

## THE HITTITE PERIPHRASTIC PERFECT

### Introduction and State of the Art

Hittite features two parallel periphrastic constructions from the earliest times. These consist of a participle combined with the present or preterite of the verbs *ḫark-* ‘to have’ and *eš-* ‘to be’ with the value of a periphrastic perfect.

The construction with *ḫark-* looks comparable to the Latin *habeo* + object + perfect participle, which gave rise to the analytic perfect in the Romance languages through a process of reanalysis from *habeo* + (object + participle) to (*habeo* + participle) + object (ex. Plautus, *Trinummus*: *multa bona bene parta habemus*), and to the Hellenistic Greek construction ἔχω + middle perfect participle. However, there is a crucial difference: while in Latin and Greek—and partly still in their descendant languages such as Italian—the participle always agrees with the object, in Hittite this is never the case. The participle is always in the neuter nominative-accusative singular. Furthermore, this construction was extended already at an early stage to intransitive unergative verbs, as shown by Dardano (2005). This indicates a more advanced stage of grammaticalization, which is also evident from the higher degree of cohesion within the construction, interrupted only—though not necessarily—by indefinite pronouns and the subordinating conjunction *kuit*. Furthermore, the Hittite construction has both an anterior and a stative-resultative meaning (<sup>LÚ</sup>KUR *utnē tarahḫan ḫarta* ‘the enemy held the land subdued’).

According to Benveniste, in Latin the participle has an adjectival value, while in Hittite it has an adverbial one. *Ḫark-* would be an auxiliary only in specific contexts related to the expression of anteriority, while in the majority of contexts it would retain its lexical meaning ‘to have, to keep’ (*Vollverb*). The lexical meaning of *ḫark-* would be proven by cases in which a periphrastic perfect is attested together with a *Vollverb*: GÜB-la-az-ma <sup>ĜIS</sup>ka-a-pu-úr *ḫar-zi* <sup>ĜIS</sup>GIDRU-za-an an-da *ḫar-zi nu* <sup>ĜIS</sup>GIGIR me-na-aḫ-ḫa-an-da ta-me-eš-ša-an *ḫar-zi* ‘with his left hand he holds a vase, he holds the reins inside and he pushes them against the chariot’; ŠA KUR <sup>URU</sup>Ha-at-ti-kán DIĜIR<sup>MEŠ</sup> šu-ma-aš A-NA DIĜIR<sup>MEŠ</sup> ŠA KUR <sup>URU</sup>Ga-aš-ga ar-ḫa Ú-UL ku-it-ki *ḫar-kán-zi dam-mi-iš-ḫa-an-na-aš-ma-aš Ú-UL ku-it-ki ḫar-kán-zi* ‘the gods of Ḫatti have taken nothing from you, gods of Kaška, nor have they harmed anything of yours’. There would be also transition cases: GAL KÙ.BABBAR-ia ta-a-u-wa-li-it šu-u-an-da-an *ḫar-zi* ‘he holds a silver cup filled with the cult drink’. The adverbial origin of the participle would be proven by expressions such as *menahḫanda ḫark-* ‘to keep in front, to consider’, *arahzanda ḫark-* ‘to keep surrounded, to protect’, *arḫa ḫark-* ‘to keep away’, *peran ḫark-* ‘to keep in front’ and *ḫanza ḫark-* ‘to keep with benevolence’. In some cases, it seems that the adverb alternates with the participle: *ḫanza/ḫanzan*, *munnanda/munnan* (*munnanda* is not the plural of the participle). On a typological level, similar expressions are found in Greek: ἐκποδὼν ἔχειν ‘to stay clear’ and ὥς ἔχω ‘how I am’. However, this is a circular argument, since this type of adverb is found only with the *ḫark-* construction, whereas participles usually form adverbs with the suffix *-ili*, with the possible exception of *ḫandan* ‘truly’. Furthermore, none of the adverbs quoted by Benveniste originates from a neuter nominative/accusative, apart from *peran* ‘ahead’.

This thesis is now untenable: the syntactic cohesion of the construction in both the stative and the anterior construction shows that the verb *ḫark-* must have completed a process of auxiliarization, and, when combined with the participle, it always functions as an auxiliary, never as a verb of possession (criteria for auxiliarization are defined in Ramat 1987). This is the conclusion reached by Boley

(1984), who compiled a large *corpus* of attestations. Her thesis is proven by the fact that it is impossible to insert a negation or a dimensional adverb between the auxiliary and the non-finite form, with the already mentioned exceptions of indefinite pronouns (but only when in pairs: *dam-mi-iš-ḫa-a-an ku-iš-ki ku-it-ki ḫar-zi* ‘if someone has damaged something’) and the subordinating *kuit*. There is only one occurrence of a negation between the finite and non-finite form: *dam-mi-iš-ḫa-an-na-aš-ma-aš Ú-UL ku-it-ki ḫar-kán-zi* ‘they have not damaged anything yours’.

Concerning the participle, an alternative hypothesis (Luraghi 1998) is that the construction was initially restricted to transitive verbs, and the participle always agreed with the object. Only at a later stage, due to grammaticalization, did the participle lose agreement with the object, and the construction was extended to intransitive unergative verbs, as happened in the Romance languages. This transition may have occurred via transitives used in an absolute sense, which, like unergatives, require only a subject (ex.: *aran ḫarti* ‘you have given an oracle’, *šarninkan ḫarmi* ‘I have paid’, *malan ḫarti* ‘you have approved’, *pirann-a-tta waḫnuwan ḫarzi* ‘it will not take priority over you’, *lalukišnuwan ḫar-zi* ‘he keeps illuminated’, *lagan ḫardu* ‘let it keep its back inclined’, cfr. Dardano 2005). The main issue with this hypothesis is the lack of evidence for original agreement between participle and object. Significantly, in 5th-century BC Greek, the construction  $\epsilon\chi\omega$  + aorist participle shows agreement with the subject, rather than the object (Drinka 2017).

## Research Objectives

The objective of this research is to collect the full *corpus* of attestations of the *ḫark*- and *eš*- constructions and to reanalyze them one by one. In fact, Boley’s *ḫark*- corpus is incomplete (she collects around 150 sentences, but actually there are more than 400), while *eš*- constructions have never been studied systematically.

According to Boley (1984), in Old Hittite only a stative reading would have been possible, whereas the anterior developed from the stative in Middle Hittite. In addition, intransitive participles would be attested only in Old Hittite. The problem is that these conclusions are based on partial data and Old Hittite originals are treated together with imperial age copies, which fakes the results. The absence of the anterior in Old Hittite may be due simply to a lack of documentation; Boley tends to overestimate the stative value not recognizing transition contexts towards the anterior. Finally, the claim that intransitive participles are restricted to Old Hittite is simply false.

This confusion between originals and copies characterizes also the largest corpus of *eš*- constructions, Cotticelli-Kurras (1991). In this work, only around 40 forms are treated extensively, with reference to their temporal context. Cotticelli-Kurras denies the auxiliary value of *eš*:- according to her, such constructions are simply nominal copular clauses, with the participle agreeing with the subject in the same way as an adjectival predicate and the reflexive particle *-za* appearing in the 1st and 2nd person singular.

There is some truth in this claim since in *eš*- constructions the meaning is compositional: the participle of transitive verbs almost always has a P-resultative meaning, even in states (*ḫā* ‘to trust’ > *ḫānza* ‘trusted’), and transitive verbs form the passive construction, whereas the participle of intransitive telic verb has a S-resultative meaning (*irmaliya*- ‘to become ill’ > *irmaliyanza* ‘ill’; *akk*- ‘to die’ > *akkanza* ‘dead’) and intransitive telic verbs form the perfect. Finally, intransitive stative verbs form the stative, since they cannot have a resultative meaning.

However, the boundary between *Vollverbum* and auxiliary should not be regarded as sharply defined, but rather as a *continuum* which also includes intermediate forms, as pointed out by Ramat (1987). According to the most recent study (Inglese & Luraghi 2020), those three different values, the stative, the passive and the anterior, represent three different stages on the path of grammaticalization. In the stative, the verbs *eš-* and *ḫark-* function as semi-auxiliaries and the meaning is compositional and very close to that of the *Vollverbum* (ex.: *tarahḫan ḫarmi* ‘I hold down’), whereas in the passive and in the anterior they function as full auxiliaries. The anterior with *ḫark-* shows the greatest degree of grammaticalization, greater than that of the *eš-* constructions, because its meaning is not compositional: the participle of transitive verbs is passive, yet the construction has an active value (*iyan* ‘done’; *iyan ḫarmi* ‘I have done’). The absence of agreement with the object in the stative *ḫark-* construction remains difficult to explain, especially since in this case the participle functions as direct object.

Boley (1984) and Cotticelli-Kurras (1991) do not take into account these recent developments and are incomplete and misleading concerning dates. For this reason, a new study of the diachronic development of the two constructions is needed, and also a comparison of the two. In fact, the distribution of the two forms has led Garrett (1996) to argue that auxiliary selection for the perfect mirrors that of the Romance languages, with transitive and unergative verbs selecting *ḫark-*, and unaccusative verbs selecting *eš-*. To check this theory, verbs attested both with *ḫark-* and with *eš-* will be studied, with particular attention towards intransitives like *paršnai-*. It will also be checked how Hittite intransitive verbs act in relation to Sorace (2000)‘s Auxiliary Selection Hierarchy, which correlates auxiliary selection with the actional properties of the verb, on a scale which runs from change of location verbs (which categorically select *be*) to controlled non-motional processes (which categorically select *have*):

CHANGE OF LOCATION selects *BE* (least variation)

CHANGE OF STATE

CONTINUATION OF A PRE-EXISTING STATE

EXISTENCE OF STATE

UNCONTROLLED PROCESS

CONTROLLED PROCESS (MOTIONAL)

CONTROLLED PROCESS (NONMOTIONAL) selects *HAVE* (least variation)

TABLE 1. The auxiliary selection hierarchy (Sorace 2000: 863).

## Methodology and Sources

The data presented in the foundational volumes by Boley and Cotticelli-Kurras will be supplemented with those found in Frotscher (2013), which provides the most updated study on the Hittite participle, and the Hethitisches Wörterbuch. Additional data will be drawn from the new *Thesaurus Linguarum Hethaeorum Digitalis* by *Hethitologie-Portal Mainz*. The *ḫark-* corpus includes around 400 occurrences and has already been collected for the Ferdinando Rossi dissertation titled *Il perfetto perifrastico ittita con l’ausiliare ḫark-*.

Each form will be translated and studied within its temporal and aspectual context and also with reference to the presence of temporal adverbs. For example, the adverb *karū* means ‘previously’ with the preterite, but ‘already’ in the *ḫark-* construction, and it is not the only adverb attested (for instance, *duwan para* means ‘till now’). Also, it must be checked if and to what extent the perfect is compatible with temporal reference. For instance, in English it is not permitted (*\*I have got up at five o’ clock this morning*).

Furthermore, the intersections between lexical (i.e. actionality or *Aktionsart*) and grammatical aspect will be analyzed. In fact, the different values of the Hittite construction depend substantially on the semantics of the verb: in the indicative mood, atelic intransitive verbs can appear only in the stative construction, whereas other verbs may appear in both the stative-resultative and the anterior (Inglese & Luraghi 2020). Each verb will be assigned to one of the four actional classes described by Vendler (1957) and Bertinetto (1986): states, activities, achievements and accomplishments. Interesting cases to look for are those in which the participle does not have its usual meaning. For example, there are participles which denote states (*šakkanza* ‘known’ but also ‘knowingly, intentionally’; *adant-* ‘eaten’ but also ‘eating’; *akunt-* ‘drinking’) and participles which denote A-resultatives (again, *adant-* ‘having eaten’ and *akunt-* ‘having drunk’). Particular attention will be paid to sentences in which the verb *ḫark-* seems to retain its lexical meaning, or in which the participle seems to have an adverbial value.

There is also an interesting connection between perfect and middle semantics, which may have its roots in the historical development of Proto-Indo-European (see the so-called middle-theory by Jasanoff 2003). This connection is proven synchronically by sentences in which a middle and a perfect form are in correlation: UGULA LÚ<sup>MEŠ</sup>MU *ḫaššaš katta ket arta* 6 ḪAR-*nai*<sup>SAR</sup> *ḫarzi* LÚ<sup>ḫešta</sup> *ḫaššaš katta edi paršnan ḫarzi* 6 ḪAR-*nai*<sup>SAR</sup> *ḫarzi* ‘the chief cook stands near the hearth on this side and he holds 6 plants; the mausoleum man squats near the hearth on this side and he holds 6 plants’.

In addition, morphology of the verbs will be studied. For example, it needs to be checked if the imperfective suffixes are incompatible with the perfect. Concerning the imperative, it seems that only the stative construction or the passive with *eš-* would be possible, although scholars like Garrett (1996) also acknowledge the existence of the perfect. However, the semantics of the perfect are difficult to reconcile with the imperative, as shown for example by the rarity of the perfect imperative in Classical Greek, apart from idiomatic expressions like εἰρέσθω ‘this be said’. An Hittite example is: *iš-ḫi-<sup>1</sup>i<sup>1</sup>-ni-uš-ma-aš-kán* UM[BIN-*i*]a *da-a-an e-eš-du pár-ku-wa-ia* TÚG<sup>HLA</sup> *wa-<sup>1</sup>aš<sup>1</sup>-ša-<sup>1</sup>an<sup>1</sup>* *ḫar-kán-du* ‘let their hair and nails be cut and let them wear clean clothes!’.

Finally, it seems that the construction was already grammaticalized in Old Hittite, since the linear order is almost always respected and it can be interrupted only by the causal subjunction *kuit*, by indefinite pronouns and in one case by a personal tonic pronoun. From the study of the *ḫark-* corpus it can be said that, among 414 occurrences, linear order is not respected only 11 times, and usually when there are two indefinite pronouns together.

Other interesting aspects to look for include the use of the reflexive particle *-za*, which according to Boley gives an intransitive meaning to *ḫark-* (‘to stand, to take up a position of doing the verbal action’) and the use of locative particles.

## Expected Results and Impact

The study of the Hittite periphrastic perfect proves particularly interesting due to its comparison with the analogous construction of the Romance languages, with which it seems to share the auxiliary choice. From a typological perspective, the periphrastic perfect with the auxiliary to have is found in European languages exclusively, as shown by WALS data. Unsurprisingly, it is considered one of the defining traits of the so-called Standard Average European or Charlemagne Sprachbund. While the dynamics behind the transmission of this construction from Hellenistic Greek to Vulgar Latin, and from Vulgar Latin to the modern European languages, are clearly due to language contact (Drinka 2017), the presence of such a construction in Hittite is not as easily explained.

Since the Hittite periphrastic perfect is not attested in other Anatolian languages of the first millennium, it is highly unlikely that it is the result of contact, though contact between Hittite and Greek is not such a bizarre hypothesis (for example, it has been proposed for the iterative suffix *-šk-*). Significantly, the first attestations in 5th-century Greek present the aorist participle agreeing with the subject—not the object—and with an active meaning. It is likely that the two languages independently developed the construction from an earlier Indo-European linguistic material. The origins of this construction may lie in the peculiar semantics of Indo-European *-nt-* participles and in the ability of Indo-European languages to express possession through a verb, though this verb has not the same root across all languages.

Finally, the so-called perfect is not the only periphrastic construction in Hittite. For example, there is also the so-called serial construction, which combines two finite forms. It is attested with the verbs *pai-* ‘to go’ and *uwa-* ‘to come’, the first one being used in the imperative with controlled events, and the second one with uncontrolled events. It would be interesting to check if the selection between these two verbs matches the auxiliary selection between *ḫark-* and *eš-* and, if so, if it is just a coincidence.

The first year will be dedicated to the study of previously collected data on *ḫark*; the second to the collection of data on *eš-*; the third to the comparison between the two constructs and the study of perfect semantics.

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