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Hittite temporal adverbials and the aspectual interpretation of the
ske/a-suffix
(preliminary version)

Abstract

The aim of this work is to call attention to the nature and interpretation of the highly debated Hittite *ske/a*-suffix. Traditionally, this suffix has been assigned either actional or (less frequently so) aspectual features, or even both considering that habituality, often indicated among the range of its semantic values, belongs to aspect as opposed to the actional feature ‘iterativity’. In this paper we attempt at pursuing a new type of analysis, inspired by tense-aspect semantics.

As a first step, we shall provide operational definitions of the main categories within the domains of Aspect and Actionality (i.e. Aktionsart). We shall then briefly examine the aspectual and actional inclinations of a small set of temporal adverbials, known for their highly selective behaviour in other languages. Finally, we shall exploit the well-established method consisting in analysing the compatibilities between verbal forms and temporal adverbials, thus allowing us to carefully establish the actional vs. aspectual values exhibited by the relevant Hittite forms as found in our reference corpus.

In our discussion, we shall constantly compare two alternative explanations: (a) the ACTIONAL hypothesis, whereby it is assumed that the meaning of *ske/a*-forms is predominantly governed by actional features such as ‘iterative’, ‘distributive’, ‘durative’; (b) the ASPECTUAL hypothesis, whereby it is assumed that the meaning of such forms is purely aspectual, more specifically imperfective. The suggested conclusion will be that the ASPECTUAL hypothesis has a much greater chance of accounting for the data than the most widely held ACTIONAL hypothesis.**

1. *Introduction*

1.1 *The Hittite verbal system*

The Hittite verbal system appears to be rather simplified in comparison with the traditionally reconstructed system of Indo-European (particularly considering Ancient Greek and Ancient Indian).¹

* Although this paper was jointly developed by the two authors, for academic purposes PMB takes responsibility for sections 2, 3.1, 3.2, 6, and VC for sections 1, 3.3, 4, 5.

** We wish to thank Prof. F. Giuseppe Del Monte for generously providing us his own unpublished transliterations of some of the texts analysed, most of which will soon be published.

¹ There is a large body of studies on the Hittite verbal system. For the sake of the present discussion, suffice it to cite the following works: Adrados (1962, 1971), Benveniste (1962), Boley (1984), Carruba (1976), Cowgill (1975), Friedrich (*HE*), Jasanoff (2003),

Hittite had two finite tenses, a Past and a Non-Past, commonly referred to as Preterite and Present(/Future). Modality was a partially inflectional category, involving two verbal moods (Indicative and Imperative). The potential and counterfactual modalities were expressed by means of the Indicative plus a modal sentence particle (cf. *man*). Only in the Present was the Imperative inflected for all persons. Second and third person imperatives mostly occurred in orders or commands. First person imperatives presented volutative or optative meaning. Negative orders were expressed by means of the negation *leÊ* with the Present Indicative.

The Hittite verb had two diatheses (Active and Middle). Voice oppositions underwent deep semantic changes after the Old Hittite period, especially with respect to the possible use of the Middle voice as a true Passive.

Hittite only had one Participle, formed on the verb stem with the suffix *-ant-* and inflected as a *-nt-* stem. From the point of view of diathesis, the Participle of active verbs had a past passive reading (cf. *ep-/ap-* ‘to take’ ~ *appant-* ‘taken’), whereas the Participle of intransitive verbs had an active meaning (cf. *pai-* ‘to go’ ~ *pant-* ‘gone’).

Hittite also presented three periphrastic constructions (*xark-* ‘to have, to hold’ + Participle; *es-* ‘to be’ + Participle; *daÊi-* ‘to set, put’ / *tiya-* ‘to step’ + Supine).² In its auxiliary function, *xark-* was accompanied by the Participle of a full verb in the nom./acc. singular neuter. Intransitive verbs in this construction disappeared after the Old Hittite period. According to the hypothesis put forth by Boley (1984), *xark-* forms presented an aspectual value denoting durativity. After the OH period, *xark-* constructions preserved in part this meaning (e.g. the use with the Imperative: *GEŠTU-an lagan xark* ‘keep your ear turned’) and in part acquired a perfectal value that we might assimilate, for the sake of illustration, to that of the English Present Perfect. The auxiliary *es-* ‘to be’ accompanied by the Participle of a transitive or intransitive verb agreeing in number and gender with the subject, was almost exclusively found in the Past, and should be interpreted as a Pluperfect.

The verb *daÊi-* ‘to put’ occurred as an auxiliary with the so-called Supine in *-uwan-*, an uninflected form denoting the beginning of a durative action (cf. *memiskiwan dais* ‘(s)he started speaking, telling a story’). All non-deponent Hittite verbs belonged to one of two inflectional classes: the *mi-* conjugation and the *xi-* conjugation.³ These two conjugations only differed in the singular as to the Present and the Preterite and in the 3sg. as to the Imperative. The formal contrast between *mi-* verbs and *xi-* verbs was not correlated to any systematic difference in meaning (cf. Cambi 2001).

Kammenhuber (1961, 1969), Kronasser (1956, *EHS*), Luraghi (1997), Meid (1975), Meriggi (1980), Neu (1967, 1968a, 1968b, 1976), Oettinger (1979, 1992a, 2002), Pedersen (1938), Schmid (1979), Sommer (1947), Sturtevant (1951), Yoshida (1990).

² As to the periphrastic construction *xar(k)-* + partic., cf. Boley (1984) and the references cited therein; as to *es-* + partic., cf. Bechtel (1936: 104-105), Kammenhuber (1969: 222), Cotticelli-Kurras (*THeth 18*: 122-157); *daÊi-* ‘to set, put’ / *tiya-* ‘to step’, cf. Bechtel (1936: 67-69), Kammenhuber (1955: 31-57), Puhvel (1994: 161-165).

³ As to the Hittite *xi-* conjugation, cf. Adrados (1981), Cowgill (1979), Di Giovine (1994), Eichner (1975), Jasanoff (1979, 2003), Kurylowicz (1927, 1979), Lindeman (1979), Morpurgo-Davies (1979), Neu (1968b), Oettinger (1979, 1992a, 2002), Risch (1975), Rosenkranz (1953, 1958), Stang (1932), Sturtevant (1938, 1951), Tischler (1982).

A number of affixes were used to form derived verbs in Hittite. The *nu*-suffix and the *nin*-infix derived causatives from adjectives (cf. *parkui*- ‘pure’ ~ *parkunu*- ‘to purify’), from intransitive verbs (cf. *xuwai*- ‘to run’ ~ *xuinu*- ‘to let escape’; *xark*- ‘to perish’ ~ *xarnink*- ‘to destroy’)⁴ and from transitive verbs (cf. *zai*- ‘to cross’ ~ *zainu*- / *zinu*- ‘to let cross’). The ‘factitive’ *-axx-* was employed for denominal predicates (*naxxi*- ‘heavy’ ~ *naxxiyax(x)*- ‘to behave in a heavy, oppressive manner’) and sometimes could also present causative meaning (cf. *suppi*- ‘pure’ ~ *suppiyax(x)*- ‘to purify’). The so-called ‘inchoative’ *-ess-* derived verbs from adjectives (cf. *idalu*- ‘evil’ ~ *idaluess-* ‘to become evil’).

The function of the three suffixes *-skela-*, *-(eli)ss(a)-*, *-anna/i-* is more difficult to understand. In general, *-anna/i-* was assigned durative value, but this reading does not always fit with the context where this suffix is found.⁵

As to the etymologically related suffixes *-ske/a-* and *-(s)sa-*, they are the Hittite and Luwian reflex of Indo-European **sk ← e/o-*. The Luwian form is marginally employed in Hittite texts and only appears with particular stems (cf. also Hoffner & Melchert 2002: 385). All predicates belonging to *media tantum*, the auxiliaries *xar(k)*- ‘to have’ and *es-* ‘to be’, the stative verbs *as-* ‘to remain’, *paxs-* ‘to keep, guard, preserve’, *pe xar(k)*- ‘to have in one’s possession, keep’, *sakk-* ‘to know’ are incompatible with the *ske/a-* suffix.⁶ Furthermore, there are no cases of *xar(k)*-forms marked by *-ske/a-*.

1.2 The *ske/a-*suffix

The apophonic *ske/a-*suffix (henceforth simply *ske*-suffix) was very productive. Due to its wide use in different contexts, scholars attribute to it a variety of actional and aspectual readings. For reasons that will soon become clear, we shall keep these two sorts of readings apart.

The traditional ACTIONAL hypothesis singles out the following features:

- iterative;
- distributive (with respect to both subject and object);
- durative;
- intensive;
- usitative.

Most scholars, however, are unable to find a single prototypic value, so that this suffix is often assigned a number of functions.⁷ Dressler (1968) made an attempt to connect all

⁴ The *nu*-suffix was also used to build denominal verbs: *tepu*- ‘small’ ~ *tepnu*- ‘to make small’ (Luraghi 1992).

⁵ For an etymological reconstruction, cf. Oettinger (1992b). For a functional point of view, cf. Hoffner & Melchert (2002: 379).

⁶ For the *media tantum* category, cf. Neu (*StBoT* 6: 52ff.). All the verbs belonging to this category were incompatible with the *ske*-suffix, except for *eÊs-* ‘to sit’.

⁷ Pedersen (1938: 132) favours the univocally ‘iterative’ value, while Neumann (1967: 24) generically speaks of ‘distributive verbs’. For Friedrich (*HE*), the meanings attested are three: ‘iterative’ (§141, §269a), ‘distributive’ (§269b-c-d) and ‘durative’ (§269e). Other scholars opted for global labels such as ‘iterative-durative-distributive’ (Rosenkranz 1966: 174), ‘iterative-durative’ (Gusmani 1965: 79) and ‘iterative-durative-intensive’ (Kronasser *EHS*: 575ff.).

these nuances to the single category of ‘verbal plurality’. The analysis of the texts shows, however, that the notion ‘plurality’ is also frequently involved in contexts where this suffix is not used. According to Dressler (1968: 207), the reason for this was that the presence of *-ske-* was supposedly optional, depending on the speaker’s preference.

The ASPECTUAL hypothesis was first put forth almost seventy years ago by Bechtel (1936). According to this author, *ske*-forms were durative and laid emphasis on the continuation of the event, whereas the unmarked forms merely denoted that an event takes place, apparently without regard to Aspect but acquiring by contrast punctual meaning. Reinterpreting Bechtel’s views in current terms, one might claim that according to him unmarked forms conveyed the purely perfective (specifically, aoristic) aspect, for punctuality was, at that time, the usual term to denote this notion. This hypothesis, however, was not widely received in the literature (cf. Dressler 1968 and the literature quoted therein).

Recently, Hoffner & Melchert (2002) addressed again the issue, suggesting that *ske*-forms expressed the following values:

- progressive/descriptive;
- durative;
- iterative;
- habitual/gnomic;
- distributive;
- inceptive.

These authors point to the following, heterogeneous conclusions:

- oscillation of *-ske-* between the actional (‘iterative’, ‘distributive’) and the aspectual category (‘progressive’, ‘habitual’, ‘durative’,⁸ inceptive’);
- possibility, within the aspectual domain, of expressing both imperfective (‘progressive’, ‘habitual’, ‘durative’) and perfective values (‘inceptive’).

The undesirably hybrid character of *ske*-marked forms as interpreted by Hoffner & Melchert led Cambi (2002) to a reanalysis of the data from a diachronic perspective. The study essentially addressed contexts where a clear contrast in meaning between marked and unmarked forms is to be found. The preliminary conclusions were as follows: from the diachronic point of view, the three stages of Hittite (Old, Middle, New Hittite) do not seem to diverge in the use of *ske*-forms; the comparison between *ske*-marked and unmarked forms suggests that the *ske*-suffix was related to Aspect (specifically, imperfective) rather than Actionality.

The aim of this paper is to compare the respective merits of the two competing hypotheses, i.e. the ACTIONAL and the ASPECTUAL one.

⁸ ‘Durativity’ is a typically actional concept. Yet, it appears that this term, as used by Hoffner & Melchert (and previously by Bechtel), also indicates the progressive/continuous Aspect, namely (according to the general theory of tense-aspect semantics) an aspectual notion belonging to the imperfectivity domain (Bertinetto 1986). This conceptual oscillation is also to be observed in other scholars, such as Boley. In the remainder of this paper we shall use ‘durative’ in its usual actional meaning, and the labels ‘progressive’ or ‘continuous’ with reference to the aspectual meaning alluded to by Hoffner & Melchert. This way, whatever the exact interpretation of the label ‘durativity’ by other authors, we shall consistently distinguish the actional from the aspectual domain as involved by the use of *ske*-forms.

2. Actionality and Aspect

2.1 Actionality

For the sake of the present discussion, suffice it to take the category Actionality in the sense of the traditional four Vendlerian classes (stat(iv)es, activities, achievements, accomplishments; cf. Vendler 1967). Although a number of refinements could be added (cf. for instance Bertinetto 1986; Bertinetto & Squartini 1995; Dini & Bertinetto 1995), these four classes capture the bulk of the problem. Their mutual delimitation may easily be assessed on the basis of the features [\pm durative], [\pm dynamic], [\pm homogeneous], as shown in the following table:

	durative	dynamic	homogeneous
<i>stat(iv)es</i>	+	-	+
<i>activities</i>	+	+	+
<i>achievements</i>	-	+	-
<i>accomplishments</i>	+	+	-

Although the details of the presentation might differ, most authors would agree on this picture. Let us review the main points.

The notion 'non-durative' should obviously be interpreted in a strictly operational sense. Literally speaking, any event takes some amount of physical time to occur. However, it is a fact that while we may say *John reached the top of the mountain at noon*, suggesting that the very event of reaching the top occurred precisely at that moment, sentences like *John wrote his dissertation at 5 o'clock last Tuesday* are rather unnatural, and can at most indicate (given the appropriate context) the initial or final boundary of the event.

The feature homogeneity refers to the lack of an inherent, internal boundary of the event. This amounts to the distinction between telic vs. atelic events (i.e., achievements and accomplishments vs. states and activities). Atelic events are generally said to possess the 'sub-interval' property, by which it is meant that if event *e* occurs at interval *i*, *e* also occurs at any relevant sub-interval of *i*. A few qualifications are in order. First, the sub-interval property holds in a literal sense only with states, whereas with activities one should make allowance for (pragmatically irrelevant) gaps. Thus, although it cannot be the case that, by uttering *John worked the whole day* or *John worked as a lawyer for two years*, one actually wants to suggest that John worked all the time without intermission, scholars generally agree that these pragmatic discontinuities within the event may be disregarded for the purpose of the sub-interval property. Second, the correct interpretation of this property should be modulated by the differing granularity of the given event. To see this, consider the following activities: *walk*, *cry*, *wait*. An event of *walking* consist of a series of rhythmical gestures, that repeat themselves in a precise order. It is intuitively clear that, beyond a certain limit, further partitioning of interval *i* would amount to isolating but a fragment of the basic rhythmical gesture, that may not any more be understood as an act of

walking (the given gestures could in fact be part of another type of event, like lifting one's foot or the like). On the other hand, *waiting* is very much like a state, in that any sub-interval of waiting may literally instantiate an act of that sort, although one might probably contend that, below a certain time-dimension, there is no psychological plausibility in the assertion that somebody is waiting. As to *crying*, it obviously remains somewhat in the middle; its granularity is finer than that of walking, but coarser than that of waiting. Ultimately, the correct way of looking at these problems is to take a pragmatically inspired stance. Namely: the sub-interval property holds for activities *salva pragmatica veritate*.

The feature dynamicity is at the same time intuitively clear and very tricky. The most typical states are non-agentive, but dynamic events may also be non-agentive (cf. *stumble*). The feature [\pm agentive] is responsible for the unavailability of the Imperative or for the incompatibility with the adverb *deliberately*, that hold in general for statives as well as for all non-agentive predicates. But note that some degree of control may sometimes be implied (cf. *be happy!*); furthermore, some basically stative verbs may tolerate the adverb *deliberately*, again suggesting control (cf. *John stood deliberately on the way for one hour*). More crucially, statives involve events that hold at a given interval, without any internal development. In other words, nothing actually 'goes on' in states. An alternative way of putting this consists in saying that states, as opposed to dynamic events, have no internal granularity: they are 'dense', i.e. their structure is isomorphic with the structure of time.⁹

This is ultimately the reason why states, as opposed to dynamic events, may not normally be employed with the progressive. Note, however, that in some languages, like English or Portuguese, the progressive is readily available with quite a number of stative verbs; and although in most such cases one might claim that, as a consequence of using the progressive, the state is turned into a dynamic event (cf. *John is resembling his father more and more*), one also finds situations where the progressive merely suggests a temporal delimitation of the event, rather than its dynamicization (compare *the statue stands in the park* to *the statue is (temporally) standing in the park*). Thus, the divide between states and dynamic events proves to be more difficult to assess than it is often assumed. Besides, it is not a sharp, dichotomic opposition, but a more structured one (Bertinetto 1986: sect. 4.1.2). Yet, at least operationally, and disregarding limit-cases, the distinction seems pretty robust.

It is essential to realize that the assignment of a given predicate to an actional class is subject to at least two conditions. First, the predicate should be understood as an argumental frame, i.e. as a predicate with its arguments. Indeed, while *draw* is an activity, *draw a circle* is an accomplishment. Thus, as a first approximation, one may say that the accomplishment meaning of *draw* should be understood as referring to the set of contexts in which this predicate appears in conjunction with a direct object. However, this is not enough. The second condition concerns in fact the nature of the determiner phrase that occupies the relevant argumental position. The crucial feature is, in this case, [\pm determinate]. Thus, while *draw a / three / several circle(s)* is an accomplishment, *draw circles* is again an activity, despite the presence of a direct object. An important conclusion

⁹ A dense temporal structure is to be understood in the sense that between every two points there always is a third point (Landman 1991: 106). This cannot be the case of non-stative events, due to their granularity.

to be drawn from this is that most predicates may have more than one actional assignment.¹⁰ It follows that this type of classification does not concern the bare predicate, but rather the different sets of contexts in which it may occur.

In the same vein, although *John fell* is an achievement, *the stones fell on the road (all along the summer)* instantiates an activity, due to the subject-oriented distributional character of the event, as well as to its iterative nature. As it happens, non-durative events are often turned into durative ones via iteration. Compare the achievement *Yesterday John found a shell in the sand* with the activity *Yesterday John found several shells in the sand*. For our present purposes, it is very important to stress this fact, because features like iterative, distributive, and durative will play a crucial role in the discussion of the Hittite data. Note that distributivity may be subject-oriented, as in the stones' example above, or object-oriented, as in the shells' example. The difference is in most cases immaterial, for distributivity usually amounts to iterativity, hence durativity. Note however that this is not always the case, as shown by *Everybody stood up at the same time*, which is distributive (subject-oriented) but non-iterative. Equally, *John knocked several times at the door* is iterative but non-distributive. Thus, distributivity and iterativity are to be regarded as mutually independent, although the former notion often involves the latter.

2.2 Aspect

For the sake of the present discussion, suffice it to illustrate the main features characterising the contrast perfectivity/imperfectivity, disregarding minor detail. Within the domain of perfectivity there is a fundamental divide between the aoristic and the perfect Aspect. The former is for instance conveyed, in most of its uses - but see below for further qualifications - by the English Simple Past (cf. *at 4 o' clock, John went out*), the latter by the Perfect tenses (cf. *by this time, John has / had/ will have gone out*). Although some scholars consider the perfect Aspect to be on the same level as the perfective and imperfective ones (see for instance Coseriu 1976, Comrie 1976), there are solid reasons to regard it as a subspecification within the domain of perfectivity. In fact, both the aoristic and the perfect Aspect imply attainment of the telos with telic predicates, as shown by the achievement *go out* (as in the examples just quoted), or by the accomplishment *draw a circle* (cf. *John drew / has drawn a circle*).

The imperfective Aspect, on the other hand, does not imply attainment of the telos (cf. *John was drawing a circle*). This fact is at the basis of the so-called 'imperfective paradox', that should more properly be called 'telicity-paradox'.¹¹ But, once again, qualifications are in order. Suspension of telicity is only involved by specific imperfective values, most typically by progressivity. Note in fact that habituality - that on all relevant counts should be viewed as an imperfective specification (Delfitto & Bertinetto 2000; Lenci & Bertinetto 2000), - does not suspend telicity, as shown by: It. *ogni giorno, Gianni faceva i compiti in*

¹⁰ The actional 'hybridism' (Bertinetto 1986) of verbal predicates has repeatedly received the attention of the specialists. See the notion of 'coercion' as developed, e.g. by Pustejvsky (1991). Cf. also Jackendoff (1996).

¹¹ The 'imperfective paradox' is a prototypical case of interaction between Aspect and Actionality as far telic predicates are concerned. Indeed, telic verbs exhibit their specific character only in conjunction with perfective Tenses, while they lose it, i.e. they are detelicized, in combination with imperfective ones.

mezz'ora 'every day, G. would do his homework in half an hour', where the presence of the «in X TIME» adverbial proves that telicity is preserved.

It is essential, in the context of this study, to point out the difference between iterativity and habituality. Although sometimes confused (even at the terminological level) given their common feature of 'verbal plurality', these two notions, if properly understood, belong to different semantic domains, namely actional vs. aspectual. An iterative event consists in fact of repeated subevents that occur within one and the same situational frame, as in: *John threw stones on the surface of the water*. A habitual event, by contrast, involves a series of different situational frames, as in *John used to come every Monday*. Needless to say, these two conditions may combine, giving rise to habitual iterative events: *Whenever he came, he would throw stones on the surface of the water*.

The basic opposition [\pm perfective] is best described with reference to the nature of the interval corresponding to the Event Time (for the latter notion, cf. Reichenbach 1947). Perfective situations are to be construed as corresponding to closed intervals, for the event is viewed in its entirety, whereas imperfective situations refer to intervals open at their right boundary, such that their conclusion lies outside the horizon of the language user (even though s/he might be perfectly aware of the actual state of affairs). Indeed, speaker and hearer would both agree that in *John wrote a letter* a closed interval is involved, since we construe this sentence - in its most natural, i.e. perfective, interpretation - as implementing the inherent telicity of the event. By contrast, a progressive sentence like *John was writing a letter* necessarily presents us with an open interval, since the (potential) end-point of the telic event is left unspecified; for all we know, the letter might or might not be written up. On this count, a habitual sentence such as It. *Gianni scriveva lettere* 'G. used to write (lit. wrote-IMPERFECT) letters' is ostensibly an instance of imperfectivity, for the entire duration of the reference interval (hence, the number of letter-writing events) is again left unspecified.¹²

For the sake of our discussion, it is also important to introduce a finer distinction within the domain of progressivity, namely between progressive proper and continuous Aspect. The latter involves unbounded durative events (possibly turned into durative ones via iteration) that occur in a single situational frame. Consider the following examples:

- [1] a. Carnival was at its climax: people *would sing, would laugh, would hop*; confetti *would fly*, crackers *would burst*; there was a big mess all around.
b. Mentre Maria andava (IMPERFECT) facendo le sue prime esperienze come avvocato, Filippo *raccoglieva* (IMPERFECT) / *andava* (IMPERFECT) *raccogliendo* idee per la tesi
'While Mary did her first experience as lawyer, Philip was busy collecting ideas for his thesis'.

¹² An obvious proof of this is provided by the fact that the habitual Imperfect is rejected in sentences where the duration of the reference interval is implicitly suggested by a numerical specification. Consider It. **Gianni scriveva lettere alla fidanzata quindici volte* 'G. wrote(-IMPERFECT) letters to her girl-friend fifteen times'. By contrast, *Gianni scriveva lettere alla fidanzata quindici volte al mese* 'G. wrote(-IMPERFECT) letters to her girl-friend fifteen times per month' is acceptable, because it projects the recurring series of letter-writing events onto a larger, unspecified period of time.

Example [1a] presents us with a number of overlapping events, whose mutual boundaries are left unspecified. Although we know that these events could not possibly be coextensive, there is no way for us to order them with respect to one another. All we know is that each of them could indefinitely repeat in the most unpredictable way. The function of the imperfective Aspect in these contexts consists precisely in suggesting that the depicted events loosely overlap, rather than neatly following each other. Example [1b] exhibits, in the second clause, a further manifestation of the continuous Aspect, whereby Italian (just like Spanish) may exploit the so-called ‘continuous’ periphrasis «*andare* + Gerund” which (particularly when used with imperfective tenses) conveys an idea of gradual and unbounded development of the event. One may easily realize that the progressive periphrasis would often be rather inappropriate in these contexts, although the situation may vary from language to language. In English, for instance, the progressive could be used in the second clause of [1b] much more easily than in Italian.

Aspect is directly conveyed by the various tenses available within any given language. It is thus a completely independent category with respect to Actionality, considering that the latter is ultimately attached to the lexical meaning of the various predicates. In other words, while Aspect is vehicled by morphosyntactic devices, Actionality is a property of the lexicon. Note, however, that just as the actional specification of a predicate cannot be assessed without taking into consideration the actual syntactic context in which it appears (see sect. 2.1), the aspectual values of a given tense may not be specified once and forever. Consider the following examples:

- [2]
- a. (Every day), John walks to school.
 - b. (Right now), John has a terrible head-ache.
 - c. John often has a terrible head-ache.
 - d. I pronounce you man and wife.
 - e. John C. receives the ball in the middle-field gets rid of a couple of opponents he now prepares to strike. What a magnificent score!
 - f. Tomorrow, John leaves to Rome.
 - g. In the early morning of the 7th December 1941, the Japanese air force strikes the American fleet at Pearl Harbour. This deed changes the future of the war.

Sentence [2a] exhibits the habitual-generic value often associated to the English Simple Present. However, although this is indeed a prominent aspectual feature of this tense, it is by no means the only one. First, as is well known, with stative verbs the Simple Present often conveys the meaning of an on-going imperfective present, as in [2b], although even with this sort of predicates it may easily express a habitual-generic meaning, as in [2c]. More importantly, the Simple Present may also take on perfective values, as shown by [2d-g], exhibiting the following readings: performative and reportive Present as in [2d] and [2e], both corresponding to on-going perfective Present; *pro-futuro* Present as in [2f], conveying the meaning of a [perfective) future-time-reference tense; historical Present as in [2g], conveying the sense of a (perfective) past-time-reference tense. Thus, although tenses may have a unique aspectual specification, as with the Romance Simple Past or the Bulgarian Aorist (both invariably aoristic, namely perfective), they normally simply have a predominant characterization. Their actual value varies according to the context, as shown in [2].

On top of this, it is important to realize that any tense - in any language - necessarily expresses both temporal and aspectual values. It thus makes no sense to state that, e.g., German has no Aspect, whereas English has. Rather, one could say that German lacks almost completely explicit aspectual markers (although, to be sure, it presents Past and Future Perfects). But even when a given language lacks overt morphological contrasts, the use of a given tense in a given context necessarily involves a specific aspectual interpretation. For instance, although the German Pasts are in themselves aspectually neutral, their interpretation becomes straightforward in context. Consider:

- [3] a. Von 1994 bis 1999, *studierte* Hans in der Uni / *hat* Hans in Uni *studiert*
 ‘In 1997, H. studied at the university’.
 b. Als ich nach Stuttgart fuhr / gefahren bin, *studierte* Hans in der Uni / *hat* Hans in der Uni *studiert*
 ‘When I came to Stuttgart, H. was studying at the university’.

As it happens, [3a] is preferably to be read perfectly, disregarding the specific form employed, while [3b] can only be interpreted imperfectively. Indeed, in many varieties of German there tends to be only one Past tense, either Simple or Compound, which may be interpreted perfectly or imperfectively according to the context. Note that the English Simple Past is also aspectually underspecified, for it may be used in habitual contexts or even in progressive contexts with stative verbs. The difference with respect to the German Pasts is merely that the latter are inherently neuter, for they do not directly contrast with anything else, while the English Simple Past has a prevalent perfective interpretation as a result of its opposition to the Past Progressive.

An important consequence of this, often overlooked in the literature, is that the term ‘tense’ should not be understood as synonymous with ‘temporal reference’. The latter is an independent theoretical concept, standing in its own right on a par with Aspect and Actionality. In fact, tenses are morphological coalescences, that appear in any given language as a result of idiosyncratic diachronic developments. No doubt, a given tense may have unequivocal aspectual and temporal values. Recall again the example of the Romance Simple Past, that undeniably has past-time-reference and conveys an aoristic interpretation; two features that distinguish it from the English Simple Past, which is aspectually flexible (as noted above) and may sometimes even have future-time-reference.¹³ However, as shown above, most tenses simply come with a range of possibilities, so that we need a context in order to assess their actual temporal and aspectual reading.

3. Temporal adverbials

¹³ As to future-time-reference, consider the following sentences, contrasting English with Italian:

- [i] a. Next Month, when he comes, he’ll discover that Mary *left* the day before.
 b. Il mese prossimo, quando arriverà, scoprirà che Maria **partì* (Simple Past) / *è partita* (Compound Past) il giorno prima.

As the example makes clear, in Italian only the Compound Past may be used in such contexts.

3.1 *Design of the analysis*

Temporal adverbials endow us with a robust syntactic test for assessing aspectual and actional values, and indeed they have been exploited for this purpose (Bertinetto 1986; Bertinetto & Delfitto 2000). We shall therefore consider the interaction of a small selection of temporal adverbials with the Hittite verbal forms, with special regard to the contrast between *ske*-marked and unmarked forms. Although the selected adverbials also lend themselves to analyzing the most relevant actional features, and in particular the feature [\pm telic], for our present purposes we shall concentrate on the aspectual feature [\pm perfective]. For a more detailed analysis, see the cited literature.

The adverbials to be considered are the following four: (I-II) «*in X TIME*» and «*for X TIME*» (where 'X TIME' stands for any quantified conventional units of time: e.g. two hours, three and half weeks, five years); (III) *already*; (IV) *still*.

In the examples discussed below, we shall contrast telic and atelic predicates on the one side, and (most importantly) perfective and imperfective sentences. Note that the imperfective value exhibited in the examples consists in the progressive aspect. Since, however, the habitual aspect is also crucial in the present context, we shall add comments as appropriate.

3.2. *Aspectual values of selected temporal adverbials*

3.2.1. «*In X TIME*»

As shown in [4], the adverbial «*in X TIME*» is only associated with the perfective Aspect:

- [4] a. Mary *Painted the wall* in two hours
b. * Mary *was painting the wall* in two hours

Another relevant property of this adverbial is its incompatibility with atelic predicates, as shown by **Mary danced / was dancing in two hours*. As to the aspectual side, although the progressive aspect is clearly rejected, the habitual aspect is not (e.g. It. *Gianni puliva (sempre) la vasca in 2 ore* 'John used to clean the bathtub in 2 hours'). As observed above in sect. 2.2, the habitual aspect corresponds to an open interval, due to the intrinsic indeterminacy of the overall series of repeated occurrences of which the event is composed. Each individual occurrence, on the other hand, has to be conceived as perfective. Indeed, we could not possibly conceive of a repeated series of occurrences if each of them did not take place until the end, i.e. if each of them were not envisaged as a complete sub-event.

3.2.2. «*For X TIME*»

Let us now consider the adverbial type «*for X TIME*»:

- [5] a. Mary *Painted the wall* for two hours
b. % Mary *was painting the wall* for two hours

From the actional point of view, this is a detelicizing adverbial. Indeed, although the predicate used is telic, (a) does not mean that the event is carried through to the end. This effect is clearly brought about by the adverbial itself.

As to aspectual values, the situation may differ from language to language. Although this adverbial type clearly favors perfective contexts, the English sentence (b) may receive contrasting judgments by the speakers, as shown by the diacritic used (%). Note however that if a punctual temporal clause is added (e.g. **When I came in, John was painting the wall for two hours*), the incompatibility turns out to be quite clear. Even more interesting is the case of Italian. The Imperfect of the progressive periphrasis is quite inappropriate with this adverbial, but with the bare Imperfect the situation changes on two counts. First, the habitual reading is once again perfectly legitimate for the same reasons pointed out in 3.2.1 (e.g. *Gianni dipingeva il muro ogni giorno per due ore* ‘John paint-IMPERFECT the wall every day for two hours’). Second, in the appropriate contexts one may find that the continuous reading (see sect. 2.2) turns out to be acceptable, as in: *Mentre l’acqua allagava la casa, Gianni e Maria chiacchieravano in giardino per due ore di seguito senza accorgersi di nulla* ‘While the water flood-IMPERFECT the house, G. and M. chat-IMPERFECT in the garden for two full hours without noticing anything’.

3.2.3 *Already*

At first sight, the adverb *already* seems to combine with any aspectual values, although with different meanings:

- [6] a. Mary *already painted this wall* [i.e. sometimes in the past]
 b. Mary *was already painting this wall*, when I came

The meaning acquired by *already* in perfective sentences - as indicated in the comments attached to (a) - must be regarded as a derived one, available only in particular contexts and in the relevant languages. In fact, in *??during today’s math class, Mary already played cards with John* the perfective reading sounds inappropriate. In any case, to avoid confusion, in the remainder of this paper we shall designate as *already I* the meaning of this adverb only compatible with the imperfective aspect.

As to the detelicization of the predicate to be observed in (b), it does not depend on the direct contribution of the adverb, as in [5a] above, but is a mere product of the progressive Aspect (see the so-called ‘imperfective paradox’ described in fn. 11), since the adverb is not in itself incompatible with telic verbs, witness (a).

3.2.4 *Still*

The adverb *still* has a more restricted usage, for it does not combine with perfective tenses]:¹⁴

- [7] a. * Mary *still painted this wall* before leaving [i.e. again]
 b. Mary *was still painting this wall*, when I came

¹⁴ With (a) it is marginally possible to have the following reading: ‘At the given time, Mary was still able to paint the wall’. Here this reading will be disregarded. Besides, *still* may also be used as a contrastive adverb, in which case it is obviously compatible with perfective Tenses (*Still* [i.e. notwithstanding this] *Mary danced the polka*).

Other languages, such as Italian, are more flexible in this respect, because they allow for a semantic reinterpretation of *ancora* so that, in conjunction with perfective tenses, it means ‘again, another time’, as shown by the following example:

- [8] Maria *ballò* ancora la polka, prima di andarsene
 Mary dance-PF.PAST still the polka before of go-*INFINITIVE*
 ‘Mary danced the polka again, before leaving [i.e. again]’

Once again, in order to prevent misunderstandings, we shall designate as *still I* the imperfective reading of this adverb. It goes without saying that *still I* is compatible with the habitual reading (*Mary still willingly danced the polka at that time*).

3.3. Hittite temporal adverbials

3.3.1 In Hittite, the temporal adverbials «*in X TIME*» and «*for X TIME*» are expressed both by case-morphology and ideographic constructions such as *INA MU.10.KAM*. (‘in/ for 10 years’). The dative-locative is used to indicate the ‘time at which’ (e.g. *saniya witti* ‘in the same year’, Bechtel 1936: 34; Friedrich *HE*: § 207d; Neu *StBoT 18*: 57-58; Starke *StBoT 23*: 46-47, 66; Francia 1997: 143-144),¹⁵ whereas the accusative is employed to indicate duration (*UD-an xumandan* ‘all the day’, Bechtel 1936: 34; Francia 1997: 142-143). Unfortunately, these temporal expressions are often written in an ideographic form which does not differentiate between ‘time at which’ and ‘duration’. Expressions of the type *INA MU.10.KAM* may have three distinct meanings (Bechtel 1936: 34):

- a) ‘in the tenth year’
- b) ‘in ten years’
- c) ‘for ten years’.

Fortunately for our present concern, readings (b-c) are both perfective-oriented, so that the aspectual interpretation is unambiguous.

3.3.2 The Hittite adverbials corresponding to ‘phasal’¹⁶ adverbs *already I* and *still I* are respectively expressed by *karuÊ* (which also means ‘early; formerly, earlier’) and *nuÊwa*.¹⁷ So far, there are no systematic studies about these adverbials (but cf. Cambi, in press).

ENGLISH TEMPORAL ADVERBIALS	HITTITE TEMPORAL ADVERBIALS
« <i>in X Time</i> »	dative-locative / <i>INA MU.10.KAM</i>
« <i>for X Time</i> »	accusative / <i>INA MU.10.KAM</i>
<i>already I</i>	<i>karuÊ</i>
<i>still I</i>	<i>nuÊwa</i>

¹⁵ The dative-locative case may also exhibit a distributive function (*MU-ti MU-ti* ‘year by year’).

¹⁶ The term ‘phasal’ is used by van der Auwera (1993, 1998) with reference to the adverbs *still*, *no longer*, *already* and *not yet*. Löbner (1987, 1989) calls them ‘phasal quantifiers’.

¹⁷ In the remainder of this paper the form *karuÊ* is always used in the meaning of *already I*.

Table 1: Summary of the Hittite expressions corresponding to the temporal adverbials
«in X TIME», «for X TIME», already I, still I.

4. The Hittite data

4.1. Predictions concerning the possible aspectual value of the *ske*-suffix

It may be useful, at this point, to recapitulate the aspectual values of the temporal adverbials analysed in 3.2.

TYPE OF TEMPORAL ADVERBIAL	ASPECT	
	<i>Perfectivity</i>	<i>Imperfectivity</i>
« <i>in</i> X TIME»	+	[– progressive] / [– continuous] / [+ habitual]
« <i>for</i> X TIME»	+	[– progressive] / [(+) continuous] / [+ habitual]
<i>already</i> I	– ¹⁸	+
<i>still</i> I	–	+

Table 2: Aspectual properties of selected temporal adverbials.

On the assumption, to be verified by the analysis, that the *ske*-suffix has an aspectual (namely, imperfective) rather than actional value, we may put forth the prediction that this suffix should preferably be found in combination with temporal adverbials exhibiting the properties listed in the right hand-side of table 2. In other words, supposing that the ASPECTUAL hypothesis receives a strong confirmation by our analysis, we should only find the *ske*-forms in combination with the adverbial «*in* X TIME» in habitual contexts, rather than in continuous-progressive ones, and with the adverbial «*for* X TIME» in habitual and possibly continuous contexts, to the exclusion of progressive ones. With the adverb *karuÊ* (= *already* I), the reading of the *ske*-forms should typically be progressive-continuous, and the same applies to *nuÊwa* (= *still* I), except for the morphological restrictions indicated below (cf. sect. 4.2).

4.2. Criteria of the analysis

The texts analyzed (both ‘original’ and ‘copies’) belong to all stages of the Hittite language (Old, Middle, New Hittite). For more details, see the Appendix. Within our corpus, we found 19 examples presenting «*in* X TIME», 30 with «*for* X TIME», 49 with *karuÊ* (= *already* I) and 16 with *nuÊwa* (= *still* I).

For the sake of clarity, verb forms will be distinguished into four categories, that we shall always list in the same order in the summarizing tables:

- a) *ske*-forms
- b) *media tantum* and auxiliaries
- c) unmarked forms
- d) *xar(k)*-forms.

¹⁸ If Perfectivity is marked by a + sign, the adverb *already* has to be interpreted in its derived meaning, as explained in sect. 3.2.3.

The reason for the separate analysis of categories (a) and (c) is self-explanatory. As to categories (b) and (d), their inclusion has to do with their incompatibility with the *ske*-suffix (see sect. 1.1). The predictions, according to the ASPECTUAL hypothesis, are straightforward. *Ske*-forms should supposedly show a strong imperfective inclination, possibly in sharp contrast to unmarked forms. As to the remaining forms, the ones in (b) are expected to be found both in perfective and in imperfective contexts, for they are characterized by morphological neutralization; the forms in (d), on the other hand, should obviously appear only in perfective contexts.

In section 5 we are going to list the linguistic evidence. At the end of each subsection we shall present a summarizing table, where the two alternative hypotheses, the ACTIONAL and the ASPECTUAL one, are compared. Due to space limitations, we shall only report a single example for each pattern of semantic features to be found in the corpus. Sect. 6 will offer our conclusions.

5. Corpus data

5.1 «In X TIME»

5.1.1 Ske-forms

The song of Ullikummi (CTH 345)

[9] A. Vo. iv 23'-27': ^{23'}INA UD.1.KAM-*ia-as* 1 AMMATÙ *parkiskattari* ^{24'}[(INA ITU.1.KAM-*ma-as* 1 IKU-*an*)] *parkiskattari*

- | | | | | |
|-----|-------------------------------|----------------------------------|-----------------|------------------|
| 23) | INA UD.1.KAM= | <i>ia=</i> | <i>as</i> | 1 AMMATÙ |
| | 'in 1 day' | conn. | pro.ps.3sg.n.c. | '1 cubit' |
| | <i>parkiskattari</i> | | | |
| | <i>parkes</i> - ^{mi} | 'to become high'3sg.prs.md.-ske- | | |
| 24) | INA ITU.1.KAM= | <i>ma=</i> | <i>as</i> | 1 IKU- <i>an</i> |
| | 'in 1 month' | conn. | pro.ps.3sg.n.c. | '1 IKU'acc.sg. |
| | <i>parkiskattari</i> | | | |
| | <i>parkes</i> - ^{mi} | 'to become high'3sg.prs.md.-ske- | | |

Translation: "In one day he (*scil.* Ullikummi) grows one cubit, in one month he grows one ikû". [Güterbock 1951: 156, 157; Pecchioli-Daddi & Polvani 1990: 154]

Annals of Mursili II (CTH 61)

[10] KBo 3.4 iv 46: ⁴⁶DUMU^{MEŠ} LUGAL-*ma-za* BELU^{MEŠ}-*ia* *kue* KUR.KUR LÚKÚR *taraxxeskir*

- | | | | | | | |
|-----|---------------------|-----------|------------|-----------------------------|---------------------------|-----------|
| 46) | DUMU ^{MEŠ} | LUGAL= | <i>ma=</i> | <i>za</i> | BE-LU ^{MEŠ} = | <i>ia</i> |
| | 'prince'pl. | conn. | ptc.rfl. | 'lord'pl. | conn. | |
| | <i>kue</i> | KUR.KUR | LÚKÚR | <i>taraxxeskir</i> | | |
| | pro.rel.acc.pl.ntr. | 'country' | 'enemy' | <i>tarx</i> - ^{mi} | 'to win'3pl.prt.act.-ske- | |

Translation: "(Since I sat on my father's throne, I have already been king for ten years and in ten years I won with my hands these enemy lands), but those enemy lands which the

Princes and the Lords would gain (are not comprised)”. [AM: 136, 137; Del Monte 2003: 72, in preparation (a) I: 15, 94-95]

5.1.2 Media tantum and auxiliaries

No examples concerning *media tantum* or auxiliaries were found in our corpus.

5.1.3 Unmarked forms

Annals of Mursili II (CTH 61)

[11] KBo 3.4 iv 44-46: ⁴⁴*nu-za-kan ANA* ^{GIŠ}GU.ZA *ABI-IA kuwapi eÊsxat nu karuÊ*
 MU.10.KAM ⁴⁵LUGAL-*uiznanun nu-za keÊ* KUR.KUR ^{LÚ}KÚR *INA MU.10.KAM*
ammeÊdaz ŠU-az ⁴⁶*taraxxun*

- | | | | | | | | | |
|-----|-----------------------------|---------------|--------------|-----------------|----------------------|---------------|-----------|---------------|
| 44) | <i>nu=</i> | <i>za=</i> | <i>kan</i> | <i>ANA</i> | ^{GIŠ} GU.ZA | <i>ABI=</i> | <i>IA</i> | <i>kuwapi</i> |
| | conn. | ptc.rfl. | ptc. | ‘on’ | ‘throne’ | ‘father’ | ‘my’ | ‘when’ |
| | <i>eÊsxat</i> | | | | <i>nu=</i> | <i>karuÊ</i> | MU.10.KAM | |
| | <i>eÊs</i> - ^a | ‘to sit’ | 1sg.prt.md. | conn. | ‘already’ | ‘10 year’ | | |
| 45) | LUGAL- <i>uiznanun</i> | <i>nu=</i> | <i>za</i> | <i>keÊ</i> | | | KUR.KUR | |
| | ‘to be king’ | 1sg.prt.act. | conn. | ptc.rfl. | pro.dem.acc.pl.ntr. | ‘country’ | | |
| | ^{LÚ} KÚR | <i>INA</i> | MU.10.KAM | <i>ammeÊdaz</i> | | | ŠU-az | |
| | ‘enemy’ | ‘for 10 year’ | | pro.ps.1sg.abl. | | ‘hand’abl.sg. | | |
| 46) | <i>taraxxun</i> | | | | | | | |
| | <i>tarx</i> - ^{mi} | ‘to win’ | 1sg.prt.act. | | | | | |

Translation: “Since I sat on my father’s throne, I have already been king for ten years and *in ten years* I won with my hands these enemy lands, (but those enemy lands which the Princes and the Lords would gain are not comprised)”. [AM: 136, 137; Del Monte 1993: 72, in preparation (a) I: 15, 94-95]

Annals of Qattusili I (CTH 4)

[12] KBo 10.2 ii 17-18: ¹⁷*nu kapp[uÊ]wand<as>* <UD>.KAM^{QLA}-*as* ^{id}*PuÊran[an]*
¹⁸*zixx[un]*

- | | | | | |
|-----|----------------------------|---------------------|-----------------------------------|-------------------------------|
| 17) | <i>nu</i> | <i>kappuÊwandas</i> | UD.KAM ^{QLA} - <i>as</i> | ^{id} <i>PuÊranan</i> |
| | conn. | ‘small’dat.pl. | ‘day’dat.pl. | ‘Purana’acc.sg. |
| 18) | <i>zixxun</i> | | | |
| | <i>zai</i> - ^{xi} | ‘to cross’ | 1sg.prt.act. | |

Translation: “(The men of Qassuwa fought against me and at their side there was the army of [Aleppo] helping <them>; it fought against me and I vanquished it on the Adalur mountain). *In few days* I crossed the Purana river: (like a lion with its nails I made a heap of ruins out of Qassuwa, like a lion I hit and I poured earth over it)”. [De Martino 2003: 52, 53; Del Monte 2003: 4]

5.1.4 Qar(k)-forms

In our corpus, there are no examples concerning *xar(k)*-forms.

5.1.5 Summary and discussion

The following Table presents a synoptic summary. The verbal forms are listed according to the four categories pointed out in section 4.2. The following abbreviations have to be noted: *iterat.* for ‘iterative’, *distr.* for ‘distributive’, *dur.* for ‘durative’, *habit.* for ‘habitual’, *cont.* for ‘continuous’, *prog.* for ‘progressive’, *perf.* for ‘perfective’. As to the plus sign between parentheses, it stands for the contextually durative meaning of lexically non-durative verbs, obtained via iterative reading, possibly through interaction with the appropriate type of temporal adverbial.

FORM		ACTIONALITY			ASPECT			
		<i>Iterat.</i>	<i>Distr.</i>	<i>Dur.</i>	<i>Imperfective</i>			<i>Perf.</i>
					<i>Habit.</i>	<i>Prog.</i>	<i>Cont.</i>	
A.	<i>parkiskattari</i> [9]	+	–	+	+	–	–	–
	<i>taraxxeskir</i> [10]	+	+	(+)	–	–	+	–
C.	<i>taraxxun</i> [11]	+	+	(+)	–	–	–	+
	<i>zixxun</i> [12]	–	–	+	–	–	–	+

Table 3: Actional and aspectual values available for the forms found in conjunction with «*in X TIME*»

As one might easily expect, due to the actional inclinations of the adverbial «*in X TIME*» (see sect. 3.2.1), all predicates involved in Table 3 are telic: *parkes-* ‘to become high’, *tarx-* ‘to win’ [achievement], *zai-* ‘to cross (a river)’ [accomplishment].

Let us now consider the two competing hypotheses. As far as *parkiskattari* [9] is concerned, one cannot choose between the ACTIONAL and the ASPECTUAL hypothesis. The event is clearly iterative, according to the actional interpretation, and habitual according to the aspectual one. Although these two notions do not coincide, they are obviously compatible with one another, as explained in sect. 2.2.

Consider however examples [10-11], where one and the same verb (*tarx-* ‘to win’) appears both as *ske*-marked and as unmarked form. The actional values of *taraxxeskir* [10] and of *taraxxun* [11] are exactly alike: distributive and iterative, thus contextually durative. It follows that the traditional ACTIONAL hypothesis cannot account for the presence vs. absence of the *ske*-suffix. The ASPECTUAL interpretation, by contrast, fares much better. Although the context of *taraxxeskir* is not strictly habitual (the only imperfective value compatible with the adverbial «*in X TIME*»), the intention of the author is ostensibly to stress the ‘indeterminacy’ of the event: at the end of the ten years period, the number of lands conquered by Mursili’s army is uncountable. In other words, the event of land-conquering is presented as potentially pursuable beyond the indicated time limits, so that we cannot have a global view on it, namely a perfective one. It is important to observe, in fact, that the «*in X TIME*» adverbial is actually adjacent to a strictly perfective form, as indicated in the translation, while the sentence containing the *ske*-form itself is simply coordinated to the former one. Accordingly, the use of an imperfective form appears to be justified. In languages such as Spanish or Italian, where an explicit aspectual choice has to be made in past-referring tenses, the Imperfect would be a perfectly legitimate choice in this case. Even more appropriate would be the usage of the ‘continuous’ periphrasis with

the Imperfect in the auxiliary (Sp. *iban conquistando*, It. *andavan conquistando*) which, particularly when used with the Imperfect, is a definitely imperfective device as shown in Bertinotto (1997, ch. 7).

By contrast, the unmarked forms in [11-12] are definitely compatible with the perfective interpretation. Thus, the ASPECTUAL hypothesis seems to be entirely consistent with the above data.

5.2 «For X TIME»

5.2.1 Ske-forms

Annals of Qattusili I (CTH 4)

[13] KBo 10.2 i 46-48: ⁴⁶[MU.IM.MA-*anni-ma* INA]A ^{URU}*Sana<xxu>itta* MÈ-ya *paÊun* ⁴⁷[*nu* ^{URU}*Sanaxxuit*]tan I<NA> ITU.5.KAM *zaxxeskinun* ⁴⁸[*na-an* INA ITU.6.KAM] *xarn<ink>un*

- 46) MU.IM.MA-*anni*= *ma* *INA* ^{URU}*Sanaxxuitta* MÈ-ya
 ‘in that year’dat./loc.sg.ntr. conn. ‘against’ ‘Sanaxxuitta’ ‘battle’dir.sg.
 paÊun
 pai-^{mi} ‘to go’1sg.prt.act.
 47) *nu* ^{URU}*Sanaxxuittan* *INA* ITU.5.KAM *zaxxiskinun*
 conn. ‘Sanaxxuitta’acc.sg. ‘for 5 month’ *zaxxiya*-^{mi} ‘to fight’1sg.prt.act.-ske
 48) *na*= *an* *INA* ITU.6.KAM *xarninkinun*
 conn. pro.ps.3sg.acc.c. ‘in 6 month’ *xarnink*-^{mi} ‘to destroy’1sg.prt.act.

Translation: “[In the following year] I went to fight against Sanaxxuitta: *for five months* I fought against [Sanaxxuit]ta, [in the sixth month] I destroyed it”. [De Martino 2003: 44, 45; Del Monte 2003: 4]

Annals of Mursili II (CTH 61)

[14] KBo 19.76 i 25: ²⁵*nu* GE₆-*an* *xuÊmandan* *xeÊuwaneÊsk*[it]

- 12) *nu* GE₆-*an* *xuÊmandan*
 conn. ‘night’acc.sg.c. ‘all, entire’acc.sg.c.
 xeÊuwaneÊskit
 xeÊuwaniya-^{mi} ‘to rain, made rain’3sg.prt.att.-ske-

Translation: “(I, His Majesty, went and camped in Pitakalasia, but when the army laid the bivouac, the strong Tarxunta, my Lord, showed again his divine power): he made it rain *the whole night* (and laid down a fog, and then the enemy did not see the army’s [camp]fire and the enemy ran away)”. [AM: 194, 195; Del Monte 1993: 103, in preparation (a) II: 18, 19]

Apology of Qattusili III (CTH 81)

[15] A. ii 10-16: ^{10LÚ}[(KÚR)] KUR ^{URU}*Turmita-ma* ¹¹[KUR ^{URU}*T(uxupiya walx)ann*]iskiuwan *daÊis* ¹²[*nu* *kuit* (KUR *Ipasana-ma*) *da*]nnattan *eÊsta* ¹³[*nu*-kan *p(a)raÊ* *INA* KUR ^{URU}*Suw*)]*adara* *aÊraskit* ¹⁴[^{URU}*Qakpis(as-ma-kan* ^{URU}*Istaxar*)]*as-a* 2-*eÊl* *isparzir* ¹⁵[*kue-ma* KUR.KUR^{Q1.A-(TIM)} *istappan* *eÊsta* *nu*]-*smas* *INA* MU.10.KAM ¹⁶[(NUMUN *UÊL* *anneskir*)]

- 10) LÚKÚR KUR URU *Turmita*= *ma*
 ‘enemy’ ‘country of Turmita’ conn.
- 11) KUR URU *Tuxupiya* *walxanniskiuwan daÊis*
 ‘country of Tuxupiya’ walx-^{mi} ‘to strike’3sg.prt.periphr.ingr.
- 12) *nu kuit* KUR *Ipasana*= *ma dannattan eÊsta*
 conn. ‘since’ ‘country of Ipasana’ conn. ‘empty’acc.sg.ntr. es-^{mi} ‘to be’3sg.prt.act.
- 13) *nu= kan paraÊ INA* KUR URU *Suwadara aÊraskit*
 conn. ptc. prv. ‘in’ ‘country of Suwadara’ ar-/er-^{xi} ‘to arrive’3sg.prt.act.-ske-
- 14) URU *Qakpisa*= *ma= kan URU Istaxaras= a 2-eÊl*
 ‘Qakpisa’ n.sg. conn. ptc. ‘Istaxara’ n.sg. conn. ‘two’
isparzir
 ispart-^{mi} ‘to run away’3pl.prt.act.
- 15) *kue= ma KUR.KUR^{Q1.A-TIM} istappan eÊsta*
 pro.rel.n.pl.ntr. conn. ‘country’pl. istap(p)-^{xi} ‘to block’3sg.ppf.
nu= smas INA MU.10.KAM
 conn. pro.ps.dat.pl. ‘for 10 year’
- 16) NUMUN UÊL *anneskir*
 ‘seed’ neg. *anniya-^{mi}* ‘to make, work’3pl.prt.act.-ske-

Translation: “The enemy of Turmita began assaulting the country of Tuxupiya and, [since] the country of Ipasana was deserted, headed toward the country of Suwatara: only Qakpisa and Istaxara survived. [The territories which] had been cut out, they had not been cultivated for ten years”. [Götze 1925: 16, 17; Otten *StBoT* 24: 10, 11; Del Monte 2003: 33, 36]

Festival of Istar of Niniveh (CTH 714)

[16] KUB 27.16 iii 14-15: ¹⁴*nu* MUNUS.LUGAL ^D*IŠTAR* URU *Ninuwa INA UD.3.KAM kissan* ¹⁵*mukeskizzi*

- 14) *nu* MUNUS.LUGAL ^D*IŠTAR* URU *Ninuwa INA UD.3.KAM kissan*
 conn. ‘queen’ ‘Istar of Niniveh’ ‘for 3 day’ ‘so, this way’
- 15) *mukeskizzi*
mugai-^{mi} ‘to evoke’3sg.prs.act.-ske-

Translation: “And for three days the queen evokes Istar of Ninive in this way, (but on the third day she resumes the journey, when the offer *ambassi-* in the temple is over)”. [Vieyra 1957: 91, 96]

5.2.2 Media tantum and auxiliaries

Zalpa (CTH 3)

[17] KBo 22.2 Vo. 11: ¹¹*MU.2.KAM kattan eÊsta*

- 11) *MU.2.KAM kattan eÊsta*
 ‘2 year’ prv. ‘down’ es-/as-^{mi} ‘to be’3sg.prt.att.

Translation: “(In the third year the king went and besieged Zalpa). *For two years* he besieged <it> (and asked for Tabarna and Qappi, but the town dwellers did not deliver <them>). [Ottén *StBoT 17*: 12, 13; Del Monte 2003: 104]

Annals of Mursili II (CTH 61)

[18] KBo 5.8 iii 21: ²¹*nu ispandan xuÊmandan iyaxxat*

21) *nu ispandan xuÊmandan iyaxxat*
 conn. ‘night’acc.sg.c. ‘all, entire’acc.sg.c. *iyaxxat*
 iya-^{ta} ‘to march’3sg.prt.md.

Translation: “(Thus from there I turned my eyes on Pittapara, but when the night came I made a conversion on the place and went against Pitagatalli): I marched *the whole night* (and the daylight came in the countryside of Sapituwa)”. [*AM*: 158, 159; Del Monte 1993: 111, in preparation (a) II: 76, 77]

5.2.3 Unmarked forms

Laws (CTH 291-292)

[19] §79 (Testo A) iv 12: ¹²[(UD.1.KA)]M *tuÊriyezzi*

6) [(UD.1.KA)]M *tuÊriyezzi*
 ‘1 day’ *turiya*-^{mi} ‘to hitch’3sg.prs.act.

Translation: “(If oxen enter <another man’s> field, <and> the field’s owner finds <them>), <he> may hitch <them> *for one day*, (but when the stars come out, he shall drive them back to their owner)”. [*HG*: 42, 43; *Leggi*: 86, 87; *Laws*: 84]

Annals of Mursili II (CTH 61)

[20] KBo 3.4 iii 30-32: ³⁰*nu-kan INA ŠÀ KUR* ^{URU}*Arzauwa kuit ŠE₁₂-ianun INA*
 MU.2.KAM=*ma-mu* ^{31D}UTU ^{URU}PÚ=*na GAŠAN-IA* ^DU NIR.GÀL EN=*IA* ^DMezzullas
 DINGIR^{MES}=*ia* ³²*xuÊmantes peran xuÊieÊr*

30) *nu= kan INA ŠÀ KUR* ^{URU}*Arzauwa kuit*
 conn. ptc. ‘in’ ‘inside’ ‘country of Arzawa’ ‘since’
 ŠE₁₂-*ianun INA MU.2.KAM= ma= mu*
 ‘to spend the winter’1sg.prt.act. ‘for 2 year’ conn. pro.ps.1sg.dat.
 31) ^DUTU ^{URU}PÚ=*na GAŠAN= IA* ^DU NIR.GÀL EN=*IA*
 ‘Sun of Arina’ ‘lady’ ‘my’ ‘Tarxunta’ ‘strong’ ‘lord’ ‘my’
^DMezzullas DINGIR^{MES}=*ia*
 ‘Mezzulla’n.sg. ‘deity’pl. conn.
 32) *xuÊmantes peran xuÊieÊr*
 ‘all, entire’n.pl.c. ‘in front of’ *xuwai-/xuiya*-^{xi} ‘to run’3pl.prt.act.

Translation: “Since I spent the winter in the Arzawa country - *for two years* the Sun of Arina, my Lady, the strong Tarxunta, Mezzulla, and all other gods marched in front of me (and I won the Arzawa country)”. [*AM*: 74, 76; Del Monte 1993: 67, 2003: 30, in preparation (a) I: 10, 72, 73]

Ritual of Paskuwatti (CTH 406)

[21] KUB 7.5 Ro. i 5: ⁵*na-an INA UD.3.KAM muÊgaÊmi*

- 5) *na= an INA UD.3.KAM muÊgaÊmi*
 conn. pro.ps.3sg.acc.c. 'for 3 day' mugai-^{mi} 'to evoke' 1sg.prs.act.

Translation: "(I make an offer in his favour <the lord of the ritual> to Uliliyassi) and I evoke it *for three days*". [Hoffner 1987: 272, 277; Del Monte: *unpublished manuscript*]

5.2.4 Qar(k)-forms

Deeds of Suppiluliuma I (CTH 40)

[22] KBo 5.6 iii 28-29: ²⁸*na-an-kan INA UD.7.KAM anda waxnuwan xarta* ²⁹*nu-si INA UD.8.KAM INA UD.1.KAM zaxxin pais*

- 28) *na= an= kan INA UD.7.KAM*
 conn. pro.ps.3sg.acc.c. ptc. 'for 7 day'
anda waxnuwan xarta
 prv. waxnu-^{mi} 'to besiege' 3sg.ppf.act.
- 29) *nu= si INA UD.8.KAM INA UD.1.KAM*
 conn. pro.ps.3sg.dat./loc.sg. 'in 8 day' 'in 1 day'
zaxxin pais
 'battle' acc.sg. pai-^{xi} 'to give' 3sg.prt.act.

Translation: "(<In the meantime> until Qattusaziti came back from Egypt, my father finally conquered the city of Karkamiš). He had besieged it *for seven days*, and on the eighth day he fought a battle against it. (On the eighth day, in one day, through a terrible battle, he [conquered] it)". [Güterbock *DS*: 95; Del Monte in preparation (b): 89, 115, 116]

5.2.5 Summary and discussion

Here follows the synoptic summary:

FORM		ACTIONALITY			ASPECT			Perf.
		Iterat.	Distr.	Dur.	Imperfective			
					Habit.	Prog.	Cont.	
A)	<i>zaxxeskinun</i> [13]	+	–	+	–	–	–	+
	<i>XeÊuwaneÊskit</i> [14]	–	–	+	–	–	–	+
	<i>UÊL anneskir</i> [15]	+	+	+	–	–	+	–
	<i>mukeskizzi</i> [16]	+	–	+	+	–	–	–
B)	<i>kattan eÊšta</i> [17]	+	–	+	–	–	–	+
	<i>iyaxxat</i> [18]	–	–	+	–	–	–	+
C)	<i>tuÊriyazi</i> [19]	+	+	(+)	–	–	–	+
	<i>peran xuÊieÊir</i> [20]	+	+	+	–	–	–	+
	<i>muÊgaÊmi</i> [21]	+	–	+	–	–	–	+
D)	<i>waxnuwan xarta</i> [22]	+	–	+	–	–	–	+

Table 4: Actional and aspectual values available for the forms found in conjunction with «for X TIME»

The predicates found in combination with the temporal adverbial «for X TIME» belong to different actional classes: states (e.g. *kattan es-* ‘to be down’), activities (e.g. *zaxxiya-* ‘to fight’), contextually durativised achievements (e.g. *turiya-* ‘to hitch’). This is not surprising, due to the actional inclinations of this type of adverbial.

Let us now contrast the two competing hypotheses, beginning by the ACTIONAL one. Consider first examples [16] and [21] based on the verb *mugai-* ‘to evoke (the deity)’. According to the traditional view, the *ske*-forms should express the idea of ‘plurality’ of the event, with an iterative or distributive or durative nuance. But it turns out that the actional value of *mukeskizzi* and *muÊgaÊmi* are exactly alike, namely iterative and durative, despite the morphological difference of these two forms. Thus, once again the ASPECTUAL interpretation fails to account for the data. Moreover, as shown in the left hand-side of the table, the situation appears to be on the whole rather muddy, since the iterative, distributive and durative features are not exclusively attached to the *ske*-forms (see, for instance, example [20]).

The situation in the right hand-side (Aspect) is also quite variegated. The *ske*-forms *UÊL anneskir* [15] and *mukeskizzi* [16] easily admit of an imperfective interpretation. However, the forms *zaxxeskinun* [13] and *xeÊuwaneÊskit* [14] apparently provide embarrassing counter-examples, for the habitual reading is obviously unavailable, and the continuous reading would also be rather far-fetched. These forms present an unmistakable perfective value. We shall return to this delicate issue in sect. 6.

5.3 KaruÊ ‘already I’

5.3.1 Ske-forms

Annals of Musili II (CTH 61)

[23] KBo 4.4 iii 59-60: ⁵⁹LÚ.MEŠ^{URU} *Azzi=ma* ^{60D}UTU^{ŠI} *kuit karuÊ xulliskinun*

- 59) LÚ.MEŠ^{URU} *Azzi=* *ma*
‘people of Azzi’ conn.
- 60) ^DUTU^{ŠI} *kuit* *karuÊ* *xulliskinun*
‘His Majesty’ ‘since’ ‘already’ xulle-xi ‘to vanquish, to smite’ 1sg.prt.act.-ske-

Translation: “But since <I>, His Majesty, *already* vanquished the inhabitants of Azzi (and also Nuwanza, the Great of the Wine, under Kanuwara, vanqui[shed] them, they did not dare any more to fight against me during the day, but they got ready to assault me during the night)”. [AM: 130, 131; Del Monte 1993: 98, in preparation (a) I: 246, 249]

5.3.2 Media tantum and auxiliaries

Treaty with Qukkana of Qayasa (CTH 42)

[24] KUB 19.24 + KUB 14.6 Vo. 48-49: ⁴⁸apuÊnn-a-za *arxa daÊli karuÊ-za kuin* ⁴⁹xar[si]

- 48) *apuÊn=* *a=* *za* *arxa* *daÊli*
pro.dem.acc.sg.c. conn. ptc.rfl. prv. daliya-mi ‘to release’ 2sg.imp.act.
karuÊ= *za* *kuin*
‘already’ ptc.rifl. pro.rel.acc.sg.c.
- 49) *xarsi*
xark-mi ‘to have, hold’ 2sg.prs.act.

Translation: “(In addition, don’t take a woman from the land of Azzi as wife). Divorce the one whom you *already* have, (she shall legitimately be your concubine, but you shall not make her your wife)”. [Friedrich SV 2: 128; HW² 221, II; Beckman 1999: 32; Cohen 2002: 19, 85]

ANTAQŠUM *Festival* (CTH 625)

[25] KBo 19.128 i 7-8: ⁷xantezziaz-ma ^{LÚ.MEŠ}ALAM.KAxUD ⁸karuÊ *arantari*

- 7) *xantezziaz=* *ma* ^{LÚ.MEŠ}ALAM.KAxUD
‘in front’ conn. ‘ALAM.KAxUD-men’
- 8) *karuÊ* *arantari*
‘already’ ar-ta ‘to stand’ 3pl.prs.md.

Translation: “(When the king arrives at the palace), the men A. *already* are staying <there> in front <of the palace>”. [Ottén StBoT 13: 2, 3; Neu StBoT 18: 104]

Prayer of Qattusili III e Pudukpa to the Sun Goddess of Arina (CTH 383)

[26] KUB 21.19 +1303/u +38/v +1193/u ii 13: ¹³nu-za *apaÊs-a* DINGIR^{LIM}-is *karuÊ kisat*

- 13) *nu= za apaÊs= a DINGIR^{LIM}-is karuÊ*
 conn. ptc.rfl. pro.dem.n.sg.c. conn. ‘deity’n.sg. ‘already’
kisat
 kis-^a ‘to become’3sg.prt.md.

Translation: “(If you, Sun of Arina, my lady, became somehow angry for the matter about Danuxepa, the one who committed that evil action, and led that matter about Danuxepa), he has *already* become god”. [Lebrun 1980: 312; Del Monte 2003: 146]

5.3.3 Unmarked forms

Letters from Maşat-Höyük

- [27] Lett. 43 Ro. 6-8: ⁶*nu apuÊs URU^{DIDLI.QI.A} karuÊ⁷ arnuir*

- 6) *nu apuÊs URU^{DIDLI.QI.A} karuÊ*
 conn. pro.dem.acc.pl.c. ‘town’pl. ‘already’
 7) *arnuir*
 arnu-^{mi} ‘to move, transport’3pl.prt.act.

Translation: “(The towns which in the country are called for the deportation), one has *already* deported those towns”. [HBM: 194, 195]

Annals of Murşili II (CTH 61)

- [28] KBo 4.4 ii 56-57: ⁵⁶*nu-wa iÊt namma apuÊn-ma-wa-ta^{LÚ} KÚR^{URU} Qayasan^{57D} U BELI-IA karuÊ pais*

- 56) *nu= wa iÊt namma*
 conn. ptc.disc.ind. *iya-ta* ‘to march’2sg.imp.md. ‘dunque’
apuÊn= ma= wa= ta^{LÚ} KÚR^{URU} Qayasa
 pro.dem.acc.sg.c. conn. ptc.disc.ind. pro.ps.2sg.dat. ‘enemy’ ‘Qayasa’acc.sg.
 57) ^b*U BELI=IA karuÊ pais*
 ‘Tarxunta’ ‘lord’ ‘my’ ‘already’ *pai-/piya-xi* ‘to give’3sg.prt.act.

Translation: “«So go: Tarxunta, my lord, have *already* delivered to you this enemy of Qayasa (and you will destroy him)»”. [AM: 118, 119; Del Monte 1993: 95, in preparation (a) I: 235, 236]

- [29] KBo 4.4 iv 45-46: ⁴⁵*BELI-<NI>-wa-nnas karuÊ⁴⁶ [ku]it xarnikta*

- 45) *BELI= NI= wa= nas karuÊ*
 ‘lord’ ‘our’ ptc.disc.ind. pro.ps.1pl.acc. ‘already’
 46) *kuit xarnikta*
 ‘since’ *xarnink-^{mi}* ‘to destroy’2sg.prt.act.

Translation: “(When the springtime came I went and arranged the region of Azzi, but when the men of Azzi heard that His Majesty was arriving, the men of Azzi sent Mutti of Qalimana towards me saying: «Since you, our lord, have *already* destroyed us (do not come

again!»). [AM: 138, 141; Del Monte 1993: 100, in preparation (a) I: 214, 255, 256]

Prayer of Qattusili III e Pudukexpa to the Sun Goddess of Arina (CTH 383)

[30] KUB 21.19 +1303/u +38/v +1193/u ii 15: ¹⁵na-at IŠTU SAG.D[U-Š]Ú karuÊ paraÊ sarn<ik>ta

- 15) na= at IŠTU SAG.DU= ŠÚ karuÊ
 conn. pro.ps.3sg.acc.ntr. ‘with’ ‘head’ ‘his’ ‘already’
 paraÊ sarnikta
 prv. sarnink-^{mi} ‘to pay’3sg.prt.act.

Translation: “(If you, Sun of Arina, my lady, became angry somehow for the matter about Danuxepa, the one who committed that evil action, and led that matter about Danuxepa, he has *already* become god, got out of scene) and has *already* paid for that with his head”. [Lebrun 1980: 312; Del Monte 2003: 146]

5.3.4 Qar(k)-forms

Letters from Mašat-Höyük

[31] Lett. 10 Ro. 4-6: ^{4m}Pixinakkis-za maxxan ^{5URU}Lisipr[a]n eÊski[tt]ari ⁶nu-wa-za karuÊ
 30 Ê^{TUM} asesan [x]arzi

- 4) ^mPixinakkis= za maxxan
 ‘Pixinakki’ n.sg. ptc.rifl. ‘come’
 5) ^{URU}Lisipran eÊskittari
 ‘Lisipra’ acc.sg. es-/as-^a ‘to set’3sg.prs.md.-ske-
 6) nu= wa= za karuÊ 30 Ê^{TUM} asesan xarzi
 conn. ptc.disc.ind. ptc.rifl. ‘already’ ‘30 house’ ases-/asas-^{xi} ‘to settle’3sg.pf.

Translation: “(As far as the issue of Pixinakki of which you wrote to me is concerned): «Just as Pixinakki is settling down in Lisipra and has *already* settled thirty families»”. [HBM: 134, 135; Del Monte 2003: 79]

ANTAQŠUM 11th day (CTH 609)

[32] IBoT 3.1 Vo. 15-16: ^{15LÚ.MEŠ}MUQALDIM-ia ¹⁶⁸UDU.GE₆^{QLA} INA Êxesti karuÊ
 xandaÊn xarkanzi

- 15) ^{LÚ.MEŠ}MUQALDIM= ia
 ‘cook’ conn.
 16) 8 UDU.GE₆^{QLA} INA Êxesti karuÊ xandaÊn xarkanzi
 ‘8 black sheep’ ‘in’ ‘mausoleum’ loc.sg. ‘already’ xandai-^{mi} ‘to put in order’3pl.pf.

Translation: “(The king and the queen go to the mausoleum [...]), the cooks have *already* prepared eight black sheep in the mausoleum”.

5.3.5 Summary and discussion

Here follows our synoptic summary:

FORM		ACTIONALITY			ASPECT			
		Iterat.	Distr.	Dur.	Imperfective			Perf.
					Habit.	Prog.	Cont.	
A)	<i>xulliskinun</i> [23]	+	–	(+)	–	–	+	–
B)	<i>Xarsi</i> [24]	–	–	+	–	+	–	–
	<i>arantari</i> [25]	–	+	+	–	+	–	–
	<i>kisat</i> [26]	–	–	(+)	–	–	–	+
C)	<i>arnuir</i> [27]	+	+	+	–	–	–	+
	<i>pais</i> [28]	–	–	–	–	–	–	+
	<i>Xarnikta</i> [29]	+	+	(+)	–	–	–	+
	<i>paraÊ sarnikta</i> [30]	–	–	–	–	–	–	+
D)	<i>asesan xarsi</i> [31]	+	+	+	–	–	–	+
	<i>xandan xarkanzi</i> [32]	–	+	(+)	–	–	–	+

Table 5: Actional and aspectual values available for the form found in conjunction with *karuÊ*

As a general observation, note that the situation in the left hand-side of the table (Actionality) looks definitely unintelligible. The various features seem to be randomly distributed among the different verbal forms. We shall then ignore the ACTIONAL hypothesis and concentrate on the ASPECTUAL one.

The only *ske*-form found in combination with *karuÊ* is *xulliskinun* [23], from the verb *xulle-/xulliya-* ‘to vanquish, defeat’. In order to understand the aspectual meaning of this form, we should keep in mind the particular nature of the text in which it appears, i.e. the *Annals of Mursili II*. In this type of composition the events are chronologically ordered and strictly coordinated to one another, so that each fact is viewed with respect to the others. The situation described by *xulliskinun* concerns in fact a campaign of Mursili II’s against the land of Azzi / Qayasa during the 10th year of his kingdom. But this is not the only campaign launched against this land. Indeed, in the 7th year Mursili had personally conquered the Azzi territory and in the 9th year he gave his officer Nuwanza the task of rejecting the Azzi enemies. From an actional point of view, this *ske*-form clearly has an iterative meaning. Consider, however, the aspectual meaning. The imperfective value of *xulliskinun* seems to be justified in this particular context. The intention of the author is to stress that the action of smiting the Azzi enemy is not yet over. Indeed, in the 11th year we find again Mursili II facing with the people of Azzi. This is thus one of such cases where the Spanish or Italian ‘continuous’ periphrasis could appropriately be used (*andavo già sbaragliando il nemico*).

Now compare the previous example with the unmarked form *xarnikta* [29], stemming from the 11th year of the Annals. In the discourse of Mutti of Qalimana (messenger of the Azzi men), this form refers to Mursili II: ‘Since you, our lord, *have* already *destroyed* us (do not come again!)’. From an actional point of view, the situation described by *xarnikta* is

quite similar to that described by *xulliskinun*. In both cases the event is iterative, but in *xarnikta* it is also distributive (despite, most crucially, the lack of *-ske-*). So, what is the ultimate difference between these two forms? Apparently, they differ with respect to Aspect. With *xulliskinun*, the adverb *karuÊ* in combination with a (supposedly) imperfective form suggests that although Mursili II had already defeated the Azzi enemy in the past, he was still engaged in defeating them at that specific reference time (the 10th year). On the contrary, *karuÊ* in combination with the perfective form *xarnikta* suggests that the event is definitely over: Mursili II has once and for ever vanquished the Azzi land.

The ASPECTUAL hypothesis receives additional support from the behaviour of the *xark* forms in [31-32], both clearly perfective in agreement with our proposed interpretation (see sect. 6 and Table 7). As to the forms in [24-26], they appear in conjunction with both perfective and imperfective readings; but this is exactly what we would expect from morphologically neutralized forms.

5.4 NuÊwa ‘still I’

5.4.1 Ske-forms

Birth ritual (CTH 477)

[33] KBo 17. 62 i 18: ¹⁸[*k*uitman-ma-z [MUNU]S-za nuÊwa wiwiskizz[*i*]

- 18) *kuitman*= *ma*= *z* MUNUS-za *nuÊwa*
‘while’ conn. ptc.rifl. ‘woman’ n.sg. ‘still’
wiwiskizzi
wiwai-^{mi} ‘to cry out’ 3sg.prs.act.-ske-

Translation: “But while the [wom]an is *still* crying out, (then they drive into the inner chamber a ewe which has been prepared, either preg[nant] or not)”. [Beckman *StBoT* 29: 32, 33; *CHD L-M*: 469]

5.4.2 Media tantum and auxiliaries

Prayer of Qattušili III and Pudukpa to the Sun Goddess of Arina (CTH 383)

[34] KUB 21.19 iv 14-15: ¹⁴[] ANA DINGIR^{MES} *peran apeÊ waskuwana* ¹⁵*eÊszi-pat kuitki nuÊwa*

- 14) ANA DINGIR^{MES} *peran* *apeÊ* *waskuwana*
‘to’ ‘deity’ pl. ‘in front of’ agg.dem.n.ntr.pl. ‘sin’ n.ntr.pl.
14) *eÊszi*= *pat* *kuitki* *nuÊwa*
es-/as-^{mi} ‘to be’ 3sg.prs.act. ptc. pro.indf.n./acc.ntr.sg. ‘still’

Translation: “[If²] in front of the gods these sins, somehow, *still* exist”. [Lebrun 1980: 316; *CHD L-M*: 469]

Transfer of the Goddess of the Night (CTH 481)

[35] KUB 29.4 ii 14-15: ¹⁴INA UD.3.KAM-ma *maÊn lukkatta nu* EN SISKUR.SISKUR *karuÊariwar* ¹⁵*xuÊdak* INA É.DINGIR^{LIM} *uizzi* MUL^{Q1.A} *nuÊwa aranda*

- 15) *INA* UD.3.KAM= *ma maÊn lukkatta nu*
 ‘in 3 day’ conn. ‘when’ lukk-^{ta} ‘to dawn’3sg.prs.md. conn.
 EN SISKUR.SISKUR *karuÊariwar*
 ‘lord’ ‘ritual’ ‘at dawn’
- 15) *xuÊdak INA É.DINGIR^{LIM} uizzi MUL^{QI.A}*
 ‘immediately’ ‘in’ ‘temple’ uwa-^{mi} ‘to come’3sg.prs.att. ‘star’pl.
nuÊwa aranda
 ‘still’ ar-^{ta} ‘to stand’3pl.prs.md.

Translation: “But when the morning of the third day arrives, right at dawn, the lord of the ritual comes to the temple, <while> the stars *still* stand <in the sky>”. [Kronasser 1963: 14, 17; *CHD L-M*: 469]

Deeds of Suppiluliuma I (CTH 40)

[36] KBo 14.3 iii 8-9: ⁸*ABI ABI-IA-ma nuÊwa kui[t]* ⁹*[irmali]yanza eÊsta*

- 8) *ABI ABI= IA= ma nuÊwa kuit*
 ‘grandfather’ ‘my’ conn. ‘still’ ‘since’
- 9) *irmalianza eÊsta*
 irmaliya-^{ta} ‘to be sick’partc.n.sg. es-/as-^{mi} ‘to be’3sg.prt.act.

Translation: “Since my grandfather was *still* [si]ck, (my grandfather <spoke> so: «[Who] will go?») Thus <spoke> my father: «I will go». [So] my grandfather sent forth my father”. [Güterbock *DŠ*: 67; *CHD L-M*: 469; Del Monte in preparation (b): 19, 31]

5.4.3 *Unmarked forms*

No examples concerning the unmarked forms of the verb were found in our corpus.

5.4.4 *Qar(k)-forms*

No examples concerning *xar(k)*-forms were found in our corpus.

5.4.5 *Summary and discussion*

Here follows our synoptic summary:

FORM		ACTIONALITY			ASPECT			Perf.
		Iterat.	Distr.	Dur.	Imperfective			
					Habit.	Prog.	Cont.	
A.	<i>wiwiskizzi</i> [33]	+	–	+	–	+	–	–
B.	<i>eÊszi</i> [34]	–	–	+	–	+	–	–
	<i>aranda</i> [35]	–	+	+	–	+	–	–
	<i>irmalianza eÊsta</i> [36]	–	–	+	–	+	–	–

Table 6: Actional and aspectual values available for the forms found in conjunction with *nuÊwa*

The overall picture is less informative than in the previous cases, due to corpus limitations. We only found one *ske*-form and three forms belonging to the *media tantum* and auxiliaries category. As a consequence, there is little to say about the ACTIONAL hypothesis, for the forms in group B are all consistently durative, with the form in [35] additionally exhibiting the distributive feature. As to the single *ske*-marked form *wiwiskizzi*, it can be accounted for according to both the ACTIONAL and the ASPECTUAL hypothesis. As to the latter, the presence of the conjunction *kuitman* ‘while’ forces the so-called (strictly progressive) ‘incidence scheme’ reading, so that the verb indicates that the event of crying out is still in progress at the time when the priest drives the ewe in the inner chamber. As to the former hypothesis, it should be noted that although the verb *wiwai*- ‘to cry out’ is in itself ambiguous between durativity and non-durativity, in this specific context it clearly has an iterative (thus durative, namely activity-like) interpretation.

The *media tantum* and auxiliaries forms of group B are all associated with the imperfective Aspect. In these instances, however, the lack of the *ske*-suffix is not surprising, for these verbs are intrinsically incompatible with it. This is perfectly understandable if one considers that *media tantum* are in the great majority stative. Needless to say, stative verbs may appear not only in imperfective contexts, but also in perfective ones.

6. Conclusions

In this paper we have made an attempt to investigate the behavior of the Hittite *ske*-forms with regard to their compatibility with a selection of temporal adverbials. The data have been analyzed according to two alternative hypotheses: the ACTIONAL and the ASPECTUAL hypothesis. Our findings suggest the following conclusions:

1. The ACTIONAL hypothesis does not account for the use of *ske*-forms, for: (a) one and the same verb appears both as *ske*-marked and unmarked form with no noticeable difference in actual categorization (cf. examples [10], [11], [16] and [21]); (b) the overall distribution of actional features prevents a clear-cut interpretation, since the same features are randomly assigned to any of the four verbal categories considered in our analysis.
2. The ASPECTUAL hypothesis, on the contrary, is directly compatible with most of the examples proposed, namely: [9], [10], [11], [12], [15], [16], [19], [20], [21], [22], [27], [28], [29], [30], [31], [32], [33]. As to the possible counter-examples (cf. [13], [14] and [23]), some additional considerations are in order. With respect to the last example, we already suggested a possible explanation in sect. 5.3.5. With respect to the remaining cases, both met in connection with the adverbial «for X TIME», it is worth noting that in languages presenting a sharp aspectual distinction such as the Romance languages, one may find in historical-narrative texts that an imperfective device is occasionally used in clearly perfective contexts. Consider, in this connection, the so-called ‘narrative’ Imperfect, also called *Imparfait ‘pictoresque’* by French grammarians, which plays the role of an aspectual metaphor. The stylistic effect obtained may be described as a sort of temporal dilatation of the event. Although the context presupposes a global, hence perfective view, the author simulates, so to say, a view from the inside, as though he could witness the course of the events in its actual development. Needless to say, one should be very cautious when advancing this kind of proposals, for they may appear as

an *ad hoc* solution. An alternative view could be that although *ske*-forms are most naturally met in imperfective contexts, they may also occasionally be found in perfective ones. This would inevitably lead to the conclusion that they were, at least in part, underspecified from the aspectual point of view. The weakness of this position, in our opinion, is that it does not account for the overwhelming imperfective inclination of *ske*-forms as witnessed by our corpus inspection. The ‘narrative’ imperfective interpretation, by contrast, seems to be allowed by the very nature of the texts where the offending examples were found. Indeed, the predicates *zaxxiya-* ‘to fight’ and *xeÊuwaniya-* ‘to rain’ appear in historical-epic compositions (i.e. *Annals of Qattusili I* and *Annals of Mursili II*, respectively).

3. The existence of imperfective contexts not marked by *-ske-* (cf. [24], [25], [34], [35], [36]), does not constitute a problem for the ASPECTUAL hypothesis, for all verbs used in these contexts belong to the *media tantum* and auxiliaries category. As already observed, these verbs could never be associated with the *ske*-suffix. In other words, they were underspecified with respect to this morphological feature and could thus receive both a perfective or an imperfective reading depending on the context. This reminds us of the behavior of stative verbs, which are prototypically incompatible with the progressive periphrasis, yet can appear in both perfective and imperfective contexts, as shown by the following English examples where the Simple Past neutralizes the aspectual distinction between imperfective (ipf) and perfective (pf) meaning:

- [36] a. When I arrived, John *was ill* [ipf (prog)]
 b. John *was often ill* [ipf (habit)]
 c. Last year, John *was seriously ill* for two months [pf]

The following table recapitulates our proposal:

HITTITE CATEGORIES	ASPECT	
	<i>Perfectivity</i>	<i>Imperfectivity</i>
<i>Ske</i> -forms	–	+
<i>Media tantum</i> and auxiliaries	+	+
Unmarked forms	+ (Present or Preterite)	+ (Present)
<i>Qar(k)</i> -forms	+	–

Table 7: Aspectual values of the relevant Hittite verbal categories

If our interpretation is correct, the distinction into four categories (A. *ske*-forms, B. *media tantum* and auxiliaries, C. unmarked forms, D. *xar(k)*-forms) seems perfectly motivated on the aspectual ground. We would thus conclude by suggesting that in Hittite Aspect was morphologically expressed, with the notable exception of *media tantum*, where aspectual distinctions were neutralized. Specifically, the imperfective Aspect was most likely conveyed by the *ske*-forms, while the perfect aspect (a subspecies of perfective) was expressed by the *xar(k)*-forms. As to the unmarked forms, they were preferably interpreted as perfective, although in the Present tense they could occasionally be read as imperfective. This seems to point to the aspectual underspecification of this tense, as is often observed in natural languages. Although we did not find examples of this sort in the materials quoted

above, they are to be found in our corpus. This, however, would be the object of a further analysis. The ambition of this paper was to show that at least in the Preterite the aspectual choice was explicitly marked.

Appendix

Anitta (CTH 1)
Zalpa (CTH 3)
Annals of Qattusili I (CTH 4)
Anecdotes - Palace Chronicle (CTH 8)
Zukrasi of Aleppo (CTH 15)
Edict of Telipinu (CTH 19)
Treaty of Zidanza with Pilliya of Kizzuwatna (CTH 25)
Treaty pre-Empire period (CTH 28)
Deeds of Suppiluliuma (CTH 40)
Treaty with Qukkana of Qayasa (CTH 42)
Annals of Mursili II (CTH 61)
Treaty with Duppi-Tešub of Amurru (CTH 62)
Treaty with Targasnalli of Qapalla (CTH 67)
Treaty with Kupanta-LAMMA (CTH 68)
Treaty with Manapa-Tarxunta (CTH 69)
Mursili II on the Tawannanna Affair (CTH 70)
Treaty with Alaksandu of Wilusa (CTH 76)
Apology of Qattusili III (CTH 81)
Qattusili III Decree in Favour of Mittannamuwa (CTH 87)
Treaty with Sausgamuwa of Amurru (CTH 105)
Treaty with Ulmi-Tešub of Tarxuntassa (CTH 106)
Conquest of Alasiya (CTH 121)
Mida of Paxxuwa (CTH 146)
Madduwatta (CTH 147)
Instructions from Asmunikal to the Caretakers of the Mausoleums (CTH 252)
Instructions for the Royal Bodyguard (CTH 262)
Laws (CTH 291-292)
The Song of Ullikummi (CTH 345)
Prayer/treaty of Arnuwanda I and Asmunikal (CTH 375)
Mursili II Plague prayers (CTH 378)
Muwatalli's Prayer to All Gods Through the Storm-God of Lightning (CTH 381)
Prayer of Qattusili III and Pudukpa to the Sun Goddess of Arina (CTH 383)
Ritual of Qantitassu (CTH 395)
Ritual of Paskuwatti (CTH 406)
Ritual of Pupuwanni (CTH 408)
Substitute King (CTH 419-420)
Substitution Ritual (CTH 421)
Soldier's oath (CTH 427)
Funerary Rituals (CTH 450)
Birth Rituals (CTH 477)
Transfer of the Goddess of the Night (CTH 481)
Dream of Pudukpa (CTH 585)
Monthly Festivals (CTH 591)
ANTAQŠUM Festival (CTH 609, 612, 625)
Festival of Storm and Thunder (CTH 631)

Letters from Maşat-Höyük

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