressed by other means. Thus, with some states the object can vary between the accusative and the partitive depending on whether the whole concept of the object is involved or not, without the aspect changing. This is in keeping with what Kangasmaa-Minn (1978:86) says about stative verbs: 'changes in the realization of the nominative category governed by them have no bearing on the aspect'. With activities the object is always [-total], which is realized by the partitive case. If the object is [+total], the process is necessarily an accomplishment, since the total concept of the object is involved (cf. ¿öín leipää/'l ate some bread, was eating bread' and śőin leivän/'l ate the bread').

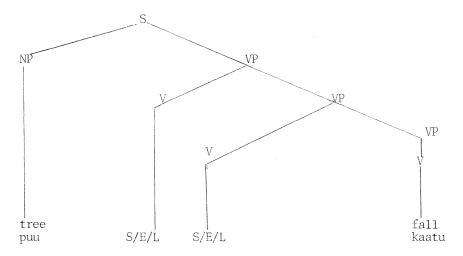
4. EXPRESSIONS OF TIME

It was concluded above that aspects are a matter of the nucleus of the sentence, ie. the verb and the NP's that belong to the nucleus. Time is outside the nucleus and has to be introduced into it by transformations. The underlying time-relations can be represented, as is done within generative semantics, by separate sentences which contain the points effecting the expressions of time (cf. Ross 1967, McCawley 1971, Wiik 1976). The topmost sentence is a performative sentence containing the point of speech, the next lower sentence contains the point of reference, the third lower sentence the point of event, and the lowest sentence the nucleus (see Wiik 1976). It is not important from the contrastive point of view to discover the operations needed to generate the actual sentences from this deep representation, particularly since they seem to be very much alike in English and Finnish. A suggestion as to the derivation of surface tenses from the above deep time-relations has been made for Finnish by Wiik (1976). To a great extent the same processes can also be applied to English. The principles are as follows: As mentioned above, the three points are placed in the deep structure in sentences, of which the highest is a performative one containing the point of speech and having the meaning 'I tell you now'. The next highest sentence contains the point of reference and means roughly 'I look from point X'. The next lower sentence contains the point of event. These relations can be represented in the form of the following tree:



The point of reference is determined in relation to the point of speech the point of event in relation to the point of reference. Both can be either simultaneous (S), earlier than (E), or later than (L) the next higher point.

The transformations needed are of four types: deletion of the performative sentence, VP-raising, and tree-pruning. These transformations result in structures in which the point of reference and the point of event are auxiliaries to the left of the main verb:



In the tense forms which consist of an auxiliary and the main verb, the point of reference is represented in the auxiliary, the point of event in the main verb (eg. on kaatunut/has fallen, oli kaatunut/had fallen). In the case of simple tenses a further transformation is needed which deletes one of the auxiliaries. According to Wiik, the past tense shows that it is the point of event that is deleted, and thus the point of reference remains.

Since Finnish has no future tense marker, a transformation is also needed which changes L to S (Future to Present), which then leaves two present tenses. One of these is deleted and the result is the present tense with future reference. Both can also be retained, which results in the compound present (olla + present participle).

The future poses a problem in English. Of course, the same process can take place in English as in Finnish, ie. the process that leads to the present tense being used with future reference. If in the other alternatives for future reference, however, for example the <code>shall/will</code> + infinitive alternative, the same process of generation is applied, the

rule that the point of reference is represented in the first tense of the predicate does not seem to hold. Consider the case S,R - E (will fall), in which the point of reference is simultaneous with the point of speech. The tenses could be expected to be present and future, the former representing the point of reference, the latter the point of speech. However, in will fall it is the auxiliary, ie. the first tense, that carries the futurity. It must thus be said that in this case either the tense referring to the point of reference is deleted, or that both points are expressed in the auxiliary will (strictly speaking will is a present tense form). The latter seems to be the more attractive solution.

However, more interesting from the contrastive point of view than the description of the derivational processes is to try and explain why, for example, a certain point of reference is chosen and what the effects of this choice are on the expressions used. It was suggested above that, to explain certain phenomena that occur, a further point, the point of view, is needed and thus a further sentence in the deep structure as well. This sentence could be located between the performative sentence and the sentence containing the point of reference. It is also important to keep in mind that expressions of time not only involve tenses but also time-specifiers, and that the aspect included in the nucleus influences the expressions of time.

It was mentioned earlier (p.40) that the tripartite division of time can be followed, although there are reasons to think that this division is perhaps not the most relevant one from a purely linguistic point of view. As it corresponds, however, to a human tendency in the way of conceiving of time, it can be adopted as a basic division here. The division can be made on the basis of the relation of the point of event to the point of speech: the present means that the point of event is simultaneous with the point of speech, the past means that the point of event precedes the point of speech, and the future means that the point of event follows the point of speech. Thus, the division follows the general everyday division of time into present, past and future (in terms of history books, diaries, time-tables, plans for the future). The main interest will be on the effects of the point of reference and of the point of view on these relations as well as the reasons that lead to a particular point of reference or a particular point of view.

4.1. Present

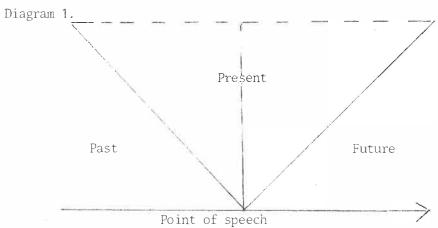
The time-sphere of the present comprises all processes that occur simultaneously with the time of speech. The speaker's point of reference is then also simultaneous with this prime point of orientation. Thus, the present means that all three points fall together. Theoretically it is possible to think of the point of speech and the point of event being simultaneous and the point of reference either preceding or following them. But these would fall together with the future in the past and the past in the future respectively (cf. Reichenbach 1947:296) and thus do not form separate cases.

Thus, it is the time of utterance, the time of the speech situation itself, that constitutes the speaker's present. But the time span of the utterance can be very short. If the time of occurrence of the process is supposed to be absolutely simultaneous with the time of utterance, ie. have the same time span as the utterance, there are very few such processes. However, there is no need to limit the present to these cases only, but, instead, it can simply be defined to mean that the point of speech and the point of event coincide but can be varying in length. The present can then be stretched to any length. This is possible if we adopt the view of time presented by Allen (1966:182):

Time can be viewed as a broad stream flowing in the direction of the future, on which we are now situated at a point near one edge. As we stare across the stream at the opposite shore, we may consider as being 'in front of us' just that part of the stream which could be represented by an imaginary line drawn as a perpendicular to the opposite shore from our position; or we could consider as being 'in front of us' all of the opposite shore that we can see, including all the stream between us and the shore spreading out in a large triangle with our position at its apex and the opposite shore as its base.

¹ This is a good illustration of the illogical nature of the term 'point of event', as well as the term 'point of speech', because it now has to be said that the points 'can be varying in length'.

This could be a description of the speaker's present, which could be the same as the time of the utterance, ie. correspond to the 'imaginary line drawn as a perpendicular to the opposite shore', or be extended to include various portions of the stream, depending on how much of the opposite shore the speaker chooses to observe. In linguistic terms these extensions could extend from 'this morning' to 'this month', 'this year', to a person's life-time, or even to the whole of recorded history. An important requirement is that the moment of speaking must be inside this time. If it is not, the speaker looks at the event from the outside, ie. looks either into the past or into the future. The following diagram illustrates this view of the present:



The question which arises from this view of the present is whether it can also include the so-calle' eternal truths or whether there are processes that are altogether outside time. As was pointed out before (p.42), saying that some processes are outside time would complicate matters, because we would first have to make a choice between timeless and timebound sentences. Thus, it is simpler to say that the speaker's present can be extended to 'all time' and include within that the eternal truths.

It is, however, useful to make a distinction between cases in which the time referred to is limited to the moment of speaking and those in which it is stretched to longer periods such as 'this morning', 'this month', 'this year' etc. There are thus two types of present, which could be called absolute and relative present respectively, or punctual and extended present (see Lyons 1977:683).

4.1.1. Absolute present

Absolute present means, as suggested above, that the speaker sees only that part of the opposite shore that is directly in front of him, ie. the time of event is simultaneous with and has the same span as the utterance itself. It is hard to conceive of events that would be so absolutely simultaneous with the utterance as to have no existence outside it. The only candidates that immediately offer themselves as eligible for this type are the so-called performative utterances, which were mentioned in the discussion on aspect (p.68) as almost the only processes that can be perfective in aspect when the time is the present. These processes have no existence outside the utterance: by uttering the words the speaker performs an act. Performative sentences are distinguished from 'constative' ones in that they cannot be really said to be true or false like 'constatives', but rather felicitious or infelicitious (cf. Austin 1962)¹. Performative sentences have to fulfil certain formal requirements (see Ross 1970): they must have first person subjects, usually a second person direct or indirect object in the deep structure, they must be affirmative, and the time in them has to be the present. Thus, sentences in (1) and (2) below are performatives but sentences (3) and (4) are not.

- (1) I declare the meeting closed. Julistan kokouksen päättyneeksi.
- (2) I pronounce you man and wife.
 Julistan teidät mieheksi ja vaimoksi.
- (3) I declared the meeting closed. Julistan kokouksen päättyneeksi.
- (4) The judge pronounces you man and wife.
 Tuomari julistaa teidät mieheksi ja vaimoksi.

The distinction between performative and constative sentences is not that easy to make. Austin himself observed that to make a statement is in fact to do something. Anderson (1971:1) remarks that 'there are also certain conditions in which we may say that someone's declarative sentence was infelicitous in much the same way that performatives can be: thus, G.E. Moore had observed that, if someone says something, one of the presuppositions is that he believes it. If, then, he says it but doesn't meant it, the situation is not unlike that of the man who says I bet fifty cents you'll be able to get the cash away from the steamer company officials., but doesn't intend to pay up if you succeed in the task assigned'. Ross accounts for this similarity by positing a performative sentence for the deep structure of declarative sentences, a performative sentence containing a verb of stating, which is then deleted after semantic interpretation.

The absolute present requires the use of the present tense in both English and Finnish. Since the aspect is perfective, the progressive is impossible and in Finnish the object is in the accusative.

In addition to performative sentences, there is another type of context in which the time in the utterance can be the absolute present in the above sense, ie. it can have the same span as the utterance and consequently the perfective aspect: running commentaries of events taking place at the moment of speaking. These could be also described as 'contexts where the speaker reports on an event to which only he, and not the hearer, has sensory access' (Braroe 1974:14). This is the case for example in (5)-(7).

- (5) (Now) Moore passes the ball to Charlton and Charlton kicks it into the goal. (Nyt) Moore antaa pallon Charltonille ja Charlton potkaisee sen maaliin.
- (6) A man crosses the street, goes to a car, opens the door, gets into the car, and drives away. Joku mies ylittää kadun, menee auton luo, aukaisee oven, astuu autoon ja ajaa pois.
- (7) (Now) I place the cake into the oven. (Nyt) panen kakun uuniin.

Sentence (5) could be part of a football commentary on the radio, sentence (6) a commentary of events the speaker sees occurring in the street but to which the hearer has 'no sensory access', and sentence (7) could be part of a cooking demonstration. It could be argued, of course, that these are not cases of absolute simultaneity, that in (7) for example, the action most likely follows the utterance, and thus the point of event is in actual fact in the immediate future, not in the present. It could be said of (6) and (5) that the speaker actually utters the words after he has seen the action, particularly in (5), in which the processes are momentary, ie. achievements. Even if it is admitted that logically these are not cases of absolute simultaneity, in actual fact people experience them as simultaneous, with the processes having no existence outside the moment of speaking.

A similar problem of interpretation occurs in stereotype utterances of the following type, and they can also be interpreted as having an absolute present and with no existence outside the moment of speaking:

- (8) Here he comes! Siinä hän tulee!
- (9) There goes our train! Siinä menee meidän juna/meni meidän juna!

These sentences are stereotypes as far as word-orderis concerned: the adverb of place takes the initial position and is followed in English by an inversion of subject and verb (in Finnish this inversion is not compulsory), if the subject is a noum, not a pronoum. If these sentences are uttered, for example, when a person walks into the room (8) and when a train is suddenly noticed moving (9), the simultaneity of the process and the utterance is as 'absolute' as it is in (5)-(7) above. Even if the coming and the going could not be limited logically to the time of the utterances, in the speaker's mind they need not have any existence outside it. If this interpretation is accepted, the processes are also momentaneous and the aspect in the sentences is perfective. Similarly, otherwise stative verbs like those in (10)-(12) have to be interpreted as momentaneous when they occur in sentences with a reference to the absolute present (cf. discussion on aspect p.74).

- (10) Now I believe you. Nyt minä uskon sinua.
- (11) You remember it now? Joko muistat sen?
- (12) I see/hear it now. Nyt minä näen/kuulen sen.

That the time in these sentences is the absolute present is made clear by the use of the specifier now/nyt, which is obligatory. Without it the sentences would refer to the relative present, the processes would be states and the aspect would be imperfective. This is clear if we compare (10)-(12) with (13)-(15).

- (13) I believe you. Uskon sinua.
- (14) You remember it? Muistatko sen?
- (15) I see/hear it. Minä näen/kuulen sen.

There are thus four types of contexts that seem to cover all possibilities of the absolute present and perfective aspect occurring together:

(i) performative sentences, (ii) utterances that serve as running commentaries of events taking place at the moment of speaking, (iii) sentences that refer to the beginning of states at the moment of speaking, (iv) a few stereotyped expressions. The situation seems to be the same in both English and Finnish (see Ikola 1949:67 on performative sentences in Finnish). The present tense is the surface expression in both languages. Finnish naturally requires the accusative object since the aspect is perfective, except with those states that take either a partitive or accusative object owing to other reasons than aspectual distinctions (cf. p.63), like (10) and (13) above. No time-specifier is necessary except with state verbs like (10)-(12). In performative sentences no other interpretation is possible, and in the other cases it is the context or situation that makes the time-reference obvious, as in the case of the commentaries. Taken out of their contexts, the sentences in (5)-(7) could be ambiguous. Moore passes the ball to Charlton and Charlton kicks it into the goal/ Moore antaa pallon Charltonille ja Charlton potkaisee sen maaliin, for example, could be part of the plan for a future match in both languages. A man crosses the street/Mies ylittää kadun... also allows this interpretation and can even have a frequentative reading, in which case time is the relative present. Thus we must have either a timespecifier referring to the moment of speaking or a context that makes the utterances unambiguous.

In the above discussion all the sentences contained a reference to the absolute present in the literal sense of the word: the point of event was simultaneous with the point of speech and moreover had the same time span as the utterance, so that their aspect was perfective. There are also utterances in which the time-reference is to the moment of speaking, ie. the absolute present, but in which the process has an existence outside this moment, although the speaker is only interested that the process is going on when he utters the sentence. Since the reference is to a point in time, the point of speech, and the process has an existence outside it, the aspect is imperfective (cf. p.64). This is clearly seen in (16)-(19) below.

- (16) John is driving the car into the garage. John ajaa/on ajamassa autoa talliin.
- (17) Mother is cooking dinner. Aiti laittaa/on laittamassa päivällistä.

- (18) That candle is burning nicely. Tuo kynttilä palaa kauniisti.
- (19) What is happening here? Mitäs täällä tapahtuu?/on tapahtumassa?

This combination of absolute present and imperfective aspect requires the use of the progressive in English. It was concluded when discussing the aspects that the progressive is required for the expression of imperfectiveness only when the verb/verb phrase is capable of denoting an accomplishment. Of the above examples only (16) contains such a verb and the progressive is needed to denote imperfectiveness. Without the progressive the time-reference would also be different: John drives the car into the garage would not contain a reference to the moment of speaking but either to the relative present (frequentative interpretation) •r to the future. The same applies to sentences (17)-(19): their time-reference would be different without the progressive, although the progressive is not required in them for the expression of the imperfective aspect as the processes are activities and, as such, inherently imperfective. This is again seen if we omit the progressive in, for example, (18): That candle burns nicely is a generic statement about the general quality of the candle. Mother cooks dinner and What happens here? allow both a frequentative and a future reading, depending on the context. Thus, although the progressive is not needed for the expression of the imperfective aspect, it is needed to make reference to the absolute present. Here the progressive has the connotation of temporariness a against the genericity of the simple forms. But we also have to include the denotation of a temporal distinction between absolute and relative present, and between absolute present and future, among the meanings of the progressive. That the progressive really is necessary in (16)-(19) is due to the fact that there is no other way of clarifying the reference to the moment of speaking. (20) and (21) with a time-specifier referring to the moment of speaking but without the progressive would be possible in running commentaries of events occurring at the moment of speaking.

- (19) Right now John drives the car into the carage.
- (20) Now mother cooks dinner.

As pointed out above, the action most likely follows the utterance in sentences like these, and, thus the reference is to the immediate future rather than to the absolute present. Among the examples in (16)-(19), only (18) That candle burns nicely now remains completely unchanged in its time-reference when the progressive is omitted.

In Finnish this type of absolute present has two possible expressions in many cases: the present tense alone (with object, if there is one, in the partitive) or the progressive with the present tense. There are of course many cases in which the progressive is not possible at all, as in (18) above. Thus, Tuo kynttilä palaa kauniisti remains ambiguous as to the time-reference unless we add a specifier referring to the moment of speaking and thus suggest temporariness: Tällä hetkellä tuo kynttilä palaa kauniisti/At the moment the candle burns nicely. In the case of verbs which can denote accomplishments, the fact that the object is in the partitive is also enough to make the time-reference unambiguously the absolute present. Compare (22) and (23).

- (22) Jussi ajaa autoa talliin.

 John is driving the car into the garage.
- (23) Jussi ajaa auton talliin.

 John will drive the car into the garage/drives the car into the garage. (frequentative reading)

The [+total] object in (23) makes the sentence refer to the future or, if the context makes it clear, to the relative present with a frequentative reading. Thus, the Finnish object not only denotes an aspectual distinction but can also denote a temporal difference. If there is no object and the verb alone would denote an accomplishment, the progressive is necessary for the expression of the absolute present. Compare sentences (24) and (25), (26) and (27).

- (24) Virenin jalka on paranemassa. Viren's foot is getting better.
- (25) Virenin jalka paranee. Viren's foot will get better.
- (26) Asiasta on kehittymässä vakava riita.
 The matter is developing into a serious dispute.
- (27) Asiasta kehittyy vakava rııta.

 The matter will develop into a serious dispute.

(24) and (26), with the progressive, refer to absolute present, (25) and (27), without the progressive, refer to the future. Like the object, the progressive can denote not only aspectual difference but also a difference in time-relations. The progressive is not, however, always necessary, even though there is no object in the sentence. Thus (28) would more likely refer to the present than to the future.

(28) Hän valmistautuu iltaa varten. She is getting ready for the evening.

This is probably due to the nature of the process itself: 'getting ready for something' means preparing for the future and thus takes place in the present, and it is likely that the sentence will be uttered in a situation where the reference is to the moment of speaking. On the other hand, the progressive is necessary in the following sentences if the speaker wants to make unambiguous his reference to the absolute present:

- (29) On tulossa pimeä. It is getting dark.
- (30) Tulee pimeä. It will get dark.
- (31) Me olemme menossa kotiin. We are on our way home going home.
- (32) Me menemme kotiin. We will go home.

The progressive in Finnish is thus necessary for the expression of the absolute present when the verb alone denotes an accomplishment and there is no object in the sentence, no feature in the process itself or the context to make the time-reference unambiguous.

From the fact that the aspect is imperfective when the time is the absolute present it follows that achievements, being inherently perfective, are incompatible with the absolute present with the exceptions mentioned at the beginning of this chapter. Thus sentences like (33) and (34), which contain achievements, necessarily refer to the future.

- (33) Mikkola voittaa maailmanmestaruuden. Mikkola will win the world championship.
- (34) Vanha mies kuolee.
 The old man will die.

As was pointed out in the discussion on aspects (p.70), some of these achievement verbs also allow the progressive in Finnish. Then the sentences refer to the absolute present, as in (35).

(35) Mikkola on voittamassa maailmanmestaruutta/
mestaruuden.

Mikkola is winning/about to win the world championship.

In English the progressive is regularly possible with these verbs that can denote the approach towards the transition from one state to another (cf. p.69). Thus, it is possible in the following English sentences but not in the Finnish ones:

- (36) The old man is dying.
 *Vanha mies on kuolemassa.
- (37) The man is drowning. *Mies on hukkumassa.

States, which are imperfective in aspect, come with the suggestion that they last longer than the time of the utterance. Thus, they cannot be limited to the usually short time span of the speech-situation. Neither can they, like activities, be seen as progressing in time. From this it follows that states and reference to the absolute present are incompatible. Consequently, the progressive is also impossible with verbs denoting states (cf. p.61). English, however, provides some exceptions. In the following sentences the verbs &ee, hear, taste, which denote states, occur with the progressive, and the reference is to the moment of speaking.

- (38) I am seeing it better now.
- (39) I am hearing it more clearly now.
- (40) I am tasting more and more salt in this soup.

Considered more closely, the verbs in these sentences do not denote states, owing to the presence of the qualifying adverbs better, more clearly, more and more. Hatcher (1951) calls these 'developing states' and, as such, they would be activities in the Vendlerian terms rather than states, capable of progressing in time. This would then explain their compatibility with the progressive and the possibility of the time being the absolute present in the above sentences. As it is possible to see these processes as being in progress, developing, it is

also possible to say that the speaker is only interested in their being in progress at the moment of speaking, which accounts for the time being the absolute present.

4.1.2. Relative Present

When the time is the relative present, the speaker does not draw attention to what is ensuing at the moment of speaking, but the processes talked about are placed within a wider temporal frame. Nevertheless, the moment of speaking is within this frame. It is difficult to draw a definite line between the absolute and the relative present. It is difficult to decide whether the speaker's 'now' is limited to the speech-situation or whether it is extended into a longer period. It could thus be argued that some of the sentences used as examples in the previous chapter actually contain reference to the relative rather than the absolute present, eg. Asiasta on kehit-tymässä vakava riita/The matter is developing into a serious dispute. There is no doubt about the time being the relative present in (41)-(43) below, which have time-specifiers referring to a longer time span than just the point of speech.

- (41) I am learning French this year. Opiskelen ranskaa tänä vuonna.
- (42) He is writing a book these days. Hän kirjoittaa kirjaa nykyään.
- (43) John is studying for an exam this week. John lukee tenttiin tällä viikolla.

If the time-specifiers are omitted it is not certain whether the reference is to the absolute or the relative present. It then depends on the context, whether, for example, He is writing a book/Hän kirjoittaa kirjaa refers to the person's being engaged in writing at the moment of speaking or for a longer period. The aspect is imperfective in both cases. As the processes would otherwise be accomplishments, the progressive is required in English and the partitive object in Finnish to make them activities and the aspect imperfective. In the other two sentences the processes are activities and because the meaning is that the activities are in progress at the times

indicated - they do not necessarily last for the whole year or week - the progressive is again obligatory in English. Without the progressive the time-reference would change: I learn French this year could be part of a plan for the future (I learn French this year, German next year ...), He writes a book could refer to the future or to the relative present (frequentative reading), depending on the context, and John studies for an exam this week could be a plan for the future if said at the beginning of the week.

In (44)-(50), on the other hand, there is no doubt about the reference being to the relative present, even though the sentences do not contain any time-specifiers.

- (44) They live in London. He asuvat Lontoossa.
- (45) I enjoy the seaside. Pidän merenrannikosta.
- (46) She sings very well. Hän laulaa erittäin hyvin.
- (47) He walks in a strange way. Hän kävelee kummallisesti.
- (48) The engine works perfectly. Kone toimii erinomaisesti.
- (49) Italy borders on France and Germany. Italia on Ranskan ja Saksan rajanaapuri.
- (50) The statue stands in the centre of the square. Patsas seisoo keskellä aukiota.

Even though no time is specified in these sentences, it is fairly easy to give an 'understood' time for each of them, In (45)-(47) it could be the person's lifetime, for if someone enjoys the sea-side, sings well, or walks in a strange way, he/she will most likely do so all his/her life. In (44) and (48) it could be something like 'as long as there is no change in the circumstances', and in (49) and (50) it would be'for all time', at least from the speaker's point of view. But although some kind of timespan can be inferred, it remains vague. None of these sentences are, however, timeless. Even (49) and (50) allow a change of time: it is possible to imagine that one day we can say Italy bordered on France and Germany fifty years ago; equally possible is The statue stood in the centre of the square last year. The sentences in (44)-(50) are general statements about the 'state of affairs' within the speaker's present, which, as suggested above,

can stretch as far as the speaker chooses to see. The processes are either activities or states and thus the aspect is imperfective in these sentences. Both languages employ the present tense alone for the relative present. The truly 'timeless' statements, like Twice two is four/Kaksi kertaa kaksi on neljä, also have the present tense in both languages, and, as was decided earlier, these could also be included in the speaker's present.

Achievements and accomplishments are also possible in sentences in which the time is the relative present in this general sense. This is possible if reference is not only to one occurrence of the process but to a chain of repeated processes, which then is imperfective in aspect (cf. $\mathfrak{p}.72$). This is the case in (51)-(53).

- (51) John drives the car into the garage every day. John ajaa auton talliin joka päivä.
- (52) We cycle to work these days. Me menemme pyörällä töihin nykyään.
- (53) I wake up at seven and have breakfast at half past. Herään seitsemältä ja syön aamiaista puoli kahdeksan.

Again both languages employ the present tense alone. The progressive is not possible, except in English in (52): We are cycling to work these days, in which the progressive suggests temporariness of the habit of cycling to work. It would also be possible in the other two sentences if the frequency adverb was dropped and these days added to suggest temporariness: John is driving the car into the garage these days, I am waking up at seven and having breakfast at half past these days.

As was shown in the discussion on aspects (p.61), the English progressive can be used even with some verbs denoting states, in which case it denotes temporariness of the state. This does not change the time from the relative present the to absolute present, it only suggests a shorter duration of the state, as in (54) and (55).

- (54) They are living in London.
- (55) I am enjoying the seaside.

In the case of activities like those in (46)-(48) above, the addition of the progressive changes the time from the relative present to the absolute present:

- (46a) She is singing very well.
- (47a) He is walking in a strange way.
- (48a) The engine is working perfectly.

It is obvious that (46a) no longer refers to the permanent characteristic of 'having a good voice' as (46) did, but refers to an individual act of singing going on at the moment of speaking. A similar explanation applies to the other two sentences.

It has also been shown above that verbs denoting states in Finnish do not allow the progressive, nor do all verbs denoting activity. Moreover, there is no other way of showing temporariness. Consequently, the following sentences are ambiguous in relation to a general characteristic and a temporary activity:

- (56) Hän laulaa erittäin hyvin. She sings very well/is singing very well.
- (57) Hän kävelee kummallisesti. He walks/is walking in a strange way.
- (58) Kone toimii erinomaisesti.
 The engine works/is working perfectly.

The only way of making an unambiguous reference to the absolute present is, in addition to the context, through a time-specifier referring to the moment of speaking: for example Kone toimii erinomaisesti tällä hetkellä ('at the moment').

Finnish has, however, one way of denoting a temporary state. When the state is expressed by the verb olla ('be') and an NP or adjective as a predicate complement, temporariness can be suggested by the case of the predicate complement. Compare sentences (59) and (60), (61) and (62).

- (59) Hän on opettaja. He is a teacher.
- (60) Hän on opettajana. He is working as a teacher.
- (61) Hän on sairas. He is ill.
- (62) Hän on sairaana. ★He is being ill.

In (60) the fact that the predicate complement NP is in the essive case suggests that the person is temporarily working as a teacher, but his being a teacher is not as permanent as it is in (59), in which the predicate complement NP is in the nominative. Penttilä's (1963:350) explanation

for this construction is that the state denoted by the NP or adjective is the result of a change. Thus, a sentence like (62) indicates that the person is ill at the moment but has not been so before, whereas this connotation is not included in the meaning of (61). A similar connotation can be found in the sentence Huoneet ovat kylminä (Penttilä's example), which means that the rooms are not heated at the moment although this is not usually the case, whereas Huoneet ovat kylmiä indicates that being cold is the general characteristic of the rooms. It can therefore be said that the nominative vs. essive opposition indicates a temporal distinction: the essive suggests temporariness as against the permanence of the nominative. The use of the essive presupposes that the state has not always existed and will not last forever. This view is supported by the fact that the construction with the essive cannot be used of a state that cannot be conceived of as temporary; thus (63) is unacceptable.

(63) *Tyttö on kauniina.

*The girl is being beautiful.

However, it is possible even in a sentence like (64), in which it again suggests temporariness:

(64) Olin heidän äitinään kaksi viikkoa. I was a mother to them for two weeks.

Although the English progressive can also denote temporariness with states, it does not do so in the same sense as the Finnish essive construction. There is a similarity between them in that they are not possible with states that cannot be conceived of as temporary, cf. the sentences in (63). The use of the English progressive is made possible, however, by the fact that in Leech's words (1971:25) 'an activity reading may be supplied'. Anderson's (1971) explanation is that there is the underlying feature [+ergative], ie. the subject is the initiator of the state and plays an active part in it. This feature does not form a part of the meaning of the Finnish construction. Thus, the progressive is possible in the following English sentences but the essive construction is not possible in their Finnish equivalents:

- (65) He is being a fool (ie. acting foolishly) ∗Hän on hulluna/typeränä.
- (66) He is being awkward (ie. deliberately obstructive) *Hän on hankalana.

The Finnish equivalents for (65) and (66) would be something like Hän käyttäytyy typerästi ('He is acting foolishly') and Hän on ruvennut hankalaksi ('He has begun to be awkward'). There is no doubt that the English progressive also suggests that the state is temporary, but it has the extra connotation of ergativeness, ie. of the subject being the initiator. Therefore, it is not possible to say The rooms are being cold nor ?He is being ill, unless the latter sentence indicates that he is pretending to be ill. As the essive construction in Finnish does not have the <code>[+ergative]</code> feature, it is impossible in sentences like *Hän on hankalana.

¹The difference between the essive and the nominative in the 'predicate complement' is also discussed by Hämäläinen (1977:130), who compares it with the English progressive. She calls the difference aspectual, which cannot be the case if aspect is defined in the way it has been in this thesis: regardless of whether the state is temporary or permanent, the aspect is imperfective.

4.1.3. Present Time with Point of View not Present

As was mentioned above (p.39), the three points, point of speech, point of reference and point of event, are not enough to explain all phenomena that occur in the expression of time. It was suggested that a fourth point, the point of view, could be added to the analysis. Within the present time-sphere there are cases in which this fourth point is needed, cases in which the point of event and the point of reference are simultaneous with the point of speech and yet the surface expressions are not as expected. Consider the following English sentences:

- (67) Boys will be boys.
- (68) Accidents will happen in the best regulated families.
- (69) A lion will attack a man only when hungry.

The surface expressions of time in these sentences seem to indicate that reference is to the future, because of the auxiliary will. According to the scheme presented on page 37 we would here have a point of reference either simultaneous with the point of speech or later than the point of speech, but a point of event later than the point of speech in both cases. That this is not the case can be seen by the fact that the sentences do not allow the addition of a time-specifier referring to the future (*Accidents will next year happen in the best regulated families). Nor does it allow a change to the past tense and the addition of a past time-specifier (*A lion did last year attack a man only when hungry). Instead these sentences are quite normal with a present tense form and allow the addition of a time-specifier like always:

- (67a) Boys are boys.
- (67b) Boys will always be boys.
- (69a) A lion attacks a man only when hungry.
- (69b) A lion will always attack a man only when hungry.

Thus, the sentences belong to our relative present and could further be classified as belonging to the 'omnitermoral' type. Leech (1971:79) describes the use of the auxiliary will as an expression of predictability,

which, when denoting habitual predictability, 'comes to have the force of typical or characteristic hebaviour'. It is not only used in 'omnitemporal' states of affairs but also in general statements about, for example, a person's characteristics:

(70) She will sit there for hours without saying a word.

If we accept the idea of prediction, we can say that the speaker makes the presupposition that this is how things have been up to now and, on the basis of that, he can predict that they will continue being so. Moreover, it is this feature that distinguishes the sentences with will from those with the present tense like Boys ore boys. Thus, the distinction made by the use of will has no connection with the time-reference as such. But we can also say that the speaker here chooses a future point of view to 'omnitemporal states of affairs', which then causes the use of an expression that usually denotes the future.

In these omnitemporal statements it is sometimes also possible for the speaker to take a past point of view. This is the case in (71).

(71) The course of true love never did run smooth.

It is equally obvious that this sentence does not refer to a past state of affairs but that the reference is to a general truth, ie. the time is the relative present. But the speaker views it from the point of view of the past and says that this past state is what it will also be in the future. It is this emphasis on the past state of affairs that distinguishes (71) form the corresponding sentence containing a present tense form: The course of true love never runs smooth. But again, logically there is no change in the time-reference.

In Finnish these omnitemporal statements use the present tense, and although an expression of futurity might be possible in some, it does not sound natural; in others any change to the future is impossible:

- (72) Pojat ovat poikia/tulevat aina olemaan poikia. Boys are boys/will always be boys.
- (73) Sattuuhan sitä paremmissakin perheissä.*Sitä tulee sattumaan paremmissakin perheissä.Accidents happen in the best regulated families.

(74) Leijona hyökkää ihmisen kimppuun vain nälkäisenä. *Leijona tulee hyökkäämään ihmisen kimppuun... A lion attacks/will attack a man only when hungry.

In omnitemporal statements the past point of view is also possible in Finnish but it requires a reference point in the present, ie. the surface form is the present perfect:

(75) Todellisen rakkauden kulku ei ole koskaan ollut tasaista. The course of true love has never run smooth.

As a matter of fact, the past tense and the present perfect in English are largely interchangeable with always, ever, never, when denoting a period up to the moment of speaking (Leech 1971:41). Thus, the present perfect would also be possible in the English sentence in (75).

The general statements about the characteristic habits of a person, which in English allow the future point of view, do not allow this in Finnish, as is seen in the Finnish equivalent of (70):

(76) Hän saattaa istua tuntikausia sanomatta sanaakaan. She will sit there for hours without saying a word.

It is not only the omnitemporal statements that allow the change of the point of view described above. It can also occur in other types of sentences which have reference to the present. Consider, for example, the English sentences of the type of (77) and (78).

- (77) That will be the postman.
- (78) Those apples will be three for a dollar.

The explanation for the use of will in (77) could be that the speaker is making an assumption about the person at the door at the moment of speaking. It is possible to paraphrase (77) with That is probably the postman. But it is also possible to say that the speaker takes a future point of view as regards the situation and thinks on the lines of 'If I go to the door, there will be a postman there'. A similar explanation is applicable to (78): the speaker is thinking of the actual payment, which is still in the future at the moment the sentence is uttered (see Lakoff 1970). Again, Finnish does not allow this future point of view, which is seen in the following equivalents of the English sentences in (77) and (78).

- (79) Se on varmaan postinkantaja.
- (80) Noita omenoita saa kolme dollarilla.

A past point of view as regards the present situation is, however, possible in both languages, as in (81) and (82).

- (81) What was your name? Mikä olikaan nimi?
- (82) What was the size? Mikä oli koko?

These sentences could be uttered in a situation in which the speaker is inquiring about the addressee's name or his shoe size, thus the usual explanation for the choice of the past tense that the reference point and the point of event lie in the past is not applicable here. Thus we again need the point of view in accounting for the use of the past tense. The explanation could be that the speaker is implying that he has already heard the addressee's name or size but no longer remembers it. He is referring to past information about a state of affairs that is still true at the moment of speaking and thus belongs to the present. This also explains the use of the past tense in the following Finnish sentence:

(83)Olikos se kokous täällä? Was the meeting here?

The speaker here clearly refers to the fact that he has had information about the meeting but has forgotten and is now checking whether he remembers it correctly.

There are, however, cases in both languages in which this type of explanation is not possible or in which it is difficult to apply this explanation. Consider for example (84)-(86) (Palmer's 1965 examples):

- (84) Did you want to speak to me?
- (85) I wanted to ask you about something.
- (86) Did you want me? Yes, I hoped you would give me a hand with the painting.

According to Palmer (1965:71), the use of the past tense in these sentences expresses a tentative or polite attitude. Why the past tense should be felt to be more polite than the present tense is difficult to explain. Perhaps these sentences could also be explained through

the past point of view. In (84) the speaker could be said to refer to the fact that he has heard the addressee express the desire to see him, while in (85) the speaker could be referring to his previous wish although the wish is still true, with the same explanation for (86).

This explanation, which uses the idea of a past point of view for the present situation, cannot be applied to the following Finnish cases:

> (87) Oliko siellä rouva Virtanen tavattavissa? 'Was Mrs. Virtanen there?'

This is a usual way of asking on the phone if one could speak to a certain person. There cannot be any past information to which the speaker could be said to be referring in this case. Similarly, there is no past information to which a shop assistant could be referring when he/she asks a customer:

(88) Tuliko muuta?
Did you want anything else?

Nor is there any past information involved in the following series of questions asked by a clerk filling in a form:

(89) Nimi oli?/Your name was ...? Ikä oli/Your age was ...? Ja olitte töissä/You were working where?

There does not seem to be any other explanation for this use than that, for some reason, the past tense, or in our terms choosing the past point of view over the present situation, is felt to be more polite, particularly since it occurs in contexts that require politeness on the part of the speaker, eg. a shop assistant to a customer.

Present time in this study means that the point of event is simultaneous with the point of speech, simultaneity meaning that these two points coincide, although they do not necessarily have the same length. The point of reference also coincides with these two other points in practice, although it could also be either anterior or posterior to the point of speech. When the only requirement is that the point of event coincides with the point of speech, it follows that the time span of the present can be extended to comprise even 'omnitemporal' and 'timeless' processes.

Normally, the speaker's point of view also coincides with the other points, but both English and Finnish exhibit cases in which the point of view is different. This overrules the influence of the other points and the surface expression is thus not the normal present tense form. In English it is possible for the speaker to choose a future point of view over the present situation, which is not possible in Finnish. English this leads to the use of the auxiliary will. It is usually said that will in these cases does not indicate futurity but expresses assumption/probability (cf. Leech 1971). This is made possible by the fact that will was originally not a future auxiliary but a full verb with a full meaning of its own and some of this old meaning still remains. The old meaning was, however, volition and thus does not explain the use of will in sentences like That will be the postman. On the other hand, Leech (1971:79) admits that this use of will is more closely related to the future meaning of will/shall than the volitional meaning. Thus, it is quite legitimate to interpret these cases as having a future point of view and also having a typically future surface expression. In Finnish the present tense form is the most usual expression for the future in any case, and the other possibilities (eg. tulla + infinitive) are so strong that it is natural that they cannot be used when the processes in fact take place within the present. The possibility exists in both languages of choosing the past point of view as regards the present situation, which leads to the use of the past tense form. In most cases the explanation is that the speaker is referring to past information concerning the present. There are, however, cases in which this explanation is no applicable. A possible reason for these cases

is that the past point of view is more polite. With these exceptions the point of view is the same as the point of reference, ie. simultaneous with the point of speech, and the surface form in both languages is thus the present tense.

Within the present it is possible to distinguish two subtypes: (i) cases in which reference is made to the moment of speaking, ie. the absolute present, and (ii) cases in which reference is made to a general state of affairs for which no special time span is defined but can often be inferred. Between these two extremes there are cases in which the time span is longer than the moment of speaking but does not extend to anything like a person's lifetime or all time. In these, reference is often made to 'today', 'this week', 'this year' etc. As a type these belong to the absolute rather than the relative present.

As the point of speech and the point of reference coincide with the point of event, the speaker finds himself within the situation he is talking about. From this it follows that it is difficult for him to see the situation as a whole, and the aspect is thus imperfective in most cases. Very few situations allow the aspect to be perfective. These are easily definable and can be limited to a few types: (i) performative utterances, (ii) running commentaries on present events, (iii) the beginning of states or activities, and (iv) a few stereotype phrases. These require the use of the present tense in both languages, and, in Finnish, naturally a [+total] object if there is an object in the sentence. With these exceptions, the aspect is imperfective both in the case of the absolute and in the case of the relative present.

The fact that a point of time is involved in the absolute present, ie. the moment of speaking, limits the type of processes capable of occurring with it to activities, the reason being that these are the only ones that can be seen as progressing at a point of time. In English the absolute present here requires the use of the progressive. If the verb/verb phrase could denote an accomplishment (eg. build a house), the progressive is needed not only to make aspect imperfective but also to denote the temporal distinction between the absolute present on the one hand and the future or the relative present on the other. In the case of activities, the progressive makes the distinction between the absolute and the relative present possible. In Finnish, a partitive object denotes the same distinctions as the English progressive. If there is no object, Finnish also requires the use of the progressive with the verbs capable of denoting accomplishments, unless some other feature in the context makes the time-reference clear.

Past time in our terms means that the time of occurrence, or in Reichenbach's terminology the point of event, is anterior to the moment of speaking, ie. the point of speech. The time is past for example in the following English and Finnish sentences:

- (1) I saw him on Tuesday. Näin hänet tiistaina.
- (2) They took the child to a doctor yesterday. He veivät lapsen lääkäriin eilen.
- (3) His sister was an invalid all her life. Hänen sisarensa oli invalidi koko elämänsä,

The processes clearly occurred before the moment of speaking, ie. the speaker looks at them retrospectively. The surface expression in the above sentences is the past tense in both languages, together with a time-specifier, which, however, is not obligatory as the time would be past without them: I saw him/Näin hänet, His sister was an invalid/Hänen sisarensa oli invalidi, They took the child to a doctor/He veivät lapsen lääkäriin. The time-specifiers only nail down the moment or period in the past, but they do not have to refer to the past themselves, as is seen in (1) and (3); on Tuesday/tiistaina and all her life/koko elämänsä ajan can occur equally well in sentences with a reference to the future:

- (4) I'll see him on Tuesday. Näen hänet tiistaina.
- (5) His sister will be an invalid all her life. Hänen sisarensa tulee olemaan invalidi koko elämänsä.

The time specifiers occurring with the past tense can of course be of the type that refer exclusively to the past, like <code>yesterday/eilen</code> in (2) above. Furthermore, the time-specifiers, if they occur, identify either a point in the past (on <code>Tuesday/tiistaina</code>, <code>yesterday/eilen</code> or a period (all her like/koko elämänsä ajan.)

Both languages have another possibility of talking about past processes: by using the present perfect. Thus, the same events occurring in

(1)-(3) can be referred to by using this form:

- (6) Olen nähnyt hänet. I have seen him.
- (7) He ovat vieneet lapsen lääkäriin.
 They have taken the child to a doctor.
- (8) Hänen sisarensa on ollut invalidi koko elämänsä ajan. His sister has been an invalid all her life.

Within the scheme for expressions of time laid down in chapter 2. (p.37), the difference between these two forms was explained through a difference in the point of reference: when using the past tense the speaker chooses a point in the past as his point of reference, while in using the present perfect he chooses a present point of reference. In the former case the point of reference is simultaneous with the point of event, and in the latter case it is simultaneous with the point of speech. The reason for the speaker choosing one or the other of these reference points is perhaps the most interesting question concerning the expressions of time in both English and Finnish. A proof of this is provided by the ample literature existing on the subject, particularly concerning the difference between the past tense and the present perfect in English.

The writers generally agree that the basic difference is that in the case of the past tense the process talked about is entirely in the past, whereas in the case of the present perfect it is seen as somehow connected with the speaker's present. The presentness of the present perfect is manifested in the present tense form of the auxiliaries have and olla, the pastness in the combination of the auxiliary and the participle form of the main verb. This view is clearly reflected in Huddleston's (1969) interpretation of the past tense as involving only one tenseselection and the present perfect as involving two tense-selections, one past, the other present. McCawley (1971:105) takes a similar view of the present perfect in that it corresponds to 'semantic representations in which something that provides the source of a past tense is embedded in something that provides the source of a present tense'. The 'something'

Zandvoort (1972:61) actually suggests that the present perfect belongs to the present rather than the past. He says that the present perfect 'usually denotes an action that falls within the time-sphere of the present'

that accounts for the pastness is naturally the past point of event. Various explanations have been effered for the 'something' that accounts for the presentness. It apparently means that there is some kind of a connection between the past process and the speaker's present. The problem is the nature of this connection. In some cases it obviously means that the process has begun somewhere in the past and continues up to the moment of speaking. This is the case in (9) and (10).

- (9) We have known each other for years.
 Olemme tunteneet toisemme jo vuosia.
- (10) The house has been empty since September. Talo on ollut tyhjänä syyskuusta lähtien.

In both sentences the processes are states that began at an unidentified (9) or identified (10) point in the past and continue up to the moment of speaking. This, however, is not the case in (11) and (12).

- (11) Somebody has broken the window. Joku on rikkonut ikkunan.
- (12) I have cut my finger.
 Olen saanut haavan sormeeni.

The processes in (11) and (12) have taken place somewhere in the past. As far as the point of event is concerned it could be the same as in the corresponding sentences which contain a past tense form:

- (13) Somebody broke the window. Joku rikkoi ikkunan.
- (14) I cut my finger.
 Sain haavan sormeeni.

In this case the meaning of the present perfect has been described in English grammars as 'resultative', ie. the process is seen as having results or consequences which have a bearing on the present moment (see eg. Jespersen 1931:60, Kruisinga 1931:39, Zandvoort 1972:61). Palmer (1974) argues against the use of the term 'resultative', which is misleading unless 'nil-results' are also included. 'Nil-results' are needed to explain cases like (15) and (16), (Palmer's examples).

- (15) I've hit it twice but it's still standing up.
- (16) I've written twice but they haven't answered.

A more suitable term in Palmer's view is 'current relevance', which means that 'someway or other (not necessarily in its results) the action is relevant to something observable at the present' (Palmer 1974:50). This, however, does not change the interpretation in any essential way, but only offers a perhaps more satisfactory term.

Some writers do not agree with the idea of results or consequences as an explanation for the choice of the present perfect. For example, Bryan (1936) rejects the idea that any results could be implied by the present perfect form itself. The idea of consequences derives instead from the meaning of the particular verb used, or from the context. Thus, the consequence of a past event could just as well be denoted by a past tense form. For example, It rained last night results in the ground being wet this morning, although nobody would say that this result is expressed through the past tense form. For Bryan, the present perfect merely conveys the notion of time: it places the process talked about within a period whose starting point is somewhere in the past, any point in the past, and which extends to the moment of speaking. The speaker looks back at this period and places the process within it (Bryan 1936:366). In some cases this is difficult to comprehend; for example in sentences like (17).

(17) Newton has explained the movements of the moon.

The occurrence of the present perfect in this type of sentences is usually explained by reference to the present validity of, in this case, Newton's explanations. According to Bryan (1936:372), cases like these have to be taken as part of a wider context and explained through it in the following way:

If one where writing a life of Newton, giving in order the events that filled it and the achievements that marked it, the account of this explanation of the movements of the moon would be presented through the preterite

Bauer(1970:190) shares Bryan's view and suggests that 'whether or not the action has led to tangible results depends obviously on the kind of action the speaker has in mind; in other words, on the lexical meaning of the main verb and not on the grammatical category perfect'.

tense, however valid the explanation might be today. If, on the other hand, one were making a survey of the achievements for example, of British scientists throughout a period extending from some point in the past up to the present, one might well use the perfect tense even if the explanation had lost its validity.

Something similar, although carried further, is offered by Weinrich (1964) as an explanation for the use of the present perfect. Weinrich aims at a universal systematization of the use of tenses. He divides all human experience into two types of 'worlds', one that is talked about ('besprochene Welt') and one that is told about ('erzählte Welt') Consequently, it is possible for the speaker to view the past in two different ways: either as belonging to him directly, which enables him to speak about it as about other things that he meets in the speech situation, or through the filter of telling ('Erzählung'). In the former case he uses different tense-forms (among these the present perfect) from those he uses in the latter (among them the past tense). The division into 'besprochene' and 'erzählte Welt' is made on the basis of the speech situation. There are situations in which we tell other people about things, such as the progress of a political conference, a hunting adventure, a fairy tale. A characteristic of this type of situation is that the speaker is not concerned about the truth value of what he is telling, in fact it might be true or untrue. He is not involved in what he is telling, while in other situations the speaker is really involved in what he is saying, when he talks about things that concern him in the immediate speech situation. Weinrich takes his examples from literature: a most typical instance of 'Erzählung' would be an epic, a typical example of 'Besprechung' would be a dramatic dialogue. The tenses typically used in the former type are the past tense and the past perfect, and in the latter the present tense and the present perfect.

Within the above view, the present perfect indicates that the process occurred within a period stretching up to the moment of speaking, without the idea of results or consequences. Ota (1963) also agrees with this in his definition of the present perfect as indicating the occurrence of an action or the existence of a state in or for a period of time extending to the moment of speaking. This explanation

is particularly attractive as it covers all the different functions (resultative, continuative, perfect of experience and so on) ascribed to the form. These can all be ascribed to the verb itself, to the adverbials, or to the context. This view simplifies matters as the same explanation applies to both of the cases mentioned earlier in this chapter, ie. the case in which the process continues up to the moment of speaking, and that in which the process takes place within a period extending to the speaker's now. Ikola (1961:100-101) also agrees with this type of explanation when discussing the use of the present perfect in Finnish. He emphasizes the fact that all that the present perfect temporally denotes is that the process is prior to the moment of speaking: 'the present perfect in itself only denotes in any case that it (an event/action) took place within a period stretching up to the present moment'. According to Ikola, this is only the temporal significance of the present perfect, which also indicates that the process has some significance at the present moment. This view agrees with the 'current relevance' theory of the English present perfect. Other Finnish grammarians (Setälä 1926, Siro 1963) see the most important function of the present perfect as denoting a process which is completed at the moment of speaking ('päättynyttä tekemistä'), with the added fact that the process may continue up to the moment of speaking. This idea of completion does not include any 'current relevance'. But it does not seem capable of accounting for the difference between the past tense and the present perfect: the process is equally 'completed' in both Sain haavan sormeeni/I cut my finger and in Olen saanut haavan sormeeni/I have cut my finger.

The use of the present perfect and the difference between the present perfect and the past tense in English have been looked at from yet another angle. In (18) and (19) below, both sentences marked (a) and those marked (b) refer to the same events, the time of occurrence being the same in both.

- (18a) They have bought a house.
- (18b) They bought a house.
- (19a) I have seen the film.
- (19b) I saw the film.

The difference between (a) and (b) in both pairs of senctences can be seen as an indefinite time-reference versus a definite time-reference,

or, 'unidentified time' versus identified time', as Allen (1966) calls it. Both denote time prior to the moment of speaking, but the past tense form is used when reference is made to definite/identified time, while the present perfect is used when reference is made to indefinite/unidentified time. Allen sees a striking parallelism between the past tense vs. present perfect opposition and the definite vs. indefinite article dichotomy. Like the definite article, the past tense can refer to something unique, as in (20).

(20) Napoleon died in St. Helena.

The event might have been shared by the speaker and the listener and therefore be identified, as in (21).

(21) I am glad we did it when we did.

Or the past event may already have been talked about and therefore be definite, as in (22); again a parallelism with the definite article.

(22) I've been to the Guggenheim Museum only once.

Pid you like it?

The opposition definite vs. indefinite does not exclude the idea of placing the process within a period extending up to the moment of speaking when the present perfect is used. Leech (1971:33) points out that when using the present perfect in the unidentified sense the speaker often has a period in mind. Thus, in (23) this period is the period of time within which the dustman's regular visit is expected.

(23) The dustman hasn't called at our house.

Diver (1963) also takes this view of identified/unidentified time in his treatment of the English tenses: 'The signal 31 consists of the form 31, have-ed, and represents the meaning AR, 'past indefinite'; example: he has walked. The meaning, freely rendered: The event indicated by the attached verb took place on an indefinite occasion in the past' (Diver) 1963:155-156).

The explanation of the difference between the past tense and the present perfect through definiteness versus indefiniteness is supported by the fact that in English a sentence containing a present perfect form does not allow the addition of time-specifier referring to a

definite point in time, whereas a sentence with a past tense allows this addition. Thus (24) is unacceptable but (25) is acceptable.

- (24) * It has rained last night.
- (25) It rained last night.

In Finnish, however, this restriction does not hold: both types of sentences allow the addition of a time-specifier referring to a definite point in the past:

- (26) Viime yönä on satanut.
- (27) Viime yönä satoi.

As the above discussion shows, highly different explanations have been given for the choice of the present perfect: (i) the 'current relevance' explanation that in one way or another the past process is relevant at the present, (ii) the placing of the process within a period extending up to the moment of speaking, (iii) the unidentified time explanation, and, for the Finnish present perfect, (iv) the completed process explanation. These explanations are by no means contradictory, they emphasize different aspects. If we, for example, accept the view that the present perfect places the event within a period extending up to the moment of speaking, the actual point of event can be left unidentified and the event can be relevant to the present. In addition, this can all be fitted into the concept of the reference point being the point of speech. We could then say that when choosing the point of speech as his point of reference the speaker temporally places the process within a period extending up to the point of speech, doing this because the process is meaningful to him at the moment of speaking. Furthermore, the speaker does this in situations in which he is involved in what he is saying; he is not telling a story, he is discussing matters (besprochene Welt).

It is thus possible to accommodate all the above features in one theory of the present perfect. This can be done, as suggested above, by adopting the view that in the present perfect the point of reference is identical with the point of speech and the point of event is earlier than both. The reason for the speaker choosing this point of reference is that he presupposes that the past event is relevant to the point of speech. Temporally the speaker can place the process within a period extending up to the moment of speaking, as in (28) and (29).

- (28) Jane has got married since I saw her last.

 Jane on mennyt naimisiin sitten viime näkemän.
- (29) They have moved into a new flat since September. He ovat muuttaneet uuteen asuntoon sitten syyskuun.
- These sentences refer to events that occurred between a point in the past (my seeing her last, September) and the moment of speaking. In (30) and (31) there is no period, or beginning of a period, mentioned. Nevertheless, we can imagine that the events occurred within a period whose starting point is left unspecified but whose terminal point is the moment of speaking.
 - (30) They have left the district. He ovat lähteneet paikkakunnalta.
 - (31) I have written to him.

 Minä olen kirjoittanut hänelle.

The 'unidentified past' interpretation is also valid here as far as English is concerned, because the above sentences in English do not allow the addition of a time specifier that pins down a point in the past: * They have left the district on Tuesday. In Finnish this is possible: He ovat lähteneet paikkakunnalta tiistaina. There is, however, an exception to this restriction in English: the combination of present perfect and a definite point in the past is possible in sentences that denote a frequentative occurrence of a process (cf. Smith 1976:10):

(32) They have read the news at 10 o'clock for years.

In this case there is not only one occurrence of the process but a whole series of processes regularly repeated. Each individual event takes place at a point in the past but the chain of the repeated events started somewhere in the past and lasts up to the moment of speaking.

There are also cases in which the process fills up the whole period within which it is placed, ie. it starts when the period starts and continues up to the moment of speaking, as in (33)-(34).

- (33) I have lived here since 1975. Olen asunut täällä vuodesta 1975 lähtien.
- (34) His sister has been an invalid all her life. Hänen sisarensa on ollut invalidi koko elämänsä.

In the discussions on the present perfect this type has been called 'continuative' (eg. Kruisinga 1931:390) or 'state-up-the-present' (Leech 1971:31). Both terms describe an essential feature of the process in these sentences: they are both states and they continue at least to the speech situation. It is, however, not only states that can continue up to the moment of speaking. In (35) and (36) we have activities continuing in the same way.

- (35) We have been waiting since 2 o'clock.
 Olemme odottaneet kello kahdesta saakka.
- (36) He has been writing a book since last summer. Hän on kirjoittanut kirjaa viime kesästä saakka.

In (36) the progressive and the [-total] object are obligatory in English and Finnish respectively for expressing the fact that the process fills up the whole period. This is clear if we compare (36) with (37).

- (37) He has written a book since last summer. Hän on kirjoittanut kirjan sitten viime kesän.
- (37) refers to the process of writing a book at some time between last summer and now, but the process does not continue up to the moment of speaking; it has been completed in the past and the aspect is thus perfective, whereas it is imperfective in (36). If the beginning of the period is not specified, as it is in (36), neither the progressive in English nor the [-total] object in Finnish makes clear whether the process continues up to the moment of speaking. Consider (38).
 - (38) They have been widening the road. He ovat leventäneet tietä.

The process of widening might be finished, but only a part of the road has been widened. This is even clearer if we compare (39) with (40), (cf. Leech 1971:46).

- (39) Who has eaten my dinner? Kuka on syönyt päivälliseni?
- (40) Who has been eating my dinner? Kuka on syönyt päivällistäni?

In both cases the process of eating is obviously finished but in (39) all the food is gone, while in (40) some of it still remains.

The English progressive can in this context denote the same idea of only a part of the object being involved as the Finnish [-total] object.

Verbs denoting activities cause a problem of interpretation in English. The progressive is used even when the process is clearly over at the moment of speaking. In (41) and (43), which are Palmer's (1965) examples, there is no question of the progressive denoting the continuation of the activity up to the speech situation, nor is it needed for the expression of the imperfective aspect since activities are imperfective in any case.

- (41) I have been drinking tea. (That's why I am late)
- (42) You have been playing with fire. (I can smell it)
- (43) She has been crying. (Her eyes are red)

Many activity verbs are not even possible without the progressive:

- (44) *She has cried.
- (45) *He has read.
- (46) *We have walked.

Jespersen (1931:196) refers to the unacceptability of sentences like (44)-(46) when he says: 'It would be impossible to use the perfect of a transitive verb without an object (I have read). But the expanded perfect may very well stand alone, because of the idea of incompletion attached to it'. Allen (1966) disagrees with Jespersen and quotes the following example, in which the verb read occurs without the progressive:

(47) I've read, I've listened to the radio, I've watched television - but I haven't enjoyed anything as much as just sitting and doing nothing.

Why, then, is the progressive necessary in sentences like (44)-(46)? A possible explanation is that the speaker refers to a process that was going on at an unidentified point within the period extending up to the moment of speaking, and, as always when there is a point of time involved, the progressive is obligatory with activities (cf. discussion on aspect p. 66).

When the activity happens to fill up the whole period, the progressive seems to suggest the continuation of the activity not only up to the

point of speech but also past it into the future. Thus in (48) the activity does not continue past the point of speech but in (49) it does.

- (48) We can go, we have waited for two hours now.
- (49) We have been waiting for two hours.

Sometimes however, there seems to be a virtually free choice between a sentence with the progressive and one without it (cf. Leech 1971:45), as in (50) and (51).

- (50) Jack has looked after the business for years.
- (51) Jack has been looking after the business for years.

If the process is to fill up the whole period up to the point of speech unambiguously the beginning of the period must be indicated. Thus, in (52) and (53) reference is to a state that lasted for some time within the period but did not necessarily fill all of it.

- (52) He has been ill.
- (53) I have lived in England.

If, however, a specifier denoting the beginning of the period is added, there is no doubt about the state continuing for the whole period:

- (54) He has been ill since Monday.
- (55) I have lived in England since Christmas.

Thus, the time-specifier denoting the starting point of the period is found necessary to make the continuation clear (cf. Crystal 1966:27). If the sentence contains an adverbial denoting duration, the meaning is not altogether clear. Consider for example (56).

(56) I have lived in England for two years.

It could be argued that this two-year period of living in England could be anywhere between the beginning of the person's life and his present, the point of speech. The progressive in this case would unambiguously indicate that the state continues at the moment of speaking:

(57) I have been living in England for two years.

Where the continuation of the state is clear on account of a timespecifier, the progressive can again suggest temporariness. Compare for example (58) and (59) in this respect (cf. Leech 1971:44).

- (58) The Browns have lived in that flat since their marriage.
- (59) The Browns have been living in that flat since their marriage.

In Finnish, the continuation of a state up the point of speech can only be made clear through a time-specifier denoting the beginning of a period. The time-specifier has to be of the type N+lähtien/siitä lähtien kun +S, which correspond to the English since + NP/S.

(60) He ovat asuneet Helsingissä syyskuusta lähtien. (They have lived in Helsinki since September.)

If the time-specifier is of the type $N+j\ddot{a}lkeen/sen~j\ddot{a}lkeen~kun~+S$ (after + N/S), the process does not necessarily fill up the whole period, even though the process is a state:

(61) He ovat asuneet Helsingissä sotien jälkeen.

In this case the time-specifier simply gives the starting point of the period within which the process occurred (or the state existed), whereas <code>lähtien</code> (since), in addition to giving the starting point of the period, also suggests that the process really started at that point and has lasted up to the moment of speaking. Therefore <code>lähtien + N</code> is not possible with momentaneous processes, ie. achievements:

(62) * Liisa on mennyt naimisiin syyskuusta lähtien. Liisa on mennyt naimisiin sitten syyskuun/syyskuun jälkeen.

Thus, there is a slight difference in the type of time-specifiers occurring with the present perfect in English and Finnish.

Reference has already been made (p.124) to the fact that in Finnish the present perfect is also possible when a definite, fixed moment in the past is explicitly expressed, which is impossible in English:

(63) Viime yönä on satanut. (*It has rained last night.) Sisareni on syntynyt vuonna 1947. (*My sister has been born in 1947)

(65) Tämä koulu on perustettu sata vuotta sitten. (*This school has been founded a hundred years ago.)

The sentences are also possible with a past tense form:

- (63a) Viime yönä satoi. (It rained last night)
- (64a) Sisareni syntyi vuonna 1947. (My sister vas born in 1947.)
- (65a) Tämä koulu perustettiin sata vuotta sitten. (This school was founded a hundred years ago.)

The difference between sentences (63)-(65) and (63a)-(65a) is explainable through the speech situations in which they are likely to occur. (63) for example could be uttered in the morning when seeing that the ground is wet, (63a) tells about rain that disturbed the speaker's sleep during the night. (64) could occur when telling how old the speaker's sister is at present, while (64a) could be part of the sister's life story. Similarly, (65) could be used in telling how old the school was, and (65a) in telling the history of the school. 'Current relevance' could serve as an explanation for the choice of the present perfect in these sentences; they express the observable effects of a definite past event at the moment of speaking. Sometimes, however, the distinction is hard to explain. Consider for example (66) and (66a).

- (66) Sain haavan sormeeni/I cut my finger.
- (66a) Olen saanut haavan sormeeni/I have cut my finger.

Both sentences would be equally likely to occur in a situation in which the speaker's finger is bleeding. Similarly, somebody coming home and seeing a friend waiting there could equally well utter either (67) or (67a).

- (67) Milloin sinä tulit?/When did you arrive?
- (67a) Milloin sinä olet tullut?/ When have you arrived?

The 'current relevance' explanation does not work here. The only distinction the native speaker's intuition is able to give in this case is that the sentences with the past tense are more 'definite' and those with the present perfect more 'indefinite'. Therefore, the

former is preferred in an 'acute' case like (66) above. This contradicts with the 'current relevance' explanation which Palmer (1965:52) uses in the corresponding case in English: the present perfect is used in I've cut my finger because the finger is still bleeding, ie. the case is 'acute'. On the other hand, Palmer himself admits that it is difficult to define what is relevant and what is not. In any case, there is a clear difference between English and Finnish here: in Finnish it is possible to have a definite point in the past as the point of event and yet have the point of reference identical with the point of speech, a combination which is not possible in English.

Ikola (1961) and Penttilä (1963) refer to some occurrences of the present perfect that seem to contradict the usual explanation of the meaning of this form. They both quote the following example:

(68) Johdumme täten kysymykseen, mistä Agricolalla oli suomen kielen taitonsa. Joko sen on täytynyt olla hänen äidinkielensä tai hän on sen myöhemmin oppinut.

(Thus we come to the question how Agricola acquired his knowledge of Finnish. Either it must have been his mother tongue or he*has learnt it later.)

The example begins with the past tense, as expected, since it tells about the life of a dead person. Then, however, there is a sudden switch to the present perfect in the second sentence. The explanation given is that, when using the present perfect in this case, the speaker has no immediate knowledge of the past but draws a conclusion about it on the basis of some present facts (Ikola 1961:105). Another related case in which the present perfect is used is one in which the speaker tells something that is not based on knowledge but on hearsay, as in (69), which again is an example quoted by Ikola (1961:105).

(69) Kerran on elänyt ukko ja akka. (*Once upon a time there have been an old man and an old woman.)

These cases do not really contradict the explanations given above; there is a connection between the past process and the speaker's present, although in this case it cannot be said to be due to the current relevance of the past process, but to present assumptions about the past, which explains the reason for the speaker making the point of speech his point of reference.

4.2.2. Point of Reference Identical with Point of Event

The previous chapter dealt with references to the past when the point of reference fell together with the point of speech. The other alternative for referring to past processes is through making the point of reference identical with the point of event in the past. This then means that there is no connection between the past event and the moment of speaking, neither through a temporal link nor through 'current relevance'. The result of this way of looking at past processes is the past tense in both English and Finnish. The past point that serves as the point of event and point of reference can be explicitly expressed in the sentence, as in (70).

(70) The telegram arrived at 2 o'clock yesterday. Sähkösanoma tuli eilen kello 14.

This is, however, not obligatory; the point can be implicitly expressed:

- (71) Did you enjoy your stay in London?
 Oliko sinulla hauskaa Lontoossa?
- (72) Did you have a good journey? Oliko sinulla mukava matka?

In (71) and (72) the time is known to both the speaker and the listener and is implied by the words stay in London/Lontoossa and journey/matka. As was pointed out in the discussion on the difference between the past tense and the present perfect (p.123), the point can be identified either because it is common knowledge when some event took place, because the knowledge is shared by the speaker and the listener, or because the point has been identified elsewhere in the same context. Thus, as Leech (1971) points out, a sentence like (73) contains an implicit reference to a definite time, knowledge of which is shared by the speaker and the addressee.

(73) Did you put the cat out?

This is an utterance used, for example, in a discussion between a husband and wife and the reference is to the time at which the cat is usually put out. In (74) it is common knowledge that Sparta existed for a certain period in the past:

(74) For generations Sparta produced Greece's greatest warriors.

Sukupolyien ajan Sparta tuotti Kreikan parhaat

Often in a narrative, for example, the point in the past is identified in connection with the first event related and the time of the other events is understood to be the same, as in (75).

(75) Last night I went into this pub. I walked straight to the counter, ordered myself a beer, sat down and took a look around. I didn't see any familiar faces. Eilen illalla minä menin siihen pubiin. Kävelin suoraan tiskin luo, tilasin oluen, istuuduin ja katselin ympärilleni. En nähnyt yhtään tuttua naamaa.

The time of event does not have to be a point in the past, but can instead be a period, as in (74) above and in (76) below.

(76) The house was empty for years. Talo oli tyhjänä yuosikausia.

The period is not definite in this case, and could be anywhere in the past. The reason for the past tense being used, or rather for the point of reference being in the past, is that there is no connection between the state and the moment of speaking. If no period was mentioned:

(76a) The house was empty. Talo oli tyhjä.

reference would be to a definite point known to both participants, for example, to the time of the speaker's recent visit to the house.

Normally, then, when the point of event and the point of reference coincide in the past, the past tense is used in both English and Finnish. Both languages have another alternative, as in (77).

(77) Last night I go into this pub. I walk straight to the counter, order myself a beer, sit down and take a look around. I don't see any familiar faces. Eilen illalla minä kävelen yhteen baariin. Kävelen suoraan tiskin luo, tilaan oluen, istuudum ja katselen ympärilleni. En näe yhtään tuttua naamaa.

The present tense used in this way is usually called the historical/dramatic present and it normally occurs in narratives of events related

in sequence. A sudden change from the past tense to the present tense is also possible, as seen in (78), an example cited by Bolinger (1947:434):

(78) Jack said that his mother was very ill, and got me to go and see what I could do for her. I had to leave my other patients and drive half the evening, which meant that all my plans were upset. And then he tells me that the whole thing was a hoax.

The usual explanation given for the choice of the present tense in narratives of past events is that in this way the past events are made as vivid as present ones (see for example Poutsma 1926:254, Palmer 1965:69, Penttilä 1963:473). According to Leech (1971:7), in English this usage is 'typical of a high-coloured popular style of oral narrative, a style one would be more likely to overhear in the public bar of a village inn than in the lounge of an expensive hotel'. Furthermore, he draws a distinction between this historical present of the oral narrative style and its fictional use as 'a device of dramatic heightening, 1, which 'puts the reader in the place of someone actually witnessing the events as they are described' (1971:12). In the system described here, however, this use of the present tense means that, although the point of event and the point of reference are identical and in the past, the speaker uses a present point of view, which overrules the influence of the two points and leads to the choice of the present tense (cf. explanation of 'false tense choice' within the present, p. 110). The reason, then, for choosing the present point of view is that in this way the past becomes more vivid, as if the events were taking place at the moment of speaking.

In English, outside narratives, the present point of view over a past process is also possible with verbs denoting delivering or receiving messages, such as say, tell, write, hear, as in (79) and (80).

Penttilä (1963:473) distinguishes four types within this use of the present tense. He talks first about the actual praesens historicum, which the speaker uses when wanting 'to arouse in the listener the feeling that what he is relating is taking place in front of the listener'. Next he distinguishes 'a calmer vesion', praesens tabulare or annalisticum, which is used in scientific writing about historical matters. A special case of this is praesens referens, which 'is usual in summaries of literary products and also in the titles of works of art'. Finally, there is praesens auctoris, which is used when quoting written or otherwise well-known sources.

- (79) My father tells me I should take the job.
- (80) I hear you are leaving us after Christmas.

In Finnish this is possible in a sentence corresponding to (79):

- (81) Isäni sanoo, että minun olisi otettava se paikka.
- but not in one corresponding to (80):
 - (82) *Kuulen, että olet lähdössä pois joulun jälkeen.

Nor is it possible in (83), though possible in the equivalent English sentence.

(83) Kello kymmenen uutisissa sanottiin, että tulee kylmä.

The ten o'clock news says it's going to be cold.

On the other hand, it is again possible in a sentence like (84).

(84) Kirjeenvaihtajanne kirjoittaa helmikuun numerossa... Your correspondent writes in your February issue....

The reason why the present point of view is possible in some of the above Finnish sentences but not in others seems to lie in the nature of the verb: 'saying' and 'telling' are processes which normally leave no trace behind, while the traces of writing are there even after the process is finished. In (81) the verb sanoa seems to form an exception, but it can be explained by the fact that the reference in this sentence is to a repeated process (My father keeps saying...) and thus the point of event is really the present, not the past. On the whole, it can be said that, with verbs denoting delivering and receiving messages, Finnish is more tied to the observability of the message at the moment of speaking than English, and the speaker's point of view cannot overrule the influence of the point of reference as easily.

As for aspect in connection with this way of seeing the past, ie. having both the point of event and the point of reference in the past, the same sort of considerations apply as did when the time was the present. When the combined event and reference time is a point in time, only momentaneous processes, ie. achievements, can be perfective. If the process is of any other type and a point is implied or mentioned,

the aspect is imperfective, in English activities usually require the progressive in this case, as in (85)-(87).

- (85) He was writing a novel last year.
- (86) The candle was burning nicely a moment ago.
- (87) He was playing the piano at midnight.

But it is only with verbs/verb phrases which could denote accomplishments that the progressive is needed for the expression of the imperfective aspect. Compare (88) and (89):

- (88) They were building a house, (at some point in the past)
- (89) They built a house.

With durative processes, of which only activities are usually compatible with the progressive, the progressive is free to denote other things since it is not needed for the expression of the imperfective aspect. With activities it thus often gives a temporal frame for other processes, as in (90)-(92).

- (90) It was snowing last night when I walked home.
- (91) He was playing the piano when we entered the room.
- (92) I was travelling in the south when I met him.

The progressive often gives the suggestion of a frame for something more important in a narrative as well. There can be a long succession of sentences with the progressive and then a sudden change to a sentence without it. Consider for example (93).

(93) Senora de Caspearo, with an assorted bag of gentlemen in attendance was lying face upwards and talking deepthroated, happy Spanish. Some French and Italian children were playing at the water's edge and laughing. Canon and Miss Prescott were sitting in beach chairs observing the scene. There was a convenient chair next to Miss Prescott and Miss Marple made for it and sat down.

It is thus the context that determines the use of the progressive in cases like (90)-(93): in these contexts a point is set by the most important event and the other events are described as being in progress at this particular point. Taken out of their contexts, sentences like (94) and (95) seem to have hardly any differences.

- (94) It snowed last night.
- (95) It was snowing last night.

The only difference possible in this case is that (95) suggests temporariness or a shorter duration than (94).

In Finnish there is no special way of showing the 'framing effect'. Thus, the equivalent of (93) above has the simple past tense where English uses the progressive:

(96) Senora de Caspearo makasi selällään ja puhua pälpätti espanjaa ympärillään olevalle valikoidulle ihailijakaartille. Muutamia ranskalaisia ja italialaisia lapsia leikki ja nauroi veden rajassa. Kaniikki ja neiti Prescott istuivat rantatuoleissa katsellen näytelmää. Neiti Prescottin vieressä oli mukava vapaa tuoli ja neiti Marple varasi sen itselleen ja istuutui.

The limitations on the use of the progressive were explained in connection with aspect (p.66) and they also hold good when the time is the past. Similarly, the progressive is necessary within the past time-sphere for the expression of imperfective aspect with verbs that can denote either accomplishment or activity when there is no object in the sentence. Now, however, the distinction is only an aspectual one, not one in time as in the case of the present time-sphere (cf. p.101). Thus, sentences marked (a) have the perfective aspect and sentences marked (b) the imperfective aspect in the following:

- (97a) Hän toipui sairaudestaan. She recovered from her illness.
- (97b) Hän oli toipumassa sairaudestaan. She was recovering from her illness.
- (98a) Ilma viileni. The weather got cooler.
- (98b) Ilma oli viilenemässä. The weather was getting cooler.

The progressive in Finnish is also necessary for expressing the simultaneity of two events if there is no other feature in the sentence making this unambiguous. Consider sentence (99).

(99) Hän juoksi pois, kun huomasin hänet.

The sentence can refer to two consecutive events: he ran away after I noticed him, or it can refer to two simultaneous events: he was running

away when I noticed him. This latter meaning can be made unambiguous by using the progressive or a time-specifier denoting simultaneity (juuri, parhaillaan/just):

(100) Hän oli juoksemassa pois, kun huomasin hänet. Hän juoksi juuri pois, kun huomasin hänet.

It is noteworthy that time-specifiers in fiction can be more freely combined with tenses that is usually the case. Thus, a time-specifier referring to the present can occur with the past tense, as in (101).

(101) Though usually labelled Sin, she couldn't help feeling that that was preferable to what it seemed nowadays - a kind of Duty.

Vaikka sitä tavallisesti kutsuttiin Synniksi, hän ei voinut olla pitämättä sitä parempana kuin sitä, mitä se näytti olevan nykyisin eräänlainen velvollisuus.

In (101) the writer relates the thoughts of one of her characters about a state of affairs that existed within the present time-sphere of the character, which for the writer herself lies in the past. The past tense is due to the fact that the point of event lies in the writer's past, while the time-specifier denoting present is due to the fact that the point of event lies in the character's present.

4.2.3. Past in the Past

In the foregoing analysis of the expressions of the past the point of event was in the past and the point of reference either simultaneous with it (past tense normally used) or simultaneous with the point of speech (present perfect used). As the initial scheme in chapter 2. (p. 37) showed, both the point of event and the point of reference can be in the past but not simultaneous. The point of event can be either anterior or posterior to the point of reference. In the former case we have what could be called 'a past in the past', in the latter 'a future in the past'. Using Bull's (1960) terminology this means that the speaker shifts his point of orientation into the past, to a 'retrospective point', from which it is possible to look again backward (past in past) and forward (future in past).

The past in the past means, then, that the speaker as it were moves two steps backwards in time into the past: one to the point of reference, the other to the point of event. In (102) the matrix clause gives the point of reference for the embedded clause and is thus later in time than the point of event in the embedded clause.

(102) I didn't go with them to the pictures last night. because I had seen the film before.
En mennyt heidän kanssaan elokuviin eilen illalla, koska olin nähnyt filmin jo aikaisemmin.

The exact point of event can be left unidentified as in (102), or it can be identified as in (103).

(103) I didn't go with them to the pictures last night because I had seen the film the night before.

En mennyt heidän kanssaan elokuviin eilen illalla, koska olin nähnyt filmin edellisenä iltana.

Neither does the point of reference have $t \bullet$ be identified in the same sentence but can occur elsewhere in the same context or be otherwise understood by the participants in the conversation. Thus in (104)

(104) Had they met each other before?

it is obvious that the reference is to a certain occasion either mentioned previously or otherwise known to the participants, and the point of event in this sentence is anterior to the known reference point. In one way or another the point of reference has to be known, or at least the speaker must assume that the listener knows it. A sentence like (105)

(105) Had the Browns enjoyed their stay in London?
Olivatko Brownit nauttineet käynnistään Lontoossa?

would not make sense unless the listener knows that the speaker is referring to the listener's recent meeting with the Browns. This is why 'it is difficult to begin a conversation with a Past Perfect Tense' (Leech 1971:42).

The past in the past gets its expression in both English and Finnish usually through the past perfect form. There is, however, a possible ambiguity in the use of the past perfect, which can be illustrated by (106).

(106) They had eaten at 3 p.m. He olivat syöneet klo 15.

The sentences can be interpreted either as referring to the fact that the eating had taken place by 3 p.m. or that the eating took place at 3 p.m. This means that the event took place within a period lasting up to the point indicated or that the event took place at the point indicated, which preceded a point in the past, not mentioned in the sentence. The time-specifier can thus modify either the point of reference or the point of event. In the latter case the sentences 'fail to be independent declaratives, in the sense of being assertions wouched for by the speaker' (Braroe 1974:144). Instead they are dependent clauses having an underlying matrix, something like 'Somebody said (that they had eaten at 3 p.m.)' (See eg. Jespersen 1924, Palmer 1965, Leech 1971, Penttilä 1963 on the dual interpretation of the past perfect).

The past in the past can sometimes be expressed by the past tense. Consider the sentences in (107).

(107) She told it to me after the other guests left. Hän kertoi sen minulle sen jälkeen kun toiset vieraat lähtivät.

It is obvious that the process in the embedded clause is prior to the process in the matrix clause. The temporal relationship between the two processes can be described by using a diagram:



Exactly the same relationship exists between the processes in (108).

(108) She told it to me after the other guests had left. Hän kertoi sen minulle sen jälkeen, kun toiset vieraat olivat lähteneet.

The neutralization of the opposition that usually exists between the past tense and the past perfect seems to be usual if the two processes follow each other in quick succession, whereas the past perfect indicates a less immediate succession (cf. Curme 1931:361, Edgren 1971:132). In the following sentences the processes follow each other in quick succession and consequently the past tense is natural in them:

- (109) As soon as Michael saw him, he switched off the lights (rather than had seen him)
- (110) As soon as he heard it, he turned pale. (rather than had heard it)
- The same is also possible in Finnish:
 - (111) Niin pian kuin Michael huomasi hänet, hän sammutti valot.
 - (112) Niin pian kuin hän kuuli sen, hän valahti kalpeaksi.

It is also possible that the influence of the past point of reference is overruled by the present point of view of the speaker. The choice of the present perfect instead of the past perfect results from this, as in (113).

(113) Last night I have just come home and sat down to have my dinner when the telephone rings. It is a friend who asks if I have heard the latest news.

The same is possible in Finnish:

(114) Eilen illalla olen juuri tullut kotiin ja istuutunut syömään päivällistä, kun puhelin soi. Siellä on eräs ystäväni, joka kysyy, olenko kuullut viimeisimmät uutiset.

The reference point is *last night/eilen illalla*, ie, a past point. There are two kinds of processes in the sentences: those that take place at the past point indicated and those that have taken place previously and are past in the past.

4.2.4. Future in the Past

As mentioned above (p.138), the point of event can also be later than the point of reference when the point of reference is in the past. The speaker looks forwards from his past point of orientation, and we have a future in the past:

The diagram represents this time-relation. The dotted line indicates that the point of event can occur anywhere on the time-line, even after the point of speech, as long as it is to the right of the point of reference and this latter point occurs before the point of speech.

Leech (1971:48) maintains that 'English speakers manage without a future-in-the-past construction, and use the ordinary Past Tense when they wish to anticipate', quoting (110) as an example.

(110) Pitt, who later became Britain's youngest Prime Minister, was at this time Chancellor of the Exchequer.

The same could be said of Finnish on the basis of similar cases. The Finnish equivalent of (110) can also have the past tense in it:

(110) Pitt, josta myöhemmin *tuli* Britannian nuorin pääministeri, oli tuohon aikaan valtiovarain-

The time when Pitt was the Chancellor of the Exchequer is the point of reference and his becoming Prime Minister is obviously later than this point. But it is also obvious that the time-specifiers *later* and *myöhemmin* are obligatory. Without them the time-relation is ambiguous: the sequence of the events is not necessarily the one indicated above.

Even though the speakers of English and Finnish manage without a special future-in-past construction, both languages have ways of denoting this time-relation unambiguously. Thus, (110) could be expressed by using (111) and (112).

(111) Pitt, who was to become Britain's youngest Prime Minister (112) Pitt, who would later become Britain's youngest Prime Minister ...

The difference between (111) and (112), if any, is very slight. At least it is not as great as it is between the same constructions when the point of reference is the moment of speaking and the point of event is in the future:

- (113) Pitt, who is to become Britain's youngest P.M. ...
- (114) Pitt, who will become Britain's youngest P.M. ...

Of these, the former expresses a plan for the future, the latter a prediction about the future (cf. p.163). It seems that in (111) and (112) we simply have a time-relation between two processes without any colouring of plan or prediction, because the speaker is relating past events and their temporal order. The situation is different, however, in (115), in which the past progressive and the going to + infinitive construction are used for the future in the past.

(115) The beauty contest $\begin{cases} was taking place the next day, \\ was going to take place \end{cases}$

This kind of future in the past does not simply indicate a time-relation but is coloured by the notion of intention (Leech 1971:48). Therefore, it would not be acceptable in (110) * Pitt, who was later becoming/was later going to become ... These future-in-past expressions are common in cases in which the anticipated process remains at the stage of intent, is never realized. Thus, a sentence like (116) often has the implication that something prevented the execution of the intention.

(116) I was leaving yesterday.

Palmer (1965:87) points out that this future in the past is 'often associated with a fall-rise intonation with nuclear stress on the auxiliary and often a nuclear stress on the adverbial, too' and implies that a reservation follows. By means of the intonation ambiguity can be avoided in sentences like (116), in which the reference could just as well be to a process going on at a point in the past. That sentences like (116) can have a future-in-past interpretation can be proved by changing the time-specifier to, for example, today or tomornow, which make the time-relation unambiguous:

(117) I was leaving today/tomorrow

There is now no doubt about the sentence meaning 'It was my intention to leave today/tomorrow ...' The meaning becomes even clearer if we add another specifier identifying the time of the intention:

(118) Yesterday I was leaving today ...

The alternative used in (111) above (be/to + infinitive) can also have a special connotation, one of destiny or a plan that may not be fulfilled:

(119) I was to read a paper yesterday but I fell ill.

The alternative involving the use of would, (112) above, is not possible if the reference is to an unfulfilled intention:

(120) *I would read a paper the next day but I fell ill.

This alternative, is, however, common in indirect speech, in which the point of reference is the time of the reporting in the matrix clause and the anticipated process is in the embedded clause:

- (121) She thought that the day would be as dull as any other.
- (122) She thought that in an hour's time she would be at home and asleep.

When changed to direct speech, these sentences would have will/shall + infinitive and express a prediction about the future:

- (123) 'This day will be as dull as any other', she thought.
- (124) 'In an hour's time I'll be at home and asleep', she thought.

From this if follows that the indirect speech sentences in (121) and (122) also contain a prediction about future, but from a past reference point.

In Finnish, too, the 'future in the past' has more than one surface exponent, although this function is usually assigned to the 'compound past tense' (see eg. Penttilä 1963, Wiik 1976). This construction (past tense of olla + present participle) is possible in (110) above, instead of the simple past tense:

(110) Pitt, josta oli tuleva Britannian nuorin pääministeri, oli tuohon aikaan valtiovarainministeri.

(Pitt, who was to become Britain's youngest P.M. ..)

This compound past tense has a strong predictive connotation, an almost prophetic ring to it (cf. discussion on expressions of future, p.169), which makes its use impossible in many contexts. It would sound strange in the following sentences for example:

(125) Minä olin pitävä esitelmän seuraavana päivänä ja niin tein töitä koko yön.

Minun oli määrä/minun piti pitää esitelmä seuraavana päivänä ja niin tein töitä koko yön.

- (I was to read a paper the next day and so I worked the whole night.)
- (126) Tytöt olivat hermostuneita, koska kauneuskilpailujen oli määrä/piti olla/?kauneuskilpailut olivat oleva sinä iltana.

(The girls were nervous because the beauty contest was to be that evening.)

The compound past tense is impossible particularly if the sentence refers to something that was planned or intended but never took place.

(127) *Minä olin lähtevä tänään, mutta en saanut kaikkea valmiiksi.

Minun oli määrä/piti lähteä tänään, mutta ...
(I was to leave today but I couldn't get everything ready.)

The compound past tense for the expression of the future in the past is possible only if the speaker knows that the process he is talking about really took place, not if he only knows that it was planned or intended at some past point; it is thus comparable with the English would + infinitive construction. In the latter case, ie. with a past plan or intention, the verb pitää, the phrase olla määrä or the verb aikoa are used.

(128) Aioin lähteä tänään, mutta en saanut kaikkea valmiiksi.

(I was going to leave today but I didn't get everything ready.)

Finnish often has the conditional in the embedded clause in indirect speech in which the matrix clause contains a verb of reporting and defines the reference point for the process in an embedded clause, which lies in the future relative to the time of saying or thinking something:

- (129) Hän ajatteli, että päivä olisi yhtä tylsä kuin kaikki muutkin. (She thought that the day would be as dull as any other.)
- (130) Hän kuvitteli, että tunnin kuluttua hän olisi kotona ja nukkumassa. (She thought that in an hour's time she would be at home and asleep).

The conditional is not obligatory, however. The embedded clause can also have the present tense, as in (131) and (132).

- (131) Liisa ajatteli, että hän lähtee heti. (Liisa thought that she would leave immediately.)
- (132) Hän vannoi, ettei hän ikinä enää nouse laivaan. (He swore that he would never go on board a ship again.)

This means that in Finnish the time of the reported utterance can be the same as it is in the corresponding direct speech. It is enough in Finnish that the higher clause defines the point in the past at which the reported process is anticipated, and the embedded clause has the same time as the original utterance. However, the conditional seems to be the most common alternative (Ikola 1961b:142-144). There is a clear difference between English and Finnish here: in English it is impossible to keep the same time in indirect speech as in the original direct speech utterance: *She thought that the day will be as dull as any other. (This problem will be further discussed in chapter 5).

4.2.5. Points of Contrast within the Past

Finnish and English both make four basic distinctions in time-relations within the past time-sphere (the point of event is in all cases prior to the point of speech):

- (i) the point of reference is simultaneous with the point of speech, ie. we have E R,S
- (ii) the point of reference is simultaneous with the point of event, ie. E,R S
- (iii) the point of event is prior to the point of reference although both are prior to the point of speech, ie. E R S
- (iv) the point of event is later than the point of reference but both are prior to the point of speech, ie. R E S.

The difference between the first two time-relations, ie. the question of what determines the choice of the point of reference in these cases, has been the most difficult and controversial question in this area of time-relations. An explanation general enough to apply in most cases in both languages is that the point of speech is chosen as the point of reference when the speaker presupposes that the past process is relevant at the moment of speaking, because of its consequences or otherwise. There is a clear difference between English and Finnish in that Finnish allows a definite point of event with the present point of reference, whereas in English the point of event is in these cases always left indefinite. In both languages this E - R,S time-relation is expressed through the present perfect form.

The E,R - S relation leads to the use of the past tense, in both languages except when the point of view is simultaneous with the point of speech and thus causes the present tense to be used. This happens when the speaker wants to put the listener in the place of someone actually witnessing the events he is relating. The context is mainly limited to narratives, and a past time-specifier is obligatory. However, the present point of view is also possible in both languages in embedded clauses following verbs of reporting; but the number of possible contexts is more limited in Finnish than in English.

When the point of event is earlier than the point of reference, both being prior to the point of speech (E - R - S), the verb form used in both languages is the past perfect, with a possibility of the present perfect being used as a result of a present point of view.

The future in the past (R - E - S) has several possible expressions in both English and Finnish. One way in both languages is the use of the past tense, provided there is a time-specifier which indicates that the point of event follows the point of reference. Of the other alternatives most have special meanings in addition to denoting the time-relation. In English the past tense + the progressive and the past tense + qoing to have the implication that the process was intended or planned but not necessarily carried out. The past tense + be to construction can have a similar implication but can also simply denote the future in the past. Would + infinitive is mainly used in indirect speech and corresponds to its direct speech counterpart in expressing anticipation or prediction. In Finnish, the compound past tense has a predictive anticipatory implication. Finnish expresses the idea that the plan or intention was not necessarily executed through constructions such as the past tense + olla määrä and past tense + pitää. In Finnish, indirect speech normally has the conditional as an expression of the future in the past. The embedded clause can, however, also keep the tense of the corresponding direct speech sentence, ie. the present tense, which is generally not possible in English.

On the whole, English and Finnish show the same tendencies in the expressions of time-relations within the past, and the similarities are far greater than the differences.

4.3. Future

The time-sphere of the future means either that the point of reference is simultaneous with the point of speech and the point of event later than these two points, or that the point of reference is later than the point of speech and the point of event simultaneous with it, or earlier or later than it. Thus we have the following four relations between the three points:

1. S,R - E	Peter will leave	Pekka on lähtevä/lähtee
2. S - R,E	Peter will leave	Pekka on lähtevä/lähtee
3. S - E - R	Peter will have left	Pekka on lähtenyt
4. S - R - E	Peter will leave	Pekka on lähtevä/lähtee

As the lists of one possible surface realization for each of the relations in English and Finnish shows, only 3., which could be called 'past in the future', finds a special expression: all the others are treated in the same way. Thus, we only have to distinguish two types of future: (i) one in which the point of event is simultaneous with or later than the point of reference and (ii) one in which the point of event precedes the point of reference.

Talking about the future is not as straightforward as talking about the present or the past. The speaker can never be absolutely certain about future events and consequently cannot talk about them with the same conviction as he can talk about what has happened in the past or is happening at the present. The only type of future event about which it is possible to be fairly certain is one that occurs according to some natural law. Thus the speaker can say with certainty: The sun rises at 4.15 tomorrow; the only thing that could prevent this would be a change in the natural order of things. About other types of future events people can only have various degrees of certainty or uncertainty. The uncertainty of the future also means that various additional connotations are attached to the expressions of futurity, such as the speaker's intentions, his desire to do something, plans made for the future and so on. This is all reflected in the expressions of futurity and especially in the ways languages have acquired these expressions. In many languages, Finnish and English among them, the present tense is employed in reference to the future; in Finnish it still continues to be the most

common way of expressing futurity, although in English it has gradually lost ground after having been a common way of expressing futurity in Old English (see Wekker 1976:26-27). In English, the auxiliaries which are often used in references to the future originally expressed volition (will) and obligation (shall). Verbs of motion ('coming' and 'going') are also used to indicate futurity: in English I am going to read the book, in Finnish Se tulee olemaan vaikeaa (literally: 'It comes to be difficult').

A natural consequence of the nature of futurity is that the expressions of futurity approach the expressions of mood. As future events cannot be referred to as facts, they have to be based on intentions, assumptions, beliefs and the like. Therefore, it is no wonder that in English will and shall, the auxiliaries that are called future auxiliaries, are also employed in expressions of mood. Lyons (1969:310) refers to this close connection between futurity and mood when he says, 'For general syntactic theory, it may be taken as axiomatic that futurity' is a notion that cuts across the distinction of mood and tense.'

The fact that future events can be viewed in various different ways leads naturally to different manifestations of future reference. This is particularly true of English, which has the following 'basic' ways of expressing futurity:

the present tense: The president makes a speech tomorrow afternoon.

the progressive present: The president is making a speech tomorrow afternoon.

will/shall + infinitive: The president will make a speech tomorrow afternoon.

be going to + infinitive: The president is going to make a speech tomorrow afternoon.

 $\mbox{will/shall}$ + progressive infinitive: The president will be making a speech tomorrow afternoon.

Finnish has only the following three possibilities of expressing this time-relation:

the present tense: Presidentti pitää puheen huomenna iltapäivällä. the compound present: Presidentti on pitävä puheen huomenna iltapäivällä. tulla + infinitive: Presidentti tulee pitämään puheen huomenna iltapäivällä.

Before these expressions in the two languages can be contrasted their meanings and the differences in their connotations will have to be analysed

in the two languages separately. Only then can it be seen to what extent the expressions are really equivalent.

4.3.1. Expressions of Futurity in English

There are two opposite views about the expressions of futurity in English. According to one, will/shall + infinitive is the Future Tense. This view is represented by grammarians such as Curme (1931) and Zandvoort (1972). The opposite view is that English has no real future tense (see, for example, Jespersen 1931, Palmer 1969 and 1974, Leech 1971; this is also reflected in Chomsky's auxiliary formula, in which Tense is only either present or past, and will/shall is included in the Modal).

The reasons for the view that there is no future tense in English are that (i) there are, as the examples in the previous chapter show, several ways of expressing futurity in English, (ii) will and shall have other functions in addition to denoting futurity, and (iii) in the purely structuralist view (cf. Joos 1964 and Palmer 1974) tense is a morphological category and there can thus be only two tenses in English, the present tense (unmarked) and the past tense (marked by -ed). Leech (1971:52), although he represents the view that there is no future tense in English, admits that will/shall + infinitive 'provides English with its nearest approximation to a 'neutral' or 'colourless' future'. The difficulty lies in deciding when will/shall express this 'neutral' future and when they have to be taken as modal auxiliaries. Moreover, all modal auxiliaries can refer to the future. Thus, in (1) and (2) the processes referred to undoubtedly lie in the future.

- (1) I must write to him.
- (2) I might write to him.

It is in the nature of obligation, possibility, or willingness to do something that they refer to the future. Therefore, when will expresses volition or shall obligation the reference is to the future.

Wekker (1976:14-18), who represents the view that will/shall + infinitive could be called the future tense, bases his arguments on six points in the syntactic behaviour of will/shall as future auxiliaries:

- (i) A sentence containing will/shall as future auxiliaries can be passivized, which the modal will/shall does not allow, 'without radically changing the meaning of the sentence'. Thus John will meet Mary can be passivized to Mary will be met by John, whereas Johan won't meet Mary, if passivized to Mary won't be met by John, changes its meaning.

 (ii) The future will/shall does not normally occur in temporal and conditional clauses, whereas the modal will/shall does. Thus we have If you do that, you will only make matters worse but If you will do that I'll see that you won't regret it.
- (iii) Like the past tense, the will of futurity can be used in 'false, tense choice', while, for example, be going to cannot (cf. p. 112).
- (iv) In direct speech, the past tense forms of will and shall, ie. would and should, are 'quite uncommon' as expressions of the future-in-past, and this restriction in their use for past time reference is for Wekker 'evidence for their status as tense markers'.
- (v) Will/shall does not allow double negative marking, unlike may, must and can, which allow this.
- (vi) In short answers to yes/no questions will can occur instead of the modal auxiliary of the question (Do you think Mary might go? Yes, I think she will), which supports the view (see McCawley 1971) that will/shall can be treated as underlying future tense markers. On the basis of these points Wekker suggests that 'in a grammar of modern English the will/shall construction, rather than be going to, is best regarded as a primary marker of future tense, with be going to functioning as a suppletive form and a variant'.

From the point of view of the present semantically based analysis it is trivial whether will/shall is called a future tense marker or not; in the end it is only one of the various ways of referring to the future. From our point of view the most important question is its meaning, whether we can really have a 'pure', 'colourless' future, and more importantly, whether it is possible to make a clear distinction between the future and the modal will/shall.

In trying to decide when shall and will express 'pure' future and when modality, the writers on the subject have worked out paradigms for their

For McCawley (1971) will/shall is the future tense marker in English and differs from the present and past tense markers in being morphologically a modal verb and not an affix. This future marker is deleted or replaced by the present tense morpheme in a number of environments.

use, because the solution seems to be connected with the person of the subject. Palmer (1965:114-115) first works out a paradigm for the 'coloured' use of will/shall. His suggestion is that will indicates internal initiation by the subject and shall indicates external initiation by someone else. From this it follows that when the speaker talks about a process initiated by himself, he uses will. When he asks a question, he inquires about a process initiated by someone else and therefore asks Shall 1? or Will you? In the case of a third person subject the initiator is always external, whether it be the speaker or the addressee, and thus the form has to be He shall or Shall he? The paradigm for the 'coloured' use, then, is:

I will	Shall I?
You shall	Will you?
He shall	Shall he?
We will	Shall we?
They shall	Shall they?

By elimination this leaves the following paradigm for the 'pure' future:

I shall	Will I?
You will	Shall you?
He will	Will he?
We shall	Will we?
They will	Will they?

Two modifications have to be made to the latter paradigm: (i) in the first person shall and will are free variants in both statements and questions, (ii) shall in the second person belongs to literary but not to colloquial usage. The old paradigm used by some grammarians with its insistence that will is a future auxiliary only in the second person and third person no longer holds good. Present-day grammarians agree that will is used in the future sense in the first person throughout the English-speaking world (see eg. Quirk, Greenbaum, Leech and Svart-vik 1972:87).

The above paradigms together with Wekker's arguments indicate that it is possible to make a distinction on formal grounds between will/shall as auxiliaries in expressions of the future and as modal auxiliaries. It is quite a different question, then, whether this will/shall + infinitive

construction can be singled out as the future expression on a par with the present and the past tense. It is not even certain that it is the most common expression of future reference. Close (1970a:227-229), for example, refers to the growing use of the be going to construction. It is, he says, 'available for pure prediction', mainly in a conversational style. He describes it as 'a semantically unstressed construction when precision or a particular emphasis is not required, or is required - or at least made - at some other point in the utterance'. Close in other words gives the be going to construction the role of the 'neutral', 'colourless' future. The only way of reaching some decision in the midst of all this argument is by comparing will/shall + infinitive with the other possible expressions of futurity.

4.3.1.1. Will/shall in Contrast with Other Expressions

If there really is a 'pure', 'neutral' future, it means that this construction expresses nothing in addition to the fact that the point of event is later than the point of speech. Sharwood-Smith (1974) talks about a 'Future-Future' and distinguishes it from a 'Present-Future', which sees the future process as somehow related to the present. 'Pure future' would then mean that the only distinction between the following sentences would be a difference in time-reference:

- a. The Chancellor made a speech
- b. The Chancellor has made a speech
- c. The Chancellor makes a speech
- d. The Chancellor will make a speech

Leech (1971:52) describes the use of will/shall as future auxiliaries as having the meaning of prediction, 'something involving the speaker's judgement'. This view is also represented by Boyd and Thorne (1969), who analyse sentences containing modal verbs through the notion of the speech act, mainly following Austin (1962). They explain sentences containing will as having the illocutionary force of prediction. 'It must be emphasized that the only function of the modal verb will is to indicate that the illocutionary potential of the sentence in which it

occurs is that of being a prediction' (Boyd and Thorne 1969:63-65). The illocutionary force of a sentence with shall, is 'a demand that the speaker makes on himself'. (The paraphrase of a sentence like He shall go is I guarantee his going.) Thus, any of the following sentences could be paraphrased by 'I predict ...':

- (3) From now on everything will be different.
- (4) The price of alcohol will go up again.
- (5) In twenty years' time, the average employee will work a twenty-five hour week. (Leech's 1971 example)
- (6) It will rain tomorrow.

Of the other exponents of future reference mentioned at the beginning of this chapter (p.150), going to is possible in all the above contexts:

- (3a) From now on everything is going to be different.
- (4a) The price of alcohol is going to go up again.
- (5a) In twenty years' time the average employee is going to work a twenty-five hour week.
- (6a) It is going to rain tomorrow.

The question is naturally whether the sentences still contain an underlying 'I predict ...'. (6a) would for example be uttered in a situation in which the speaker sees that there are threatening clouds in the sky. (5a) could be used if the speaker wanted to emphasize that there was a tendency towards a twenty-five hour week. This implies that the speaker sees a connection between the state of affairs at the present and a future development, or 'the train of events leading to the future happening is already under way', as Leech (1971:55) puts it. Thus, what the speaker says about the future is based on his present knowledge or observations about the state of affairs. What, however, does the speaker base his predictions on if not on what he knows or can observe at the present? Therefore, making a distinction between sentences (3)-(6) and those in (3a)-(6a) seems like splitting hairs. There are, however, cases in which there is a difference in meaning, as between (7) and (8).

- (7) They are going to sell their house.
- (8) They'll sell their house if you ask them.

In (7) the emphasis is clearly on the present intentions of the subject, while in (8) their selling of the house does not depend on anything

connected with the present, but depends on whether a certain condition is fulfilled in the future. In this sense it can be said that (8) expresses a 'purer' future than (7), and that going to here also has the overtone of intention whereas (8) seems to be free from overtones that go beyond the condition expressed in the sentence. Consider a further example:

(9) That's the phone - I'll answer it.

In the situation in which this sentence could be uttered there is no need to emphasize the speaker's present intentions or preparations, because there is no time for them. It would be different if the phone had been ringing several times without anybody answering it, and finally the speaker had made up his mind to go and answer it. Then he might have said: Oh, I'm going to answer it. Neither is there any question of intention in (10)-(12), yet the going to construction would be more likely to occur than will/shall:

- (10) Help! I'm going to faint.
- (11) Look! That bus is going to overturn,
- (12) There is going to be a thunderstorm.

The contexts in which these sentences are likely to occur could be for example the following: in (10) the speaker feels sick and thinks that he/she will faint, in (11) a bus is turning round a corner too sharply and the speaker is afraid that it will overturn, and in (12) there are threatening clouds in the sky. In all three cases there seems to be an immediate danger of something happening in the near future. This imminence of the future event, or put less strongly, the nearness of the future event, is used as an explanation of the meaning of the going to construction. The concept of 'nearness' is, however, relative; it is difficult to define whether it means 'in a minute' or 'tomorrow' (cf. Fenn 1978:178). Thus, Leech's statement about this expression of the future indicating that 'the train of events leading to the future happening is already under way' is a more reliable explanation.

There are thus two explanations for the choice of going to: either something observable at present will be the cause of a future event or the person concerned intends doing something. The semantic interpretation of the going to construction is therefore twofold; it either connects the future process with a present cause or colours it with the subject's

intention. For obvious reasons the latter interpretation is possible only with a process which is voluntary, which depends on somebody's intentions. Another obvious limitation is that the subject has to be human, ie. capable of intention. 'Subject' here refers to the logical subject of the sentence, as this interpretation is also possible in the case of passive sentences:

(13) Those trees are going to be cut down.

Since the future process in (14) cannot be voluntary, the sentence cannot express intention:

(14) We are going to know the answer tomorrow.

The interpretation of (14) is something like: 'on the basis of a promise it is certain that we will know the answer tomorrow'. Again, in this case there seems to be virtually no difference between We are going to know and We'll know. In many cases these two constructions are so close to each other in meaning that any difference between them is a stylistic one: going to seems to be primarily used in informal spoken English, 'best regarded as typically conversational' (Wekker 1976:124).

While the difference between will/shall and going to is often very slight, or even non-existent in some cases, it is fairly easy to explain the reasons that lead to the choice of the other possible expressions of futurity. Consider the use of the present tense for future reference in (15)-(18) below.

- (15) The concert starts at 7.30.
- (16) The president arrives at midday.
- (17) We have dinner at 7 tonight.
- (18) We meet at Victoria at 9 o'clock.

Common to the above sentences is the fact that they obviously belong to definite plans or even schedules for the future. It is also part of this scheduling that a definite time is set for the future process. This is normally expressed in the same sentence through a time-specifier indicating a point. As a matter of fact, it is this time-specifier that makes the sentences refer to the future. Without it (15) and (16), for example, would only make sense if they were part of a running commentary, and the reference was to the moment of speaking (cf. p.97):

- (15a) The concert starts (at this very moment)
- (16a) The president arrives (actually walks in at the moment of speaking)

If, however, the time has been previously fixed, or is otherwise already known to the participants, there is no need for a specifier, as in (18a).

(18a) We meet at Victoria.

The time of the meeting has obviously been settled previously and the speaker now informs the listener about the place for the meeting.

As the sentences containing the present tense and referring to the future are part of a definite plan, there is a great deal of certainty involved in their use. Therefore, (19) is impossible and the occurrence of (20) highly unlikely.

- (19)* It rains tomorrow.
- (20) He dies tonight.

It is impossible to schedule rain or be absolutely certain about its future occurrence. (20) could only be uttered by someone planning a murder or execution.

The will/shall and going to constructions are also possible in sentences (15)-(18):

- (15b) The concert will/is going to start at 7.30.
- (16b) The president will/is going to arrive at midday.
- (17b) We'll/we are going to have dinner at 7 tonight.
- (18b) We'll/we are going to meet at Victoria at 9 o'clock.

The difference between these two constructions on the one hand, and the present tense on the other, is best explained through the wider contexts in which they are most likely to occur. The occurrence of the present tense is limited to contexts in which official programmes are discussed (see Sharwood-Smith 1972). Thus a sentence like (16), The president arrives at midday would most likely occur if the speaker was discussing an official programme for the president's visit and would be followed by other items of the schedule like 'he meets the Mayor at 12.30, has lunch at 1.30' and so on. As a matter of fact, if we are looking for an expression of futurity in English that merely states an objective fact without any colouring of intentions, willingness, desire and so on,

the present tense with a time-specifier would be the most likely candidate (see Fenn 1978). This expression of futurity denotes only a statement of fact that an event will take place at a point in the future.

A special use of the present tense for future reference occurs in conditional and temporal clauses. This occurrence of the present tense is often described as a result of the deletion of an underlying will/shall (eg. McCawley 1971), ie. as the use of the present tense instead of will/shall rather than as the choice of the present tense for future reference in its own right. The explanation sometimes offered is that the use of will/shall would be pleonastic in this case because the matrix clause usually contains will/shall and futurity is thus sufficiently clearly indicated (see Wekker 1976), as in (21)-(22).

- (21) I'll tell him when he comes.
- (22) We'll stay here if it starts raining.

If, however, the interpretation of the present tense as simply presenting a future event as a fact is accepted, this interpretation also explains its choice in conditional and temporal clauses. The meaning of the whole sentence containing a conditional or temporal clause would then be 'I predict X will happen if/when/after etc. Y is a fact' (cf. Leech 1971, Wekker 1976). This would also mean that the present tense in these cases is not a peculiarity of the syntactic pattern but reflects a contrast of meaning. If will/shall occurs in conditional and temporal clauses, it usually has a volitional meaning, although the will of futurity is sometimes found in conditional clauses, as in the following example (quoted by Palmer 1974):

(23) If the play will be cancelled, let's not go.

Clearly, will is not volitional in this sentence. Palmer's explanation is that will is needed here because the process in the conditional clause is subsequent to the process in the main clause (the relation is usually the reverse). Thus, the meaning of (23) is 'we should not go if the play is going to be cancelled subsequent to our going'.

The present tense combined with the progressive is also said to refer to present plans or arrangements made for the future (see Leech 1971, Close 1970, Sharwood-Smith 1972). How does it differ, then, from the present tense used in plans and arrangements? Palmer (1974:66) compares the following sentences:

- (24) I start work tomorrow.
- (25) I am starting work tomorrow.

He explains the difference between them by the fact that (24) implies an official decision by a firm or a doctor, while in (25) the speaker himself has made the decision. This seems to be the general view of the two alternatives. When the progressive present is used, the future event is planned by an individual, but in the case of the present tense the future event is part of an official plan or general arrangements, with the individual concerned having very little, if anything, to say in these arrangements (cf. Wekker 1976). This makes the occurrence of the progressive impossible in sentences like (26) (cf. Leech 1971).

(26) *The sun is rising at 2.30 tomorrow.
The sun rises at 2.30 tomorrow.

This is in keeping with the difference between the simple and the progressive present in their 'normal' functions as references to the present time-sphere: when the speaker talks about the permanent, natural order of things, he uses the simple present; the use of the progressive always includes the idea of incompleteness. Thus, the use of the progressive present emphasizes the fact that the future event is at the stage of being planned at present, as against the certainty of the occurrence of the future event involved in the use of the present tense (cf. Wekker 1976).

Neither is the idea of a plan made by a human agent far from present intentions. Therefore, the difference between the progressive present with future reference and the *going to* construction is again very slight. Compare the following:

(27) I am starting work tomorrow.

I am going to **start** work tomorrow.

The difference seems to be only in the stage of the arrangements, or, rather that in the former case the arrangements have already been made, whereas in the latter they are still at the stage of intentions. Leech (1971:58) remarks that only the former sentence could be uttered with some reluctance by someone who now regrets the arrangement, because an intention could not be regretted. Furthermore, the *going to* construction does not have the restriction of the progressive present of occurring only in references to processes that can be planned by human beings.

Thus, it can occur in sentences like (28), in which the progressive present is impossible.

(28) It is going to rain tomorrow.

*It is raining tomorrow.

Both going to and the progressive present differ from the simple present tense in that they do not necessarily need a time-specifier to accompany them in references to the future. Consider (29) and (30).

- (29) He is going to resign from his job. He is resigning from his job. He resigns from his job.
- (30) They are going to get married. They are getting married. They get married.

The last sentences in both (29) and (30) give the obvious impression that something is missing, and they are ambiguous between a future reference and reference to a repeated occurrence within the present time-sphere. Of course, it is possible to interpret the sentences with the present progressive as referring to the moment of speaking: 'He is resigning from his job at this very moment' and 'They are getting married at this very moment'. There are, however, contexts in which the progressive present without a time-specifier could not refer to the future but necessarily refers to the present, as in (31) and (32).

- (31) She is playing the piano.
- (32) They are climbing the mountain top.

There is no possibility of interpreting these last two sentences as referring to the future, without a time-specifier. The interpretation thus seems to depend on the nature of the process referred to. Processes such as 'resigning from a job' and 'getting married' can be described as achievements, which by their very nature cannot be presented as continuing in time, whereas processes like 'playing the piano' and 'climbing a mountain top' can be seen as in progress at a point in time. This is the reason why He is resigning from his job and They are getting married are most likely to be interpreted as referring to the future.

There is yet another possible construction for references to the future in English. This is the combination of will/shall and the progressive, as in (33) and (34).

- (33) They will be driving down to Helsinki on Friday.
- (34) We will be moving into a new flat soon.

Leech (1971:62) describes this construction as the 'future-as-a-matter-of-course' and explains its use in the following way:

It is tempting to speculate that this usage has grown up through the need to have a way of referring to the future uncontaminated by factors of volition, plan, and intention which enter into the future meanings of will/shall + Infinitive, the Present Progressive, and be going to + Infinitive.

This construction, of course, also has the meanings usually attributed to the progressive, ie. it can denote the imperfective aspect or limited duration or emphasize the fact that something will be in progress at a future point. Thus, an aspectual difference can exist between the two sentences in (35).

(35) He will write a letter tonight.

He will be writing a letter tonight (so, don't disturb him)

But this is not necessarily the case, as the latter sentence can simply denote that this act will take place tonight, not that it will be in progress at a certain point in the future.

If Leech's view is accepted, this construction is another candidate for the 'pure', 'neutral' future. The modal overtones of will/shall can be present in this construction. Perhaps this can be described as a more polite alternative to the will/shall construction, as Leech (1971:63) remarks, quoting the following sentences, the second of which expresses a much more polite inquiry than the first, rather abrupt sounding question:

(36) Will you put on another play soon?
Will you be putting on another play soon?

On the basis of the above discussion we can say that English shows

at least the following distinct attitudes to future events:

- (i) the future event is predicted
- (ii) emphasis is on the present cause for a future event
- (iii) emphasis is on the present intentions for the future
- (iv) the future event is part of an official programme
- (v) the future event is presented as part of a present plan or an 'unofficial' programme

Although these distinctions are often very slight and difficult to keep separate, each of the above attitudes to the future can be said to have an exponent characteristic of it. Owing to the nature of the 'attitudes', there are limitations as to the types of processes with which they can be connected. Moreover, since some of the expressions used also denote other temporal distinctions, time-specification is obligatory in some cases. Table 2. is an attempt to clarify this rather complicated situation:

Table 2. Expressions of future reference in English

"Attitude"	Limitations	Exponent	Time-specification
prediction		will/shall	optional
present cause		be going to	optional
present intention	human agent voluntary pro- cess	be going to	optional
official programme	certainty of occurrence	present tense	obligatory
unofficial programme	process capable of being initi- ated by human agent	progressive present	obligatory depen d- ing on type of process

To the above list of expressions of futurity others could be added: eg. be about to + infinitive, be to + infinitive, be destined to + infinitive. These expressions are, however, less important than the five discussed here (cf. Leech 1971, Wekker 1976). According to Leech (1971:65),

only be about to + infinitive is common enough 'to be worth comment' and is in meaning very close to going to + infinitive or the progressive present.

4.3.1.2. Future Reference and Mobality

In the foregoing discussion on the expressions of futurity, reference was made several times to the fact that the auxiliaries will and shall may retain at least some of their original meanings of willingness and obligation even when they can be considered as functioning as future auxiliaries. This fact is admitted even by those who prefer calling the will/shall + infinitive construction the Future Tense. Thus, for example, Wekker (1976:39) writes, 'It will be seen that, in a given context, the meaning of this tense may range from a plan or purely factual statement about the future, without the slightest trace of uncertainty or diffidence, to a more tentative speculation or prognostication, and that the idea of futurity is sometimes in greater or lesser degree coloured by that of volition.' It is therefore useful to look at will and shall as part of the system of expressions of modality in English. This consideration is also important because time and modality are closely connected within the future time-sphere.

The English modal verbs/auxiliaries, among which will and shall are included, are usually distinguished from other verbs through certain formal characteristics: their defective inflection, the fact that they cannot be immediately preceded by another verb, and the fact that they occur in questions and negative sentences without do (see eg. Ehrman 1966, Twaddell 1968). Semantically, they can be classified using the notions of necessity and possibility, which are central notions in general philosophical discussions of modality (cf. Lyons 1977). Another distinction usually made is between epistemic and deontic modality, ie. between making a judgement about the truth value of a proposition on the basis of one's knowledge of the state of affairs and expressing the necessity or possibility of a process. It is deontic modality that has 'an intrinsic connection' with futurity (see Lyons 1977).

When will and shall are distinguished as modal auxiliaries from their use as future auxiliaries, they are usually said to denote a volitional attitude (cf. Leech 1971). Thus, the following sentences can be said to contain this attitude:

- (37) I will write to him tomorrow.
- (38) I shall write to him tomorrow.
- (39) You shall have your money back tomorrow.
- (40) He shall pay dearly for what he has done.
- (41) I will do it whatever you say.
- (42) He'll help you.
- (43) Shall we go for a walk?
- (44) Will you come with us?

Different degrees of volition can be distinguished. Leech (1971) makes a distinction between weak, intermediate, and strong volition. Thus, (42) above would contain weak volition; one clue to this is that the auxiliary is weakly stressed. (37) and (39) would express intermediate volition and be very close to intention; (40) and (41) contain strong volition, which could almost be described as insistence. In the last two examples the speaker is inquiring about the addressee's willingness. The examples show that both shall and will can denote willingness: will the volition of the subject, shall that of the speaker. When these two coincide, both will and shall can be used. As will is used as a future auxiliary in all persons at the present time, it is especially difficult to distinguish the modal use from the future use, particularly since the weakly volitional will can be weakly stressed. Shall with a second or third person subject is undoubtedly volitional, expressing the speaker's volition. The only case in which it could denote the 'pure' future would be with a first person subject.

With will, the only way of deciding whether it is a modal auxiliary or a future auxiliary is often by the context: if the subject is inanimate - or non-human - and thus cannot be willing to do anything, or the process referred to is such that no one can desire it, we can be sure that will is non-volitional. These facts serve as explanations for the following examples, in which the reference is simply to future time without any volitional overtones:

- (45) It'11 rain tomorrow.
- (46) The letters will arrive tomorrow.
- (47) He'll be ill tomorrow.

The time reference in all the above sentences is to the future. This is natural: if will/shall expresses volition, it is natural that reference is to the future because what we desire lies in the future. Will, however, has a non-volitional sense which does not have to refer to the future. This is case in (48) and (49), which can be interpreted as containing an epistemic will, ie. the speaker draws conclusions about the present state of affairs on the basis of his knowledge.

- (48) That'll be the postman.
- (49) They will be at home now.

As was pointed out in connection with the present time-sphere (p.110), sentences like these can also be interpreted as containing a reference to the future: (48) 'if you open the door, you'll find the postman there', (49) 'if we phone them we'll find them at home'. There is a condition that the sentence has to fulfil for will to be interpreted as referring to the present: the aspect has to be imperfective. Ehrman (1966:34) apparently talks about the same requirement when she says, 'Neutral time function (equals what is called general present in this thesis) may be said to correspond to the contextually abstract. The other time function, future, may on the other hand be described in terms of concreteness. It always occurs in contexts referring to specific situations, in which unique events follow a linear time-determined sequence' 'Unique events' must be perfective in aspect. Ehrman, however, interprets sentences like (50) as having a neutral time function.

(50) A hypothetical example will illustrate the point.

Her argument is that the function of will is to assure that the example illustrates the point: 'The use of the example would have illustrated the point if applied before the writing of the article, it is a fact that it does so illustrate, and finally it is assured of doing so at any time'. This is a counter-argument to the one presented above in connection with (48) and (49), and both are equally convincing. All that can be said with certainty, therefore, is that the volitional will refers to the future. Moreover, in the case of the non-volitional will, interpretation at least partly depends on the context, and the reference can be to the present ('neutral time function') if the aspect is imperfective.

Aspect also plays a part in the interpretation of time reference in connection with modals denoting necessity. In the following sentences there is an expression of necessity or obligation and the reference is to the future:

- (51) I must write to him.
- (52) I have to finish this today.
- (53) You should do something to your hair.
- (54) I ought to read that book.

Even without any time specification it is obvious that the processes towards which necessity is felt are in the future. In most cases it is natural that necessity concerns something in the future rather than in the present. However, in (55)-(57) the reference is to the present.

- (55) They must be at home.
- (56) There must/has to be a mistake somewhere.
- (57) You ought to/should know this song.

In these sentences the modals can be interpreted as epistemic, ie. the sentences could be paraphrased by something like 'It must/should/ought to be the case that ...' When compared with the processes in (51)-(54) those in (55)-(57) are different: they are states, ie. imperfective, whereas those in the former are perfective. The same difference can be seen between (58a) and (58b), (59a) and (59b).

- (58a) They must come home now.
- (58b) They must be coming home now.
- (59a) They should sail across the Atlantic.
- (59b) They should be sailing across the Atlantic.

In the (a)-sentences the aspect is perfective and the reference to the future, in the (b)-sentences the aspect is imperfective and the reference to the present.

Similar considerations also apply to those modals that denote possibility, or 'no obstruction' in Ehrman's terms. Thus, in (60a) the time-reference is to the future, and in (60b) the reference-to-the-present interpretation is possible, and becomes clear if a time-specifier is added:

- (60a) They may/might sail across the Atlantic.
- (60b) They may/might be sailing across the Atlantic (now).

In (61) and (62) the processes are states, ie. the aspect is imperfective, and the reference can only be to the present.

- (61) There may/might be a mistake somewhere.
- (62) A dark bathroom can be very scary.

In (63), the reference can, however, only be to the future, the aspect is perfective, and the process is an achievement.

(63) They may/might/can reach the mountain top.

The most important conclusion that can be drawn from the above discussion is that in connection with modal auxiliaries the interpretation of time reference depends at least partly on the aspect, as does the interpretation of the modal auxiliary as epistemic or deontic. Time reference can be interpreted as applying to the present when the aspect is imperfective. Naturally, there are sentences which refer to a generic fact although the process is an achievement or an accomplishment, as in the following:

- (64) The engine can be removed from the boat with ease.
- (65) You must take your flashlight when you go out.

Although these sentences can be interpreted as referring to the general possibility or necessity of the process, it can still be argued that the actual process lies in the future.

4.3.2. Expressions of Futurity in Finnish

The system of expressions of futurity is much less complex in Finnish than it is in English. There are three main alternatives, as the list on page $150\,\mathrm{already}$ demonstrated: the present tense, the compound present, and the $tulla+3\mathrm{rd}$ infinitive construction.

- (66) Kansleri pitää puheen.
- (67) Kansleri on pitävä puheen.
- (68) Kansleri tulee pitämään puheen.

The difference between these alternatives could be said to be on the scale of certainty involved in their use. The two latter ones, ie. the compound present and the *tulla* + 3rd infinitive construction, denote a stronger

conviction about what is going to happen than the present tense, which is therefore the most common, most 'neutral', of the alternatives. Because the other two emphasize the speaker's conviction about future events, they are strange in sentences like (69).

(69) Jonakin päivänä minä kuolen.

Jonakin päivänä minä olen kuoleva.

Jonakin päivänä minä tulen kuolemaan.

(One day I'11 die.)

One's death some day is so certain that there is no need to sound particularly convincing about it. The degree of certainty is not the only difference between the alternatives; there is also what could be described as a stylistic difference: the compound present has very solemn, almost prophetic overtones. Thus, it is used in very formal language, mainly in predictions to which the speaker wants to give a reassuring tone (see Ikola 1949:158, Saarimaa 1967:233). The tulla + 3rd infinitive construction is less formal and solemn than the compound present but has a more formal overtone in this context than the present tense. However, it can occur in contexts like the following:

- (70) Tästä lähtien kaikki muuttuu/tulee muuttumaan. (From now on eyerything will be different.)
- (71) Alkoholin hinta nousee/tulee nousemaan taas. (The price of alcohol will go up again.)
- (72) Kahdenkymmenen vuoden kuluttua keskivertotyöläinen tekee/tulee tekemään töitä 25 tuntia viikossa.)
 (In twenty years' time the average employee will work a twenty-five hour week.)

Because, however, it denotes a strong conviction, it is natural in contexts in which the speaker wants to sound particularly reassuring:

- (73) Hän tulee tekemään sen. (He will do it.)
- (74) Jonakin päivänä tulet ymmärtämään tämän asian. (One day you will understand this.)

With the compound present, the above sentences would sound prophetic, as suggested above:

- (73a) Hän on sen tekevä.
- (74a) Jonakin päivänä olet ymmärtävä tämän asian.

There are, however, cases in which the present tense alone is not enough to make the time-reference to the future unambiguous; this is the case when there is no time-specifier in the sentence, as in (75)-(78).

- (75) Se on vaikeaa. (It is/will be difficult.)
- (76) En koskaan ymmärrä niitä lääkäreitä, jotka vaativat, että ihmisen pitäisi hyväksyä sairautensa.
 (I never understand/will never understand doctors who demand that one should accept one's illness.)
- (77) Hän on varmaan ylpeä sinusta. (She is/will be proud of you.)
- (78) Meidän lapsemme elämä on rikkaampi kuin meidän. (Our child's life is/will be richer than ours.)

In these cases the speaker has to use one of the other alternatives to make the time-reference to the future unambiguous. No time-specifier is possible in these contexts because no particular point in the future is referred to; the time is simply vaguely later than the moment of speaking.

- (75a) Se tulee olemaan vaikeaa.
- (76a) En tule koskaan ymmärtämään niitä lääkäreitä, jotka vaativat, että ihmisen pitäisi hyväksyä sairautensa.
- (77a) Hän tulee varmaan olemaan ylpeä sinusta.
- (78a) Meidän lapsemme elämä tulee olemaan rikkaampi kuin meidän/on oleva rikkaampi ...

Nevertheless, there are contexts in which the present tense alone is enough, even though there is no time-specifier referring to the future, as in (79)-(81).

- (79) Kaikki saavat kuitenkin tietää totuuden. (Everybody will learn the truth anyway.)
- (80) Uusi johtaja panee asiat järjestykseen. (The new manager will put things in order.)
- (81) Hän tekee sen kyllä. (He'll do it.)

The processes in the above sentences are accomplishments and the aspect in them is perfective (marked by a [+total] object). As was pointed out in connection with aspect, these types of processes, which are perfective, cannot combine with present time-reference. If the aspect is imperpective - and the object [-total] - the reference is to the present:

(80a) Uusi johtajamme panee asioita järjestykseen. (The new manager is putting things in order.)

Thus, in this case the form of the object denotes both an aspectual difference and a difference in time-relations at the same time. The same naturally applies to achievements, which are inherently perfective and as such the time-reference with them cannot be to the moment of speaking, with a few exceptions (cf. p.96). Thus, the reference is to the future in the following sentences, which refer to achievements and contain the present tense form:

- (82) Me löydämme kyllä sen virheen.
 (We will find that error.)
- (83) He saavuttavat vuorenhuipun. (They'll reach the mountain top.)

Thus, we can summarize the situation in Finnish in the following way:

(i) the present tense is the most common alternative for expressing the future time-reference, (ii) it has to be accompanied by a time-specifier, unless the aspect is perfective and the reference could not be to the present; (iii) the other two alternatives emphasize greater reassurance and are stylistically more formal than the present tense, but they have to be used when the process is imperfective in aspect (thus necessarily with activities and states) and there is a time-specifier in neither the same sentence nor the context.

The contrastive question, of course, is how these Finnish exponents of futurity correspond to those in English. The decisive factor in the choice between the alternatives in English was the speaker's 'attitude' towards the future event, ie. whether he wanted to make a prediction about it, whether he wanted to emphasize the present cause of future events or saw them as only being intended at the moment of speaking or as part of a plan, official or unofficial.

Where English has a predictive future with will/shall as its chief exponent, Finnish could have any of the three alternatives, with the stylistic differences and differences in the degree of certainty described above. Sentences (84)-(86) exemplify this.

- (84) Huomenna sataa/tulee satamaan/on satava. It will rain tomorrow.
- (85) Jonakin päivänä ymmärrät/tulet ymmärtämään/olet ymmärtävä tämän asian.
 (One day you'll understand this.)

(86) Kahdenkymmenen vuoden kuluttua keskivertotyöntekijä työskentelee/tulee työskentelemään/on työskentelevä 25 tuntia viikossa.

(In twenty years' time the average employee will work a twenty-five hour week,)

When the speaker's attitude to the future event can be described through the present cause' and English uses the *going to* construction, the only possibility in Finnish seems to be the present tense, as seen in (87)-(89).

- (87) Apua! Minä pyörryn! (Help! I'm going to faint!)
- (88) Katso! Tuo bussi kaatuu!
 (Look! That bus is going to overturn!)
- (89) Hän saa toisen lapsen. (She's going to have another baby.)

The other alternatives, the *tulla* + 3rd infinitive construction and the compound present, are possible in (89), but, if used in that context, they would change the connotation of the sentence to a prediction, or an almost solemn prophecy. Thus, *Hän tulee saamaan toisen lapsen* could be uttered by a soothsayer. Another reason why these alternatives are impossible in the above sentences, particularly in (87)-(89), is that their reference is to the immediate future, and the other alternatives can only refer to a more distant future. Moreover, the present tense alone is enough for future reference in these cases because the processes ('faint' and 'overturn') are achievements, and, as such, momentaneous and it is not possible for them to be in progress at the moment of speaking. Nor are these sentences parts of commentaries of events taking place at the moment of speaking, with the consequence that they can only refer to the future.

Where the *going to* construction in English denotes 'present intention' Finnish uses either the present tense or the verb aikoa ('intend') as seen in (90)-(92):

- (90) Jussi aikoo viedä/vie Maijan ulos päivälliselle. (John is going to take Mary out to dinner.)
- (91) He myyvät/aikovat myydä talonsa. (They are going to sell their house.)
- (92) Nuo puut kaadetaan/aiotaan kaataa. (Those trees are going to be cut down.)

The problem here is that the present tense as an alternative in this case does not convey the idea of intention and makes the future event too certain, unless the context makes it clear in some way that intention is meant. On the other hand, the verb aîkoa overemphasizes the idea of intention and does not really convey the connotation of the English going to, which does not mean the same as intend. The verb intend does not imply that the intention is really carried out, whereas going to has this assumption (cf. Leech 1971:55).

The most natural expression for 'programmes' for the future, whether official or unofficial, is again the present tense:

- (93) Konsertti alkaa klo 19.00 (The concert starts at 7 p.m.)
- (94) Presidentti saapuu puolen päivän aikaan. (The president arrives at midday.)
- (95) Tapaamme asemalla klo 9. (We meet/are meeting at the station at 9 o'clock.

Again, the other alternatives would sound much too predictive to be used in the context of programmes for the future, eg. Tulemme tapaamaan asemalla klo 9. would sound more like the prediction of a future event than a programme. Thus, we cannot distinguish an 'official' programme from an 'unofficial' one in Finnish. Both I start work tomorrow and I'm starting work tomorrow would be rendered in Finnish as Aloitan työt huomenna. A possibility for expressing a 'programme' is the construction olla määrä + infinitive, whose literal meaning is something like 'to be destined to'. This construction, however, has the connotation that 'this is the plan but something might change it', and thus it is not as neutral as the present tense.

Thus, if we look for equivalents among the English and Finnish exponents of future time-reference, we have to conclude that (i) the predictive will/shall in English has three possible equivalents in Finnish: all three alternatives can be said to express this connotation, except that the compound present and the tulla + 3rd infinitive construction denote a greater degree of certainty than the English will/shall, and often have stylistic limitations in their use, which the English will/shall does not. (ii) Of all the other 'attitudes' to the future expressed in English, only present intentions can be said to find a special expression in Finnish, although again this possibility, the verb aikoa, carries much too strong a connotation to be an exact equivalent of the

English going to. In all the other cases the present tense in Finnish is the equivalent for the English expressions of futurity.

The simple conclusion that can be drawn from the results of the comparison is that the distinctions made in English between different attitudes to future events are not important in Finnish. The Finnish expressions vary only in the scale of certainty. Leech (1971:65) has arranged the English expressions of futurity on such a scale: the simple present tense is the most certain, followed by will/shall + infinitive and will/shall + progressive infinitive, and the least certain are going to and the present progressive. In Finnish, the present tense is the least certain alternative.

As the present tense is the most common expression used for future reference in Finnish, time-specifiers necessarily play a more important role in Finnish than they do in English. In many cases there is no need for a specifier in English as will/shall and going to at least are enough to make the time-reference unambiguous. The time-specifiers are not always obligatory in Finnish either, even when the present tense is used to refer to the future, either because of a perfective aspect or because the process as such can only refer to the future, or owing to the context, which can make the futurity sufficiently clear.

4.3.2.1. Modality and Futurity in Finnish

Finnish does not pose the same kind of problem in the relations of futurity and modality as English does: in Finnish there is no modal auxiliary that would also function as a future auxiliary in the same way as the English will/shall. In Finnish there are verbs expressing necessity (eg. täytyy/pitää) which are, in a way, defective: they occur only in the third person singular. On the other hand, some writers talk about modal verbs in Finnish as including all verbs that take another verb as a complement, if both verbs have identical subjects (cf. Siro 1951, Penttilä 1963). Thus, in Minä haluan lähteä ('I want to go') haluta is a modal but in Minä haluan Jussin lähtevän ('I want John to go') it is not. Only those verbs that denote necessity or possibility and can be regarded as the equivalents of the English modal auziliaries will be considered here. These verbs differ from verbs like haluta

in that in sentences in which they occur the complements cannot have separate surface subjects. (See also Hakulinen 1973 on modal verbs.)

With these verbs, like their English counterparts, two interpretations are possible: an epistemic and a non-epistemic interpretation. The same restriction holds in Finnish in the epistemic interpretation as in English: the aspect has to be imperfective. Thus, the modals are epistemic and the time reference consequently to the present in the following sentences, in which the verbs denote states and are thus imperfective in aspect:

- (96) Tässä täytyy/saattaa olla jokin virhe. There must/may be a mistake here.
- (97) Pimeä kylpyhuone saattaa/voi olla pelottava. A dark bathroom may/can be scary.
- (98) Sinun pitäisi tuntea tämä laulu. You ought to know this song.
- (99) He saattayat olla purjehtimassa Atlantin yli. They may be sailing across the Atlantic.

On the other hand, the reference is clearly to the future in the following sentences in which the aspect is perfective:

- (100) Sinun pitäisi lukea tämä kirja. You should read this book.
- (101) He saattavat purjehtia Atlantin yli.
 They may sail across the Atlantic.

If the modal verb denotes, not possibility or necessity, but a person's ability, ie. osata/kyetä/pystyä in Finnish and can in English, reference can be to the present even though the aspect is perfective. Thus, in (102) and (103).

- (102) Minä osaan neuloa villapuseron. I can knit a sweater.
- (103) He pystyvät purjehtimaan Atlantin yli. They can sail across the Atlantic.

Although the process has not yet taken place or is not yet taking place, the ability is there at the moment of speaking.

Finnish has no modal verb that could be considered as an equivalent of the English will/shall. Even in the cases in which will/shall is considered to have a volitional meaning, and does not simply function

as a future auxiliary, the most natural equivalent in Finnish is the present tense form, as the following translations of the English examples (37)-(44) on page 165 show:

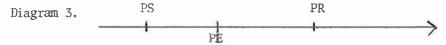
- (104) Kirjoitan hänelle huomenna.
 I will/shall write to him tomorrow.
- (105) Saat rahasi takaisin huomenna. You shall haye your money back tomorrow.
- (106) Hän maksaa tästä vielä kalliin hinnan. He shall pay dearly for this.
- (107) Teen mitä tahansa pyydät. I'll do whatever you ask.
- (108) Hän auttaa sinua. He'll help you.
- (109) Menemmekö kävelylle? Shall we go for a walk?
- (110) Tuletko mukaan? Will you come with us?

The fact that the most natural equivalent in Finnish for the 'volitional' will/shall is the present tense rather than a verb denoting willingness such as haluta/tahtoa ('want') seems to indicate that the idea of volition is not very strong in the English originals either. Consequently, making a distinction between a futuristic and volitional will/shall is unnecessary and Ehrman's (1966) analysis of them as meaning that 'the occurrence of the predication is guaranteed' is more plausible. Like other modals, if we include will/shall in the modals on the basis of their syntactic behaviour, they can refer to the present when the aspect is imperfective. This is the case in the following example:

(111) She will sit for hours without saying a word.
Hän saattaa istua tuntikausia sanomatta sanaakaan.

Both languages thus show that sentences with verbs denoting modality, ie. necessity or possibility, have the tendency to refer to the future, particularly when the aspect is perfective. When the aspect is imperfective, the time-reference is very likely to be to the present, in which case an epistemic interpretation of the modal is also likely.

The term 'past in the future' was given above (p.149) to the timerelation that can be described as having both the point of reference and the point of event later than the point of speech, and the point of event earlier than the point of reference. This can be shown diagrammatically as:



This temporal relationship is exemplified in the following English and Finnish sentences:

- (112) I'll certainly have finished the book by tomorrow. Olen varmasti lukenut kirjan huomiseen mennessä.
- (113) They'll have eaten everything by the time we get there. He ovat syöneet kaiken siihen mennessä, kun me ehdimme sinne.
- (114) By next Wednesday we'll have moved into a new flat. Ensi keskiviikkoon mennessä olemme muuttaneet uuteen asuntoon.

The point of event does not have to be identified but it is obvious that it is between the point of speech and the reference point in the future, which is expressed through a time-specifier of the type by + NP or S/NP or S + mennessä. Leech (1971:54) remarks that it could also fall somewhere before the moment of speaking, ie. the period within which the event falls has begun before the speaker's now. He gives the following example:

(115) By next week-end I'll be sick of exams; I'll have had four exams last week and another four in the coming week.

The processes in the above examples are all accomplishments. Achievements can also occur in connection with this time-relation but not states or activities as such, which means that the aspect must be perfective. (116) contains an achievement, (117) and (118) refer to activities and show their incompatibility with the past in the future.

(116) Come back tomorrow, I'll certainly have found an answer to your problem by then.

Tule takaisin huomenna. Olen varmasti löytänyt vastauksen ongelmaasi siihen mennessä.

- (117)* He will have run in the street by two o'clock.
 *Hän on juossut kadulla kahteen mennessä.
- (118) *We will have waited for him by tomorrow.

 *Olemme odottaneet häntä huomiseen mennessä
- (119) and (120), on the other hand, are acceptable.
 - (119) He will have run a mile by two o'clock. Hän on juossut mailin kahteen mennessä.
 - (120) We will have waited for him for two days by tomorrow. Olemme odottaneet häntä kaksi päivää huomiseen mennessä.

According to our analysis, run a mile/juosta maili is not an activity but an accomplishment and, as such, is perfective in aspect. 'Waiting' in (120) is still an activity but its duration is now limited by the time-specifier for two days/kaksi päivää. The necessary requirement for this time-relation is, then, that the process is completed in one way of another. Either the aspect is perfective or, if imperfective, the duration of the process is limited in time. This requirement applies naturally to states as well. (121), without a limiting period of time, is unacceptable, whereas (122) is acceptable.

- (121)★ Next Sunday they will have been married.
- (122) Next Sunday they will have been married for twenty-five years.

The state or the activity can continue past the point of reference but the part in which the speaker is interested is completed. The continuation of the process beyond the point of reference can be indicated in English by using the progressive, but in Finnish there is no special way of suggesting this, unless the adverb jo ('already') can be interpreted in this way:

- (123) Tonight the competitors will have been driving their cars continuously for twenty-four hours.

 Tänä iltana kilpailijat ovat ajaneet yhtäjaksoisesti jo kaksikymmentäneljä tuntia.
- (124) Tomorrow we'll have been living here for two years. Huomenna olemme asuneet täällä jo kaksi vuotta.

As the examples show, the expression of futurity in this case consists in English of shall/will + perfect infinitive, and in Finnish simply of the present perfect. In Finnish there is, however, another possibility in the case of activities and states: the construction consisting of

tulla + the translative of the 2nd participle, as shown in (125) and (126).

- (125) Tänä iltana kilpailijat tulevat ajaneeksi kaksikymmentäneljä tuntia.
 - (Literally: Tonight the competitors will come into the state of having driven for 24 hours.)
- (126) Kymmenen minuutin kuluttua tulemme odottaneeksi häntä jo kaksi tuntia.

(Literally: In ten minutes' time we shall come to the state of having waited for him for 2 hours.)

With accomplishments and achievements this construction has a different meaning, if it is at all possible when the reference is to the future. Thus, the acceptability of (127) is doubtful.

(127)?Tulen varmasti löytäneeksi vastauksen ongelmaan huomiseen mennessä.

The meaning of this sentence is roughly 'I'll certainly happen to find the answer to the problem by tomorrow' and is similar to the meaning of the construction connected with references to the past: Tulin löy-täneeksi vastauksen ongelmaan ('I happened to find an answer to the problem'). Thus, it is only with activities and states that this construction can have the meaning of 'coming into the state of having done something', ie. having completed a period of time filled with that activity or state, and be a possible way of expressing the past in the future.

In English the past in the future is normally expressed by will/shall + perfect infinitive (the addition of the progressive is also possible). Of the other alternatives for expressing futurity going to could be combined with the perfect infinitive, but the construction is clumsy, as is seen in (128).

(128) I am going to have finished the book by tomorrow.

It is noteworthy that the point of event is the same in (128) as it is in *I* am going to finish the book by tomorrow. The same applies to the sentences in (129) and their Finnish equivalents in (130).

(129) I'll find the answer to your problem by tonight.

I'll have found the answer to your problem by tonight.

(130) Löydän varmasti vastauksen ongelmaasi tähän iltaan mennessä. Olen varmasti löytänyt vastauksen ongelmaasi tähän iltaan mennessä.

The actual time of finding the answer could be the same in both sentences but the point of reference is different: in the first sentence the speaker views the finding of the answer from the moment of speaking, i.e. uses this as a point of reference, while in the latter he uses to-night as his reference point, with the result that finding the answer must precede it. It is noteworthy that having the point of speech as the point of reference and specifying a point in the future and then presenting the process as occurring between these two points is possible only with accomplishments and achievements, not with states and activities. Therefore, (131) and (132) are unacceptable.

- (131) *We'll wait for him for two hours by 2 o'clock.
 *Odotamme häntä tunnin kello kahteen mennessä.
- (132) *He ovat naimisissa 25 yuotta ensi sunnuntaihin
 mennessä.
 *They'll be married for twenty-five years by
 next Sunday.

The essential point about the past in the future, and this applies to both English and Finnish, is that the process must be seen as completed by a point in the future, which point has to be explicitly specified. Completion is expressed either by making the aspect perfective or, in the case of inherently imperfective activities and states, by giving a period of time which has been filled up by the activity or state, thus giving the impression that something has been completed.

If the past in the future is part of a programme for the future, the present perfect is possible also in English;

(133) At midday the president has arrived. He then has lunch with the Mayor and ...

4.3.4. Future and Aspect

Although the same considerations that applied in the case of reference being to the present or to the past also apply to aspect in connection with expressions of futurity, there are certain points that deserve special mention in connection with futurity.

First of all, there is a problem of interpretation, or a case of ambiguity, in English. This is caused by the fact that the progressive occurs in the expressions of futurity without necessarily denoting imperfectivity. Thus, I'm starting work next week is no more imperfective in aspect than I start work tomorrow. The rule that the aspect is always imperfective when the progressive is used (cf. discussion on aspect and the use of the progressive, p.87) does not necessarily hold when the reference is to the future. This is particularly true in the case of the construction will/shall + the progressive infinitive, or 'future-as-a-matter-of-course'. Consider the ambiguity of (134).

(134) He'll be writing a letter tonight.

This sentence can be interpreted as referring to the fact that a letter will get written tonight 'as a matter of course', ie. the aspect is perfective, or to the fact that letter writing will be in progress at a point of time in the future. The latter interpretation is the only one if an exact point of time is specified:

(135) At 8 o'clock tonight he '11 be writing a letter.

Write a letter is a verb phrase that requires the use of the progressive if the aspect is imperfective because otherwise it denotes an accomplishment. However, verbs/verb phrases which can only denote activities and with which the aspect is inherently imperfective also require the progressive when an exact point of time is specified. The progressive is then necessary to indicate that the activity will be going on at that point, not beginning at that point. Compare (136) and (137) in this respect.

- (136) We'll celebrate when he comes.
- (137) We'll be celebrating when he comes.

In (136) celebration starts when the person concerned has arrived, in

(137) it is going on at the point when he walks in. This is, however, a problem of aspectual difference only in the case of verbs capable of denoting accomplishments and with activities, with which it is a problem of interpretation between an inchoative activity and an activity in progress. With states and achievements it does not arise at all since the former are imperfective and the latter inherently perfective, and thus no ambiguity is found.

(138) I'11 be arriving at 10.

(138) has only one interpretation: my arrival will take place at 10. Normally, states are not even possible with the progressive, and thus the progressive present with future reference is impossible with them.

The problem does not arise with most Finnish verbs/verb phrases capable of denoting accomplishments because the aspectual difference is indicated by the form of the object:

- (139) Kirjoitan kirjeen tänä iltana. I'll write a letter tonight.
- (140) Kirjoitan kirjettä tänä iltana. I'll be writing a letter tonight (ie. I'll be writing at some point tonight.)

As has become obvious in earlier contexts, there are some verbs/verb phrases in Finnish which need the progressive if the aspect is to be made imperfective. This is also true when the reference is to the future:

(141) Voit mennä tapaamaan häntä ensi sunnuntaina. Olen varma, että hän on silloin jo toipumassa. You can go and see her next Sunday. I'm sure she'll be recovering then.

Without the progressive the sentence (... han toipuu silloin/she'll recover then) would refer to a sudden, miraculous recovery at a future point.

The main points made in the foregoing discussion on the expressions of futurity in English and Finnish can be summarized as follows:

- 1. In both languages only two types of relations within the future timesphere need to be distinguished: (i) the point of event is simultaneous with or later than the point of reference and (ii) the point of event is earlier than the point of reference.
- 2. Both languages have more than one way of expressing the first of these relations, with English having more alternatives than Finnish.
- 3. Among the English expressions of futurity the present tense can be singled out as the only one that merely indicates the time-relation. All the others are coloured by a special attitude to the future: will/shall could be paraphrased by 'I guarantee the taking place of the process'; going to emphasizes a present cause for the future process or the intentions of the subject; the progressive present emphasizes a present plan for the future.
- 4. The differences between the Finnish alternatives are either stylistic or concern the degree of certainty about the future. The present tense is the mildest and most neutral of the alternatives. Thus, it can be said that there is a similarity between English and Finnish that both use the present tense to denote a time-relation without particular connotations. Otherwise the correspondence between the English and the Finnish alternatives is such that all the Finnish alternatives can correspond to the English shall/will, depending on which of the Finnish alternatives stylistically fits the context. The present tense in Finnish corresponds to all the other English alternatives. The overtone of prediction (or even prophecy) is so strong in the tulla + 3rd infinitve construction and in the compound present that these alternatives are ruled out in the contexts of programmes/plans/intentions for the future. Norare they suitable in contexts in which the imminence of the future event is felt to be strong. On the other hand, none of the English alternatives seems to have as strong a predictive connotation as, in particular, the Finnish compound present. Thus, emphasis is put on different attitudes towards the future in English and Finnish: in Finnish it is on the certainty of the future process, in English on plans, programmes etc. There are, however, contexts in which one of the stronger alternatives has to be used, ie, contexts in which the reference to the

future is not otherwise clear, or there is no time-specifier, or the aspect is not perfective, which in most cases means that reference is to the future rather than to the present.

- 5. The role of time-specifiers is more important in Finnish than in English, owing to the use of the present tense as the most common expression of futurity. In English only two of the alternatives, the present tense and the progressive present, need a time-specifier to make the situation unambiguous. Aspect also plays a more important role in Finnish than in English in the interpretation of time-reference: The fact that the aspect is perfective(often expressed on the surface by a total object) is often enough to make a clear time-reference to the future, whereas the imperfective aspect often implies that the reference is to the present. In English aspectual distinctions are important only in the case of the progressive present. The role of aspect is important in both languages in sentences which contain a modal auxiliary. In both languages these sentences are interpreted as referring to the future when the aspect is perfective, and only the imperfective aspect allows, in most cases, a reference-to-the-present interpretation and consequently the epistemic interpretation of the modal as well.
- 6. When the point of event is earlier than the point of reference both languages have the same requirement, in that the process must be completed by a certain point in the future, which point also has to be specified. The completion of the process can be denoted by the perfective aspect or, in the case of states and activities, by a timespecifier that puts a limit on the process. The correspondence in this time-relation is between the English will/shall + the perfect infinitive and the Finnish present perfect, with the addition of an alternative way in Finnish in the case of durational processes, ie. the tulla + translative of 2nd infinitive construction.

5. TENSES IN COMPLEX SENTENCES

The preceding analysis has been for the most part concerned with expressions of time-relations in individual simple sentences, with some consideration of a wider context whenever explanations have necessitated this. This does not give the total picture of the problems connected with expressions of time in either English or Finnish. Complex sentences, ie. sentences containing subordinate clauses and infinitival, gerundival or participial constructions, exhibit phenomena which do not follow the rules of tense-choice in simple sentences. The most important among these are the phenomena known as 'tense replacement', 'shifting of tense', and 'sequence of tenses'.

5.1. Tense Replacement and Shifting of Tense

Tense replacement is connected with the expressions of time within the past time-sphere and found in both English and Finnish. The term refers to the neutralization of the differences between the past tense, the present perfect and the past perfect. One of the contexts in which it takes place is complementations which take the form of an infinitival construction in English, ie. sentences like (1)-(3), (McCawley's (1971) examples).

- (1) John is believed to have arrived at 2,00 yesterday,
- (2) John is believed to have drunk a gallon of beer by now.
- (3) John is believed to have already met Sue when he married Cynthia.

The three infinitival constructions represent different underlying timerelations. This is seen in the following paraphrases of the above sentences:

- (1a) People believe that John arrived at 2,00 yesterday.
- (2a) People believe that John has drunk a gallon of beer by now.
- (3a) People believe that John had already met Sue when he married Cynthia.

Similarly, neutralization takes place in gerundival nominalizations like the following:

- (4) John's having arrived at 2.00 yesterday surprises me.
- (5) John's having drunk a gallon of beer by now surprises me.
- (6) John's having already met Sue when he married Cynthia surprises me.

Paraphrases again show the different underlying time-relations of the above sentences:

- (4a) The fact that John arrived at 2.00 yesterday surprises me.
- (5a) The fact that John has drunk a gallon of beer by now surprises me.
- (6a) The fact that John had already met Sue when he married Cynthia surprises me.

A third environment in which neutralization takes place is sentences containing a modal auxiliary:

- (7) John may have arrived at 2.00 yesterday.
- (8) John may have drunk a gallon of beer by now.
- (9) John may have already met Sue when he married Cynthia.

The reason why the sources can be seen as the past, the present perfect, and the past perfect respectively is their compatibility with only certain types of time-specifiers: at 2.00 yesterday is possible only with the past tense, by now only with the present perfect, and already ... when only with the past perfect. Jespersen (1931:88), when talking about the 'perfect infinitive' as corresponding 'notionally to the preterite and pluperfect as well as the perfect', refers to instances like the following, in which the perfect infinitive is replaced by do in the past tense:

(10) He may have heard me: I think he did.

McCawley (1971:101) suggests that 'there must be a stage in the derivation at which modals can be followed by present, past, present perfect, and past perfect'. All instances of this neutralization have one feature in common: the tense morpheme does not undergo subject-verb agreement. Tense replacement can therefore take place in instances in which the subject-verb agreement does not apply. McCawley further suggests that all underlying have's could be taken as underlying past tenses.

Smith (1976) argues against McCawley's interpretation. She first points out that the present perfect can also occur with a time-specifier denoting a definite point. This happens in iterative sentences like John has arrived at 2 for years, and these have to be accounted for in the grammar. Another point that she brings out is the fact that have does not only occur with past time-adverbials but with present and future adverbials as well, as in Evelyn may have won the race tomorrow. This, according to Smith, means that have should be treated here, as well as elsewhere, as a relational element indicating anteriority of the event time in relation to reference time. What Smith does not take into account is that, although the present perfect is compatible with time-specifiers denoting a point in iterative sentences, it is never compatible with specifiers referring exclusively to the past. A specifier like at 2.00 is not limited to the past but can equally well refer to a future point, whereas yesterday can only refer to the past. There are no contexts in which the present perfect could occur with yesterday or, vice versa, a past tense form could occur with a specifier like by now. Thus, Smith's arguments do not change the fact that the sentences in (1)-(3), (4)-(6), (7)-(9) above have different sources, ie. that there are environments in which the distinction made through choosing a past tense form, a present perfect form or a past perfect form is neutralized. In English the constructions in which neutralization occurs are to + V, V, -ing, and modal aux. + V.

In Finnish a similar neutralization is possible in embeddings which appear on the surface in the form of the second participle, as in (11)-(13).

- (11) Jussin uskotaan saapuneen eilen klo 14.00 (John is believed to have arrived at 2.00 yesterday.)
- (12) Jussin uskotaan juoneen 5 litraa olutta tähän mennessä. (John is believed to have drunk 5 litres of beer by now)
- (13) Jussin uskotaan tavanneen Liisan jo ennen kuin hän meni naimisiin Maijan kanssa. (Jussi is believed to have already met Liisa when he married Maija.)

These can be paraphrased by using että (that)-clauses:

(11a) Uskotaan, että Jussi saapui eilen klo 14.00 on saapunut eilen klo 14.00 (It is believed that Jussi arrived/*has arrived at 2.00 yesterday,)

- (12a) Uskotaan, että Jussi on juonut viisi litraa olutta tähän mennessä. (It is believed that John has drunk 5 litres of beer by now.)
- (13a) Uskotaan, että Jussi oli tavannut Liisan jo ennen kuin hän meni naimisiin Maijan kanssa. (It is believed that Jussi had already met Liisa when he married Maija.)

In (11) the source can be either a past tense or a present perfect as both are possible in Finnish with a specifier indicating a past point. As for nominalization, it is possible in only one of the Finnish sentences corresponding to the English ones in (4)-(6): Jussin saapuminen eilen klo 14.00 hämmästyttää minua/John's having arrived at 2.00 yesterday surprises me. Nominalization is not possible in the others, in which the verb has complements: *Jussin juominen viisi litraa olutta tähän mennessä ... and *Jussin Liisan tapaaminen ennen kuin meni naimisiin Maijan kanssa ... are not acceptable. The form used when nominalization is possible is the fourth infinitive, which is often characterized as a verbal noun and which shows no time distinction, as the 1st and 2nd participles do. The pastness of Jussin saapuminen eilen klo 14.00 ... is entirely dependent on the time-specifier, and Jussia saapuminen as such could just as well refer to the future, unlike the English John's having arrived. A similar nominalization is also possible in English: John's arriving/arrival at 2.00 yesterday surprises me, in which the pastness depends on the time-specifier. Thus, as Jespersen (1931:95) points out, 'the ing (the verbal substantive in ing) had originally, and to a great extent still has, no reference to time: on account of his coming may be equal to 'because he came' or 'he will come', according to the connection in which it occurs'.

When English has a modal auxiliary and the perfect infinitive and a neutralization of the past tense, present perfect, past perfect distinctions, neutralization also takes place in Finnish:

- (14) Jussi on saattanut saapua eilen klo 14. (Jussi may have arrived at 2.00 yesterday.)
- (15) Jussi on saattanut juoda 5 litraa olutta tähän mennessä. (Jussi may have drunk 5 litres of beer by now.)
- (16) Jussi on saattanut tavata Liisan jo ennen kuin hän meni naimisiin Maijan kanssa. (Jussi may have already met Liisa when he married Maija.)

The neutralization of the disctinction is revealed by the paraphrases of the above sentences:

- (14a) Saattaa olla, että Jussi saapui/on saapunut eilen
 klo 14,
 (It may be that Jussi arrived/ has arrived at 2,00
 yesterday,)
- (15a) Saattaa olla, että Jussi on tähän mennessä juonut 5 litraa olutta. (It may be that Jussi has drunk 5 litres of beer by now.)
- (16a) Saattaa olla, että Jussi oli tavannut Liisan jo ennen kuin meni naimisiin Maijan kanssa. (It may be that Jussi had already met Liisa when he married Maija.)

There is a clear difference between English and Finnish, however: in English the neutralized have occurs in the infinitive of the main verb, while in Finnish the modal verb itself is in the present perfect. The Finnish verbs which correspond to the English modal auxiliaries have all the tense forms, unlike the English modals. Thus, it is possible to have the past perfect form of the verb saattaa ('may') in (16) above: Jussi oli saattanut tavata Liisan jo ennen kuin meni naimisiin Maijan kanssa. Whether the time-reference is the same in (16) and its paraphrase (16a) is an interesting problem, which leads us to another phenomenon connected with modal auxiliaries/verbs. It is what is known as 'tense-shifting in infinitive constructions' (Poutsma 1926:441) or as 'past tense transportation' (Huddleston 1977).

Tense-shifting means that the time-distinction is not expressed where it could logically be expected to occur, but is shifted from the higher (matrix) clause to the lower (embedded) clause. Thus, for example, in (17):

(17) I hoped to have arrived in time but the bus was late.

The have, which logically belongs to the matrix clause, gets shifted or transported to the embedded clause, which appears in the surface structure in the form of an infinitive construction. Tense-shifting is obligatory when there is a 'defective verb' ie. a modal auxiliary, which does not have a past participle form, but it can also occur with non-defective verbs such as hope in (17). It is possible to maintain that the meaning of (17) is not exactly the same as the meaning of the corresponding sentence without tense-transportation:

(17a) I had hoped to arrive in time but

Huddleston (1977:44) points out that (17) implies that the speaker did not do what he had hoped to do, whereas this is only a suggestion and not an implication in (17a) because it can occur in contexts in which the speaker really did what he had hoped to do, as in (18).

(18) I can't understand why you are surprised that I arrived in time because you knew I had always hoped to do so.

As pointed out before, tense-transportation is obligatory in the case of defective verbs, ie. modals, but only with non-epistemic modals. Epistemic modals are related to the moment of speaking because they express a judgement made at that moment (Palmer 1978:78). Thus, as Leech also remarks (1971:92), a sentence like The voyage may have been dangerous 'informs us of the (present) possibility of a past danger', ie. the pastness is related to be dangerous, not to may and thus there has been no tense-transportation.

If modals are taken as main verbs and the infinitive constructions as embeddings, tense-shifting can be explained as a Tense Lowering Transformation, as Huddleston (1977:43) suggests. If on the other hand, Chomsky's formula Auxiliary Tense (Modal) (Perfect) (Progressive) is accepted, we need a rule of semantic interpretation associating the past time component' with the auxiliary rather than the main verb. The former analysis is the simpler one as it makes it possible to treat the sentences with modals like sentences with full verbs, as hope in (17) above. (19) could then be treated exactly like (17):

(19) I could have stolen the money then.

That the speaker is talking about his past ability in this sentence is clearly seen in the Finnish equivalent of (19):

(20) Olisin voinut varastaa rahat silloin.

If this sentence referred to the *present* possibility of a past event, we ought to be able to paraphrase it with a sentence in which the pastness is expressed in the embedded clause. (20a), however, is not possible.

(20a)* Voi olla, että olisin varastanut rahat silloin.

There are some controversial cases among the English modals. Huddleston (1977) considers that tense-transportation has also taken place in sentences like (21).

(21) If he had stayed in the army, he would have become a colonel.

In other words, he considers will/would to be a modal here, on a par with may, must etc., and that the pastness belongs to will rather than become. Palmer (1978) rejects this view on account of would here being a marker of unreality. According to traditional interpretations of the construction, would have become is the past (unreal) conditional of become, not to be compared with must have become or might have become. In Finnish there is a clear distinction here:

- (22) Hänestä olisi tullut eversti, jos ... (would have become)
- (23) Hänestä olisi saattanut tulla eversti, jos ... (He might have become ...)

In (22), which corresponds to the English would have become, the past conditional of the main verb without a modal verb is found, whereas in (23), which is the equivalent of the English might have become, there is a modal verb in the past conditional form.

Tense-transportation is generally not possible in Finnish, at least it never occurs with toivoa (hope) or haluta (like); the corresponding English verbs are those full verbs with which transportation most often occurs:

(24) I'd like to have shown you those pictures.

Olisin halunnut näyttää sinulle ne kuvat.

★ Haluaisin olla näyttänyt sinulle ne kuvat.

It is also impossible with most modal verbs in Finnish. Consider the following sentences and their English equivalents:

- (25) Tuo sama henkilö olisi varsin hyvin voinut viedä lääkepullon majurin huoneeseen.

 The same person could have put that bottle of tablets in the Major's room.
- (26) Kuvan olisi pitänyt olla hänen lompakossaan. The picture ought to have been in his wallet.
- (27) Ei hänen *olisi tarvinnut kuolla*, jos hän olisi huolehtinut kunnolla itsestään. He needn't have died if he'd looked after himself properly.

In Finnish the pastness, which is expressed in English in the infinitival construction with have, is where it logically belongs, ie. in the matrix with the modal verb. As pointed out previously, this is due to the fact that the Finnish verbs which correspond to the English modal auxiliaries are not defective in the sense the English modal auxiliaries are, but have, for example, a past participle (2nd participle) form, which the English modals lack. The verb täytyä ('must'), for example, has the following paradigm with all the tense forms of 'normal' verbs:

(28) Minum täytyy olla kotona tänä iltana. I must stay at home tonight. Minum täytyi olla kotona eilen illalla. I had to stay at home last night. Minum on täytynyt olla kotona koko viikko. I have had to be at home all this week. Minum oli täytynyt olla kotona koko edellinen viikko. I had had to stay at home for the whole preceding week.

In connection with epistemic modality, ie. when the speaker makes an assumption about a past process on the basis of the present state of affairs, the situation in Finnish is the opposite to that in English. In this case, English has no transportation but the pastness is expressed in the main verb, where it logically belongs. In Finnish, however, tense transportation from the embedded clause to the matrix clause takes place. Consider (29) and (30) in this respect:

- (29) Matka on saartanut olla vaarallinen. voinut
 The voyage may have been dangerous.
- (30) Matkan on täytynyt olla vaarallinen. The voyage must have been dangerous.

The meanings of the sentences are: 'It may be the case that the voyage was/has been/had been dangerous' and 'It must be the case that the voyage was/has been/had been dangerous', ie. logically the modality belongs to the present and the process expressed through the main verb to the past. But in these, too, Finnish has the pastness in the modal verb instead of the main verb. Ikola (1974:57) refers to this: 'In the same way as the passive marker, also the markers of tense, number and person are added in the surface structure to the predicate of the matrix clause although they, too, logically belong to the predicate of the embedded clause'. Since the Finnish modals have a full range of tense forms,

the past tense and the past perfect can be substituted for the present perfect in (29) and (30):

- (29a) Matka saattoi olla vaarallinen. Matka oli saattanut olla vaarallinen.
- (30a) Matkan täytyi olla vaarallinen. Matkan oli täytynyt olla vaarallinen.

The examples indicate that the distinction made in English between epistemic and non-epistemic modality through tense-transportation is not made in Finnish. If the speaker wants to express clearly in Finish that he considers the past on the basis of his present knowledge, he will use a separate clause containing the modal verb:

(31) Saattaa olla, että matka oli/on ollut/oli ollut vaarallinen. It may be the case that the voyage was/has been/ had been dangerous.

In some cases, but very rarely, speakers of Finnish use the tense-marker in the embedded verb, where it logically belongs, instead of the epistemic modal, as in (32) and (33):

- (32) Hän saattaa olla jo voittanut kilpailun. He may have already won the race.
- (33) Hänen ei tarvitse olla vielä lähtenyt. He needn't have gone yet.

On the whole, however, there is a clear difference between English and Finnish in the tense-attachment to modal verbs. First of all, there is neutralization of tense-distinctions in English if there is a modal verb in the sentence. This does not happen in Finnish since the Finnish modal verbs have a full range of inflected forms, and tense-distinctions can be expressed in them. Secondly, Finnish does not make the same distinction between epistemic and non-epistemic modality that is made in English. In English, tense-transportation takes place with non-epistemic modals. If we assume that with epistemic modals the tensemarker logically belongs to the embedded verb, and not to the modal verb in the matrix, then tense-transportation takes place in Finnish in epistemic modals.

5.2. Sequence of Tenses

Both English and Finnish exhibit the phenomenon traditionally known as sequence of tenses or consecutio temporum. The same phenomenon has also been called 'non-deictic tense in dependent sentences' (Huddleston 1969:792). It is non-deictic in the sense that the tense-choice of dependent/embedded clauses cannot be explained through reference to the point of speech as the primary point of orientation to which the points of reference and event are related. The tense-choice of the embedded clause seems to be dependent on the tense-selection of the matrix clause. Consider the tense-choice in (34).

(34) I was wondering whether you were ill.
Tuumin juuri, että *olitte*kohan te sairas.

The reference in the embedded clauses is to the present state of health of the addressee and consequently the present tense could be expected in them. Nevertheless, since the matrix clause has a past tense, the embedded clause also has a past tense form.

Traditionally, the problem of sequence of tenses has been connected with indirect speech, ie. when the speaker reports what someone else or he himself has said or thought on some previous occasion and does not do this reporting in the exact words used originally but in terms of a matrix sentence containing a verb of reporting and an embedded sentence. Normally the reporting verb of saying or thinking in the matrix is in the past tense and this is said to influence the tense-choice in the embedded clause. Jespersen calls this phenomenon 'back-shifting' (Jespersen 1931:151). The term refers to the idea that indirect speech utterances are derived from direct speech utterances with certain changes of tense, pronouns and adverbs. For tenses the changes involve 'moving backwards in time': the present tense becomes the past tense, the past tense becomes the past perfect, and the present perfect also becomes the past perfect. Jespersen (1931:152) gives a psychological explanation for this: '... the shifting is not required logically, but is due simply to mental inertia: the speaker's mind is moving in the past, and he does not stop to consider whether each dependent statement refers to one or the other time, but simply goes on speaking in the tense adopted to the leading idea'. This also means that the sequence of tenses rule is not observed rigidly. If the speaker 'makes an effort', he uses a logical

tense form and produces sentences like (35).

(35) We learnt at school that 2 and 2 is 4. Opimme koulussa, että 2 ynnä 2 on 4.

This last example also shows that sequence of tenses is not strictly limited to indirect speech; the sentences do not necessarily report anyone's speech. Sequence of tenses can also apply in cases in which the matrix sentence contains a verb expressing remembering, believing, realizing something etc. (This view is also shared by Ikola (1961b), who includes among reporting verbs such verbs as nähdä/see, realize and olettaa/assume). For sentences in which the matrix contains a verb like realize there is no direct speech counterpart. Consider (36) in this respect.

(36) He realized that it was true. Hän tajusi, että se oli totta.

*He realized, 'It is true'.
*Hän tajusi, 'Se on totta'.

This would seem to suggest that sequence of tenses cannot be explained through a transformational rule that changes a direct speech utterance containing a present tense into an indirect speech embedded clause with a past tense, which was the view first adopted within transformational theory. (Ross (1968:181) formulated the sequence of tenses rule as follows:

a.
$$X - \begin{bmatrix} + V \\ \star \text{tense} \end{bmatrix} - Y - \begin{bmatrix} + V \\ + V \end{bmatrix} - Z$$

1 2 3 4 5

b. $X \begin{bmatrix} + V \\ - Y \end{bmatrix} - Y - \begin{bmatrix} + V \\ \star \text{tense} \end{bmatrix} - Z$

1 2 3 4 5

1 3 4 5

Ross saw it necessary to formulate the rule so that it could account for both sentences of the type (37a) and those of (37b).

(37a) It was obvious that the sun $\begin{cases} *is \\ was \end{cases}$ out.

(37b) That the sun $\begin{cases} *is \\ was \end{cases}$ out was obvious.

Ross admits that the rule as it stands is too strong because it does not allow sentences like (38), which are grammatical.

This indicates that the correct rule should be more complex. A rule that derives embedded sentences with, for example, a past tense from sentences with a present tense is plausible in cases which have a direct speech counterpart but not in cases without one (cf. Smith 1976). Moreover, as Banfield (1973) argues, relating direct speech and indirect speech transformationally is not descriptively adequate. Banfield suggests that both direct and indirect speech should be described through the addition of certain rules to the base. Thus, it seems that, if we want to account for all occurrences of consecutio temporum in terms of one and the same rule, we cannot view indirect speech as derived from direct speech, because this would set indirect speech apart from other similar cases. It is worth remembering that the problem of sequence of tenses arises only when the matrix clause contains a past tense and reference is to an event that is simultaneous with, earlier than or later than the actual point of speech, ie. when we would logically expect the present tense, the present perfect or an expression of future:

- (39) I didn't know you were here. (reference to the person's present being)
- (40) Peter said John intended to leave tomorrow.
- (41) He said he was going tomorrow.

Instead of treating indirect speech as a separate case we can adopt a principle that covers all cases of consecutio temporum. This could be, as Reichenbach (1947) suggests (see also Wiik 1976), that the point of reference is the same in the matrix and in the embedded clause(s). Thus, the relations between the point of reference and the points of event in a sentence like (42) would be as follows (Reichenbach 1947: 293):

(42) I had mailed the letter when John came and told me the news.

1st clause : E - R_1 - S 2nd clause : R_2 , E_2 - S 3rd clause : R_3 , E_3 - S (42) is not a sentence with indirect speech but a sentence containing an embedded temporal clause. The same system can be applied, however, to cases of indirect speech in which the reporting clause has a past tense form. The point of reference in this matrix clause is a point in the past and the same point serves as the reference point for the embedded clause. The point of event in the embedded clause is then either simultaneous, with, earlier than, or later than this point of reference, which means that on the surface we have either the past tense, the past perfect or an expression referring to the future in the past.

As pointed out above, the sequence of tenses rule is not always observed. Thus we have cases of, for example, indirect speech which do not follow the rule, as in (43) and (44).

- (43) He said he is going tomorrow. Hän sanoi, että hän lähtee huomenna.
- (44) I also said that carnivores have fleas but primates do not.

 Sanoin myös, että petoeläimillä on kirppuja, mutta kädellisillä ei.

In these examples the point of reference in the embedded clause is identical with the point of speech, and thus not the same as in the matrix clause. Both Finnish and English thus have the choice of making the point of reference in the embedded clause identical with either the point of reference in the matrix or the point of speech, in other words, the choice of observing or not observing the sequence of tenses rule. The problem remains, however, of how free this choice is, and, if it is not free, what the restrictions are, and whether they are the same in English and Finnish.

Kiparsky and Kiparsky (1971:359) connect the observation of the sequence of tenses rule, or, in our terms, making the reference point of the embedded clause identical with that of the matrix clause, with the factivity/non-factivity of the predicate in the matrix: the rule is obligatory in the case of non-factives but optional in the case of factives. Their example is the following: 'Let us assume that Bill takes it for granted that the earth is round. Then Bill might say; John claimed that the earth was/**is flat with obligatory sequence of tenses, but John grasped that the earth is/was round with optional sequence of tenses'. In semantic terms this means that in the case of factives the speaker presupposes that the embedded clause expresses a true proposition.

The same explanation seems to apply to Finnish in many cases. Thus, a Finnish example (46) parallel to Kiparsky and Kiparsky's John claimed that the earth was flat is quoted by Ikola (1961:138).

(46) Aneksimandros oletti, että maa oli silinterin muotoinen ja että ihmiset asustivat tämän ylemmällä pohjapinnalla ...

Aneksimandros assumed that the earth had the shape of a cylinder and that people lived on the upper bottom surface of this

Ikola's explanation is that 'The past tense is used in this way particularly if the speaker or writer wants to express that he does not consider the statement to be true or that at least it should not be taken as his own opinion'.

In spite of the similarity of the basic principle, there are differences between English and Finnish in the observation of the sequence of tenses rule. Consider the following English sentences and their Finnish equivalents:

- (47) I was wondering if you were a murderer. Mietin tässä juuri, oletteko te murhaaja.
- (48) I came to see whether you were ill. Tulin katsomaan, oletko sairas.
- (49) I didn't know you were here. En tiennyt, että olet täällä.

It is clear that in (47) and (48) at least the speaker does not presuppose that the proposition in the embedded clause is true. Accordingly, the English sentences obey the sequence of tenses rule, but Finnish does not. If the past tense was used in the above Finnish sentences (Mietin tässä juuri olitteko te murhaaja/Tulin katsomaan olitko sinä sairas/ En tiennyt, että sinä olit täällä), they would most likely be interpreted as referring to states prior to the moment of speaking, not to one simultaneous with it. This is even clearer in (50).

(50) Did you say it was the longest day of the year today? Sanoitko, että tänään on vuoden pisin päivä?

If this sentence is uttered in the morning or during the day, Finnish has to have the present tense; if it is uttered in the evening, the past tense is more natural. A similar explanation is applicable to (51),

in which English again has the past tense in the embedded clause but Finnish has the present tense.

> (51) I'd say she was a real find. Oh, she's of inestimable value to the firm, wouldn't you say, Robert? Sanoisin, että hän on todellinen löytö. Hän on arvaamattoman kallisarvoinen firmalle, eikö totta, Robert?

The past tense (Sanoisin, että hän oli todellinen löytö) would be used in Finnish, too, if the person was no longer working in the firm. On the basis of the examples it seems that Finnish prefers the present tense if the proposition in the embedded clause refers to the present state of affairs, at least if there is a possibility of misinterpretation, as in (51). This is the case even with clearly non-factive predicates in the matrix:

(52) Oletin, että tänään on vuoden pisin päivä, mutta se onkin vasta huomenna.
I assumed that it was the longest day of the year today, but it isn't until tomorrow.

Thus, the present tense is at least possible in (52), as also in (53).

(53) Luulin, että sinä olit/olet sairas kun et tullut töihin tänään, mutta näköjään et olekaan. I thought you were/*are ill when you didn't come to work today but I see you aren't.

It can be said that English obeys the sequence of tenses rule in the case of non-factive sentences. Finnish shows the same tendency but does not follow it strictly as other considerations may overrule it, such as a desire to avoid ambiguity in time-relations. As for factives, English has the choice of either observing or not observing the rule. It does not seem to be followed if reference is made to an 'eternal truth' or a permanent characteristic (eg. We were taught at school that 2 and 2 is 4). Sometimes it is also difficult to draw a distinction between factives and non-factives. Thus, in (54), for example, it is difficult to decide whether the writer believes the reflections of Miss Marple about the effects of ageing to be true or not, and thus it is impossible to say whether it is a case of sequence of tenses or not. The present tense is again more natural in the equivalent Finnish sentence:

(54) As one grew older, she reflected to herself, one got more and more into the habit of listening ...

Neiti Marple ajatteli itsekseen, että kun ihminen vanhenee, hän oppii yhä enemmän ja enemmän kuuntelemaan ...

These examples are sufficient to indicate that Finnish is less strict in obeying the sequence of tenses rule than English. An extensive collection of utterances, both spoken and written, would be needed before drawing any definite conclusions about the degree to which the rule is observed in either language, and this is not possible within the limits of the present study. Petrovanu-Cornilescu (1974) quotes Iarovici, who has investigated the present tendency in English on the basis of an analysis of nineteen contemporary English and American plays, and has found a considerable number of ecamples in which the sequence of tenses is broken. She quotes examples like (55) and (56).

- (55) I told you I don't fancy it.
- (56) I said I don't know.

Apparently, in cases like these the speaker 'makes an effort' and emphasizes the fact that what he is saying is still true at the moment of speaking.

Ikola (1961) points out that in Finnish the present tense is possible in reported speech even though the speaker or writer cannot possibly think that the embedded proposition is still true at the moment of speaking. This happens in literary texts, in narratives, from which Ikola takes his examples, eg. (57).

(57) ... ja päätettiin, että Juhani ottaa Venlan, joka kuitenkin on kelpo tyttö.
... and it was decided that Juhani take Venla, who after all is a nice girl.

The above tenses would be logical if the processes talked about still lay ahead in the future (will take) or were true at the moment of writing (is), but from the writer's point of view they are obviously in the past. Ikola's explanation for this is that the use of the present tense makes it clear that the embedded proposition is a thought or utterance of his characters, not his own. If the past tense had been used, the writer would have expressed his own opinion about the girl. This is contradictory to Ikola's opinion quoted earlier about the past tense being used

'particularly if the speaker or writer wants to express that he does not consider the statement to be true or that at least it should not be taken as his opinion (Ikola 1961:138). The only possible reason is that the use of the present tense here makes the reported clause more like direct speech and therefore livelier for the reader (cf. historical present).

Braroe (1974) focuses on another phenomenon connected with the sequence of tenses. She claims that in English it is possible to have the past tense instead of the past perfect in the embedded clause when the matrix clause contains a past tense although the point of event in the embedded clause is clearly earlier than the point of reference. Accordingly, it is possible to have (58) instead of (59).

- (58) John realized that Sally left at 2 p.m.
- (59) John realized that Sally had left at 2 p.m.

Ikola points out a similar possibility in Finnish (Ikola 1961:147); he says that in indirect speech it is possible to keep a past tense form of direct speech unchanged, and thus there are examples like (60).

(60) Mies kertoi kuinka hän heräsi valitukseen ja voihkinaan. (instead of oli herännyt)

The man told how he woke up hearing somebody complaining and ...

(instead of had woken up)

Braroe connects this with the factivity of the verb in the matrix clause and the \pm stativity of the embedded verb in the following way:

(i) a $\begin{bmatrix} \pm \\ \end{bmatrix}$ factive verb in the matrix and a $\begin{bmatrix} \\ \end{bmatrix}$ -stative verb in the embedded clause will result in the past tense only being interpreted as earlier than the matrix, not simultaneous with it (for example (58) above); (ii) if the embedded verb is $\begin{bmatrix} \pm \\ \end{bmatrix}$ -stative, the interpretation of the past tense depends on the \pm factivity of the matrix verb: if it is $\begin{bmatrix} \pm \\ \end{bmatrix}$ -factive, the interpretation can only be coreferent with the matrix; if it is $\begin{bmatrix} \pm \\ \end{bmatrix}$ -factive, both coreferent with the matrix and earlier than the matrix are possible interpretations. We thus have the following rules of interpretation (Braroe 1974:27-32):

(i) Past tense in the context V Past V ____ means 'before matrix'

(a past perfect is an optional variant).

(ii) Past tense in the context V Past V means

'coreferent with matrix'. (For 'before matrix' the past perfect is obligatory)

(iii) Past tense in the context V Past V means +factive +stative

either 'coreferent with matrix' or 'before matrix'. (A past perfect is optional in the latter case.)

It seems possible to read imperfective instead of [+stative] and perfective instead of [-stative] in the above rules since activities and states seem to behave similarly in these contexts. According to the above rules, then, the sentences in (61) and (62) would only allow the 'earlier than matrix' interpretation.

- (61) John assumed that Sally read the book. John realized that Sally read the book.
- (62) John assumed that Sally left at 2. John realized that Sally left at 2.

In (63) and (64) the interpretation, according to Braroe, depends on the verb of the matrix clause: the a-sentences contain a non-factive verb and the processes in the matrix and the embedded clause can therefore be only simultaneous, whereas the b-sentences, which contain a factive verb, are ambiguous.

(63a) John assumed that Sally played the piano.

(63b) John realized that Sally played the piano.

(64a) John assumed that Sally knew about the plans.

(64b) John realized that Sally knew about the plans.

Native speakers' intuitions about these sentences seem to vary, however. According to some, the sentences in (61) and (62) are acceptable only if the reading is frequentative, ie. for example John assumed/realized that Sally nead the book every day and John assumed/realized that Sally left at 2 regularly. They are also of the opinion that the past perfect is needed for the 'earlier than matrix' interpretation in (63) and (64) above.

The Finnish sentences corresponding to (61) and (62)

(65) Jussi oletti, että Salli luki kirjan. Jussi tajusi, että Salli luki kirjan. (66) Jussi oletti, että Salli lähti klo 2. Jussi tajusi, että Salli lähti klo 2.

are possible with a frequentative reading, like their English counterparts. The 'earlier than matrix' interpretation is also possible, particularly with (66) but contexts can be found in which it is possible even with (65): eg. Jussi oletti/tajusi, että Salli luki kirjan ennen tenttiä/John assumed/realized that Sally read the book before the exam. When the aspect is imperfective, ie. in the equivalents of (63) and (64), the 'coreferent with matrix' interpretation is the most natural one regardless of the factivity or non-factivity of the matrix verb:

- (67) Jussi oletti, että Salli soitti pianoa. Jussi tajusi, että Salli soitti pianoa.
- (68) Jussi oletti, että Salli tunsi suunnitelmat. Jussi tajusi, että Salli tunsi suunnitelmat.

The 'earlier than matrix' interpretation seems very unlikely in these sentences.

Although native speakers' intuitions about the above sentences vary, it is obvious that there are contexts in both languages in which the 'earlier than matrix' interpretation of the past tense is possible. The most interesting point from our point of view is that this interpretation partly depends on the aspect of the embedded clause, which again illustrates the close connection between aspectual and temporal distinctions.

The question of the temporal relations of two processes is also interesting in sentences which contain a temporal clause. The temporal clause identifies the point of event and/or the point of reference for the process in the matrix clause. The temporal relation between the process in the matrix clause and that of the embedded clause can be such that (i) they are simultaneous, (ii) that the process in the matrix is earlier or (iii) later than the process in the embedded clause. Aspect is also an important factor in the possible relations of the two processes, particularly when the processes are simultaneous.

When the two processes are simultaneous, it is very rare that they are both perfective in aspect, because absolute simultaneity is very hard to imagine. Consider, for example, (69) in this respect.

(69) Harry walked in when John left. Harri käveli sisään, kun Jussi lähti. It is difficult to say whether these two processes are simultaneous or whether they are consecutive. We saw in connection with past in the past(p.140) that the distinction between the past tense and the past perfect can be neutralized in favour of the past tense if the two processes follow each other in quick succession. Thus, (69) can be ambiguous as regards the temporal relation between the two processes. The usual interpretation, however, seems to be that the processes described in the two clauses take place in succession not only in the case of achievements, like those in (69), but also in the case of accomplishments, as in (70), (Heinämäki 1974:38).

(70) John built a sail-boat when Bill wrote a detective story. John rakensi purjeveneen, kun Bill kirjoitti salapoliisiromaanin.

This succession is particularly clear when one of the processes is an achievement and the other an accomplishment:

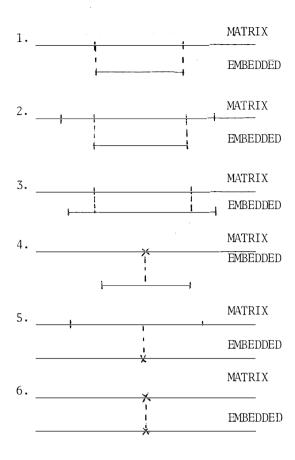
(71) Bill was surprised when John wrote a detective story. Bill hämmästyi, kun John rakensi purjeveneen.

Simultaneity is unambiguously clear when both or one of the processes is imperfective in aspect:

- (72) John was building a sailboat when Bill was writing a detective story.

 John rakensi purjevenettä, kun Bill kirjoitti salapoliisiromaania.
- (73) I noticed him when he was opening the door. Huomasin hänet, kun hän avasi ovea.
- (74) Joan rang up when we were having dinner. Joan soitti, kun olimme syömässä päivällistä.
- (75) When Joan rang up we were having dinner. Kun Joan soitti, olimme syömässä päivällistä.

As seen in (74) and (75), either of the two processes can occur in the temporal clause, establishing the time for the process in the matrix. Edgren (1971) calls this the 'interchangeability of clausal functions'. The time-relation does not change, however: the two processes are simultaneous and, if one of the processes is perfective, the other gives it 'a temporal frame'. The possibilities of the temporal relations can be presented diagrammatically as follows (cf. Heinämäki 1974):



When the two processes take place in succession, the process in the matrix clause can be earlier than the process in the embedded clause or vice versa. This is clearest in sentences like (76) and (77), which contain the connectives before/ennen kuin and after/sen jälkeen kun denoting the temporal relation between the two processes.

- (76) John arrived before Mary left. John tuli ennen kuin Mary lähti.
- (77) Mary left after John arrived.
 Mary lähti sen jälkeen kun John tuli.

The temporal relation between the two processes in unambiguously clear without the earlier process having to be denoted through the past perfect. As pointed out above, this neutralization of the difference between the past perfect and the past tense is also possible when the connective is when/kun (John arrived when Mary left/John tuli kun Mary lähti, which can be interpreted as meaning the same as John arrived when Mary had left/John tuli, kun Mary oli lähtenyt). Aspect seems,

however, to play a part in the possibility of this neutralization in when-clauses. Poutsma (1926:279) refers to this when he says, 'When in a complex with a temporal clause the reference is to two actions or states, one of which has come to a conclusion before the other comes about, the predicate in the former is normally placed in one of the perfect tenses. This predicate may stand either in the temporal clause or in the head-sentence. ... When, however, the predicate in the temporal clause is purely momentanous, or suggestive of no activity culminating in a result, there is a distinct tendency to place it in one of the simple tenses'. The past tense is quite natural in the following when/kun-clauses in both English and Finnish.

(78) When morning came (had come), the fog cleared away. Kun aamu tuli (oli tullut), sumu hälveni.

These processes are achievements. The past perfect is, however, the only possibility in (79), in which the process is an accomplishment and thus has duration, although the aspect is perfective.

(79) *When Mary read the letter, she burnt it. When Mary had read the letter, she burnt it. *Kun Mary luki kirjeen, hän poltti sen. Kun Mary oli lukenut kirjeen, hän poltti sen.

Before and after -clauses do not seem to have this restriction:

- (80) Mary burnt the letter after she√read it.

 Mary poltti kirjeen sen jälkeen kun√luki sen.

 oli lukenut sen.
- (81) Mary read the letter before she burnt it. had read

 Mary luki kirjeen, ennen kuin poltti sen. oli lukenut.

Heinämäki (1974) discusses aspect in sentences containing temporal connectives. According to her, for example, the aspectual properties of the processes in sentences containing the connective before depend on whether the before-clause is factual or non-factual. Both the perfective and imperfective aspects are possible in the matrix as well as in the embedded clause when the before-clause is factual. In the case of non-factual before-clauses the main clause has the perfective aspect.

The following are sentences including non-factual before-clauses (the English sentences are Heinämäki's examples):

- (82) The bomb exploded before it hit the target. Pommi räjähti ennen kuin se osui maaliin.
- (83) Max died before he saw his grandchildren. Max kuoli ennen kuin näki lastenlapsensa.
- (84) John burnt the tapes before anyone could listen to them. John poltti nauhat ennen kuin kukaan ehti kuunnella niitä.
- (85) ★ John was burning the tapes before anyone

 John poltti nauhoja ennen kuin kukaan ehti kuunnella niitä.

(85) with a partitive object is possible in Finnish, but here the partitive object does not denote the imperfective aspect but the fact that John only burnt some of the tapes. Sentences with the connective after/sen jälkeen kun, allow both perfective and imperfective aspects in both clauses.

Anteriority and posteriority of the process in the main clause to the process of the embedded clause can also be expressed in sentences containing clauses introduced by the connectives until/siihen saakka kun and since/siitä lähtien kun, sitten kun. With the until/kunnes, siihen saakka kun clause the matrix has the imperfective aspect, ie. the process contained in it has duration and goes on until something else happens or some other process starts. Thus, the sentences in (86) and (87) are acceptable but those in (88) are not.

- (86) They lived in that house until the war broke out. He asuivat siinä talossa, siihen saakka kun sota puhkesi.
- (87) I was writing a letter until the guests arrived. Kirjoitin kirjettä, siihen asti kun vieraat tulivat.
- (88) *I wrote a letter until the guests arrived.
 *Kirjoitin kirjeen, siihen asti kum vieraat tulivat.

A verb denoting achievement or accomplishment can, however, occur in the main clause with an embedded until-clause if the main clause is negative:

(89) We didn't notice him until he had crossed the street.

Negative clauses can be considered imperfective in aspect, ie. lack of action involves a time span (cf. Heinämäki 1974). In Finnish a negative

main clause requires a change of the connective from sithen saakka kun to ennen kuin ('before'):

(90) Emme huomanneet häntä, ennen kuin hän oli ylittänyt kadım.

In the case of a since/siitä lähtien kun clause both the perfective and imperfective aspects are possible in the main clause, the meaning being that something has taken place or some state has existed between two points in time. One of these is the point at which the process in the embedded clause took place, if it is perfective, or the point at which it started, if it is imperfective. The other point is either the point of speech or some point in the past established in the context. Consequently, the present perfect and the past perfect are the most normal tense-forms in the main clause. Other forms are possible in exceptional cases, as in the stereotyped expressions in (91) and (92).

- (91) It is now two years since I saw them last. Siitä on nyt kaksi vuotta, kun näin heidät viimeksi.
- (92) It will soon be two years since I saw them last. Siitä on pian kaksi vuotta, kun näin heidät viimeksi.
- (93) and (95) are examples of the 'normal' tense usage.
 - (93) They have built a house since I saw them last. He ovat rakentaneet talon, sen jälkeen kun näin heidät viimeksi.
 - (94) They have been building a house since I saw them last. He ovat rakentaneet taloa siitä lähtien kun näin heidät viimeksi.
 - (95) They had built a house since I had seen them. He olivat rakentaneet talon, sen jälkeen kun olin nähnyt heidät viimeksi.

In Finnish, the connective varies according to whether the aspect is perfective (sen jälkeen kun) or imperfective (siitä lähtien kun). It seems as if the since and until clauses themselves could also allow both the perfective and imperfective aspect. Consider (96) and (97) in this respect (Heinämäki's examples).

(96) Doctors have been worried ever since John has been ill. Lääkärit ovat olleet huolissaan siitä lähtien kun John on ollut sairas.

(97) Claire kept telling funny stories until Paul was in a good mood.
Claire kertoi hauskoja juttuja siihen asti kun Paul oli hyvällä tuulella.

There is no doubt about the processes in (96) and (97) having duration; they are states in the embedded clauses. Nevertheless, it is also obvious that a point is indicated by these clauses and the point is the beginning of the state referred to in the clause. Thus, in (96) the starting point for the doctors' being worried is also the starting point of John's being ill. In (97) the point marking the end of Claire's telling of stories is the starting point for Paul's being in a good mood.

The temporal relations between the matrix and the temporal clause do not always fulfil the requirement suggested above (cf. Reichenbach 1947, Hornstein 1977) that the reference points of the two clauses have to be identical. In (98) and (99), for example, this is not true.

- (98) I came to see you before you leave.
 Tulin katsomaan sinua ennen kuin lähdet.
- (99) They have built a house since I saw them last. He ovat rakentaneet talon sen jälkeen kun näin heitä viimeksi.

In (98) the reference point of the matrix is in the past but that of the embedded clause is identical with the point of speech, ie. the temporal relation for the matrix is E,R - S and for the embedded clause it is S,R - E. In (99) the temporal relation expressed in the matrix clause is E - S,R and that expressed in the embedded clause E,R - S. Heinämäki (1979) also points out that the semantic interpretation of the tense-forms in (200) does not correspond to the meaning of the sentence.

(200) Mary will play when she has rested.

The interpretation of the form has rested is, according to the three-point system, E - S,R, although it is obvious that the reference in the clause is to the future. This problem can be explained by using a transformation that changes a future expression to the present tense in a temporal clause (cf. p. 92). This would then mean that has rested was originally will have rested, and the time relation for the temporal clause would be S - E - E, while that of the matrix is E - E,E (or E - E). The three-point system could be said to apply in this case. However, there still remain cases in which the system does not function. This

means that the three point system cannot be used to describe the tenserelations in complex sentences as systematically as has been suggested.
Even if it is true in most cases that the reference points of the clauses
of a complex sentence are identical, there are exceptions, which make a
general rule about their identity impossible. As we have seen, these exceptional cases do not concern only temporal clauses but also other
types of embedded clauses. For example, when the reporting verb of indirect speech has a tense-form other than the past tense or the past
perfect, the consecutio temporum does not apply and the embedded clause
has the same tense-form as the corresponding direct speech sentence.
Thus, in (201), for example

(201) I have been told that he died in an accident.

Minulle on kerrottu, että hän kuoli onnettomuudessa.

the matrix clause has the time-relation E-R, S and the embedded clause the time-relation E, R-S, which means that the reference points do not coincide.

6. CONCLUSION

The type of contrastive study envisaged at the outset of the present thesis was a specific theoretical one, an analysis that aimed at an account of the differences and similarities between English and Finnish in the area of temporal relations and aspectual distinctions, with a focus on the use of tenses. The best grammatical model for this particular purpose seemed to be a semantically based one, within which temporal relations and aspectual distinctions could be represented as semantic concepts, as parts of the input structures shared by the two languages. The actual derivations of the surface structures from these semantic representations were not felt to be important for a contrastive analysis of this area, particularly since there is a great deal of similarity in these processes in English and Finnish. More interesting from the contrastive point of view were thought to be the reasons that lead to the choice of a particular expression and the differences between alternative expressions for a particular temporal relation or aspectual distinction. As the derivational processes were mostly overlooked, the procedure of the analysis lacked the systematization suggested by Krzeszowski (1974) for contrastive studies.

The analysis began with a definition and representation of the semantic concepts of time ans aspect and then proceeded to look for their exponents in English and Finnish. Temporal relations were represented through a system of three points (following Reichenbach 1947 and others). The points, the point of speech, the point of reference and the point of event, were seen as placed in different sentences in the deep structure: the highest sentence contains the point of speech, the next lower sentence contains the point of reference, and below this is the sentence containing the point of event. It was, however, shown that these three points do not explain all the phenomena occurring in the choice of tenses. This proved to be the case in what has been called 'false tense-choice', which takes place for instance within the present time-sphere, ie. when the three points are identical. The speaker can, in other words, refer to a present situation but use a past tense form or an expression of futurity. Similarly, he can talk about a past situation using the present tense. It was suggested that, in order to explain these phenomena, a further point could be used, the point of view, which could be situated in the deep structure in a sentence above the point of reference. The

point of view overrules the influence of the point of reference and point of event. It usually falls together with the point of reference but can also be different, thus resulting in what has usually been regarded as false tense-choice. The change of the point of view has basically the same effect in both English and Finnish: it leads to the use of the 'historical present' and the choice of the present perfect instead of the past perfect when the speaker wants to put the listener in the place of someone actually witnessing the events he is relating. It also leads to the use of the past tense in both languages to express the speaker's past point of view over the present situation; in both languages the reason for this choice is usually that the speaker is referring to past information. There are differences between the languages, however: in English it is possible to express a future point of view over the present situation, which has no particular expression in Finnish. There are also differences in the use of the present tense for past reference for purposes other than vivid narratives of past events, such as the use of the present tense with verbs denoting delivering or receiving messages.

The system of three points also fails to explain the phenomena that occur in the tense usage of complex sentences, at least in the form suggested by Reichenbach (1947) and others, namely that the points of reference are identical in the matrix clause and the embedded clause(s). If these points are identical, the result is the phenomenon usually known as sequence of tenses. Both English and Finnish, however, offer ample evidence of the sequence of tenses rule being broken frequently, in indirect speech as well as other types of complex sentences. Within indirect speech English seems to observe the rule more strictly than Finnish, particularly when the verb in the matrix clause is non-factive. Finnish shows the same tendency, but other considerations, such as desire to avoid ambiguity, overrule its influence.

Sentences with temporal clauses show especially clearly that the reference points are not necessarily identical in the matrix clause and the embedded clause. There are examples such as I have known him ever since we were at school/Olen tuntenut hänet siitä lähtien kun kävimme koulua, in which the point of reference of the matrix clause is in the present but the point of reference of the embedded clause is in the past. To what extent the sequence of tenses rule is really obeyed in the two languages could only be discovered through an extensive quantitative study of both spoken and written utterances, for which no possibility

existed within the scope of the present study.

The most significant differences between English and Finnish tenseusage were found to occur within the past and the future time-spheres. Within the past, the E - R,S time-relation is expressed through the present perfect in both languages. In Finnish the point of event can be identified, whereas in English it is always left unidentified, ie. the English present perfect is incompatible with a time-specifier denoting a definite point in the past. In English, therefore, the difference between the past tense and the present perfect can be described as the opposition between identified and unidentified past, which is impossible in Finnish. Within the future time-sphere the differences are caused by the fact that neither language has a future tense-form but different ways of denoting futurity. Both languages employ the present tense in references to the future, and in both languages this is the most neutral way of referring to the future. In Finnish it is also the most frequently used alternative, whereas in English it is used only in limited contexts. All other alternatives are less neutral, in other words they are all coloured by different attitudes towards the future. The three Finnish alternatives show a difference in the degree of certainty about the future, in addition to which there are also stylistic differences between them. In English the alternatives express a plan or an intention for the future or that the speaker wants to guarantee the occurrence of a future event or that he sees it as occurring because of something observable at the present or as a matter of course. Since the Finnish and English expressions of futurity have such different meanings, in addition to denoting the time-relation, it is impossible to determine exact correspondences across the languages. The Finnish present tense is the most natural equivalent for most of the English alternatives at least in everyday language, since the other two possibilities are archaic or too solemn for everyday usage.

Within the present time-sphere the tense-choice is the same in both languages, ie. the present tense, except for the cases of false tense choice mentioned above. Both languages also have means of expressing time-relations that can be described as past in the future and future in the past, of which the latter has various alternative expressions.

Both languages also exhibit phenomena known as tense-replacement and shifting of tense. Tense-replacement, ie. the neutralization of the distinction between the past tense, the present perfect and the past

perfect, occurs in English in the constructions to + V, V + -ing, and modal auxiliary + V. In Finnish the form involved in this case is the second participle. Neutralization can also be said to occur with modal verbs in Finnish, but in Finnish the pastness is evident in the modal verb itself, whereas it is expressed in the infinitive in English (eg. Hän on saattanut saapua/He may have arrived). When neutralization occurs, time-specifiers can make the sentence unambiguous, ie. they can show whether the underlying tense is the past tense, the present perfect or the past perfect, with the exception that, in Finnish, the same specifiers can occur with both the past tense and the present perfect.

Shifting of tense occurs in English with modal auxiliaries, which are defective and thus do not have a past participle form. If the modal is non-epistemic, pastness, which logically belongs to the modal auxiliary, is attached to the main verb (eg. I could have done it). This is also possible in English with some full verbs (eg. I hoped to have arrived in time). In neither case is tense-shifting possible in Finnish. However, it can be said that Finnish also shows tense-shifting, but performs it with epistemic modals. With epistemic modals pastness is usually evident in the modal verb, and not in the main verb, to which it logically belongs (Matka on saattanut olla vaarallinen/The voyage may have been dangerous).

Time-specifiers affect the interpretation of tense-forms in both languages. This is particularly obvious with the present tense, which can be used not only in references to the present but also to the past and the future. When the present tense is used in either English or Finnish in references to the past, ie. a present point of view over the past is expressed, a time-specifier is needed to identify the point of event in the past. The same applies to its use in references to the future: the future time of event usually has to be established through a time-specifier. Since the present tense is the most common way of denoting futurity in Finnish, the role of time-specifiers is more important in Finnish than it is in English, which has alternatives for future reference that need no temporal specification. The role of time-specifiers in the total system of temporal relations is an area that needs a much more extensive analysis than has been possible in the present study, as do also the use of tenses in complex sentences and tense-usage in different types of texts.

The term 'aspect' was defined at the outset as referring to the opposition perfective vs. imperfective. Aspect was considered to be imperfective when the speaker describes 'a state of affairs', perfective when he describes a change in the state of affairs. The 'state of affairs' can be a state or an activity (in Vendler's sense of the words), one of the differences being that an activity can be seen as progressing in time, while a state cannot. A change can be momentaneous, a quick transition, for instance, from one state to another, or it can be preceded by an activity that gradually leads to the change, ie. either an achievement or an accomplishment in Vendler's terms. Moreover, aspect was considered to be not a matter of the verb alone, but a matter of the nucleus of the sentence, adverbs of time being excluded. However, aspect can be expressed through the verb alone, ie. there are verbs which are either perfective or imperfective in their meaning and remain so regardless of the other members of the nucleus. In both English and Finnish, however, the NP's included in the nucleus, ie. the subject, the direct object, the indirect object, measure phrases, and phrases denoting location or destination, are involved in the expressions of the aspectual opposition. Thus, the changing of any of the NP's of the nucleus from one expressing 'definite quantity' to one expressing 'indefinite quantity' can change the aspect from perfective to imperfective. This means that in English the articles, and in Finnish the case-endings of the NP's, are involved in this, since they are among the surface features that denote definite and indefinite quantity (eg. The mouse ate the cheese/The mouse ate cheese and Hiiri söi juuston/Hiiri sői juustoa). In both languages some verbs allow both a perfective and an imperfective reading, and both languages also contain verbs which change from perfective to imperfective or vice versa with the addition of, in English, a particle and, in Finnish, a derivational suffix.

The progressive is needed for the expression of the imperfective aspect in both English and Finnish. Both languages have verbs and verb + object NP or/and phrase of destination combinations which denote an accomplishment and are thus perfective (eg. They built a house/He rakensivat talon, He ran home/Hän juoksi kotiin). These can be made imperfective in English by adding the progressive: They were building a house and He was running home denote activities and are imperfective in aspect. In Finnish the imperfectiveness can be expressed by making the object [-total], ie. using the partitive case. When there is no object, the progressive can also be used in Finnish, or imperfectiveness can be denoted by using an adverb like juuri/parhaillaan (eg. Hän oli juoksemassa

kotiin/Hän juoksi parhaillaan kotiin). Another case in which the progressive is necessary for the expression of the imperfective aspect in English is with verbs/verb phrases that denote achievements (eg. die, drown). With the progressive these verbs cease to denote momentaneous transitions from one state to another; instead they now denote an approach towards a transition (eg. The old man is dying). In all other cases where the English progressive is used it is not needed for the expression of imperfectiveness and can thus be used to denote other meanings, such as temporariness simultaneity with something else, the continuity of an activity or state, or the persistence of an activity. The Finnish progressive also has other meanings in addition to imperfectiveness: it often denotes location but also the simultaneity or persistence of an activity, coloured by the speaker's annoyance. The T-total object in Finnish also has other meanings apart from imperfectiveness. Neither language thus has a grammatical form or construction whose sole function would be to express imperfectiveness. In both languages aspect finds its expression through diffuse overt signals.

If aspect is defined in the way it was done in this study, neither the progressive not the present and past perfect forms in English deserve to be called 'aspect', which term has been applied to both categories by various grammarians. The progressive is needed for the expression of aspect only in certain types of sentences and it also has other meanings. In the foregoing analysis the present and past perfect forms were treated as expressions of certain temporal relations and not as realizations of aspectual distinctions. The perfect forms occur in sentences with either a perfective or an imperfective aspect. Thus, changing for instance a past tense form to a present perfect form changes not the aspect of the sentence, but the time-relation (eg. 1 knew it all the time and 1 have known it all the time are both imperfective).

Although tense and aspect are easily distinguished from each other theoretically, they are, in fact, closely interrelated. The analysis showed several instances of their interdependence. For instance, within the present time-sphere the aspect is very rarely perfective. It is more natural for a speaker to describe a present state of affairs than to see a change occurring in the present, particularly when the reference is to the absolute present, ie. to the moment of speaking. When the time referred to is longer than the moment of speaking, ie. the relative present, the speaker usually describes a general state of affairs. If he

describes changes, these are usually repeated ones (John drives the car into the garage every day), and, thus, the aspect is again imperfective. In Finnish, a consequence of this tendency is that, if the aspect is changed from imperfective to perfective, by way of changing the object from [-total] to [+total], the time-reference also changes from the present to the future (eg. Luen kirjaa vs. Luen kirjan). Thus, the same surface feature can be said to denote both aspect and time. In English, too, one and the same category can be used for the expression of both aspect and temporal relations: the progressive, which denotes imperfectiveness, is also used in references to the future. This causes ambiguity in sentences like I'll be writing to him tomorrow, in which the aspect can be interpreted as either perfective or imperfective.

Aspect also plays a part in the interpretation of the time-reference with modal verbs. The ambiguity of the time-reference with these verbs in English arises from the fact that the modals cannot be combined with any of the indicators of futurity (eg. *They will must/They are going to must), and there can thus be ambiguity between the present and the future if there is no time-specifier. If, in these cases, the aspect is perfective, the reference is to the future (They must sail across the Atlantic). If the aspect is imperfective, ambiguity still remains, although the sentence is then more likely to refer to the present than to the future. There is a similar ambiguity with Finnish modal verbs, owing to the fact that the present tense is the normal way of referring to the future. Here, too, the aspect helps in the interpretation of the time-reference.

Tense is only a part of the total system of the expressions needed for temporal relations in both English and Finnish. Their expressions also involve the use of temporal specifiers and temporal connectives, although tense plays the central part in them. The present study has dealt mainly with tenses, discussing the other phenomena only in relation to them. Moreover, only simple sentences have been considered, with the addition of some problems connected with tense-usage in complex sentences. As a contrastive study of the expressions of time and aspect in English and Finnish it is therefore only a beginning, although it has indicated obvious areas for further analyses. Even though it is only a beginning, it has been possible to draw conclusions about the degree of difference and similarity between English and Finnish in this area on the basis of the analysis.

The analysis also gives some indications as to the possible learning difficulties for Finnish learners of English. On the whole, the similarities are greater than the differences, and there should therefore be a positive influence from the mother tongue. As pointed out above, the most significant differences in tense-usage were found within the past time-sphere (in the use of the present perfect) and particularly within the future time-sphere, where the Finnish learner has to learn to make semantic distinctions that are not made in his mother tongue. The correct use of the English progressive is notoriously difficult for Finnish learners. There should, however, be some positive transfer in this from the native language, since Finnish has a progressive construction, and both progressives function in a similar way in the expressions of aspect. Their other functions do not, however, always correspond, so that positive transfer can occur only in a limited number of cases. The correspondence of the -total | object in Finnish and the English progressive as aspect markers is difficult for the learner to understand, particularly since the Finnish object has many other functions. Sequence of tenses and tense-shifting are also phenomena that are likely to cause difficulties, owing to the different behaviour of the languages in these areas.

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KONTRASTIIVINEN TUTKIMUS ENGLANNIN JA SUOMEN TEMPUKSISTA JA ASPEKTISTA

Tutkimuksen päämääränä on analysoida ja verrata englannin ja suomen kielen tempuksia ja aspektia puhtaasti teoreettiselta kannalta. Se ei toisin sanoen pyri, niin kuin kontrastiiviset tutkimukset usein, tuottamaan kielenopetukseen suoraan sovellettavaa aineistoa. Kontrastiiviset tutkimukset voidaan itse asiassa jakaa teoreettisiin ja soveltaviin, joista ensin mainittujen tarkoituksena on kielten teoreettinen vertailu ilman käytännön päämääriä. Soveltava kontrastiivinen tutkimus sen sijaan pyrkii nimenomaan käytännön päämääriin, ts. tuottamaan kielenopetusta tukevaa aineistoa.

Kontrastiivinen tutkimus ei ole sidottu mihinkään erityiseen kielenkuvausmalliin. Yleisenä periaatteena on, että valitaan soveliain malli, toisin sanoen malli, joka näyttää antavan parhaat mahdollisuudet kulloinkin käsiteltävien ongelmien ratkaisemiseen. Suomen ja englannin tempuksia ja aspektia tutkittaessa ja vertailtaessa sopivimmaksi osoittautui semanttispohjainen kuvausmalli. Kontrastiivinen tutkimus tarvitsee aina tertium comparationiksen, kummallekin kielelle yhteisen pohjan, jolta lähtien vertailu suoritetaan. Tempusten käyttöä vertailtaessa itsestään selväksi yhteiseksi pohjaksi tarjoituu käsite 'aika'. Syy siihen, miksi tietyt tempukset, esimerkiksi imperfektimuodot talked ja puhuu, ovat vertailukelpoisia, on nimenomaan, että ne ilmaisevat samaa aikasuhdetta. Näyttää siis luonnolliselta, että kuvaus on aloitettava käsitteelliseltä pohjalta. Aspektin kohdalla tämä käsitteellisen pohjan vaatimus on vielä ilmeisempi, koska kummassakaan kielessä ei ole mitään pintakategoriaa, jota kiistattomasti voisi nimittää 'aspektiksi'. Tutkimuksessa lähdetään siis liikkeelle semanttisista käsitteistä aika ja aspekti, joiden ilmenemismuotoja kielten pintarakenteissa tarkastellaan ja verrataan. Ajan ilmauksissa keskitytään lähinnä tempuksiin ja muita ilmauksia, kuten ajan adverbeja ja aikakonnektoreita käsitellään vain, mikäli ne aiheuttavat muutoksia tempusten tulkintoihin.

Koska lähtökohdan muodostavat semanttiset käsitteet, joiden kielellisiä ilmenemismuotoja pyritään kartoittamaan, kielellisen aineiston tutkimusta varten muodostavat tutkijan itsensä kummallakin kielellä muodostamat lauseet, joissa kyseiset käsitteet esiintyvät. Näin saatua perusaineistoa on täydennetty alan kirjallisuudesta poimituilla esimerkeillä, jotka tutkija on kääntänyt toiselle kielelle, sekä kummankin kielen syntyperäisten puhujien puheesta, sanomalehdistä ja kirjalli-

suudesta löydetyillä esimerkeillä. Tämä ratkaisu tuntui tyydyttävämmältä kuin turvautuminen pelkästään joistakin kirjallisista lähteistä kerättyyn korpukseen. Sekä englannin että suomen syntyperäisiä puhujia on käytetty apuna tarkistettaessa lauseiden hyväksyttävyyttä ja tulkintamahdollisuuksia.

Tempusten tulkinnan lähtökohtana käytetään eräiden filosofien ja kielitieteilijöiden esittämää kolmen hetken järjestelmää. Näistä primäärisin on puhehetki, joka toimii eräänlaisena vedenjakajana puhujan ajallisessa orientoitumisessa. Puhehetkeen puhuja suhteuttaa viittaushetken ja lopulta varsinaisen tapahtumahetken viittaushetkeen. Nämä kolme hetkeä voivat olla samanaikaisia tai seurata toisiaan. Niiden keskinäinen järjestys antaa erilaisia aikasuhdemahdollisuuksia, joista tärkeimmät ovat seuraavat yhdeksän (taulukossa P=puhehetki, V=viittaushetki, T=tapahtumahetki, pilkku erottaa samanaikaiset hetket toisistaan, viiva toisiaan seuraavat hetket):

1.	T - V - P	had left	oli lähtenyt
2.	T,V - P	left	lähti
3.	V - T - P	would leave	oli lähtevä
4.	T - V,P	has left	on lähtenyt
5.	T,V,P	leaves	lähtee
6.	P,V - T	will leave	on lähtevä/lähtee
7.	P - T - V	will have left	on lähtenyt
8.	P - V,T	will leave	on lähtevä/lähtee
9.	P - V - T	will leave	on lähtevä/lähtee

Kuten yllä oleva taulukko osoittaa, kummassakaan kielessä ei ole jokaiselle aikasuhteelle sille ominaista ilmausta, vaan samoja aikamuotoja käytetään useamman kuin yhden aikasuhteen ilmaisemiseen. Kummassakin kielessä on myös tapauksia, joissa kolmen hetken järjestelmä ei selitä tempuksen käyttöä. Tällaisten tapausten selvittämiseksi työssä on käytetty neljättä hetkeä, jota siinä kutsutaan nimellä 'tarkasteluhetki' ('point of view'). Tämä neljäs hetki on normaalisti samanaikainen kuin viittaushetki, mutta poiketessaan tästä mitätöi viittaushetken ja tapahtumahetken vaikutuksen ja aiheuttaa 'epäloogisen' tempusvalinnan.

Vaikka viittaushetki näyttääkin olevan tempusvalinnoissa määräävämpi kuin tapahtumahetki, käsittely noudattaa kolmijakoa, joka syntyy, kun tarkastellaan tapahtumahetken suhdetta puhehetkeen. Tämä jako on sama, joka näyttää olevan tärkeä ainakin länsimaisten ihmisten aikakäsityksessä: jako nykyisyyteen, menneisyyteen ja tulevaisuuteen. Nykyisyys tarkoittaa siis sitä, että tapahtumahetki on samanaikainen puhehetken kanssa, menneisyys sitä, että tapahtumahetki edeltää puhehetkeä, ja tulevaisuus sitä, että tapahtumahetki seuraa puhehetkeä. Tämän kolmijaon perusteella tarkastellaan ja verrataan aikasuhteiden saamia ilmenemismuotoja englannissa ja suomessa.

Aspekti liittyy läheisesti aikakäsitteeseen ja vaikuttaa siten aikasuhteiden lopullisiin ilmenemismuotoihin. Aspekti on tutkimuksessa määritelty perfektiivisyyden ja imperfektiivisyyden väliseksi vastakohtaisuudeksi. Jako perfektiiviseen ja imperfektiiviseen aspektiin tehdään tutkimuksessa filosofiassa ja sittemmin kielitieteessäkin käytettyjen tilan ja muutoksen käsitteiden pohjalta. Aspekti on imperfektiivinen, mikäli lause kuvaa jotakin asiantilaa (esimerkiksi It is raining/Sataa, The weather is cold/San on kylmä), mutta perfektiivinen, jos lause ilmaisee muutoksen asiaintilassa (The old man died last night/Vanha mies kuoli viime yönä). Aspektien tunnistamisessa käytetään apuna Vendlerin (1967) esittämää verbien jakoa neljään lajiin niiden temporaalisten ja eräiden muiden ominaisuuksien perusteella. Nämä lajit ovat tila, toiminta, saavutus ja suoritus. Tila, esimerkiksi jonkin asian tietäminen tai tunteminen, ja toiminta, esimerkiksi juokseminen, ovat aina imperfektiivisiä, kestoltaan rajoittamattomia. Koska ne ovat kestoltaan rajoittamattomia, niihin voidaan liittää duratiivinen ajan määre (Poika juoksi kaksi tuntia/The boy ran for two howrs). Saavutukset, esimerkiksi jonkin löytäminen, ovat hetkellisiä ja merkitsevät muutosta asiaintilassa. Suoritukset, esimerkiksi talon rakentaminen, eivät ole hetkellisiä vaan vaativat aikaa, mutta johtavat päämäärään ja saavutusten tavoin merkitsevät muutosta asiaintilassa. Aspekti ei kuitenkaan ole yksittäisen verbin eikä edes verbilausekkeenkaan, vaan lauseen koko ydinosan ('nucleus') ominaisuus. Sen ilmaisemisessa voivat siten olla mukana verbin lisäksi myös lauseytimeen kuuluvat nominilausekkeet, subjekti, objektit (sekä suora että epäsuora objekti) samoin kuin määrän, päämäärän ja paikan ilmaukset. Ajan määreet eivät vaikuta aspektin perfektiivisyyteen tai imperfektiivisyyteen, koska ne eivät kuulu lauseen ydinosaan, vaan liittyvät koko lauseeseen.

Tutkimus lähtee siis siitä olettamuksesta, että lauseen syvärakenteessa on joko imperfektiivinen tai perfektiivinen aspekti osana sen ydintä. Aika esiintyy syvärakenteessa erillisinä lauseina, jotka ovat ydinlauseen yläpuolella. Ylimpänä on puhehetken sisältävä lause, sen alla viittaus-

hetkilause ja alimpana tapahtumahetkilause. Tutkimuksessa käytetty neljäs hetki eli tarkasteluhetki voitaisiin sijoittaa puhehetki- ja viittaushetkilauseiden väliin. Vaikka tutkimuksessa lähdetäänkin liikkeelle edellä esitetyn kaltaisesta syvärakenteen kuvauksesta, siinä ei systemaattisesti kuvata syvärakenteiden muuttumista pintarakenteiksi eikä tähän muuttumiseen tarvittavia transformaatioita. Siinä tarkastellaan kunkin aikasuhteen ja aspektin ilmaisemiseen tarjolla olevia pintavaihtoehtoja ja niiden välillä mahdollisesti vallitsevia eroja, syitä eri ilmaisumuotojen valintoihin ja näiden syiden mahdollista samankaltaisuutta ja erilaisuutta englannissa ja suomessa. Tutkimuksesta puuttuu siis se teoreettinen systemaattisuus, jota kontrastiiviseen tutkimukseen on pyritty luomaan (esimerkiksi Krzeszowski 1974). Systemaattisuuden asemesta tutkimuksessa pyritään valaisemaan tempusvalintojen ja aspektin ilmausten problematiikkaa mahdollisimman monelta suunnalta, käyttäen apuna eri teoriamallien tarjoamia selityksiä.

Aspektin ilmaisumuotoja käsitellään ensin ja myöhemmässä tempusten tarkastelussa pyritään huomioimaan ajan ja aspektin välinen riippuvuussuhde. Aspektin ilmauksissa saattavat siis olla mukana verbin lisäksi kaikki lauseen ydinosaan kuuluvat nominilausekkeet, määrän, päämäärän ja paikan ilmaukset mukaan luettuina. Mikäli esimerkiksi objektilauseke on osa aspektin ilmausta, se ilmaisee tiettyä määrää ('definite quantity') aspektin ollessa perfektiivinen (He rakensivat talon/They built a house), mutta epämääräistä määrää ('indefinite quantity'), mikäli aspekti on imperfektiivinen (He rakensivat taloja/They built houses). Jos taas paikan adverbiaali on mukana aspektin ilmaisemisessa, sen on ilmaistava päämäärää, jotta aspekti voisi olla perfektiivinen. Siten Poika juoksi rannalle on perfektiivinen, mutta Poika juoksi rannalla on imperfektiivinen. Mitä erilaisimmat pintarakenteen ilmiöt voivat siis ilmaista aspektieroja. Niiden ilmaisemisessa ovat mukana esimerkiksi englannin artikkelit ja suomen objektin saamat sijapäätteet, englannin paikan määreissä käytetyt prepositiot ja suomen paikallissijat. Kummassakin kielessä on tietenkin verbejä, jotka itsessään, ilman nominilausekkeiden vaikutusta, ovat joko imperfektiivisiä tai perfektiivisiä. Suomen kielessä muutos perfektiivisestä imperfektiiviseen, tai päinvastoin, voidaan saada aikaan jonkin derivaatiosuffiksin avulla (istua/istahtaa), englannin kielessä esimerkiksi lisäämällä verbiin jokin prepositio (sit/sit down). Molemmissa kielissä on lisäksi tapauksia, joissa aspekti on kaksiselitteinen. Niinpä esimerkiksi monet saavutusta

ilmaisevat verbit/verbilausekkeet ovat tulkittavissa myös frekventatiivisesti, jolloin ne ovat aspektiltaan imperfektiivisiä, koska toistuvien saavutusten ketju voi olla kestoltaan rajoittamaton, vaikka yksittäiset saavutukset ovatkin hetkellisiä. Siten esimerkiksi Heräsin seitsemältä sallii duratiivisen ajan adverbiaalin lisäämisen (Heräsin seitsemältä kahden viikon ajan), joka osoittaa, että sen voi tulkita imperfektiiviseksi.

Koska aspektin ilmaisut koostuvat monista eri tekijöistä, kummassakaan kielessä ei voi osoittaa mitään pintakategoriaa, jota voitaisiin kutsua 'aspektiksi'. Niinpä englannin kielen progressiivista muotoa, jota eräissä kieliopeissa nimitetään 'aspektiksi', tarvitaan imperfektiivisen aspektin ilmaisemiseen vain niissä tapauksissa, joissa kaikki aspektin ilmaisemiseen osallistuvat lauseytimen muut osat ovat perfektiivisyyttä ilmaisevassa muodossa (They built a house). Tämä suoritusta ilmaiseva lause voidaan muuttaa imperfektiiviseksi käyttämällä progressiivista muotoa (They were building a house), jolloin ei olekaan enää kysymyksessä suoritus, vaan viitataan sitä edeltävään toimintaan. Sama ero ilmaistaan suomen kielessä objektin muodon erolla (He rakensivat talon/He rakensivat taloa). Suomessakin voidaan käyttää 'progressiivista' muotoa (olla + 3. infinitiivin inessiivi) imperfektiivisen aspektin ilmaisemisessa vastaavanlaisissa tapauksissa, varsinkin jos lauseessa ei ole objektia (Poika juoksi kotiin/Poika oli juoksemassa kotiin). Koska englannin kielen progressiivista muotoa tarvitaan imperfektiivisyyden ilmaisemiseen vain tietyissä tapauksissa, se on muulloin vapaa ilmaisemaan muita merkityksiä. Niinpä se saattaa ilmaista tilan tai toiminnan väliaikaisuutta, korostaa toiminnan kestoa tai korostaa toimintojen samanaikaisuutta. Suomenkin progressiivisella muodolla on muita merkityksiä kuin imperfektiviisyyden ilmaiseminen: se voi ilmaista subjektin olinpaikkaa (Lapset ovat poimimassa marjoja) tai, englannin progressiivisen muodon tavoin, korostaa toimintojen samanaikaisuutta. Myöskään suomen objektia ei aina tarvita aspektin ilmaisemiseen - negatiiviset lauseet, joissa objekti on aina partitiivissa, on tutkimuksessa käsitetty aspektiltaan imperfektiivisiksi - joten sekin voi ilmaista muita merkityseroja. Esimerkiksi tilaa ilmaisevien verbien yhteydessä, jolloin aspekti on aina imperfektiivinen, objektin vaihtelu akkusatiivista partitiiviin ilmaisee sen, kohdistuuko tila koko objektin käsitteeseen vai vain osaan siitä (Tunnen tämän kaupungin/Tunnen tätä kaupunkia).

Aikasuhteiden ilmauksissa, joista tässä tutkimuksessa käsitellään

pääasiassa vain tempuksia, on englannin ja suomen välillä runsaasti yhtäläisyyksiä. Nykyisyyteen viitattaessa kumassakin kielessä käytetään säännöllisesti preesensiä,, paitsi milloin tarkasteluhetki aiheuttaa tähän sääntöön poikkeuksen. Tarkasteluhetki saattaa kummassakin kielessä aiheuttaa imperfektin käytön ja englannissa joskus myös eräiden futuuri-ilmausten käytön. Eroavuutta aiheuttaa se, että englannissa progressiivisen muodon avulla tehdään ero absoluuttisen ja relatiivisen nykyisyyden välillä (He is playing the piano/He plays the piano), minkä eron ilmaisemiseen suomessa tarvitaan ajan adverbiaaleja (Hän soittaa parhaillaan pianoa/Hän soittaa pianoa).

Menneisyyden aikasuhteiden ilmauksissa esiintyy jonkin verran erilaisuutta. Kummassakin kielessä aikasuhdetta T,V - P ilmaistaan imperfektillä, mikäli tarkasteluhetki ei aiheuta 'historiallisen' preesensin käyttöä. Aikasuhdetta T - V,P taas kumpikin kieli ilmaisee käyttämällä perfektiä. Kielten välillä on kuitenkin ero siinä, että suomen kielessä viimeksi mainitun aikasuhteen tapahtumahetki voi olla jokin tietty menneisyyden hetki. Suomessa perfektiin voi toisin sanoen yhdistää tarkan ajan määreen, mikä on mahdotonta englannissa. Kummassakin kielessä syy perfektin valintaan on, että puhuja olettaa menneen tapahtuman merkitykselliseksi nykyhetkellä, toisin sanoen näkee jonkinlaisen yhteyden menneen tapahtuman ja puhehetken välillä. Suomessa tämä yhteys voi siis vallita jonkin määrättynä hetkenä sattuneen tapahtuman ja puhehetken välillä, mutta englannissa ei. Kummassakin kielessä on tavat ilmaista myös aikasuhteita T - V - P eli 'menneisyys menneisyydessä' ja V - T - P eli 'tulevaisuus menneisyydessä'. Edellisen ilmauksena on kummassakin kielessä tavallisesti pluskvamperfekti, jälkimmäisen ilmaisemiseen kummassakin kielessä on useampia erilaisia mahdollisuuksia.

Tulevaisuuteen puhuja ei voi suhtautua yhtä varmasti kuin menneisyyteen ja nykyisyyteen, ja tämä heijastuu futuriteetin ilmauksissa sekä englannissa että suomessa. Englannissa on useampia erilaisia mahdollisuuksia futuriteetin ilmaisemiseen kuin suomessa. Englannin futuriteetin ilmaukset osoittavat puhujan erilaisia asenteita tulevaisuuteen nähden: esimerkiksi will/shall + infinitiivi ilmaisee lähinnä puhujan ennustuksen, going to + infinitiivi aikomuksen tai johtopäätöksen, preesens ja progressiivinen preesens ilmaisevat suunnitelman ja niin edelleen. Suomen keskeiset futuriteetin ilmaisukeinot, preesens, tulla + 3. infinitiivin illatiivi ja olla + 1. partisiippi, eroavat toisistaan ilmaisemansa varmuusasteen ja tyylillisten seikkojen puolesta siten, että tyylillisesti

vanhahtava $o\ell\ell\alpha$ + $-v\alpha/-v\alpha$ ilmaisee suurinta varmuutta, kun taas preesens on vähiten varma. Englannissakin eri vaihtoehdot voidaan asettaa varmuusasteikolle, jolla preesens kuitenkin osoittaa suurinta varmuutta.

Ajan adverbiaalit vaikuttavat tempusten tulkintaan kummassakin kielessä. Tämä on erityisen selvää preesensin kohdalla, jota sekä englannissa että suomessa käytetään viittaamaan, paitsi nykyisyyteen, myös menneisyyteen ja tulevaisuuteen. Koska preesens on suomen kielen tavallisin tapa viitata tulevaisuuteen, on selvää, että ajan adverbiaalien merkitys on suomessa suurempi kuin englannissa, jossa on muita vain futuriteetin ilmaisemiseen käytettyjä vaihtoehtoja.

Yhdysvirkkeiden tempusten käytön logiikkaa on myös pyritty selvittämään edellä esitetyn kolmen hetken muodostaman järjestelmän avulla. On esitetty (esimerkiksi Reichenbach 1947), että yhdysvirkkeissä päälauseen ja sivulauseiden viittaushetket olisivat identtiset. Niissä tapauksissa, joissa tämä pitää paikkansa, on tuloksena niin sanottu consecutio temporum. Sekä englannissa että suomessa on kuitenkin runsaasti tapauksia, joissa consecutio temporum ei toimi. Epäsuorassa esityksessä englannin kieli näyttää noudattavan sääntöä tarkenmin kuin suomen kieli, erityisesti silloin kun päälauseen verbi ei ole faktiivinen. Virkkeet, joissa on temporaalinen sivulause, osoittavat erityisen selvästi, että viittaushetket eivät suinkaan ole aina identtiset. Missä määrin consecutio temporumia noudatetaan englannissa ja suomessa, olisi selvitettävissä vain laajan kvantitatiivisen tutkimuksen avulla, johon tässä tutkimuksessa ei ole ollut mahdollisuuksia.

Tempusten käyttöön liittyy sekä englannissa että suomessa kaksi ilmiötä, jotka alan englanninkielisessä kirjallisuudessa tunnetaan nimillä 'tense-replacement' ja 'tense-shifting'. Edellinen tarkoittaa imperfektin, perfektin ja pluskvamperfektin välisten erojen neutralisoitumista, joka englannin kielessä esiintyy konteksteissa to + V, V + -ing ja modaaliapuverbi + V. Suomen kielessä vastaava ilmiö esiintyy partisiippirakenteissa (2. partisiippi) sekä modaaliverbien yhteydessä, joskin mennyt aika suomessa ilmaistaan modaaliverbissä eikä infinitiivissä, kuten englannin kielessä (esimerkiksi Hän on saattanut lähteä/He may have gone). Neutralisaation yhteydessä ajan määreet kuitenkin usein ilmaisevat, mistä aikasuhteesta on kyse.

Nimellä 'tense-shifting' tunnettu ilmiö esiintyy englannin kielessä modaaliapuverbien yhteydessä, mikäli niiden merkitys ei ole episteeminen. Kun viitataan menneisyyteen, mennyt aika ilmaistaan infinitiivissä eikä apuverbissä, johon se loogisesti kuuluisi (I could have done it then). Tämä ilmiö on seuraus englannin modaaliapuverbien vaillinaisesta taivutuksesta, josta johtuen niillä ei ole partisiipin perfektiä. Ilmiö esiintyy myös eräiden taivutukseltaan täydellisten verbien yhteydessä (I hoped to have arrived in time). Saman ilmiön voi katsoa esiintyvän myös suomen kielessä, mutta päinvastoin kuin englannissa episteemisten modaaliverbien ollessa kyseessä. Tempuksen siirto tapahtuu myös eri suuntaan kuin englannissa eli pääverbistä apuverbiin. Esimerkiksi lauseessa Matka on saattanut olla vaarallinen, mikäli lause tulkitaan episteemisesti eli sen merkitys on 'Saattaa olla, että matka oli vaarallinen', menneen ajan olettaisi loogisesti olevan ilmaistuna infinitiivissä eikä modaaliverbissä.

Vaikka tempus ja aspekti voidaankin teoriassa erottaa toisistaan, tämä tutkimus osoittaa, että ne liittyvät kiinteästi toisiinsa. Analyysi paljastaa useita tapauksia, jotka todistavat niiden keskinäistä riippuvuutta. Erinomainen erimerkki tästä ovat nykyisyyteen viittaavat ilmaukset. Perfektiivisen aspektin luonteesta johtuen sen yhdistäminen nykyisyyteen on harvinaista, toisin sanoen aspekti on tavallisesti imperfektiivinen preesensin yhteydessä. Tästä johtuu myös, että jos aspekti muuttuu perfektiiviseksi, aikasuhdekin muuttuu futuuriin viittaavaksi, varsinkin suomen kielessä, jossa preesens on myös yleisin futuurin ilmaus. Näin ollen lauseiden luen lehteä ja luen lehden välillä vallitsee paitsi aspekti- myös aikasuhde-ero. Sama pintarakenteen muoto ilmaisee siis sekä aikasuhdetta että aspektia. Myös englannissa sama pintakategoria voi ilmaista sekä aspekti- että aikasuhde-eroa: progressiivinen muoto esiintyy sekä imperfektiivisen aspektin ilmaisimena että esimerkiksi futuriteetin ilmauksissa.

Aspektilla on tärkeä osuus aikasuhteiden tulkitsemisessa myös modaaliverbien yhteydessä. Koska näihin verbeihin ei voi englannissa, eikä usein suomessakaan, yhdistää mitään futuriteetin ilmausta (*They are going to must/ Heidän tulee täytymään ...), saattaa jäädä epäselväksi, viitataanko niiden yhteydessä nykyisyyteen vai tulevaisuuteen. Kuitenkin jos aspekti on perfektiivinen, viittaus on todennäköisimmin tulevaisuuteen. Jos se taas on imperfektiivinen, viitataan nykyisyyteen.

Tempus on vain osa, joskin olennainen osa, aikasuhteiden ilmaisujärjestelmää sekä englannissa että suomessa. Aikasuhteiden ilmaisemisessa ovat mukana myös ajan adverbiaalit ja aikakonnektorit. Tämä tutkimus ei siis, käsitellessään pääasiallisesti tempuksia, anna kokonaiskuvaa ajan ilmauksista näissä kielissä. Se on myöskin keskittynyt tempusten käyttöön pääasiassa yksinkertaisissa virkkeissä, joten yhdysvirkkeiden tempukset vaativat lisätutkimusta. Tempusten esiintyminen pitemmissä teksteissä on ilmeisesti myös tutkimisen arvoinen, koska tempusten käyttö näyttää olevan erilaista erityyppisissä teksteissä.

Vaikka tämä tutkimus on luonteeltaan teoreettinen, sen tulosten perusteella lienee kuitenkin mahdollista tehdä joitakin johtopäätöksiä suomenkielisille englannin opiskelijoille aiheutuvista vaikeuksista. Tempusten käytön suurimmat erot esiintyvät menneisyyteen ja erityisesti tulevaisuuteen viittaavissa ilmauksissa. Viimeksi mainitulla alueella suomalaisen on englannin kieltä opiskellessaan opittava tekemään semanttisia eroja, joita hän ei vastaavassa yhteydessä tee omassa kielessään. Englannin progressiivisen muodon oikean käytön oppiminen on tunnetusti vaikeaa suomenkielisille. Jonkin verran positiivista vaikutusta pitäisi kuitenkin olla sillä seikalla, että myös suomen kielessä on 'progressiivinen' muoto, jonka käyttö osittain vastaa englannin progressiivisen muodon käyttöä. Koska ne kuitenkaan eivät aina vastaa toisiaan, positiivista siirtoa ilmeisesti tapahtuu vain rajoitetuissa tapauksissa. Suomen kielen objektimuodon ja englannin kielen progressiivimuodon vastaavuus on taas ilmeisen hankalasti tajuttavissa. Consecutio temporum ja tempuksen siirto ovat myös ilmiöitä, joiden voi olettaa tuottavan eritvisiä vaikeuksia.