The Anatolian "ergative"

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0. Abstract

The Anatolian languages are unique among the Indo-European languages in having a suffix for neuter nouns in the agent position, hereafter referred to as the *agentive* suffix. There exist several theories concerning the grammatical analysis of this suffix (Melchert 2007). In this article I expand on research by Goedebuure (2013) by testing these theories for all languages in which this construction is attested. It turns out that the agentive was originally a personifying suffix **-ont-*, a function still present in Old Hittite and Luwian. This suffix was grammaticalised into a grammatical suffix already in Proto-Anatolian. This suffix could only occur in the common gender nominative. In Neo-Hittite, the construction *-ant-s*/*-ant-es* was reanalysed as case endings *-anza*/*-anteš* of a new ergative case appearing only in the neuter gender. A similar reanalysis was happening in Lycian. The suffix **-ont-* was grammaticalised in order to be able to form neuter agents, which was impossible in Proto-Indo-European. The non-Anatolian Indo-European languages filled this gap by extending the function of the neutral subject/patient ending **-Ø* and **-om* to the agent function. This shared innovation constitutes an argument in favour of the Indo-Hittite hypothesis.

1. Introduction

One of the characteristic features of the Anatolian languages that sets them apart from the other Indo-European languages is the fact that neuter nouns that are the subject of transitive sentences (the Agent position) do not appear in their nominative/accusative form. Instead they receive a suffix, for example Hittite sg. *-anza*, pl. *-anteš*, that is traditionally called the *ergative* suffix. Such a terminology implicitly presupposes that Anatolian has an actual ergative case, as has been argued for by Garrett (1990). This is, however, not the only theory on the place of the suffix *-anza*/*-anteš* within the grammatical system of the Anatolian languages. Laroche (1962) and Benveniste (1962) segment the suffixes into *-anza* = /-ant-s/ and *-anteš* = /-ant-es/, so that they consist of a suffix *-ant-* and a common nominative ending *-š*/*-eš*. Thus, under this analysis, there exists a suffix *-ant-* that transforms a neuter word into a common gender one. Patri (2007), on the other hand, considers the ergative construction to be a special instance of the ablative case,[2] which in Hittite has an allomorph *-anza*. Since there is no concensus whether the "ergative" actually is a separate case in the grammar of the Anatolian languages, in this article I will use the more neutral term *agentive*[3] and reserve the term *ergative* for a proper morphological case.

The discussion on the function of the Anatolian agentive is primarily a synchronic one. As such, the function of the agentive is to be decided in every Anatolian language separately. The discussion has mostly centered on Hittite, as this is the Anatolian language of which the most textual material has survived. Recently Goedegebuure (2013) has given a diachronic description of the agentive in Hittite. She shows that the agentive was a syntactic suffix *-ant-* in Middle Hittite, whose nominative singular *-anza* and plural *-anteš* became fossilised in Neo-Hittite as endings of a new ergative case.

The aim of this article is to expand upon Goedegebuure's research by determining the synchronic role of the agentive construction in the grammar of the Anatolian languages in which it

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[1] This paper is based on a term paper for a course on Hieroglyphic Luwian taught at Leiden University in 2013 by Alwin Kloekhorst, to whom I am greatful for helpful commentary.

[2] Garrett (1990) considers the ablative to be the origin of the ergative case in Anatolian, but in his analysis the ablative and ergative are two separate cases in synchronic Anatolian.

[3] Not to be confused, of course, with agentive nouns such as those formed by the suffix *-er* in English, e.g. *walk* → *walker*.

is attested, namely Hittite, Cuneiform Luwian, Hieroglyphic Luwian and Lycian.[4] After this is established, I will determine the Proto-Anatolian origins of these ergative constructions. Finally, I will consider its implications for the reconstruction of Proto-Indo-European and for the Indo-Hittite hypothesis.

2. Proposals for analyses of the agentive

As was mentioned before there have been several proposals for the analysis of the Anatolian agentive, all of which are neatly summarised by Melchert (2007). One can distinguish between the following four analyses, presented here for the Hittite agentive suffix *-anza*/*-anteš*:

1. *The semantical or derivational analysis*. Under this analysis, proposed by Benveniste (1962), the agentive suffix *-anza*/*-anteš* consists of a suffix *-ant-* and the nominative endings of the common gender. The suffix *-ant-* is a *derivational* suffix that creates an animate noun from an inanimate noun by means of personification. Hence, under this analysis, one cannot use the word *lingāi* 'oath' in the agent position, and one has to resort to using *linkiu̯anteš* 'oath gods', which has a different but similar meaning.
2. *The syntactical or inflectional analysis*. This analysis, first proposed by Laroche (1962), also considers the agentive suffix *-anza/-anteš* to consist of an inflectional suffix *-ant-* and the nominative common gender endings. The difference between this analysis and the previous one is that under this analysis the suffix *-ant-* does not have any semantic value. Instead this analysis posits that neuter nouns, as a rule, cannot be syntactic agents. To express a situation in which a neuter noun is the actor of an action with a patient, the suffix *-ant-* must be used to change the morphological gender of the neuter noun into the common gender, without affecting the semantics of the noun.
3. *The ergative analysis*. This analysis has been argued for by Garrett (1990). Under this analysis the suffixes *-anza* and *-anteš* cannot be decomposed. Instead, these suffixes are endings of a distinct morphological case, the ergative, which only occurs in neuter nouns.
4. *The ablative analysis*. This analysis, proposed by Patri (2007), considers the agentive suffix *-anza* to be a special use of the ablative case. In Hittite, this case is indifferent to number. It occurs mostly as *-az*, but it has an allomorph *-anza*. According to this analysis, neuter nouns with the suffix *-anteš* are actually not agentives, but nominative plurals of derived nouns.

Before I try to fit the Anatolian data on these four analyses it is useful to discuss how one can determine which of the analyses is correct for each Anatolian language; this will streamline the discussion in the later sections. First, as was shown by Melchert (2007: 163-164), the ablative analysis cannot hold in Hittite for a number of reasons. First, if the agentive construction is a special use of the ablative case, one would expect some attestations of the agentive construction with the more common ablative allomorph *-az*.[5] Furthermore, the Hittite ablative is indifferent to number, whereas the agentive construction has a distinct plural. Finally, if the agentive

[4] Valério (2009) raises the possibility that Palaic *fulāsinanza* is a possible example of the agentive construction of a Hattic loan *fulāsina* 'bread', although he prefers an interpretation *fulāsin-ant-s* 'having bread'. At any rate the context is too scarce to provide enough information about the role of the agentive in Palaic.

[5] As Melchert notes, although there are some neuter nouns in which the agentive appears as *-az*, this is due to "nasal reduction" and the suffix is underlyingly still /-ants/ rather than the ablative ending /-ats/.

construction featured an ablative case, one would expect accompanying adjectives and demonstratives to be in the ablative case as well. As Melchert shows this does not happen in Hittite; the agreement relations of the agentive construction will be discussed shortly.

In the Luwic languages the same reasons hold. In fact, in these languages the ablative ending is different from the agentive suffix, as can be seen from the following table:

	Agentive		Ablative
	Singular	Plural	
Hieroglyphic Luwian	*-antis*	?	*-adi*
Cuneiform Luwian	*-antiš*	*-antinzi*	*-adi*
Lycian	?	*-ẽti*	*-edi*, *-adi*

Thus in all Anatolian languages the agentive construction does not feature the ablative case. From this point onwards I will not include the ablative analysis in my discussion.

If the suffix *-ant-* is a semantical derivation, one expects its usage to be determined semantically rather than syntactically. As such, one expects a derivation *X-ant-* derived from a noun *X* to have a different meaning. Since their distribution is determined semantically, one also expects the derived noun *X-ant-* to appear in other cases than the nominative, and one also expects some instances of *X* in the agent position. Also, the usage of the suffix would not be determined by morphological gender, but by some semantic property. This property would most likely be inanimacy, as is argued for by Benveniste (1962). The correlation between the neuter gender and semantic inanimacy is not perfect, however, and we would expect a semantic derivation *-ant-* to appear on inanimate common gender words as well.

It should be noted that there is a semantic suffix *-ant-* in Hittite with many different uses, such as a singulative use and an abundative use; these uses have been described by Josephson (2004). It is a priori possible that the agentive is one of the functions of this suffix; this is especially attractive since one of the functions of the suffix *-ant-* is to form agent nouns. It is very well possible that this suffix is the historical origin of the agentive construction in Anatolian (Oettinger, 2001). Before investigating this possibility, however, it is necessary to determine the synchronic function of the agentive contruction.

The remaining two hypotheses, that *-anza* reflects either an inflectional suffix *-ant-* or a proper ergative ending, are harder to distinguish. In both of these cases the use of the agentive construction would be determined by a grammatical rather than a semantic feature of the sentence, namely the morphological gender of the agent. Also, under both of these analyses we expect no difference in meaning between a noun *X* and the form *X-ant-* in the agentive construction.

According to Melchert (2007) an inflectional suffix would be expected to appear in all morphological cases. However, this reasoning is not fully correct; if a neuter agent is the grammatical condition that defines the use of an inflectional suffix *-ant-*, we would not expect to see it anywhere but in the nominative singular and plural. The comparison Melchert makes with Latin *dea* ← *deus* is not fully applicable, since *dea* differs in meaning from *deus*. If the inflectional suffix *-ant-* is only used in the agent position, it only appears in the common gender nominative

forms *-anza* and *-anteš*. As such, the difference between the syntactical analysis and the ergative analysis cannot be seen from the forms in *-anza* and *-anteš* themselves.[6]

The difference between these two analyses, as is mentioned by Melchert, is that under the ergative analysis the underlying noun *X-ant-* is of the common gender, whereas under the syntactical analysis the underlying noun *X* is a neuter noun. Since a resumptive pronoun corresponding to *X* bears the morphological gender of *X*, anaphoric reference can show us which analysis is correct: if a noun in the agentive construction is resumed by a neuter pronoun, this shows that the ergative analysis is correct, whereas if the resumptive pronoun is of the common gender, the syntactical analysis is correct. Furthermore, if *X* governs an adjective *Y*, we expect *Y* to appear in the common nominative if the suffix *-anza* is decomposable, and in the neuter ergative if it is indecomposable. Of course, a priori the adjectival common nominative ending might be identical to the neuter ergative ending, so formally an attestation of the form *Y-aš X-anza* does not allow us to distinguish between the two analyses. If, however, we find a construction of the form *Y-anza X-anza*, this is a clear argument in favour of the ergative analysis.

The following table gives an overview of the characteristics that allow us to distinguish between analyses. In particular, we can see that if a difference in meaning between the base noun and the noun in the agentive position is found, then it is certain that the derivational analysis is correct in that example. The same holds if we find the agentive construction applied to a common gender base noun. On the other hand, if a word in the agentive construction has a modifying adjective with an ending that is not the common nominative ending, or if it is resumed by a neuter pronoun, the ergative analysis must be correct. In the next sections I will discuss the languages in which the agentive construction is attested one by one.

	Derivational analysis	Inflectional analysis	Ergative analysis
Difference in meaning	Yes	No	No
Gender of base noun	Common/Neuter	Neuter	Neuter
Adjectives	Common nominative	Common nominative	Neuter ergative
Resumptive pronouns	Common	Common	Neuter

3. The agentive in Hittite

I start by summarising the results of Goedegebuure (2013) on the Hittite agentive construction. She distinguishes between Old, Middle and Neo-Hittite. Her theory is as follows. In Old Hittite the agentive construction is purely semantical, and can be seen as an instance of the singulative use of the suffix *-ant-*. By the time of Middle Hittite, however, the agentive construction had been grammaticalised and had lost its semantic value. In Middle Hittite, nouns in the agentive construction are resumed by both neuter and common gender pronouns; as such it could be ambiguously analysed as both an inflectional suffix and an ergative ending. The diachronical development is clear: after the suffix was grammaticalised, it could only appear in its nominative forms *-anza* and *-anteš*. The lack of inflection led to a reanalysis as case endings of the underlying neuter word rather than a suffix which changed the morphological gender. We find the same ambiguous analysis for the adjectives governed by nouns in the agentive construction. These either

[6] Of course, one might argue that a language with a grammatical suffix which can only occur in the nominative case is a very unstable scenario, and that the suffix would be reanalysed into a proper case soon. This, however, does not rule out the possibility that *-ant-* is an inflectional suffix as a synchronic description.

have a common gender nominative ending *-š* or a neuter gender ergative ending *-anza*, also confirming the fact that in Middle Hittite both the inflectional and the ergative analysis can be applied. Here, the ergative adjective ending *-anza* was introduced from the nominal inflection.

Although the agentive construction in Middle Hittite is in development between a grammatical suffix and a morphological case, by the time of Neo-Hittite, we only find neuter resumptive pronouns and adjectives in *-anza*. This indicates that in Neo-Hittite the agentive construction can unambiguously be analysed as an ergative case. Thus in Hittite we can clearly see a development from a suffix with a semantic value to a grammatical suffix to the formation of a new case. Still, however, the singulative suffix *-ant-* continued to exist in Neo-Hittite as a semantic derivation.

While Goedegebuure provides evidence for the stages of Middle and Neo-Hittite, she does not give any evidence for her claim that in Old Hittite the agentive was only semantical. To investigate this claim one would have to consider all Old Hittite attestations for the agentive. By my knowledge, there are only two of such attestations, which we will discuss below.[7]

Example 1: KBo 25.107, 4-6

4. [*a*]*p-pu-uz-zi kar-ta*-x[...]
5. *ták-ku=uš še-e-er* [...]
6. [***ap***]-***pu-uz-zi-an-za*** [...]

'... the animal fat ...; if thus the animal fat ... them'

Although the text from Example 1 is too fragmentary to completely make out the meaning of the sentence, we can see that we are dealing with a derived form of the neuter word *appuzzi* 'animal fat'. Although the verb of this sentence is lost, the fact that the accusative plural commune enclitic pronoun *=uš* appears in this sentence shows that the sentence must be transitive. The question is now whether there is a difference in meaning between *appuzzianza* in this text and the neuter word *appuzzi*. The text VBoT 58 is a new script copy of this text. In this text we find the sentence (i 13-14) *takku=aš t*[*innuzi*] *nu=ma=ašta andurza* ^{UZU}*ap*[*p*]*uzziia̯nza ḫarzi* 'If he paralyzes (the grains), the fat will keep them within' (Puhvel 1984: 103).[8] In this sentence it is clear that there is no semantic difference between *appuzzi* and *appuzzianza*. The same is probably true in Example 1, since *appuzzi* in line 4 and *appuzzianza* in line 6 probably have the same referent. This means that the suffix *-anza* has a grammatical role in this sentence, and as such either the syntactical or the ergative analysis is correct in this instance. However, the context is too meagre to decide which of the two is applicable.

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[7] A short discussion of the agentive construction in Old Hittite is found in Kammenhuber 1993, who remarked that the argumentation of Laroche (1962) for the syntactical analysis of the agentive does not take the Old Hittite evidence into account. She proposes that in Old Hittite the neuter noun *italu* 'evil' occurs in its nominative-accusative form as the subject of both transitive and intransitive sentences. She gives the following example from KBo 18.151, rev. 7-8:

7. [***i-t***]***a-lu***[(-***u̯a***) *a-ra-i-iš ḫ*]*e-ẹn-ka-an ta-aš*
8. [...]x[... *t*]*a-aš a-aš-šu ar-ḫa tu-uḫ-še-et*

'Evil arose; it took the plague; it took ...; it has cut off the good'

However, as remarked by Weitenberg (1987: 227), since the actual ending of the word is not attested, this fragment is too indecisive to constitute evidence for the use of neuter nominative-accusative forms in the agent position in Old Hittite.

[8] Alwin Kloekhorst (p.c.) informs me that this interpretation (by Puhvel) cannot be correct, since the clitic *=ma* cannot follow the sentence-initial particle *nu-*.

Example 2: KUB 36.106 rev. 5-7

5. [... *tu*]*p-pí-aš ut-ta-a-ar šar-ri-et-*[*ta*]
6. [... ***l***]***i-in-ki-i̯a-an-te-eš*** *ap-pa-an-tu*
7. [...] *n=a-aš ḫar-ak-tu*

'The word of the tablet is broken. The oaths must seize ... . He must perish.'

In Example 2 we find the agentive of the neuter word *lingai-* 'oath'. To find out what the semantics of *linkiu̯anteš* is we have to consider the context. The preceding and following lines show that the sentence in line 6 is part of a curse formula. This makes one suspect that *linkiu̯anteš* means 'oath gods' rather than 'oaths'. It should be noted that we find *NI-IŠ* DINGIR^{MES} *ap-pa-an-t*[*u*] 'the oath gods must seize' earlier in the same text. Thus the most probable explanation is that the word *linkiu̯anteš* is semantically different from *lingai-*, so in this instance the evidence points toward the semantical analysis.

Although the material is quite scarce, we see from Example 1 that it is probable that the agentive suffix *-ant-* had a grammatical function in Old Hittite already. This invalidates the suggestion of Goedegebuure (2013) that the suffix *-ant-* only had a semantical function. We cannot see whether the agentive consists of a syntactical suffix *-ant-* or of an unanalysable ending *-anza* from the Old Hittite evidence itself. However, since we see an ergative ending *-anza* develop from a syntactical suffix *-ant-* from Middle to Neo-Hititte, the Old Hittite agentive is best to be interpreted as a syntactic suffix *-ant-* as well.

4. The agentive in Cuneiform Luwian

There are several attestations of the agentive in Cuneiform Luwian, but the number is small enough to treat every attestation in detail. In this section all Luwian forms are discussed that are marked as an ergative by Melchert (1993); all texts are from Melchert (2001a).

Example 3: KUB 9.6+ ii 14-16

14. *a-a-aš-ša=ti e-el-ḫa-a-du* ***tap-pa-ša-an-ti-iš***
15. ***ti-i̯a-am-ma-an-ti-iš*** *ta-a-i-in=ti-i̯=a-ta a-i-i̯a-ru*
16. *ma-al-li=ti-i̯=a-ta* [*a-*]*i-i̯a-ru*

'The sky and the earth must wash their mouths; they must become oil; they must become honey'

Example 3 contains the agentives of the nouns *tappaš-* 'sky' and *tiu̯amm*(*i*)- 'earth'. The latter is a common gender word, as its nominative singular *tiu̯ammiš* and its accusative singular *tiu̯ammin* have both been attested. This already shows that the suffix *-ant-* cannot have a grammatical function and must be semantical. This can also be seen from the content of the sentence: the two subjects have mouths and as such the words do not refer to the earth and the sky themselves but to their personifications or deifications. Thus in this sentence the semantical analysis is applicable.

Example 4: KUB 35.54 ii 49 - iii 5

ii 49. [*š*]*a-a-an-du-u̯=a-ta* ***pár-na-an-ti-in-zi***
ii 50. [*ḫ*]*u-u-um-ma-ti-iš ḫa-aš-ša-ni-it-ti-iš*

ii 51. ***ḫu-u̯a-aḫ-ḫur-ša-an-ti-in-zi*** *ti-i̯a-am-mi-iš*
iii 1. *ta*[?]*-ru-ša-an-ti-iš ad*[*-du-u̯a-al-za ú-tar-ša*]
iii 2. *ḫal-li-iš-ša pa-ra-at-ta-an*[*-za*]
iii 3. *pu-u̯a-ti-il-za* [*n*]*a-nu-un-tar-ri-š*[*a*]
iii 4. *ir-ḫu-u-u̯a-aš-ša pa-ri-it-tar-u-u̯a-a-aš-š*[*a*]
iii 5. *u-la-an-ta-al-li-i̯a-an ḫu-it-u̯*[*a-li-i̯a-an*]

'The houses, the pediment, the hearth, the *ḫuu̯aḫḫurša*-s, the earth, statues, the evil word, sickness, past (and) present impurity of *irḫuu̯a-* (and) of animals, of the dead (and) of the living must release them.'

Example 4 contains a rather large summation in which we find the two agentives *parnantinzi* 'houses' and *ḫuu̯aḫḫuršantinzi* 'statues'. Although all elements of this summation are inanimate, the words that have the agentive construction are precisely those that are of the neuter gender. In other words, the determining factor for the use of the agentive construction is grammatical rather than semantical, which shows that in this sentence the agentive is either an inflectional suffix or an ergative case ending.

Example 5: KUB 35.107+ ii 7-12

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7. [...]x ***kur-ša-ú-na-an-ti-in-zi*** *a-ri-in*[*-ta*]
8. [...]x *a-ap-pu-u̯a-ni-in-zi a-a-ri-in-ta* [...]

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9. [*tap-paš-š*]*a te-ra-a-im-ma-an-za* ^{d}IŠKUR-*za* ^{d}[...]
10. [*a-ri-*]*in* *-ta*

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11. [*du-ú-*]*u̯a-az-za-an ti-i̯a-am-me-in* DINGIR^{LUM} *RA-BU-Ú*
12. [*ti-*]*i̯a-am-ma-aš-ši-iš=ḫa* ^{d}UTU-*u̯a-za a-ri-in*[*-ta*]

'The islands restrained [...]; The *āppuu̯aninzi* restrained [...]; Tarḫunt and [...] restrained the *terāimman* sky; the Great God and the Sun-god of the Earth restrained the *dūu̯azza* earth.'

In line ii 7 of Example 5 we find an agentive construction based on *kuršau̯ar* 'island', a neuter *r*/*n*-stem. Unfortunately, the context is unclear. The next line has a parallel construction, but *āppuu̯aninzi* is a hapax. This presents us with two possibilities for the interpretation of these lines: either the agentive construction in *kuršaunantinzi* is grammatical, so that *āppuu̯aninzi* is another landscape feature, or the agentive construction denotes a personification or deification, so that *appuu̯aninzi* is another group of deities. The next lines give us the answer: here we see deities as the subjects of the verb *arinta*. Therefore it is best to view *kuršaunantinzi* and *āppuu̯aninzi* as deities as well, so that *kuršaunantinzi* 'island deities' would differ in meaning from *kuršau̯ar* 'island', and as such the semantical analysis fits this sentence the best.

Example 6: KUB 35.107+ iii 15-18

15. [*a=u̯a=t*]*i* ÍD.ḪI.A-*in-za ḫa-pí-in-ni-in-za* KI.MIN *a=u̯a=t*[*i*]

16. [SAG.D]U-*aš-ša-an-za* IGI.ḪI.A-*u̯a-aš-ša-an-za* GIG-*an-za na-a-u̯a* [KI.MIN]

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17. [...] SAG.DU-*aš-ši-iš* IGI.ḪI.A-*u̯a-aš-ši-iš* **GIG-*an-te-eš***$_{17}$?
18. [...]x *tar-pí-i-ta* ...

'Ditto (= he made) for him the rivers and streams. [Ditto] for him not the illness of the heart and the eye. [...] the illness of the head and the eye [...] *tarpī*-ed.'

Line iii 17 of Example 6 contains the agentive GIG-*anteš*. Although we cannot determine the meaning of the sentence it occurs in, it is useful to compare it to lines iii 15 en iii 16 , where we see the same noun with the neuter singular nominative/accusative ending *-anza*, as well as with the same genitival adjectives. This makes it likely that the two instances of the word GIG have the same referent, which implies that the suffix *-ant-* is here grammatical rather than semantical. It is also important to point out that the two genitival adjectives SAG.DU-*aššiš* and IGI.ḪI.A-*u̯aššiš* have the common nominative ending *-iš* rather than a hypothetical ergative ending *-antiš*. This makes it likely that GIG-*anteš* is a common gender nominative noun rather than a neuter gender ergative noun. We cannot formally rule out the latter, since it is possible that *-iš* is not only the common nominative plural ending, but also the neuter ergative plural ending. As such, the syntactical analysis fits this sentence, although the ergative analysis is possible as well.

Example 7: KUB 35.112, r.col. 3-7

3. [...]x ^{UZU}**NÍG.GIG-*an-ti-iš*** KI.MIN
4. [...] KI.MIN
5. [...]x-*u̯a-an-ti-iš* KI.MIN
6. [...]x-*ta-ti-ti-in-zi* KI.MIN
7. [...]x-*u̯a-an-ti-iš*
8. [... *ḫal-l*]*i-na-i*

'[...] the liver ditto. [....] ditto. [... the x]-*u̯ant-* ditto; [... the x-]*tati*-s ditto; [... the x]-*u̯ant-* [... is s]ick.'

Unfortunately the context of the text of Example 7, which has been badly preserved, tells us almost nothing about the use of the agentive. The only other form of the word ^{UZU}NÍG.GIG- 'liver' that is attested is the ablative-instrumental ^{UZU}NÍG.GIG-*ti*. Since the word underlying the sumerogram ^{UZU}NÍG.GIG is unknown, it is possible that *-ant-* is just a part of the stem, so we cannot be sure that ^{UZU}NÍG.GIG-*antiš* is indeed an agentive construction. Even if it were, the context does not tell us anything about its use: the only word preserved in the sentence is KI.MIN 'ditto', whose referent is unknown. As such this attestation does not help us in distinguishing between the different analyses of the agentive construction.

Example 8: KUB 35.65 iii 14-16

14. [...]=*pa=an a-ap-pa* ***ḫa-ra-at-na-an-ti-iš***
15. [...]x-*ti-iš ni-iš*
16. [... *ma-a*]*l-ḫa-aš-ša-as-si-in* EN-*an*

‘The [...] offense must not [...] him, the lord of the ritual.’

The word *ḫaratnantiš* ‘offense’ of Example 8 is otherwise also attested as a neuter *r*/*n*-stem in the nom./acc.sg. *ḫārataršа* and the ablative/instrumental *ḫaratnati*. The word [...]X-*tiš* is probably congruent to *ḫaratnantiš*, and it could give us information about the congruence relations of the agentive in Cuneiform Luwian. Unfortunately, only the very ambiguous part *-tiš* of the ending has been preserved. This sentence therefore does not help us in determining the nature of the agentive construction.

Example 9: KUB 35.86 ii 5

5. [... -]*zi* ***ḫar-da-an-ti-in-zi***

‘...’

Melchert glosses the word *ḫardantinzi* in Example 9 as an ergative because the ablative-instrumental *ḫartati* has been attested as well. Given the lack of context, however, we cannot determine whether this is an agentive construction, or simply another derivation by means of the suffix *-ant-* (Melchert suggests ‘having *ḫ*.’).

From the examples it is clear that in Cuneiform Luwian the agentive suffix *-ant-* could be found both as a semantic derivation, denoting personification or deification, and as an inflectional suffix that has a purely grammatical function. In Example 6, the two nominal adjectives corresponding to the agentive ending in the common nominative ending *-iš* point to the fact that the agentive is a suffix rather than an ergative ending in Cuneiform Luwian. Although formally we cannot rule out the possibility that this is the neuter ergative ending, we would expect the neuter ergative adjectival ending to be *-antiš*, similar to the neuter ergative adjectival ending *-anza* of Neo-Hittite. Therefore it is best to suppose that in Cuneiform Luwian there is no separate ergative case and that both the semantical and the syntactical analyses occur.

5. The agentive in Hieroglyphic Luwian

Since the agentive construction in Cuneiform Luwian has the forms sg. *-antiš*, pl. *-antinzi*, we expect the agentive to take the forms °*a-ti-sa* and °*a-ti-zi* in Hieroglyphic Luwian. Unfortunately this is also what the nominative endings for common gender nouns in *-a*(*n*)*ti-* would look like. In order to properly distinguish between these nouns and the agentive construction, I will only consider nouns ending in °*a-ti-sa* and °*a-ti-zi* of which case forms of the noun in *-Ca-* have been attested. However, in the material of Hawkins (2000) we find only two such attestations, both in a single sentence in Example 10.

Example 10: BOYBEYPINARI 2 § 21

iii.B **(“CAELUM”)*ti-pa-sa-ti-sa***=*pa*=*wa*/*i*=*tu-u* **(“TERRA”)*ta-***

iii.C ***sà*-REL+*ra*/*i-ti-sa***=*ha* || CAELUM-*sa*=*ha* TERRA-

iv.A REL+*ra/i-sa*=*ha* DEUS-*ni-i-zi* LIS-*tà-ti* || CUM-*ni* X-*tu*

‘The sky, the earth, and the gods of the sky and the earth must ... him with ligitation.’

In Example 10 the agentives (“CAELUM”)*ti-pa-sa-ti-sa* = *tipasantis* and (“TERRA”)*ta-sà*-REL+*ra*/*i-ti-s* = *taskwirantis* are derived from the neuter noun *tipas* ‘sky’ and the common gender noun *taskwira/i-* ‘earth’. Since in the latter case the agentive is made from a common gender noun, it has to be a semantical derivation rather than a grammatical suffix, since the use of a grammatical suffix would be triggered by the morphological neuter gender. This means that we should understand the subject of this sentence as ‘The sky god, the earth god, and the gods inhabiting the earth and the sky.’ We can conclude that *-ant-* is present in Hieroglyphic Luwian as a personifying/deifying suffix. However, since this is the only attestation of the agentive in Hieroglyphic Luwian, we should not regard the absence of evidence of a grammatical function of the suffix *-ant-* as evidence of its absence.

6. The agentive in Lycian

The last language in which the agentive is attested is Lycian. There are two attestations in the material by Melchert (2001b). Since these attestations are in two sentences that are very similar in nature, it is best to treat them both at once. The sentences are given in Examples 11 and 12.

Example 11: TL 135

2 ... *s=ene* ***teseti*** : *tubeiti* : *trm̃mili*

‘And the Lycian oaths will strike him.’

Example 12: TL 149

10 ... *s=ẽne* : ***tesẽti*** : *qãñti* : *trm̃milijẽt#i* [...]

‘And the Lycian oaths will seize him.’

These two formulations are remarkably parallel (note that nasalisation may drop in front of *n* or *t* in Lycian). This makes it probable that the function of the agentive *tesẽti* is the same in both sentences. The word is derived from *tese/i-* ‘oath’. This word is of neuter gender, since a neuter accusative plural *tasa* is attested in the sentence (TL 36 4-6) *s=e=i(j)=e ñta tãtẽ tasa miñta meleime se(j)=aladahali ada* ///- ‘He placed the council oaths inside for *meleime* and a fee of 3.5 ada’. In both of the examples given the noun *tese/i-* has a suffix *-ẽti* that forms the agentive construction in Lycian. As was the case in the other languages, there are three possible analyses to consider:

1. *Semantical analysis*. The suffix *-ẽti* consists of a semantical derivational suffix *-ẽt-* and the common gender plural ending *-i*.
2. *Syntactical analysis*. The suffix *-ẽti* consists of an inflectional suffix *-ẽt-* and the common gender plural ending *-i*.
3. *Ergative analysis*. The suffix *-ẽti* is the neuter plural ending of the ergative case.

In both sentences the noun *tesẽti* governs the adjective *trm̃mili-*. In Example 12 this adjective has the same suffix *-ẽti* as a case ending. Under both the semantical analysis and the syntactical analysis we would expect the form *trm̃mili* as in Example 11. This shows that the adjective *trm̃milijẽti* is in the ergative case rather than the nominative. The same must be true of *tesẽti*, so in Example 12 the ergative analysis is correct. This again implies that *tesẽti* is semantically identical to *tese/i-* ‘oath’, although one might suspect a personification in this context.

Since the two sentences are so identical, we can assume that the meanings are also similar. Thus we may suppose that in Example 11 there is no semantical difference between *tese/i-* and *tesẽti*. This rules out the semantical analysis. Unlike in Example 12, however, the adjective is *trm̃mili* rather than *trm̃milijẽti*, which has a common gender nominative plural ending. Hence the word *teseti* is a common gender nominative as well, which means that the syntactical analysis is correct.

We see that the agentive has two different analyses in Lycian. This could be a dialectal or diachronical difference, but the amount of data is too small to draw any conclusions about the distribution. At any rate, these two sentences show that a proper ergative case was present in Lycian for at least some speakers, and that this ergative case derived from an inflectional suffix *-ẽt-*, which may either still be present in the language as such, or traces of this origin can be seen in the allomorph *-i* of the adjectival ergative plural ending *-ẽti*.

7. The agentive in Proto-Anatolian

Now that we have gathered all the synchronic information on the separate Anatolian languages the historical development can be discussed. The central question of this section is what the role of the agentive construction was in Proto-Anatolian. We will do this by considering the proposals for possible analyses of section 2 and see how well they hold up for Proto-Anatolian. As in the rest of this article we leave the ablative analysis aside.

The only Anatolian languages in which the agentive construction is a reflex of an actual ergative case are Lycian and the later stages of Hittite. In Hittite this ergative case in *-anza* was created as a reinterpretation of the nominative case of a suffix *-ant-* (Goedegebuure, 2013). The Lycian ergative is attested only once, and we find a parallel construction with an inflectional suffix *-et-i* (= *-ẽt-i*). The Lycian agentive is therefore structurally the same as the Middle Hittite agentive, where the agentive can also be either an inflectional suffix or a morphological case. Thus we can posit the same development for Lycian as we can for Hittite: the agentive was originally an inflectional suffix that was reanalysed as a case ending within the history of the language. Thus in both languages the ergative is an innovation, and as such we cannot reconstruct an ergative case into Proto-Anatolian. Since in Proto-Anatolian the agentive is not an ergative case, we must conclude that every instance of the agentive in Anatolian has developed from a Proto-Anatolian suffix **-ont-*. There are two grammatical roles of this suffix in the agentive construction present in the Anatolian languages: there is a semantic suffix which denotes personification, which is present in the earlier stages of Hittite, in Cuneiform Luwian and in Hieroglyphic Luwian, and a grammatical suffix that obligatorily transfers neuter nouns to the common gender in the agent position, which is present in Hittite, Cuneiform Luwian and Lycian. The semantic suffix can be seen as a specific instance of the Hittite suffix *-ant-* discussed in section 2. This suffix has cognates in other branches of Indo-European (Oettinger, 2001), so we may conclude that this suffix is old and that there existed a semantic suffix **-ont-* in Proto-Anatolian that had personification as one of its functions. Furthermore, we can regard the syntactical suffix **-ont-* as a degrammaticalisation of the semantic suffix **-ont-*. Such a development can be sketched in Lycian as follows (but of course the same development must have taken place in all Anatolian languages). In a non-attested stage of Lycian, the sentence *sẽne tesẽti tubeiti trm̃mili* must have meant 'and the Lycian oaths [personified as deities] will strike him.' However, since the suffix **-ont-* did not have a single, well-defined semantic function in Anatolian (Josephson, 2004), the semantic component of the derivation *tesi*/*tesẽti* was lost and the sentence simply came to mean 'and the Lycian oaths will

strike him.' As a result, the suffix now had a purely grammatical function, namely to be able to put neuter nouns in the agent position by means of changing their grammatical gender. The semantical suffix, in contrast, did not only change the morphological gender, but also the semantical animacy of the noun.

By its nature this syntactic suffix could only occur in the nominative singular and plural. As it could not be fully inflected, the suffix and the nominative ending together were prone to reanalysis as a single morpheme. Since there was no longer a suffix to transfer the word to the common gender, this single morpheme was considered a case ending of the neuter word. Since this case was used precisely in the agent position, we can regard this as an ergative case. This ergative case ending then spread to the adjectival system, which allowed for sentences such as *sẽne tesẽti qãñti trm̃milijẽti* 'and the Lycian oaths will seize him.'

Since we find the syntactical suffix **-ont-* in all Anatolian languages in which the agentive is attested, we should reconstruct this grammatical suffix into Proto-Anatolian, which means that a suffix **-ont-* that could only be used syntactically must be of pre-Proto-Anatolian date. As mentioned before the actual ergative case was a separate Hittite and Lycian development that cannot be reconstructed into Proto-Anatolian. As such we see that Proto-Anatolian reflects the analysis of the agentive as a syntactic suffix as put forth by Laroche (1962) for Hittite, and that all the attested forms of the agentive in the separate Anatolian languages can be derived from this. In particular, this means that Proto-Anatolian, like all Anatolian languages except for Lycian and Neo-Hittite, did not allow neuter nouns in the agent position in sentences.

8. The Proto-Indo-European alignment system

Having reconstructed the alignment system for Proto-Anatolian, I can now turn towards Proto-Indo-European. As is well known, all branches of Indo-European that retain the distinction between neuter and masculine/feminine, except for Anatolian, display a partially accusative alignment system in which masculine/feminine nouns have nominative and accusative forms, and in which neuter gender nouns have a neutral declension, i.e. the Subject, Agent and Patient forms are identical. On the other hand, in Proto-Anatolian, we have seen that neuter nouns could not occur in the agent position, and a common gender noun had to be formed by means of the syntactic suffix **-ont-*. If the term Classical Indo-European (CIE) is used for the non-Anatolian Indo-European languages, then one arrives at the reconstructions of the noun declensions below (using *o*-stems as an example: the endings in *C*-stems are different, but the principle is the same).

	Proto-Classical Indo-European		Proto-Anatolian	
	Masculine	Neuter	Common	Neuter
Agent	**-os*	**-om*	**-os*	×
Subject	**-os*	**-om*	**-os*	**-on*
Patiens	**-om*	**-om*	**-on*	**-on*

The question is now what we should reconstruct for Proto-Indo-European. This touches on the Indo-Hittite hypothesis, which states that Anatolian was the first branch to split off from Proto-Indo-European[9]. Thus, if Proto-CIE is the latest common ancestor of the CIE branches, then the

[9] In the context of the Indo-Hittite hypothesis the ancestor of all non-Anatolian Indo-European languages is occasionally called *Proto-Indo-European*, whereas the ancestor of PIE and Anatolian is called *Proto-Indo-Hittite*. These terms correspond to my PCIE and PIE, respectively.

Indo-Hittite hypothesis states that PCIE is a later language than PIE; in other words, the non-Anatolian branches of Indo-European would share common innovations. Hence if we find that PCIE has undergone an innovation with regards to PIE, then this constitutes evidence for the Indo-Hittite hypothesis.

The only point at which PCIE and PA differ is the ending for the neuter agent. A priori there are two possible reconstructions for the neuter agent in PIE:

1. The PIE neuter agent ending was **-om* as in PCIE, and Anatolian innovated in disallowing neuter nouns in the agent position;
2. As in Proto-Anatolian, PIE did not allow neuter nouns in the agent position; CIE innovated by introducing **-om* for neuter agents.

In order to accept the first reconstruction there has to be a reason why Anatolian removed neuter agents from its grammatical systems. This can be explained by the fact that most PIE inanimate nouns were neuters. In practice, most inanimate nouns could only appear in the agent position via the personifying suffix **-ont-*, which existed in PIE already, for example in **gérh$_2$-ont-* 'the old one' (Gr. γέρων, Skt. *járanta-*), which is derived from **gérh$_2$o-* 'old' (Arm. *cer*) (Oettinger 2001: 302-303). Thus, it is conceivable that the original way to express neuter agents was lost, and the personifying suffix **-ont-* was subsequently grammaticalised.

The problem with this explanation is that one would expect the loss of agents to happen in semantically inanimate nouns, rather than in morphologically neuter nouns. Although there is a strong correlation between inanimacy and the neuter gender, this correlation is not perfect even in Proto-Indo-European. For example, **dʰéǵ-m-* 'earth' (Gr. χθών, Skt. *kṣám*, Hitt. *tēkan*) was feminine in Proto-Indo-European, but refers to an inanimate object; on the other hand **peḱu* 'cattle' (Skt. *páśu*, Goth. *faihu*, Lat. *pecū*) is neuter, but refers to something animate. Thus one would expect the agent of all inanimate nouns to be lost, and one would expect the agentive construction to be determined by animacy rather than by morphological gender. Example 4, however, shows that this is clearly not the case.

On the other hand, if PIE did not allow for neuter agents, both the CIE and the Anatolian situation can be explained. The lack of neuter agents would constitute a gap in the system of the language. PCIE 'fixed' this gap by extending the neuter subject ending **-om* to the agent, since the subject and agent endings were equal in the masculine/feminine noun declension as well. Proto-Anatolian, on the other hand, 'fixed' the gap by grammaticalising the personifying suffix **-ont-*. This reconstruction is considerably less problematic than assuming a PIE neuter agent ending **-om*, so the conclusion is that PIE did not allow for neuter agents. This was, of course, a very unstable situation, which was quickly resolved both in CIE and in Proto-Anatolian. The fact that it was resolved in different ways, however, shows that we have to reconstruct a gap in the system. We thus arrive at the reconstruction offered in the table below.

	PIE		PCIE		PA	
	Masculine	Neuter	Masculine	Neuter	Common	Neuter
Agent	**-os*	×	**-os*	**-om*	**-os*	×
Subject	**-os*	**-om*	**-os*	**-om*	**-os*	**-on*
Patiens	**-om*	**-om*	**-om*	**-om*	**-on*	**-on*

One might wonder how PIE could express situations in which an object, referenced by a neuter noun, is the agent of an action. The suffix **-ont-* was not yet grammaticalised in PIE, since

the only evidence for its grammaticalisation is found in Anatolian. Thus PIE did not have either the CIE or the Anatolian strategy for expressing neuter agents. One can imagine that such a situation could be described by means of a mediopassive construction or by means of the semantic suffix *-*ont*- (which would slightly alter the meaning of the sentence). PIE would then be somewhat similar to the situation ascribed to Anatolian according to the semantical analysis of section 2. It is, however, hard to ascertain the precise construction used, since such a construction would have disappeared in both CIE and Anatolian.

Since PIE did not have the neuter agent ending *-*om*, the CIE languages share a common innovation. Thus, the development of the CIE alignment system constitutes an argument in favour of the Indo-Hittite hypothesis. However, one might argue that these developments could have occured independently, as the absence of neuter agents constituted a gap in the PIE alignment system. Extending the neuter subject ending *-*om* to the agent function is a straightforward way to fix this gap. Thus, although this innovation points towards a period of common innovation of the CIE languages and hence towards an early seperation of Anatolian from CIE, it by itself does not conclusively prove it.

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