

# *Periphrastic constructions, phasal verbs, and Aktionsart in Hittite*

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## *1. Preliminaries on the Hittite verbal system*

The Hittite verbal system is known to have few morphological categories within the finite verbal forms and to be hardly comparable to the systems of other Indo-European languages. From the beginning of the study of Hittite a large number of both periphrastic and serial verb forms have been recognized. To what extent we can speak of “function verbs” and their semantic value ultimately depends on the analysis of the categories of *Aktionsart* and their relationship to the periphrastic constructions. For this reason it is essential to keep separated the terms and the concepts of “Aspect” and “Aktionsart”.

The categories of Tense (present and past), Mood (indicative and imperative) and Voice (active and the so called “middle”) are realized through morphological markers, namely the verbal endings. There are neither stem nor apophonical variation.

Let us summarize in a simple sketch the main categories of the Hittite verbal system in the following Table 1.

This situation allows us to argue that the missing categories (Aspect, *Aktionsart*) were expressed thanks to other strategies: it comes to no surprise that Hittite shows many periphrastic constructions since the beginning of the attestations<sup>1</sup>.

If we consider derivational verbal forms (s. table 2 below), it is however not always clear which category is expressed by which expression.

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<sup>1</sup> See also Hoffner, Melchert (2002, pp. 377-90).

TABLE 1

## The Hittite verbal system in the finite forms

Finite verb forms				
Formation	Ending set 1 -mi	Ending set 2 -un	Ending set 3 -hari/-tati	Ending set 4 -u/-tu/-ntu -ru
Formation	Stem	Stem	Stem	Stem
Tense	Present	Past	Present/Past	
Mood	Indicative	Indicative	Indicative	
Mood			Imperative	Imperative
Voice	Active	Active	Stative/Middle	Active/Stative

TABLE 2

## Derivational morphemes and categories in Hittite verbal system

Finite derivational verb forms <sup>2</sup>			
	Morphemes	Aktionsart	Aspect (?) <sup>3</sup>
Stem +	-ške/a-	Durative/Distributive	
Stem +	-nu- and infix -ni(n)-	Causative/Factitive	
Stem +	-eš-	Fientive	
Stem +	-aḫḫ-	Factitive	
Stem +	-e-	Stative	
Stem +	-ai-	Denominative??	
Stem +	-anna-		Imperfective?
Stem +	-ša-		Imperfective?

In a recent work (Cotticelli Kurras, in press) it has been critically discussed the lack of some verbal categories in Hittite within the hypothesis of the “*Schwund*-hypothesis” and the ability or inability of the hypothesis itself to explain this phenomenon. Aspect and

<sup>2</sup> We refer to Oettinger (1979) and to the grammar by Hoffner, Melchert (2008, p. 175, § 10.6) as reference works for the mentioned categories. In Hoffner, Melchert (2008) the examples with the suffix *-ške/a-* are listed under the chapter “Verb Aspect”, § 24, as well as *-anna-* and *-ša-* derivation suffixes.

<sup>3</sup> The nature of the derivational category with suffix *\*-ške/o-* in Hittite is a long discussed matter. About the last overview of the discussion see Cambi (2007).

*Aktionsart* are here rigorously treated as distinguished categories. They can be marked by different derivational morphemes, but also through some lexical constructions (particles, for example)<sup>4</sup>. Nevertheless it is important to give a clear definition of what we mean by *Aktionsart*. As asserted by Cotticelli-Kurras (in press), discussing some quotations from LIV<sup>2</sup> about the diachronic development of the category *Aktionsart* from the protolanguage into the historical languages, we will assume *Aktionsart* is expressed through different strategies. One type codes *Aktionsart* in the lexical feature of the root semantics (e.g. Hitt. *epp-/app-* “to take” as telic and punctual)<sup>5</sup>; another type codes it by compositional strategies (quoted from Cotticelli-Kurras in press):

- derivational (durch Verbkategorie, interne Derivation, wie z.B. etwa aus dem Indogermanischen die *-sk-*Präsentien, die germanischen inchoativen *nan-*Verben (Suffixbildungen), das Intensivum (Reduplikation) oder – aus dem Semitischen – die *tan-*Iterativa (Infixbildung);
- syntagmatisch (wie z.B. dt. *essen* [+durativ, -telisch] obv. *einen Apfel essen* [+telisch, -durativ]; Verbkomposita dt. *austrinken* (+telisch); (Satz)Partikel: got. *ga-*..., heth. *-kan*).
- phrasale Aktionalität: sie wird durch lexikalische Periphrasen vertreten, z.B. die hethitischen Konstruktionen mit *ḫark-* und *eš-* + Partizip.“

In this case, we differ from Rix, 1986, as he stated that a) the dimensions Person, Number and Voice were expressed by endings (Rix, 1986, p. 7); b) the dimensions Aspect and *Aktionsart* were expressed by derived stems with primary affixes (Rix, 1986, p. 8); and c) Tense and Mood were coded by secondary affixes. He stated: «es gibt im Urindogermanischen kein Tempus oder Modus ohne Aspekt oder Aktionsart» (Rix, 1986, p. 9<sup>5</sup>), but Tense and Mood exclude each other. In Hittite we have stems displaying the suffix *-š-* that can only be understood as new lexical entries. Both present and past tense display the same stem without aspect opposition: *au(š)-/u-* “to see, look” for both present and past, but *ušk-* “to observe”, in present as well as in past.

According to Rix (1986), *Aktionsarten* in PIE are grammatical categories. Consequently, a certain *Aktionsart* does not need a new (derived) lexeme, but only a new inflectional stem. However, for Hittite he also notes that the development of the *Aktionsarten* is

<sup>4</sup> For the particle *-kan* as a telic marker see Cotticelli Kurras (2014).

<sup>5</sup> We base our taxonomy on Vendler (1967) and Dowty (1979).

related to derivational strategies and thus to word formation (cf. Rix, 1986, p. 21).

Rix also asserts that the early PIE verbal system did not display an opposition of aspect (perfective vs imperfective); rather, the primary stems characterized only types of actions such as the “neutral of action”, the “intensive” (the forerunner of the present perfect), the “causative”, the “iterative”, but also subjunctive and optative (see Rix, 1986, p. 11). The dimension Tense-Mood was only a reduced category including injunctive, imperative and *Parontiv* (i.e. present, s. Rix, 1986, p. 11). He speaks also of *Aktionsart*-neutral root stems which were, according to their semantics, durative or punctual (s. Rix, 1986, p. 12) and therefore they expressed only either «Sachverhalte, deren Vollzug [...] eine gewisse Zeitdauer beanspruchte» or «Sachverhalte, die als in einem Zeitpunkt ohne Dauer vollzogen vorgestellt wurden» (Rix, 1986, p. 16)<sup>6</sup>.

We agree with Rix’s reconstruction as shown in the table below, in respect to the categories aspect and *Aktionsart*, but only for the late PIE verbal system.

TABLE 3

Aspectual Opposition through root differentiation in some Indo-European languages

	Durative Roots	Punctual Roots
Aorist (perfective)	Sigmatic aorist with primary Root aorist with Ø suffix suffix –s-	
Present (imperfective)	Root Present	New present stems Athematic apophonic or thematic primary suffixes

This distribution is not attested in Hittite, where such stems as –*ške/a*– forms are distributed in all tenses and moods.

<sup>6</sup> Also in LIV<sup>2</sup> § 3 pp. 10-25 the tense–aspectual and the *Aktionsart*-oppositional verbal semantics are based on the same concept of the Indo-European verb system. In LIV<sup>2</sup> these categories are: Causative-Iterative, Desiderative, Intensive, Fientiv and Essiv, near Aorist, Present and Past, Perfect. In order to consider an original opposition based on the reconstruction of the category of “injunctive” according to K. Hoffmann’s investigations s. Lazzeroni (1977). S. further Lazzeroni (2008) about the opposition root-aorist and causative-present-stems in Vedic and Greek.

## 2. Periphrastic constructions

The history of the Hittite verbal system shows features of grammaticalization and linguistic change in the system as a whole, including not only finite verb forms, but also derivational and periphrastic formations. Periphrastic constructions are similar in structure but clearly different in function. They are used for a variety of *Aktionsart*(-like) or tense functions. Major studies were devoted to the constructions with *hark-* and *eš-* and the participle, and to the constructions with *dai-* and the supine (see Kammenhuber, 1955). A study focusing on periphrastic strategies to mark phasal-*Aktionsart* nuances has not yet appeared.

Here we try to assess the data about these constructions in order to define their value. The following questions are crucial: first, are these forms building a consistent system? Second, are they complementary distributed? Third, which values do they display? Fourth, do they stay in concurrence with finite verbal forms? Finally: are they comparable to typologically similar constructions in other Indo-European languages?

For this purpose we will analyze the following periphrastic structures:

- Constructions with Verb + participle
- Constructions with Verb + infinitive
- Construction with Verb + supine<sup>7</sup>.

### 2.1. Constructions with participle

There are two constructions with the participle, one with *eš-* “to be”, and one with *hark-* “to hold, to have”<sup>8</sup>. These constructions do not display a symmetric opposition, because they cover functions which differ from those in other Indo-European languages.

#### 2.1.1. The *eš*-constructions

In this verb form, *eš-* is construed with the participle in the nominative agreeing with the subject as a predicative participle. Their semantic value is stative as stated in e.g.:

<sup>7</sup> The verbs *pai-* and *uwa-* + finite verb form build serial constructions like “it happens/-ed that...and then...” (or it follows a sentence with a consecutive value) which we don’t take in consideration here.

<sup>8</sup> See Boley (1984) for an early study, later Boley (1992), Dardano (2005) and Luraghi (1998, pp. 299-322).

(a) ns KUB 23, 72 rev. 14<sup>9</sup>

*nu antuwahḫaš kuiš agganza* GUD<sup>HÁ</sup> UDU<sup>HÁ</sup> *kuiš arḫa*  
 and human being who dead-PRTC.NOM.SG.C cattle-PL.N sheep-PL.N who ADV  
*adan[za]*

eat-PRTC.NOM.SG.C

“The man who (is) dead (and) who (has) eaten cattle (and) sheep”.

(b) ns. KUB 14, 17 iii 24

*nu aši<sup>URU</sup>Uran [aušdu mahban=aš u]edanza ešta*  
 and this city Ura see-IMP.3SG CONJ=PRON.NOM.SG.C build-NOM.SG.C be- PRET.3SG.

“He [should look at the city how it has been b]uilt”.

We also find grammaticalized constructions with *eš-* + participle in the accusative without agreement: these forms function as a pluperfect<sup>10</sup>, as stated in:

(c) KBo 2, 4 left edge 2f.

*n=at=za=at* *mān malai (3)*  
 and=PRON.NOM.SG.C=REFL.PRT=PRON.NOM.ACC.N if-CONJ approve-PRES.3SG

*[nasma k]arū malān man=ma=za markiyazi=ma*  
 or already approved-PRTC.SG.N or=but=REFL.PRT disapprove-PRES.3SG=but  
 “If he approves it (3) or if he has approved it or does not approve it”.

## 2.1.2. The *ḫark*-constructions

The construction with *ḫark-* and the nom.-acc. of the participle developed as a resultative perfect (or a resultative state), but originally *ḫark-* was a full verb with the meaning “to hold something in an x-state”. Boley (1984 and 1995) speaks of state perfect forms for Old Hittite, which have the same value as present forms, but they began to be opposed to the present forms from the Middle Hittite age and ended up alternating with past forms. They developed into resultative perfect forms as shown in the following examples:

<sup>9</sup> In the glosses I used the following abbreviations: ABL = Ablative, ADV = Adverb, CONJ = conjunction, GEN = Genitive, IMP = Imperative, INSTR = Instrumental; MED = Middle, NOM = Nominative, PRT = Particle, PRTC = Participle, PL = Plural, PRES = Present, PREP = preposition, PRET = Preteritum/Past, PRON = Pronoun, REFL = reflexive, SG = Singular, SUP = supin, N = neuter, C = communis.

<sup>10</sup> See Coticelli Kurras (1991).

(d) *ḥark-* in the meaning “hold”:

os. KBo 30, 39 + 25, 139+ rev. 17

*nu išḥarwanta* <sup>SIG</sup>*išmeri ḥarz[i]*  
and bloody-NOM.N reins-NOM.N hold-PRES.3SG  
“He keeps/ is keeping blood red reins”.

(e) *ḥark-*construction as resultative perfect/state:

KUB 45, 42 obv. iii 5f.

*nu=ššan* (6) *TA-ḤAP-ŠI išḥuzziyan ḥarzi*  
and=LOC.PRT belt strapp-PRTC.SG.NOM.ACC.N hold/have-PRES.3SG  
“She has strapped a belt”.

(f) *ḥark-*construction as resultative perfect form:

nh. KBo 5, 8 i 17

*nu=mu* *MUŠEN arān ḥarta*  
and=me-PERS.PRON.ACC bird stop-PRTC.SG.NOM.ACC.N have-PRET.3SG  
“A bird had stopped me”.

A recent dissertation (Frotscher, in press) about the Hittite participle accurately analysed the *ḥark-*constructions considering the semantic value of each verbal group, in order to check the existence of other semantic values beside the stative one.

Before considering the semantics of the verbs, we need to look at the syntax, i.e. the use of the participle. We can better understand the use of the Hittite participle if we consider its origin as a verbal adjective. Syntactically, it functions like an Indo-European verbal adjective in *-to-*, s. Brosnan (2010), followed by Dardano (2014). Note that the constructions with *ḥark-* are also possible with intransitive verbs (Garrett, 1996).

### 2.1.3. Other verbs with participle

The function of the participle is, perhaps, still that of a verbal adjective, especially in the *ḥark-*constructions, where the participle does not agree with the subject (or object) and always has the ending *-an*. Its origin allowed Frotscher (in press) to uncover the use of the participle in a predicative function in further special periphrastic constructions with the two full verbs *iye/a-<sup>zi</sup>* ‘to make’ and *tarna-<sup>i</sup>* / *tarn-* ‘to let’ to express a causative or permissive meaning.

#### 2.1.3.1. *iye/a-<sup>zi</sup>* “to do” + participle

*iye/a-<sup>zi</sup>* “to do” is constructed with object and predicative participle with causative meaning and expresses a stative-resultative nuance, as the followings examples show.

- (1) oh./ns. KUB 35, 148 iii 38-39  
*dakkudakuwan[teš]* (39) *īyanzi* *šarakuwanteš* *īyan[zi]*  
 cooped up-PRTC.PL.NOM.C make- PRES.3PL drenched-PRTC.PL.NOM.C make-PRES.3PL  
 “They make (38) [them] (the horses) cooped up, (39) they ma[ke] (them) drenched (saturated by water)??”.

Here the participle shows agreement with the object.

- (2) nh. [Šuppiluliuma II.<sup>?</sup> or Tudḫaliya IV.<sup>?</sup>] KBo 4, 14 iii 23-24  
*tuk=ma karū kuit kē* INIM<sup>MEŠ</sup> *piran* GAM *tiyan*  
 you-DAT=PRT already while these-PL.C words-PL.C ADV ADV put-PRTC.SG.NOM.ACC.N  
 DÙ-*nun*  
 make-PRET.1SG  
 “Though I have already made these words/facts explicit to you”.

In this case we have no agreement between the nom.-acc. n. sg. participle and object in nom.-acc. n. pl.: this could be a marker of a step in grammaticalization.

- (3) ?/nh. KUB 15, 23: 7  
 INIM<sup>?</sup>-*an* *ašantan* *īyaun*  
 word/matter-ACC.C be-PRTC.SG.ACC.C make-PRET.1SG  
 “I made this matter real (lit. “being”)”.

In Hittite no concurring analytical structure can be found that could replace the periphrastic causative construction (with a resultative-stative nuance). Usually, we find synthetic derivational structures with suffixes such as the causative *-nu*-suffix.

### 2.1.3.2. *tarna-i* / *tarn-* “to let” + participle (with permissive meaning)

A further periphrastic construction with the participle is the one with *tarna-i* / *tarn-* “to let with a permissive meaning, like engl. “to let” + infinitive.

- (4) nh. KUB 59, 47 Obv.<sup>?</sup> i 11 || KUB 7, 46 iv 7-8  
 [(*n=aš* IGI<sup>III</sup>)]<sup>A</sup>=*wa* *katta* *wahnuwanduš* *tarnanzi*  
 and=them-ACC.C eye-PL.N=SPEECH.PRT down turned-PRTC.ACC.PL.C let-PRES.3PL  
 “They let them (the arrows) (in relation to) the eyes (whereas the peaks are meant) turned down”.

It must be noted that we usually find constructions with *tarna-* + infi-



nitive in the same meaning (s. Hoffner / Melchert 2008: 337 for further examples.)

## 2.2. Constructions with infinitive

### 2.2.1. *hark-* “to hold, to have” and *epp-/app-* “to take”: parallel constructions

A case hitherto undiscussed which fits well in this framework of *Aktionsart*-like alternations is the periphrastic or functional use of *epp-/app-* “to take” followed by a predicative argument (adverbs, objects, prepositional phrases, preverbs and infinitive).

The parallel use of *hark-* and *epp-* with adverbs and the like, gives a different actional nuance which depends on the basic meaning of the full verb: while *hark-* means “to hold”, *epp-* means “to take”, developed to “to snatch” and ended up grammaticalized as “to begin”. The periphrastic construction of *hark-* displays the stative/resultative function, while the one with *epp-/app-* an ingressive/inchoative one. The two verbs significantly share many parallel constructions:

- they are built with the argument as direct object, and they can develop into a phraseological meaning (i.e. KASKAL *hark-* / *epp-* “to keep/ to take the (right) way/direction”);
- with a preverb, *šer hark-* “to hold upon” obv. *šer epp-* “to lift”;
- with an adverb, *menahhanda har(k)-* “to hold towards” obv. *menahhanda epp-* “to take towards”;
- with the particle *-za* in the meaning “to hold X” as a resultative situation obv. “to take” as a punctual situation (inchoative).

In this sense we observe a semantic change in the construction with *-za epp-/app-*, meaning “to start/begin to do something”, with ingressive value. In this case *epp-* is semantically empty and is used together with the infinitive as “Verbgefüge” or functional verb, in a periphrastic way with actional value, precisely a “Phasenaktionsart”. It develops into a syntactical construction V + obj. + infinitive, but the distribution of the actional value is still the same: *-za epp-* + inf. “to begin to do something” is quite a parallel construct to *hark-* + infinitive “to hold something to do ...”. To sum up the comparison between the two verbs we can say that the semantic value in *epp-/app-* + adverb “to start, begin”, displays an inchoative phase, while the semantic value in *hark-* + adverb “to hold” has a “stative/resultative” meaning.

At this point it might be useful to remember some definitions and the theoretical frames for *Aktionsart* and for *Phasenaktionsart*

and phasal verbs. For a definition of *Phasenaktionsart* I quote from Cotticelli-Kurras (in press: FN 4:).

Jung (1980, p. 236) definiert für die deutsche Sprache die (Phasen)aktionsart wie folgt: „Die genaue Wiedergabe der Wirklichkeit verlangt, ein Geschehen auch in seiner Verlaufsweise darzustellen, und zwar sowohl in bezug auf den zeitlichen Ablauf als auch in bezug auf modale Differenzierung“. Es werden zu den Phasenaktionsarten die folgenden Typen gerechnet: Ingressiv, Inchoativ, Egressiv, Konklusiv, Effektiv.”

We also refer to the recent works by Engerer (forthcoming and 2010), which offer a clear theoretical frame for the phasal verbs, their taxonomy and their different expressions from a typological perspective, though the best analyzed structures for these semantic verb groups are some German and Slavonic languages. Engerer specifies that «the term “phase” refers to a semantic field consisting of three primary phasal subgroups: ingressive (“begin”), egressive (“stop”) and continuative (“continue”)», and further that «the structural correlates of phasal meanings are predominantly, and prototypically, located in the lexicon, but also on the morphological layer if the language in question has developed sufficient phasal morphology (first of all prefixes...)», also in word formation and in syntax. They are involved in the formation of concepts like *Aktionsart*, tense and aspect. He also describes four possible expressions or types for the different phasal meanings, which can be found cross-linguistically. The types are displayed through phasal verbs, phasal *Aktionsart*, telic phases and aspectual phases.

In what follows, we try to focus on some phasal verbs in Hittite for the three main phases “begin, start; stop, end, finish; continue, and resume” and illustrate them with some examples<sup>11</sup>. The interplay with other features of the type “phasal *Aktionsart*” is very interesting but would go beyond the scope of this study.

### 2.2.2. Constructions with *hark-* “to hold” + infinitive

(5) KBo 23, 48 obv. (I) 11 (lacuna)

*akunna harkanzi*

drink-INF hold-PRES.3PL

“They hold out (something) for drinking”.

<sup>11</sup> Engerer (forthcoming, p. 3) notes that in the literature the term “aspectual verbs” for phasal/phase verbs is frequently used as well.

- (6) KUB 12, 26 ii 8f.

*nu=war=an*

*A-NA DUMU.LÚ.U<sub>19</sub>.LU* (9) *aniyawanzi ħarkir*

and=SPEECH.PRT=it-PRON.ACC.C to-PREP human being treat-INF hold-PRET.3PL  
 “They held it (a female sheep) (ready) (9) to treat the man magically”.

- (7) KUB 39, 12 rev. 17 und 18 (Otten, HTR 70f.)

*[akkantaš]*

*šenan*

*lilauwanzi ħarki[r]* (18) *lilauwanzi ħarkir*

dead-PRTC.SG.GEN image-ACC.SG.C atone-INF hold-PRET.3PL atone-INF hold-PRET.3PL  
 “They kept (it ready) to atone the image [of the dead], (18) they kept [X]  
 to atone”.

### 2.2.3. Constructions with *epp-/app-* “to seize, to begin” + infinitive

- (8) KUB 1, 1 obv. 77f. (Goetze Hatt., StBoT 24)

*nu=mu=za*

*aluwanzahhuwanzi namma QADU DAM.ŠU DUMU.ŠU eppir*

and=me=REFL.PRT bewitch-INF again with wife=his son=his begin-PRET.3PL  
 “They (he together) with his wife and his son began again to bewitch  
 me”.

- (9) KBo 29, 66 + KUB 27, 59 i 24

*nu=za*

*EZEN*

*namma* (25) *iyauwanzi epzi*

and=REFL.PRT festival again celebrate-INF begin-PRES.3SG  
 “He begins to celebrate (24) the festival again”.

- (10) KUB 19, 18 i 17-18

*nu=za*

<sup>URU</sup>*Tuwa[nuw]an*

*zahĥiyauwanzi epzi*

and=REFL.PRT city Tuwanunwa-ACC.SG.C fight-INF begin-PRES.3SG  
 “He takes to fighting the city Tyana”.

- (11) KUB 15, 31 i 33

*nu=za*

*DINGIR<sup>MES</sup>*

*ĥuittiyauwanzi appanzi*

and=REFL.PRT god-PL.C attract-INF begin-PRES.3PL  
 “They begin attracting the gods”.

- (12) KBo 5, 1 i 9 (JCS 10: 97, 1956)

*nu=za*

*pait*

<sup>URU</sup>*Alminan*

*wetummanzi IŠBAT*

and=REFL.PRT go-PRET.3SG city Almina-ACC.SG.C fortify-INF begin-PRET.3SG  
 “He went (and) took to fortifying the city Almina”.

- (13) KUB 19, 37 ii 22

*šipanduwanzi anda*

*appanza*

sacrify-INF in-PREVERB take-PRTC.NOM.SG.C  
 “Included for sacrificing”.

## 2.2.4. Constructions with *ar-tta(r)* “to stay/remain” + participle (stative function?)

The meaning of the full verb of *ar-tta(r)* is ‘to stay (on the feet)’. Frotscher (in press) found out a possible construction with a “functional verb” *ar-tta(r)* “to stay” with participle. It recurs sporadically together with a participle in an adverbial function and with a typical stative meaning<sup>12</sup>.

- (14) nh. KUB 38, 21 rev. 6  
 AN]ŠE.KUR.RA KÙ.BABBAR *paškan* *arta*  
 horse silver pin-PRTC.NOM.ACCN stay-PRES.MED.3SG  
 “The silver horse stays (there) pinned.”
- (15) oh./ns. KBo 10, 24 iv 22-23<sup>13</sup>  
 IŠTU É URU *Ankuwa* (23) *harpan* DUG KAŠ=*iya* *arta*  
 from house cityAnkuwa stacked-PRTC.NOM.ACC.N vessel beer=also stay-PRES.MED.3SG  
 “There is also a beer vessel together stacked (with other things) (there) (22) from the house in the city Ankuwa”.
- (16) oh./nh. KUB 10, 21 ii 7-8  
 É *hili=ma* *zeriyalli* GAD-it (8) *kariiyanda* [*k*]arū  
 courtyard-DAT.LOC=but vessel-NOM.ACC.N garment-INSTR cover-PRTC.PL.N still  
*artari*  
 stay-PRES.MED.3SG  
 “In the courtyard (8) the (supports of the) vessels stay still covered by a garment”.
- (17) mh./ns. KBo 5, 2 iv 36-38  
 nu=*za* G<sup>IS</sup>KANNUM-it *kuiš* DUG-iš *šihilliyas*  
 and=REFL.PRT support-INSTR which-PRON.NOM.SG.C vessel-NOM.SG.C purity-GEN.SG  
*uitenit* (37) *šūuwanza* *artari* nu=*kán* LÚAZU *apēz*  
 water-INSTR fill-PRTC.SG.NOM.C stay-PRES.MED.3SG and=there man AZU-Priest from this-ABL  
*šer arḥa* (38) *lāhui*  
 ADV ADV poor-PRES.3SG  
 “And which vessel (38) stays there (37) filled with purity water on the supports, from this the AZU-Priest poor”.

The following example shows a functional use of the verb *ar-tta(r)* which

<sup>12</sup> You can compare the uses in span. *estar* + Adjective/Adverb to reproduce a continuous state and the rarely types *to stand corrected*.

<sup>13</sup> See also the parallel text KUB 2, 10d: 4-5.

seems to be lexically empty; otherwise it would be in contradiction with the participle *kenuššariyant-* “on the knees”.

- (18) ns. KUB 17, 31 i 13  
*kenuššariianza*      *ar[tari<sup>2</sup>]*  
 kneel-PRTC.NOM.SG.C stay-PRES.MED.3SG  
 “On the knees he (the king) st[ays/remains] (there)”.

Also Neu (1968, p. 11<sup>8</sup>) interpreted the function of the verb *ar-tta(ri)* in the listed examples above with a copula-like semantic meaning<sup>14</sup>.

### 2.2.5. Constructions with *ḥark-* + participle “to hold”

- (19) oh. Ritual KBo 17, 15 rev. 12 (StBoT 25 Nr. 27)  
*n=uš*      *NA<sub>4</sub>-an*      *parnaš*      *ḥilamni*      E[(RÍN<sup>MEŠ</sup>-*az*  
 and=PRON.ACC.PL.C stone-GEN.PL house-GEN.SG gatehouse-DAT.LOC troops-NOM.SG.C  
*ḥand)ān*      *ḥarzi]*  
 ready-PRTC.SG.NOM.ACC.N hold-PRES.3SG  
 “At the gatehouse of the house of the stones, the troops keep them (animals) available”.

- (20) oh. Ritual KUB 12, 55 + 57 iv 6  
*[nu=]šši*      *KASKAL-an*      *tarnan*      *ḥartin*  
 And=him-DAT way-ACC.SG.C release-PRTC.SG.NOM.ACC.N hold-IMP.2PL  
 “Hold (you, pl.) the way free for him!”

### 2.2.6. Constructions with *ḥandai-* “to establish” +infinitive

- (21) nh. KUB 5, 6 ii 71 f.  
*n=aš*      *INA*      <sup>URU</sup>*Zithara* (72) *pedumanz[i SIxSÁ-a]t*  
 and=he-NOM.C to-PREP city Zithara reach-INF establish-PRET.MED.3SG  
 “He (72) has been established to go (71) to (the city) Zithara”.
- (22) nh. KBo 4, 8 ii 6  
*n=aš*      *katta*      *ašanna*      *kuit*      *SIxSÁ-at*  
 And=she-NOM.C down-ADV deposit-INF while-CONJ establish-PRET.MED.3SG  
 “Because she has been established for depositing”.

<sup>14</sup> Neu (1968, p. 6) brings a further example for *ar-tta(ri)* in this meaning which is but constructed without participle: *ANA* <sup>GIŠ</sup>*TUKUL=ma=šši* *EPIŠ* *GA artari* “But also a milker stands for the man to be available.” (Neu translates: „[...] steht ihm? aber außerdem ein Melker zu Verfügung [...]“).

### 2.2.7. Constructions with *zinnai-* + infinitive and *irḫai-* + infinitive “to finish, to be ready”

- (23) mh. (copy) sacrificial list KBo 20, 113 + KBo 35, 162+ ii 18/2f. (ChS I/3-2, 124 Nr. 39; Dupl. mh. KBo. 35, 163 + KBo 24, 68+ ii 9/3/17ff. ChS I/3-2, 128 Nr. 41)

*mahḫan=ma* <sup>MUNUS</sup>SANGA<sup>D</sup>[*Heba*]<sub>t</sub> *BI-IB<-RI>*<sup>HLA</sup> *šunmiau[anzi]* (20) *zinnai*  
when-CONJ=but female priest god H. rhyton-PL.N fill-INF be ready-PRES.3SG

*nu galga[(ltu)]ri karinuwanzi*

and galgaturi-NOM pause-PRES.3PL

“(While they fill the rhytons), when the female priest of [*Hebat*] (20) has finished to fill the rhytons, they let the *galgaturi*-instrument pause”.

- (24) KBo 15, 48 (+) ii 4f.

*mahḫan=ma* LUGAL-*un* *waḫnumanzi* (5) *zinnai*  
when-CONJ=but king-ACC.SG.C turn around-INF be ready-PRES.3SG  
“When (5) he is ready (4) to turn around the king”.

- (25) mh. Ritual with Hurrian background

KUB 29, 8 i 1f. (ChS I/1 Nr. 9)

*mahḫan* ŠA GAL<sup>HLA</sup> *waršiyaš* *memiyaneš* (2) *ḫurlili* *memiyauanzi*  
when-CONJ of cup-PL.N appeasement-GEN.SG words-ACC.PL.C Hurrian-ADV speak-INF

*zinnandari*

be ready- PRES.3PL.MED

“When they are ready to speak in Hurrian the sayings of the cup of the appeasement”.

### 2.2.8. Constructions with *irḫai-* “to make the rounds, to finish, to conclude”

- (26) Lallupiya-Fest KUB 25, 37+ iv 6 (Laroche, DLL 172)

*mahḫan=ma* [*ú*]*iniyandan akuanna irḫaizzi*  
when-CONJ=but wine-ACC.SG.C drink-INF be ready-PRES.3SG  
“When he is ready to drink the wine”.

### 2.2.9. Constructions with *dai-/tiya-* + supine “to begin”

Finally we introduce the periphrastic construction *dai-/tiya-* with the supine, displaying inchoative value in order to find out different meaning between the two constructions.

Cf. the construction with *-za epp-* + inf. “to begin to do something” (§ 2.2.3).

(27) KBo 12, 58 + 13, 162 obv. 3

EZE]N-*an*    *arḫa*    *appeškiuwan* *teḫḫun*  
 festival-ACC.SG away-ADV take-SUP    begin-PRET.1SG  
 “I began doing away with the festival”.

(28) KBo 26, 85:1

*nu=za*    <sup>LÚ</sup>HUL-*aš*    <sup>LÚ</sup>NÍG)] SIxSÁ-š=*a*    *šarriyawan* *dair*  
 and=REFL.PRT man Evil-NOM.C man Good-NOM.C=and    separe-SUP    begin- PRET.3PL  
 “They began separating “Evil” and “Good”.

(29) KUB 30, 28+ obv. 39f. and rev. 13

*wešgawan*    *tiyanzi*  
 complain-SUP begin-PRES.3PL  
 “They begin to complain”.

(30) KUB 24, 8 + 36, 60 iii 11f.

<sup>m</sup>*Appuš=za*    DUMU.NITA-*an* *duškeskiuwan* (12) *daiš*  
 man A.=REFL.PRT son-ACC.SG.C    rejoice-SUP    begin-PRET.3SG  
 “Appu (12) began (11) to rejoice in the son”.

Note the following contrastive example in which *tiya-* + infinitive has another meaning: it is a full verb and is not grammaticalized:

(31) KUB 30, 15 + 39, 19 obv. 8f. (Ottén, HTR 66f.)

*n=at=šan*    A-NA    <sup>GIS</sup>ŠÚ.A    *ašanna* (9) *tiyanzi*    *man*  
 and=them-ACC.N=LOC.PRT in/on-PREP wood chair sit-INF    begin-PRES.3PL if-CONJ  
  
*MUNUS-za=ma*    *n=at=šan*    <sup>GIS</sup>*ḫapšaliyaš* *tianzi*  
 male-NOM.SG.C=but and=them-ACC.N=LOC.PRT wood chair put-PRES.3PL  
 “They place them (the bones) on a chair for sitting. (9) If it is a woman, they put them on a women-chair”.

### 3. Conclusion

Hittite texts show an interesting variety of periphrastic constructions. Let us resume some of their features.

#### 3.1. Semantic values of periphrastic constructions with participle:

- The periphrastic constructions with functional verbs such as *iya-* “to make” or *tarna-* “to let”, with the participle, represent an analytical counterpart to the corresponding (*-nu-*, *-aḫḫ-*) derivational verb forms (s. table 2) but they only infrequently occur.

- The periphrastic construction *eš-* with the participle has a stative function, and is an analytical alternative to the category of perfect, which has been developed in some other Indo-European languages by morphological strategies. Often the verb *eš-* can be omitted. We suggest considering this construction as a counterpart of middle verb forms. In a later Hittite phase the *eš-* plus participle construction became grammaticalized and added a past tense function (pluperfect).
- The periphrastic construction *hark-* with the participle has a resultative meaning, but in later phases of the language it also shows a past tense function. Because of the lack of the morphological category of IE perfect in Hittite, the resultative and stative values of this category (i.e. the perfect) are partially expressed through periphrastic constructions, and partially through the middle verb forms.

### 3.2. Phase verbs

Phasal verbs can be found also in Hittite verbal system<sup>15</sup>, and denote the main phases Ingressive, Inchoative, Egressive, Conclusive and Continue. We have selected some of these verbs which are constructed with an object and the infinitive (*hark*, “to hold”, *epp-/app-* “to begin”, *zinnai-* “to finish”, *irhai-* “to conclude”). Some of them are constructed with the participle. Finally, we listed some verbs which can be complemented by a participle or by an infinitive. We compare these groups also with the verb *dai-/tiya-* “to begin” which takes only the supine, but not the participle and, in the cases where it is constructed with the infinitive, it is, in fact, a full verb.

In order to highlight the constraints for these constructions we put the following questions: Why don’t we find any constructions with *hark-*+ supine? And, on the other hand, why is *epp-/app-* never used together with a participle? A possible answer to these questions is that the stative resultative value of the participle is very clear and strong so that the functional verbs cannot freely select their argument constructions (infinitive or participle). The combination is led by the semantic value of the verb in the argument position and, *vice versa*, of the functional verb.

<sup>15</sup> We can compare them (typologically) with similar constructions in other Indo-European languages, see Benedetti (2006), Benedetti, Bruno (2012) and Bruno (2012a, 2012b), which use the term “ausiliazione aspettuale”. To this terminological aspect see also Engerer (forthcoming) and here above FN 11.



*Ḫark-* has a stative semantic value and cannot be constructed with the supine which has a prospective meaning, while the participle in Hittite has a strong resultative value. The constructions with the infinitive also have an object. For the same reason, though *epp-/app-* has a punctual semantic value, it cannot be used together with the participle with a stative meaning.

We can now try to explain the reasons why some of them can be constructed with different arguments. Certain phases can be interrupted while others cannot be, certain events include the end of the event itself, while in others the beginning already includes the end.

It seems that *irḫai-* (s. example 26) implicates the whole concluded event, while *zinnai-* (s. examples 23-25) does not. *ar-* (s. examples 14-18) implicates a continued state. The construction with *dai-/tiya-* and supine (s. examples 27-30) does not include the end of the event.

TABLE 4  
Structures and phases in the Hittite verb system

		Aktionsart: phases				
Struc- tures	Peri- phrastic form	Ingressive “to begin”, “to start something to x”	Inchoative “to hold something ready to x”	Egressive “to stop (something) to x”	Conclusive “to finish (something) to x”	Continue “to maintain”, “to hold something in a state”
		- <i>epp-/app-</i> + infinitive - <i>dai-/tiya-</i> + supine	- <i>ḫark-</i> + infinitive	- <i>zinnai-</i> + infinitive	- <i>irḫai-</i> + infinitive	- <i>ḫark-</i> + participle “to hold something in a state” - <i>ar-</i> + participle “to remain in a state”

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