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Temporal Anteriority of the Arabic Perfect in Relative Clauses

Effects of clause structure on tense in MSA

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Abstract

In this study I investigate how relative clauses in MSA effect the temporal properties of the verb form known as Perfect. Comrie (1976), and later Fassi Fehri (2004), describe the Perfect as having the properties of anteriority and perfectivity, i.e. it reports a finished situation temporally anterior either to the time of speech or to some other point in time. My hypotheses is that the Perfect in a relative clause always refers to a situation anterior to the situation described in the main clause, rather than the time of speech. In other words, the Perfect in a relative clause always constitutes a step back in time. In a conventional narrative this means that the Perfect in relative clauses does not push time forward, quite the opposite of how the Perfect in main clauses is interpreted. The hypothesis yielded solidly positive results when tested on a corpus of narrative text. The conclusion is then drawn that the Perfect in relative clauses are cases of relative past tense, relating to the main clause in the same way that the Perfect relates to the auxiliary *kāna* in the pluperfect construction.

Keywords: Arabic, syntax, tense

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1 Introduction

Having an interest both for literary fiction and grammar, I started to work on this paper with the intention of investigating how Arabic verb forms signal movement in narrative time; to what extent and under which circumstances the Perfect constitute a step forward in time in that it sequences events on a time-line. A major obstacle to this aim turned out to be subordinated clauses and how the Perfect in them relate to the events in the main narrative. My own direct intuitive or pre-theoretic interpretation of these cases was that the Perfect in subordinate clauses in most cases refer to events prior to narrative time, but I had no empirical or theoretical evidence for it. I also noted that the Perfect of stative verbs in subordinate clauses allowed for simultaneous interpretations, which indicated that *Aktionsart* might be of importance.

In the grammars I consulted, only Wright (1896) comments on this, but in rather vague terms. Since this is central to the understanding of the temporal relations of events in any texts, and also strongly relates to the nature of the Arabic verb forms, and yet seemed to be virtually unexplored, I chose this question, the situation time of the Perfect in subordinated clauses, to be the focus of my study.

1.1 Introducing the problem - relative clauses and narrative time

To illustrate the question at hand, we can take as point of departure Dry's article *The movement of narrative time* (1983) and her discussion on relative clauses in English. She notes that in an English narrative, perfective verbs in the simple past in relative clauses can "trigger the perception of time movement", just like the perfective preterit in main clauses, "provided that they are chronologically ordered and introduce new information" (1983:36). One of her examples, taken from James Joyce's *Dubliners* is the following:

- (1)
 - a. The old man returned with a few lumps of coal,
 - b. which he placed here and there on the fire.

In this sentence, the situation in the main clause (1)a clearly occurs before that of the relative clause (1)b. Now, a relative clause in Arabic seems to be incapable of retaining the same order of events. Consider the Arabic syntactical equivalent to (1):

(2)

- | | | | | | | |
|----|----------------|---------------------|-----------|-----------|------|----------|
| a. | Rajaʿa | l-ʿajūzu | bi-baʿḍi | l-qīṭaʿi | mina | l-faḥmi |
| | return.3ms.PER | the old man | with-some | the-lumps | of | the-coal |
| b. | llatī | naṭara-hā | ʿalā | n-nāri | | |
| | REL | spread.3ms.PER-them | on | the-fire | | |

*The old man returned with a few lumps of coal which he **had** placed here and there on the fire.*

(2) does not allow for a reading in which the event in (2)b occurs after that in (2)a, quite the opposite to the English equivalent. The only possible reading of (2) is that the old man returned with a few lumps of coal which he previously had put on a fire somewhere (from which he apparently took them out again). The insertion of a temporal adverb such as *tumma* 'then' or *baʿda dālika* 'thereafter' in the relative clause to clarify the temporal ordering of the situations, as in (3), renders the sentence ungrammatical.¹ That the "inverted" temporal ordering of situations in this sentence cannot be negated suggests that it is not a product of implicature, but of grammar.

(3)

- | | | | | | | |
|----|----------------|--------------|---------------------|-----------|----------|----------|
| a. | Rajaʿa | l-ʿajūzu | bi-baʿḍi | l-qīṭaʿi | mina | l-faḥmi |
| | return.3ms.PER | the old man | with-some | the-lumps | of | the-coal |
| b. | *llatī | tumma | naṭara-hā | ʿalā | n-nāri | |
| | REL | then | spread.3ms.PER-them | on | the-fire | |

*The old man returned with a few lumps of coal which he **then** placed here and there on the fire.*

¹ No adverbials of this kind, that effect the temporal ordering, were found in this syntactic position in the corpus. The ungrammaticality of the construction was also confirmed by Arabic speaking informants.

The only way to get the right temporal ordering seems to be to break up the sentence into two coordinated main clauses, as in (4). This suggests that the Perfect in relative clauses has a situation time anterior to that in the matrix clause.

(4)

- | | | | | | | |
|----|----------------|---------------------|-----------|----------|------|----------|
| a. | Rajaʿa | l-ʿajūzu | bi-baʿḍi | l-qīṭaʿi | mina | l-faḥmi |
| | return.3ms.PER | the old man | with-some | lumps | of | the-coal |
| b. | wa | naṭara-hā | ʿalā | n-nāri | | |
| | and | spread.3ms.PER-them | on | the-fire | | |

*The old man returned with a few lumps of coal **and** placed them here and there on the fire.*

Relative clauses in Arabic interact with the ordering of situations differently from English. There is a semantic difference in syntactically identical sentences in the two languages. It is this different ordering of events in Arabic I will attempt to explore in this paper.

1.2 Aim and scope

The aim of this study is to test the hypothesis that the Perfect in relative clauses in MSA always have a situation time anterior to that of the main clause. With situation time (henceforth ST) I mean the position on a time line of a situation denoted by a verb, as related to other linguistically expressed situations. Following Comrie (1976, 1985), the term ‘situation’ is used in a broad sense to cover events, states, processes, etc.

The question of the ST of the Perfect in subordinate clauses seems to be virtually unexplored. The only attempt of giving a unified description of the ST of the Perfect in subordinate clauses I have found in the literature is in Wright’s (1898) classical grammar.² According to Wright, one of the ways of expressing the pluperfect (anterior past in the terminology applied here) in Arabic is “[b]y the *simple perfect*, in relative

² Dahlgren’s (2005:155) grammar include a paragraph on the Imperfect in relative clauses (“Användning av imperfect i relativsatser”) but interestingly no corresponding paragraph on the Perfect in relative clauses. Cantarino mentions that “[w]hen **in contrast with another action**, either present or past, the perfect can have the idea of the **pluperfect**” (1975 I:63, emphasis in original). To demonstrate this he gives three examples of which all are cases of the Perfect in a complement clauses. In this explanation he does not draw any syntactically relevant conclusion from his data, since in any text, almost any two verbs could be said to be ‘in contrast to one another’ in some sense or another. The statement has no descriptive value.

and conjunctive clauses*, that depend upon clauses in which the verbs are in the perfect” (1898 II:4C, emphasis in original), adding in a footnote that “[b]y a relative or conjunctive clause we mean a clause that is joined to a preceding one by means of a relative pronoun or a connective particle.” (1898 II:4D) It is not clear what is meant by ‘connective particle’. Of the six examples he gives, one is a relative clause, one a adverbial with *ḥaytu* ‘where’, and four are adverbial clauses with *lamma* ‘when’. Also, the examples are from Classic and Quranic Arabic and their syntax might thus have changed with the emergence of MSA.

This study will not deal with adverbial clauses. The reasons for this will be discussed further in 3.3. Suffice it to say at this point that adverbial clauses can relate situations temporally to the main clause in many different ways, and analyzing them all systematically would require a study of much wider scope than is possible here. Complement clauses will be discussed only briefly due to the scarcity of instances of the Perfect in complement clauses in the corpus, although I believe the theory I present can encompass also these.

I will only look at the Perfect in the affirmative. Negated verbs are excluded from the study for two reasons. Firstly, negated verbs, situation that never happened, are often very difficult to position, even pre-theoretically, on a time-line in relation to other situations that *did* happen. One has to answer the question bordering to the absurd: ‘When did this not happen?’ Secondly, this excludes the problematic negation *lam* followed by the Imperfect. In most grammars, this is described as a negation of the Perfect. While it certainly negates the past, it is not clear whether it negates only perfective aspect.

The aim of this study is then to theoretically account for how the Perfect in relative clauses has a ST prior to that of the main clause, and to test this assumption on a corpus.

1.3 Method

The method employed in this study is to first theoretically account for how the Perfect fits into the Arabic tense system, extending this theory to account for relative clauses, and then empirically testing the validity of this theory on a corpus, that, due to the scope of this study, has to be somewhat limited.

When analyzing a text as to the plausible STs of the Perfect in relative and complement clauses, the context of every specific case is of great importance. If we are to analyze the ST of a certain verb form without preconditioned assumptions, the context in which it occurs provides a criteria to which all interpretations of the verb can be tested. Any interpretation that is deemed to be logically incompatible with the context is to be discarded. From this procedure it is hoped that a pattern of ST of the Perfect in relative clauses will emerge.

This method is similar to Cantarino (1974) in that it is based on a systematic analysis of authentic material. His presentation of the material, however, lacks the parameter of the context and presents authentic but decontextualized sentences. Consider the following example:

تَرَبَّعَ الْأَمِيرُ عَلَى مَنَصَّةِ
الْقَضَاءِ فَجَلَسَ عُقْلَاءُ بِلَادِهِ عَنْ
يَمِينِهِ وَشَمَالِهِ

The Emir sat cross-legged upon the
judgment seat and on each side of
him sat the wise men of the country.
Gibr.

Cantarino (1974 I:59)³

The reading of the Arabic sentence with the two verbs in the Perfect, *tarabba'a* 'to sit cross-legged' and *jalasa* 'to sit', as perfective and thus occurring after one another would probably by most Arabic speakers be regarded as more natural; i.e. "The Emir *crossed his legs* and the wise men of the country *sat down* to his right and his left." The reading Cantarino presents, with the two verbs being *imperfective*, and thus simultaneous, is only vouched for by his own English translation. He explains in the introduction that the translations are "ONLY to CLARIFY THE ARABIC TEXT, NOT TO PROVE THE SYNTACTICAL POINT AS GIVEN IN THE EXPLANATION."

³ Gibr. is short for Gibrān Khalīl Gibrān. The quote is from *Al-majmu'a l-kāmila li-mu'allafāt Jibrān Khalīl Jibrān* (Cantarino 1974 I:xii). The vowelings of the Arabic txt is here rendered slightly different from Cantarino's original due to limitations of the typeface. The translation is Cantarino's own.

(Emphasis in original.) As they stand though, as decontextualized samples, Cantarino's examples offer little proof for his claims.⁴

Presenting longer, coherent samples of texts as data for analysis could prove to be both a more effective and a more empirically valid way of showing the semantic properties of the verb forms. This way, the immediate context will be readily available for the reader and can be referred to in a direct way in the course of the analysis.

1.4 The corpus

The corpus for a analysis as the one sketched above has to comply with certain criteria. Firstly, it should be representative for the language variant that is the object of the investigation, in this case MSA. That excludes dialects and with that most spoken material, and provides a historical lower limit of roughly the beginning of the 19th century with the emergece of the *Nahḍa* movement with its renewal and modernization of the Arabic language.⁵

Secondly, it should be representative of narrative discourse. Though this is not a technical necessity, having main events clearly ordered on a timeline makes temporal relations easier to identify, as they can be analyzed as deviations from the sequenced events of the narrative. This means that the corpus should be from period when conventions of narration in MSA (practically this means novels and short stories) has been established. This point of maturity in the development of the Arabic novel and short story is generally regarded as having been reached in the 1930s (Starkey 2006). Modernistic methods; stream of consciousness and others, while certainly interesting to analyze, do not comply with this criteria as they consciously try to divert from conventions. Still, the data should not be of a too simple nature, allowing for a variety of structures that might be seen as representing common structures of the language.

Thirdly, the author should be generally recognized as a competent writer. This is of greater importance in Arabic than in many other languages because of the situation if the Arabic diglossia. Being a native speaker of Arabic is not enough to be a source of

⁴ Badawi et al., while praising Cantarino for his wide scope and systematic approach, similarly notes that his analysis of the data is "often idiosyncratic and always Eurocentric: one has the impression that the Arabic has first been translated and then analysed according to the parsing of the resulting English." (2004:4)

⁵ For a insightful discussion on the problem of defining MSA and a survey of scholarly opinion on the subject, see Persson (2002:20).

data for studies on MSA, since Arabs are only native speakers of their respective dialects.

The Nobel Prize winner Najīb Maḥfūz's *Bayn al-qaṣrayn* has been chosen as corpus for this study. *Bayn al-qaṣrayn* is the first part of Maḥfūz's famous trilogy that describes the everyday life of three generations of a cairene family in the first half of the 20th century. The trilogy was written before the revolution in 1952 but not published until 1956-57 (Starkey 2006).

I have used the edition of the Egyptian state-run publishing house Maktabat Miṣr, where in 1983 *Bayn al-qaṣrayn* was on its twelfth printing. This edition is, due to its low price, probably the most widespread. Although in poorer quality printing, paper and binding, the Maktabat Miṣr edition serves the purposes of a linguistic study better than the recent edition published by the Lebanese Dar al Shuruq (Maḥfūz 2007), since the latter suffers from grave inconsistencies in punctuation, quotation marks and paragraphing.

The corpus is limited to the first five chapters, pp. 5-33. These chapters were chosen without consideration for their content, by simply taking a section starting with the beginning of the novel with a length appropriate to the scope of this study.

In my translations of quotes from the corpus, I have consulted Hutchins and Kenny's translation, entitled 'Palace Walk' (Mahfouz 2001). This translation could not be quoted directly, since in most cases the syntactical point I am making would then be lost, but I have from Hutchin and Kenny taken many translations of individual words.

1.5 Transliteration

This paper follows the transliteration system of *Encyclopedia of Arabic Language and Linguistics* (EALL). This system has the virtue of having a one-to-one relationship between the Arabic characters and the Latin characters on which the transliteration is based. This means that fricatives are not represented by double characters, such as *dh* or *th*, but with underscoring the corresponding occlusive; *ḏ* and *ṯ*. The velars are represented by *x* and *ḡ*, respectively. Emphatic consonants are marked by a diacritic dot below the letter; *ṣ*, *ḍ*, etc. The transliteration here will however deviate from the system in EALL with regards to the letter *ẓā'* ظ. The phonetically more accurate underscored *ḏ* with a dot below can here not be employed due to limitations of the typeface. Instead, a dotted *z* will be used, which in EALL is reserved for use in proper names only.

1.6 Disposition

The study is organized into six chapters. Chapter 2 briefly outlines linguistic concepts central to the study. In chapter 3 I attempt to make a theoretical account of the hypothesis, showing how the anteriority of the Perfect in relative clauses can be understood, with special attention to the problematic case of stative verbs. Chapter 4 presents corpus data as analyzed through this theoretical framework. In chapter 5 the results are summarized and discussed, and in the appendix exact references to the corpus are given for every single piece of data for ease of reference to the interested reader and to facilitate a critical analysis of my results.

2 Linguistic preliminaries

In this chapter, the linguistic concept on which the analysis is based are briefly presented. These concepts based on theories widely known in linguistic literature, and will therefore not be described in much detail, but still presented in a way that will hopefully allow also the non-specialist to follow the line of thought of the study. For more detailed discussions the reader is referred to the bibliography. These concepts are the Reichenbacherian tenses, aspect and *Aktionsart*.

2.1 Reichenbach's tenses

Central for this study is Reichenbach's (1947) theory of tense. Briefly, the theory introduces *reference time* (R) as a third point in time to which tenses relate, *speech time* (S) and *event time* (E)⁶ being the two others. It is assumed that a finite verb form in any given language can be described by the linear ordering and/or co-occurrence of these points on a time-line. This is a metalinguistic use of the term 'tense', different from the more every-day use of the word as meaning simply 'verb form'. Henceforth, tense will be used in this metalinguistic sense referring to Reichenbach's categories, and the term 'verb forms' will refer to how these tenses are realized in a given language.

The English pluperfect, for example *John had left*, is understood as having the structure $E-R-S$ (dash represents sequencing and comma coinciding), which means that the event takes place before some other past event. This other past event can be defined by a simple past, for example *when Mary came*, having the structure $R,E-S$. In the theory, Rs in the same sentence always coincide, and thus Mary's coming defines the reference point which John's leaving precedes. This sentence, (5), with its two clauses, can be graphically described as (6).

⁶ 'Event time' is the Reichenbacherian equivalent to the term 'situation time' of this study.

- (5)
- a. John had left
 - b. when Mary came.

- (6)
- a. E — R — S
 - b. E,R—S

One reason for the popularity of this system is that it can explain the semantic difference between preterit and perfect within a general framework for all tenses. R is the point in time to which the situation relates or, put differently, from which the situation is viewed. The difference between the preterit (*He wrote*) and perfect (*He has written*) is that the preterit is viewed from within its own time, hence R and the time of the actual event, E, coincides. This gives the structure $E,R—S$. Perfect, on the other hand, is viewed from the time of the present, through its relevance in the moment of utterance. R thus coincides with S, giving the structure $E—S,R$. This explains why a sentence like **He has written the letter yesterday* is ungrammatical, while *Now he has written the letter* is not. Temporal adverbs always specify R, and perfect requires R to be in the present, to coincide with S.

In some cases, verb forms are ambiguous as to the relation of E, R and S. In English, for example, the simple future can be variously $S—R,E$ and $S,R—E$. This is evident in that both *Now I will come* and *Tomorrow I will come* are grammatical sentences. (Temporal adverbs specify R).

With S, E and R, in sequence or coinciding, we get thirteen possible combinations. Of these thirteen, nine are what Reichenbach calls “fundamental forms” and are given new names. These new names will be used throughout this paper. This is summarized in Table 1 - *Reichenbach's tenses*, reproduced from Reichenbach (1947:297) and with examples from English added here.

Table 1 - Reichenbach's tenses

| Structure | New Name | Traditional Name | Example |
|-----------|-------------------|------------------|--------------------|
| E – R – S | Anterior past | Past perfect | had written |
| E, R – S | Simple past | Simple past | wrote |
| R – E – S | } Posterior past | | was going to write |
| R – S, E | | | |
| R – S – E | | | |
| E – S, R | Anterior present | Present perfect | has written |
| S, R, E | Simple present | Present | writes/is writing |
| S, R – E | Posterior present | Simple future | will write |
| S – E – R | } Anterior future | Future perfect | will have written |
| S, E – R | | | |
| E – S – R | | | |
| S – R, E | Simple future | Simple future | will write |
| S – R – E | Posterior future | - | |

2.2 Aspect

The linguistic concept of aspect is famously defined by Comrie (1976:3) as “different ways of viewing the internal temporal constituency of a situation.” While tense is objective and can be defined by truth-conditions (the situation X either takes place in the past or future, before or after the situation Y, etc.), aspect is not. The same event can be truthfully reported in both perfective and imperfective verb forms, hence the “viewing” in Comrie’s definition. In English, this can be illustrated with the gerund:

- (7)
- a. He read the book (through).
 - b. He was reading the book.

(7) a and b are clearly different, but not contradictory. They both refer to the same situation, but whereas (7)a presents the situation as finished (perfective), (7)b presents it as unfinished (imperfective).

Since situations viewed imperfectively are not perceived as having beginning or end, they cannot be temporally sequenced as there is no temporal border between them. Instead, the imperfective is associated with simultaneity. Indeed, (7)b is felt to be incomplete as we expect a perfective event for it to be simultaneous with. It might be complemented with perfective situation, for example *when I came in*.

Imperfective verbs can be subdivided further into habitual, progressive, etc. In this paper, however, I am only concerned with the perfective-imperfective opposition, and specifically with perfective verbs, as the Arabic Perfect is assumed to be perfective, following Comrie (1976), Fassi Fehri (2004) and others.

2.3 *Aktionsart*

Closely related to aspect is *Aktionsart* (variously called Aristotelian aspect, inherent aspect, lexical aspect or event type). This study uses Vendler's (1967) definitions of the four *Aktionsarten* *state*, *activities*, *accomplishments* and *achievements*. Their definitions and characteristics have been further defined and analyzed by later scholars (e.g. Dowty 1986). These categories interact with grammatical aspect resulting in different temporal properties of the situation. The properties of the four *Aktionsarten* are summarized in Table 2.⁷

Table 2 - Characteristics of Aktionsarten

| | Telic | Dynamic | Durative | Example |
|----------------|-------|---------|----------|----------------|
| Stative | - | - | + | know, have |
| Activity | - | + | + | walk, paint |
| Accomplishment | + | + | + | build, destroy |
| Achievement | + | + | - | notice, win |

(Mani et al. 2005:7)

⁷ For a detailed analysis of *Aktionsart* and for linguistic test for determining them, see Van Valin (1997:82-102).

Telicity refers to the completion of the verb resulting in a new state. Its opposite is *atelic*.

Dynamic verbs, as opposed to *static* verbs, involve kinesis and the consumption of energy. This is the most fundamental distinction of *Aktionsarten* and the one with the clearest linguistic effect.⁸

Durative verbs are always stretched out in time, whereas their opposites, *punctual* verbs, are conceptualized as having no extension in time.

It is important to note that *Aktionsarten* do not categorize verbs as such, but whole propositions, and verbal arguments and adverbials have to be taken into consideration when specifying *Aktionsart*. For example, *to run* is an activity as it is atelic; it does not have a logical endpoint. *to run home* on the other hand does have an endpoint, the arrival at the house, it is telic and thus an accomplishment.

Most important for this paper are states and achievements, as statives in Arabic can variously be achievements, which present certain theoretical difficulties in their relations to other situations.

⁸ Van Valin (Ibid.) presents a simple test for dynamicity: stative, i.e. non-dynamic, verbs can never answer the question *What happened?*

3 The Perfect in relative clauses

In this chapter I discuss how the ST of the Perfect can be understood through the Reichenbach's framework. This is done by first looking at how the Perfect functions in main clauses, and then relating this to relative clauses.

3.1 The Perfect-Imperfect opposition

Arabic has two tensed verb forms, the Perfect, characterized by person markers being added as suffices to the verb root, and the Imperfect, characterized by a person markers taking the form of a combination of pre- and suffices. Scholars have given these different sets of names to avoid confusing designations of grammatical form from grammatical function. They have thus been called 'p(refix)- and s(uffix)-stems' (Holes 1995) or 'sets' (Cuvalay-Haak 1997), amongst other things. I will keep to the traditional designations, seeing that these are still the most common in both education and academic papers. I will in this paper consistently use capital initial letter and definite article, i.e. 'the Perfect' and 'the Imperfect', when referring to the verbal forms, as there will be some mentioning of perfect as designating a grammatical function. The letter will then have small initial letter and no definite article.

There has historically been much discussion concerning the semantic properties of these two Arabic verb forms. The Arabic grammatical tradition, together with a minority of Western scholars, has regarded them as signifying tense only, while the standard view among Western scholars has for a long time been that the two forms signify only aspect. Wright has been the most prominent representative for this later view in his often quoted claim that the "Semitic Perfect or Imperfect has, in and of itself, no reference to the temporal relation to the speaker (thinker or writer) and of other actions which are brought into juxtaposition with it" (1896 I:51). In contemporary studies, however, there is near consensus that the Arabic verb forms convey a combination of tense and aspect. This view is famously summarized by Comrie: "Perfective indicates both perfective meaning and relative past time reference, while the Imperfective indicates everything else (i.e. either imperfective meaning or relative non-past tense)" (1976:80). The meaning of the Perfect is not merely past, but relative past, i.e. anteriority. It can be anterior to the moment of speech or some other situation, whether in the past or in the future. This idea is further developed and forcefully confirmed from within the generative paradigm by Fassi Fehri (2004), who also argues for the primacy of tense

over aspect in the Arabic system. Comrie does not deal with the Perfect in relative clauses, and the question whether it as a relative tense in this context relates to the main clause or the time of speech. This is the question I will seek to answer in this study.

3.2 Situation time of the Perfect

Comrie's 'relative past' is a tense notion and means that the Perfect always reports a situation as occurring anterior to some other point in time. If there is no other tensed verb in the clause, S is taken to be this point in time. The bare Perfect is then interpreted as simple past (R,E—S) or anterior present (i.e. perfect, E—R,S), as in (8).

(8) Kataba Aḥmadu
write.3ms.PERF Ahmad
Ahmad wrote/has written

Since there is no other event for the Perfect to relate to (to be anterior to) it relates to S. R becomes superfluous as there is no verb or adverb specifying it, resulting in ambiguity as to R.

For the Perfect to relate to R, it needs to be indicated by another tensed verb or an adverb. This way, complex tenses are constructed with the use the auxiliary *kāna* 'to be', often together with the particle *qad*. *Kāna* in this function has no lexical meaning and its only function is to specify R as different from S, as in (9).

(9)

- a. Kāna ʾAḥmadu (qad) kataba
AUX.PERF Ahmad QAD write.3ms.PERF
Ahmad had written. (E—R—S)
- b. Sa-yakūnu ʾAḥmadu (qad) kataba.
FUT-AUX.IMP Ahmad QAD write.3ms.PERF
Ahmad is going to have written. (S—E—R)⁹

In both these cases, *kāna* specifies R and its position relative to S, (in (9)a it is a simple past and in (9)b it is a simple future). The Perfect, *kataba*, is in both cases anterior to the R as specified by *kāna*.

In constructions with *kāna* and the Perfect such as those in (9), the Perfect is invariably interpreted as having a ST prior to some other event and is not directly related to S; it is not a simple tense. Below I will argue that the same holds for the Perfect in relative clauses, that the Perfect in relative clauses invariably has a ST prior to R, and that R in those cases are taken to be the matrix verb, instead of *kāna*. This would explain the interpretation of (2) above.

3.3 Typology of subordinate clauses

Subordinate clauses are commonly divided into three categories; adverbial, complement and relative clauses. In this chapter I discuss these three categories, how they are realized in Arabic and how they relate to this study.

3.3.1 Adverbial clauses

This study will not deal with adverbial clauses. While complement and relative clauses have fixed syntactic structures, adverbial clauses have a variety of connectives, each effecting temporal relations of events differently, as exemplified in (10).

⁹ E—S—R and E,S—R are also possible interpretations of this construction. See 2.1.

(10)

- a. **Qablamā** qaraʔtu l-ʔaxbāra, samiʔtu ranīna l-hātifi
Before I read the news, I heard the phone ring.
- b. **Baynamā** qaraʔtu l-ʔaxbāra, samiʔtu ranīna l-hātifi
As I read the news, I heard the phone ring.
- c. **Baʔdamā** qaraʔtu l-ʔaxbāra, samiʔtu ranīna l-hātifi
After I read the news, I heard the phone ring.

In effect, to analyze the influence of temporal adverbials on the ST, each type adverb would have to be treated as separate category, which goes beyond the scope of this paper. Indeed, Dry (1983) in her discussion of narrative time-progression in English is forced to do exactly this. She discusses the adverbs *when, while and as, before and after* and *until*, all separately according to how each one of the effects temporal progression, while relative clauses are treated as a single category.

Other types of adverbial clauses, such as conditional, have in Arabic highly ambiguous STs. Though the cause logically precedes the effect, they may in fact be temporally simultaneous, with the effect occurring the instant the conditions are met. Often, the exact temporal structure of the events is not important when conditionals are used and is not clarified; the focus being on the logical structure of the situation, on cause and effect, which is not necessarily parallel to the temporal structure. If the focus was on the temporal structure, a temporal subjugators (*after, before, etc.*) would be used rather than a conditional. Thus in (11), my leaving could be simultaneous to yours, or occur days after, and in some contexts even before.

- (11) Ida ḡahabta ḡahabtu
If go.YOU.PERF go.I.PERF
If you go, I (will) go.

3.3.2 Complement clauses

Following Persson (2002), complement clause is here defined as a clause that fills the function of a verbal argument, i.e. that fills the role of subject or object in the sentence.

In Arabic, the main complementizers are *'anna*, *'inna* or *'an* 'that' . The two first introduce factual clauses, with *'inna* being reserved only for the verb *qāla*, 'to say'. They are followed directly by a noun in the accusative case, and the verb is in the indicative. *'An* introduces nonfactual clauses and is followed directly by a verb in the Imperfect in subjunctive mood. It follows that we find the Perfect more often after the complementizers *'anna* and *'inna*, and more rarely after *'an*, since the former would be used to relate nonfactual events in a relative past, which would naturally be fewer than reported factual events in the past.

The complementizer *'anna* is used in the construction *'illā 'anna* without the following clause being a complement. This construction is used to introduce main clauses that are adversative to the previous one (Badawi et. al 2004:667) and is rather frequent in the corpus, but will not be regarded as introducing complement clauses.

3.3.3 Relative clauses

This study focuses on relative clauses. In Arabic, relative clauses are introduced with the relative pronoun if the head noun is definite. The relative pronoun has two main categories. The first is *alladī* and its variants, used for both animate and inanimate head nouns and with both explicit and null heads. The second is *man* and *mā*, the former for animate and the latter for inanimate heads. These two are only used with null heads (Badawi et. al 2004:489, Cantarino vol. 2, 1975:170). Relative clauses of indefinite heads have no relative pronoun.¹⁰

That these types are all cases of relative clauses is evident from the compulsory pronoun referring to the head noun when this is not the subject of the relative clause, as illustrated in (12).

¹⁰ A full stop is occasionally found before relative clauses of this type in the corpus. This should not be understood as being of syntactic relevance, but is due to conventions of interpunctuation in Arabic different from those in the West. In the Arabic convention "the position of punctuation is determined more by rhetorical and acoustic factors than by the content of the periods and phrases" (Badawi et. al. 2004:22).

(12)

- a. Qara'tu al-kitāba llaḏī kataba-**hu**
Read.I.PERF the bookREL write.3ms. PERF-it

I read the book that he wrote.

- b. Qara'tu kitāban kataba-**hu**
Read.I.PERF book write.3ms.PERF-it

I read a book that he wrote.

- c. Qara'tu mā/llaḏī kataba-**hu**
Read.I.PERF REL write.3ms.PERF-it

I read what he wrote.

3.4 Situation time of statives in relative clauses

Stative verbs present particularly problematic cases in determining the ST of the Perfect in relative clauses, and has to be theoretically accounted for before actual data can be produced.

Comrie (1976:19) notes that it is a common phenomenon in languages with grammatical perfective/imperfective markers that stative verbs in perfective forms can have ingressive meaning, denoting the inception of the state, rather than the durative situation of the state itself. They are thus in this use achievements; non-durative telic situations. Comrie mentions Aorist in ancient Greece, a perfective past, of the verb *basilúō* 'to reign', which can mean both "to reign for a limited time" (stative), and "to become king" (achievement). Similar examples are given from Spanish, Russian and Mandarin.

This dual *Aktionsart* of stative verbs seems to be very consistent in Arabic. Examples in Arabic include the statives, *marīḏa* 'to be sick', *nāma* 'to sleep' and *ḥaḏara* 'to be present'. While clearly denoting states, these can also be achievements, denoting the transition into the state. Accordingly, the three verbs mentioned each have two possible translation to English; 'to be sick' and 'to become sick'; 'to sleep' and 'to fall asleep'; 'to be present' and 'to come' (Wehr 1994, compare Dahlgren 1995:252).¹¹

¹¹ A second group of verbs in Arabic with dual *Aktionsart* are verbs that can be both *states* and *activities*. This is probably because of the state of these verbs denoting conceptually relative, non-discrete properties (as opposed to those above), and so they semantically allow for a gradual slide within the property. Verbs with *u* as mid-vowel in both the Perfect and the Imperfect are dominant in this category. Two examples are *kabura* 'to be big; to grow', *kaḏura* 'to be plenty; to multiply'. Verbs with this vowel pattern are intransitive (Badawi et al. 2005:60), but not all of them can be

This means that achievements can be divided into two groups, the first being the one just discussed, achievements that ‘share’ a word with a stative, such as in the case of *nāma*. The second group are achievements that do not share the same word with a state, such as *wajada* ‘to find’ or *fāza* ‘to win’. These verbs cannot have stative meaning. This latter group I will call ‘pure achievements’, to separate them from the stative-achievement group.

The ambiguity of *Aktionsart* in statives often gives two possible interpretations when the ST of the verb is to be determined in relation to the matrix verb. Consider the following example where the verb *irtaḍā* has the dual meaning of ‘to consent’ (achievement) and ‘to be content’ (stative).

| | | | | | | |
|------|--------------|------------|------------|--------------------|-----|---------------------|
| (13) | wa-lam | ta’saf | yawman | ‘alā | mā | rtāḍat |
| | and-PASTNEG | regret.3fs | day | PREP | REL | be content.3fs.PERF |
| | li-nafsi-hā | mina | s-salāmati | wa-t-taslīmi | | |
| | for-self-her | of | the-peace | and-the-submission | | |

and she did not ever regret the peace and submission to which she had consented (achievement)/with which she was content (stative)

(Maḥfūz 1983:8)

In (13), the achievement reading is natural with an anterior ST; that she was not sorry about what she *had consented to*, but is difficult to harmonize with ST simultaneous to that of the matrix verb. In the stative reading, on the other hand, an anterior ST would give the meaning that she is no longer content, as the perfective aspect of the Perfect gives it a limited range in time, and thus lead to a contextual contradiction.

Where the state is clearly valid in the ST of the matrix verb, this allows for two interpretations of the verb in the subordinated clause. Firstly, it can be an achievement with ST prior to that of the matrix verb. The resultant state of the achievement is then logically valid in the ST of the matrix verb. Secondly, it can be a stative verb whose durative ST is simultaneous to, and overlaps with that of the matrix verb. These two alternatives are illustrated in Figures 1 and 2. Logically, the two interpretations are the

activities. Possibly this is when the verb is donating moral characteristics, such as *ḥasuna* ‘to be good’ and *šarufa* ‘to be noble’. These do not according to Wehr (1994) have the meaning ‘to become good’ or ‘to become noble’.

same; the logical state itself is valid in the E of the matrix verb. In the anterior-achievement reading (Figure 1), the state is seen as the result of the punctual transformation into the state and the verb refers to this transformation. In the simultaneous-stative reading (Figure 2), the state itself is the situation denoted by the verb, which is durative. These two interpretations differ, then, in how the situation is conceptualized; they do not differ as to their logical content; they describe the same state of affairs in the (real or imagined) world.¹² The ST of the Perfect in the relative clause, however, which is what interests us here, is different in the two interpretations, and indeed contradictory.

Figure 1 – Time reference of subordinated achievement

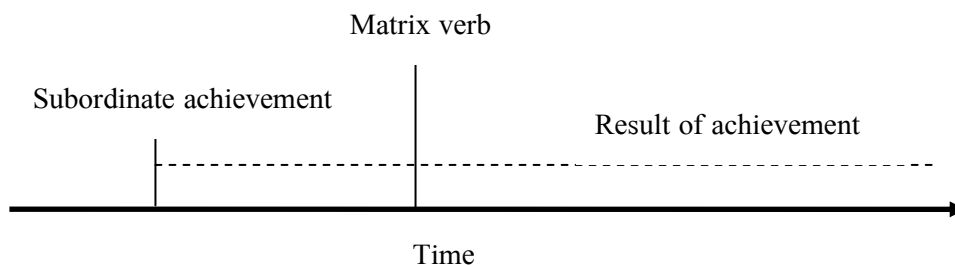
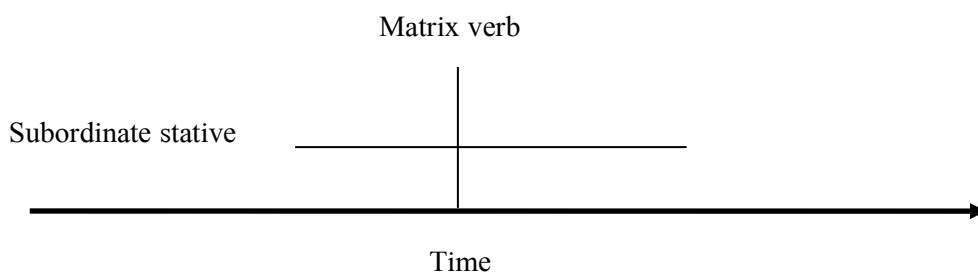


Figure 2 – Time reference of subordinated stative



¹² There is actually a logical difference between them in that in the anterior-achievement reading, the continuation in the resultant state into the ST of the matrix verb is conveyed as an implicature (of the Grician system), and can thus be negated. In the sentence *The lamp I had put on the table lit the room*, the lamp is understood to still be on the table in the time of the lightening up. But this is an implication, which is proven by the fact that it can be negated: *The lamp I had put on the table lit the room, but it now hung from the roof*. In the stative reading of a sentence such as (13), the validity of the state in the time of the matrix verb is not an implicature, but is part of the *meaning* of the sentence, and thus it cannot be negated: **The lamp which stood on the table lit the room, but now it hung from the roof*.

The context and world knowledge will only give us logical facts; that a state of affairs is valid in certain point in time. And so if one is confronted with cases such as these, without a presupposition as to the ST of the subordinated Perfect, both alternatives are equally possible.

A stative reading of the verb then, forces simultaneous ST (E,R), and an achievement reading of the verb forces anterior ST ($E-R$). Both readings produce the same logical content, that the state is valid in time of the matrix verb. This is summarized in Table 3.

Table 3 - Interpretations of states/achievements in relative clauses

| | Achievement | Stative |
|-----------------|-------------|---------|
| a. Anterior | X | |
| b. Non-anterior | | X |

Statives, then, since they can also be achievements, present a problem for this study. They cannot be used to support the thesis that the Perfect in relative clauses always has a ST anterior to that of the matrix verb, since they can be used on equally sound theoretical grounds to argue against the thesis. Using them to support the thesis would be a circular argument, as the choice between the two interpretations in Table 3 would be made under the assumption the hypothesis is correct.

In the next chapter, however, it will be shown that data from the other three *Aktionsarten* give strong evidence that the thesis is correct. On the basis of this data the choice between the two interpretations in Table 3 can then be made, thus including the at first theoretically thorny statives in a theory that unifies all four *Aktionsarten*.

4 Analysis

The temporal information given by the various tenses must correlate with what is logically possible with the actual content of text for the story to make sense, and so a theory of the tense/aspect system of a language can be tested as to what extent the computational interpretations of the tenses it generates are logically coherent with the actual content of the text.

In this chapter, STs of the Perfect in relative clauses will be empirically investigated. The choice of corpus was discussed in 1.4. The ST of each instance is determined by the functions of the Perfect outlined above together with contextual information and world knowledge. The aim in this empirical part of the study is to see if the thesis, and the theory outlined above, corresponds to empirical data, i.e. if the computing of the Perfect in relative clauses as anterior to the matrix clause generate information that is compatible with contextually given information and world knowledge.

In extracting contextual information from the text I do not follow a certain ‘theory of contextual information’, instead the evaluation of whether the situation in the relative clause happens before that of the matrix clause will be done pre-theoretically. This introduces an element of arbitrariness, since it involves literary interpretation of the text, which is no exact science, and since world knowledge differs between individuals. However, I do not believe this to be much of a problem. In the vast majority of cases, determining these kinds of STs is a straightforward process. Difference in interpretations of a literary text is usually not about what happens or in what order (at least not in traditional modes of storytelling as in what we are dealing with here) but in what this means for the psychological development of the characters, what the author’s deeper message is, etc. Nevertheless, exact references to the corpus of every piece of data are presented in the appendix, to function as a tool for a critical analysis of my results and contribute to the transparency of the study.

A total of 45 instances were found in the corpus. Of these 10 are statives. These will at first be excluded from the first step of the analysis.

4.1 Activities, accomplishments and pure achievements

In the first part of this section, statives will be excluded from the analysis, since, as was discussed in 3.4, these cannot be used in a theoretically sound way to argue either

for or against anteriority of the Perfect in relative clauses. There will however be reason to return to the statives after having presented data for the other *Aktionsarten*.

Activities, accomplishments and pure achievements make for strong evidence for the thesis. Of 35 instances of the Perfect in relative clauses, *none* had a ST simultaneous or posterior to that of the matrix clause. These 35 instances break down in *Aktionsarten* as in Table 4.

Table 4 – Situation time of the Perfect in relative clauses, statives excluded

| | <i>Act.</i> | <i>Acc.</i> | <i>Ach.</i> | <i>Total</i> | <i>%</i> |
|---------------------|-------------|-------------|-------------|---------------------|-----------------|
| <i>Anterior</i> | 7 | 13 | 15 | 35 | 100 |
| <i>Non-anterior</i> | - | - | - | - | - |

This is a for our purposes a very significant set of data: statives excluded, the hypothesis of anteriority of the Perfect in relative clauses makes 100 % correct predictions for the corpus at hand. This suggest a firm grammatical rule.

4.2 Statives

The conclusions of the ST of activities, accomplishments and pure achievements can be used when we turn to statives. In 3.4 we saw that in the context of relative clauses, a stative in the Perfect have to be either simultaneous to the matrix clause and a stative, *or* anterior to the matrix clause and an achievement, as was illustrated in Table 3. Both options produce the same logical result and so one cannot be favored above of the other on the basis of context and world knowledge, as these present nothing but logical constraints on interpretation.

The data presented above, however, constitute a strong argument in favor of the anterior-achievement reading. The anterior-achievement reading of these verbs are in accordance with the results for the other *Aktionsarten* in that it harmonizes with the theoretical assumption that the Perfect in relative clauses have a ST anterior to the matrix clause. This gives a unified theory for all four *Aktionsarten*.

Choosing the simultaneous-stative reading would force us to formulate a more complex theory that states that statives in relative clauses be treated differently, that, as opposed to the other *Aktionsarten*, they do not have anterior ST, but a ST simultaneous to that of the matrix clause.

These two theories have the same descriptive adequacy, they both account for the same phenomenon. Through applying Ockham’s Razor, however, we favor the anterior-achievement reading, as this allows for the same theoretical analysis of all *Aktionsarten* and is thereby the simplest of the two theoretical approaches.

This means that although statives, since they can also be achievements, cannot by themselves be used to argue for the thesis, they can in this two-pronged analysis be elegantly included in the theory. Adding then the statives in the corpus to the numbers presented above, analyzed in this way as achievements, we get the results presented in Table 5. (The one case of non-anteriority will be discussed below.) It is now clear that with this analysis we get a unified picture that includes all *Aktionsarten*. The data from activities, accomplishments and pure achievements showed that anterior reading is likely to be the default, and indeed the only possible interpretation of the Perfect in relative clauses. This in turn tipped the scale in favor of the anterior-achievement reading in the case of statives. So even though statives cannot themselves be used to argue for the thesis, they can in a later stage be included in a unified description on the Perfect in relative clauses.

Table 5 – Situation time of the Perfect in relative clauses, statives included

| | <i>Sta./Ach.</i> | <i>Act.</i> | <i>Acc.</i> | <i>Ach.</i> | <i>Total</i> | <i>%</i> |
|---------------------|------------------|-------------|-------------|-------------|---------------------|-----------------|
| <i>Anterior</i> | 9 | 7 | 13 | 15 | 44 | 98 |
| <i>Non-anterior</i> | 1 | - | - | - | 1 | 2 |

If one accepts this conclusion, it would mean that in the Arabic linguistic system, states in relative clauses are conceptualized in a way that is very alien to English, and perhaps to most European languages. Consider (14), which is a parenthetically inserted description of Amīna.

| | | | | | | |
|-----------|-------------|--------------|--------|---------|----------|---------|
| (14) hiya | llatī | ‘arafat | ‘an | ‘ālamī | l-jinni | ’ad‘āfa |
| she | REL | know.2f.PERF | about | world | the-jinn | doubles |
| mā | ta‘rafu-hu | ‘an | ‘ālamī | l-’insi | | |
| REL | know.2f.IMP | about | world | the-man | | |

she – who knew far more about the world of the jinn than about the world of man

(Maḥfūz 1983:7)

Seen through the interpretation presented above, with the verb *‘arafat* not as the stative ‘to know’, but as the achievement ‘come to know’, the sentence would be literally translated as something like (15).

(15) *she – who had **come to know** far more about the world of the jinn than about the world of man*

The verb here refers to an anterior situation. In English, this would only be appropriate if what made Amīna know so much about the jinn was somehow important or previously explained, as it focuses on this anterior event. In the text at hand, this is neither important nor previously explained. In Arabic, if we accept the theory presented above, this is just the standard way of expressing the state of her knowing under the syntactical conditions of the relative clause.

4.3 One exception

As is apparent in Table 5, there is one case of the Perfect in relative clauses in the corpus that deviates from the pattern. This is the stative *in‘akasat* ‘was reflected’ as it occurs in (16). This verb deviates from the general pattern in that its ST is not anterior to that of the main clause. It might be useful to look into this case in some more detail.

(16) wa-ʾaḏāʾat ʾasārīru-hu bi-nūri btisāmatin mutawāriyatin
and-shine.PERF features-his with-light smile brief

∅ inʾakasad ʿalā wajhi l-fatāti ʾiṣrāqatan
REL reflected.PERF on face the-girl radiance

muwarradatan bi-ʾihyāʾi
reddened with-shyness

*and his features shone with the light of a brief smile, that **was reflected** on the girls face as a radiance red with shyness*

(Maḥfūz 1983:26)

In (16), the stative *inʾakasad* ‘was reflected’ in the relative clause cannot have a ST anterior to the matrix verb *ʾaḏāʾat* ‘shone’, since it is physically caused by it. The ordering of events predicted by the thesis is cancelled by world-knowledge, by our knowledge that light cannot be reflected before it is emitted.

One possible conclusion that can be drawn from this example is that the proposed rule can be canceled by world-knowledge. This, however, would not explain why this has not been done in other cases. It must be concluded that this one case cannot be explained by the theoretical framework developed here. It is from this point of view an exception.¹³

4.4 Complement clauses

In this study I do not make claims as to the ST of the Perfect in complement clauses, due to the limited data provided by the corpus in this regard. No more than five instances were found in the corpus.¹⁴ However, of these five, *all* had a ST anterior to that of the matrix verb. This suggest that the theory could be extended to include

¹³ There is a tangible possibility of this being a typo; the accidental omission of the one letter constituting the conjunctions *wa-* or *fā-* in the position of the null-relative pronoun would change the syntactic structure of the sentence entirely. One of these conjugations would make the second clause a main clause, similarly to the solution mentioned in the introduction. This possibility could be eliminated or confirmed by comparing with other editions, none of which, unfortunately, were available to me in the time of writing.

¹⁴ Exact references to the corpus are found in the appendix.

complement clauses as well.¹⁵ Indeed, Fassi Fehri (2004) takes the anteriority of the Perfect in complement clauses to be a grammatical rule at face value, but does not explicitly extend this rule to relative clauses.

¹⁵ See the comment on Cantarino in footnote 2.

5 Summary and conclusion

In this study I have discussed and tested the hypothesis that the Perfect in relative clauses always have a ST anterior to that of the matrix clause. That is to say that in relative clauses in an Arabic narrative text, the Perfect will always be a step back in time ($E-R-S$ in Reichenbacherian terms), relative to the main story-line, despite being of the exact same verb form as those verbs presenting the story-line. This same verb form, the Perfect, will then according to this hypothesis have quite different interpretations as to ST, depending on the type of clause it appears in.

In testing this hypothesis empirically on a corpus, *Aktionsarten* was taken into consideration due to the dual nature of the Arabic statives; they can be both statives and achievements, and depending on which *Aktionsart* one ascribes them, they could be interpreted as having either simultaneous or anterior ST. Statives in relative clauses can thus be used to argue both for and against the hypothesis, depending on if they are interpreted as statives or achievements. They were therefore not taken into consideration when evaluating the hypothesis.

For the other three *Aktionsarten*, activities, accomplishments and what I have called *pure achievements*, the hypothesis made 100 % correct predictions in this limited material, i.e. they all had a ST anterior to that of the matrix clause. This result was then taken as a basis to analyze statives as achievements, and thus allowing for anterior ST for these as well, creating a unified theory for all four *Aktionsarten*. Statives are then not to be regarded as an argument for the hypothesis in and of themselves, but it was shown that they can be elegantly included in the theory. When including the statives in the corpus, analyzed this way as achievements, they fitted neatly in the structure, although not as neatly as the other *Aktionsarten*, as there was one instance of which the theory made the wrong prediction, one case of a stative/achievement, in the Perfect, in a relative clause that did not have an anterior ST. This one case has yet to be explained. Nevertheless, all *Aktionsarten* included, the hypothesis made 98 % correct predictions, which suggests a firm grammatical rule.

The phenomenon of the anteriority of the Perfect in relative clauses have bearing on the grammatical description of the Perfect. The Perfect in relative clauses seem to have the same relation to the matrix verb as it has to the auxiliary *kāna* in the pluperfect construction. In both cases the Perfect represent anterior past tense ($E-R-S$), with R specified by *kāna* and the matrix verb respectively. In the case of *kāna*, this refers

anaphorically to a situation given elsewhere in the discourse. The comrian description of the Perfect as always having the properties of anteriority and perfectivity can then be extended to include relative clauses as well.

In traditional grammar this can be viewed as the Perfect simply representing two different tenses: preterit/perfect (or simply “past”) and pluperfect, depending on its syntactic position. That is, it is a preterit/perfect in a main clause when not preceded by *kāna*, and it is a pluperfect when preceded by *kāna* or when it appears in relative clauses. The same probably holds for complement clauses as well, although the corpus data supporting this assumption are scarce.

This property of the Perfect can be more elegantly accounted for with the concept of binding in generative grammar. The ST of the Perfect can be described as having a ST anterior to the verbal element that binds it, whether this is an auxiliary or a matrix verb. This would explain why the relation holds also for complement clauses. When not bound by a verbal element it only relates to S in being anterior to it. It is a topic of further research to investigate how this could be more exactly and appropriately described in generative grammar.

The findings of this study also carry some important implications for translation from Arabic to English, and vice versa. In English, relative clauses with maintained iconic sequence commonly occur (Dry 1983), and one would thus expect to find a certain ratio of them in a literary narrative text. This type of relative clauses will not be found in an Arabic source-text, and so to write a translation in a natural, elegant English, the translator will be more or less obliged (depending on how frequent this is taken to be in English) to introduce relative clauses in the English translation that encompasses situations in the storyline, where there were no such relative clauses in the Arabic original.

6 Appendix: Corpus references

References to the corpus are give as page:line. Verbal arguments that have bearing on the categorization of the verb as to *Aktionsart* are added in the table.

Table 6 – *The Perfect in relative clauses - situation time anterior to matrix clause*

| <i>State/Achievement</i> | | <i>Activity</i> | | <i>Accomplishment</i> | | <i>Pure achievement</i> | |
|--------------------------|----------------------|-----------------|-------------------|-----------------------|--------------------------|-------------------------|--------------------|
| 6:23 | ʿalifat-hu | 5:13 | ṣāḥabat | 10:1 | qīla | 5:14 | talaqqanat-hu |
| 7:13 | ʿarifat | 12:11 | taʿākala | 10:4 | qīla | 5:14 | talaqqanat |
| 8:19 | irtaḍat | 17:4 | xadimat | 12:26 | jarā | 8:13 | laḥiqa |
| 11:21 | ištamat | 17:8 | tabiʿa | 14:2 | jaʿalā-hu | 13:20 | ṭāfat |
| 18:1 | ʿaḥkamat | 17:11 | qaḍat-hu | 17:7 | suddat | 14:2 | lāqat |
| 11:21 | dallatā | 18:3 | namā | 17:9 | ʿuqīmat | 15:23 | sabaqa |
| 29:8 | nāhaza ¹⁶ | 31:15 | daʿā li-s-suxriya | 20:19 | alāna-hā | 18:16 | ʿazʿajat manāma-hu |
| 29:28 | iqtaṣar | | | 23:3 | ʿunzila | 18:21 | fāta-hu |
| 30:27 | wasāʿa-hā | | | 24:5 | mazajat bi-hi bayḍatayni | 19:2 | jāʿa |
| | | | | 24:25 | ʿabbaʿa-ha | 22:25 | waḍaʿat |
| | | | | 31:8 | našaba | 23:26 | inbaʿath |
| | | | | 19:14 | irtasamat | 24:17 | ištahara |
| | | | | 29:18 | dallala | 29:17 | ʿaḥsanat |
| | | | | | | 26:24 | futiḥat |
| | | | | | | 29:18 | khaṣṣa-hā bi-hi |
| 9 | | 7 | | 13 | | 15 | Tot: 44 |

Table 7 – *The Perfect in relative clauses - situation time not anterior to matrix clause*

| <i>State/Achievement</i> | | <i>Activity</i> | | <i>Accomplishment</i> | | <i>Pure achievement</i> | |
|--------------------------|-----------|-----------------|---|-----------------------|---|-------------------------|---------------|
| 26:13 | inʿakasat | - | - | - | - | | |
| 1 | | 0 | | 0 | | 0 | Tot: 1 |

¹⁶ Expresses the being near a certain age (stative) rather than the movement towards it (activity) as it cannot answer the question *What happened?*

Table 8 – The Perfect in complement clauses - situation time anterior to matrix clause

| <i>State/Achievement</i> | | <i>Activity</i> | | <i>Accomplishment</i> | | <i>Pure achievement</i> | |
|--------------------------|-------------------------|-----------------|----------|-----------------------|--------------------|-------------------------|---------------------------|
| 13:8 | irta‘abat ¹⁷ | 9:27 | ‘abqā-ki | 24:4 | ġasala yaday-hi | 5:5 | xāna- hā ¹⁸ |
| | | | | | | 15:5 | ‘awṣā |
| 1 | | 1 | | 1 | | 2 | Tot: 5 |

¹⁷ With the complementizer *kam* ‘how much’.

¹⁸ With subjunctive auxiliary *yakūna*.

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