To be published in: David M. Goldstein, Stephanie W. Jamison, and Brent Vine (eds.). 2018. Proceedings of the 29th Annual UCLA Indo-European Conference. Bremen: Hempen.

# The Packagers -ant- and -a-, and the Origin of Split-Ergativity in Hittite (and Lycian)* 

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#### Abstract

One of the most controversial topics in Anatolian linguistics is whether the Anatolian languages show split-ergativity based on nominal type ${ }^{1}$. The debate revolves around the analysis of Hittite -ants, Luwian -antis, and Lycian -ẽti as either ergative endings in the neuter paradigms of these languages, or as a morpheme -ant- that derives common gender nouns from neuters, followed by the nominative endings. While in both views the morpheme has the effect that it allows the referents of neuters to occur as transitive subject, the linguistic analysis is vastly different, with repercussions for both the semantics of noun phrases and the origins of split NP ergativity. I will show that among the Anatolian languages only Hittite fully developed an ergative case ending for neuter nouns, while Lycian was in the process of developing one. In both cases the source of the ergative case ending was the common gender derivational morpheme -ant-. This morpheme originally served to individuate common and neuter gender non-count nouns such as masses, collectives, and abstract notions, but was replaced in Hittite by thematization by means of -a-. -ant- itself became a marker of agency for neuters, and then grammaticalized into the ergative case ending -ants for neuters. This process was completed after the reign of Mursili II (1321-1295 BCE). The proposed novel synchronic and diachronic analysis


[^0]of individuating -ant- and ergative -ants both exposes finer differences in meaning that have thus far eluded us and provides a unique insight in how NP split-ergativity might arise.

## 1. Statement of problem and proposed solution

Laroche (1962) famously detected a remarkable pattern of syntactic behavior among neuters only, namely that neuters in transitive subject function ( $\mathrm{A}=$ Agent) require the suffix -ants, spelled $a n-z a$ (sg.) or -antes, spelled -an-te-eš (pl.); for the intransitive subject ( $\mathrm{S}=$ Subject) and the object ( O ) the nominative-accusative is used. Common gender nouns use the nominative for both subjects and the accusative for the object.
(1) shows the neuter idalu 'evil' (written $\mathrm{HUL}-l u$ ) as intransitive subject (= S ), and idaluants 'evil' (written HUL-u-an-za) as transitive subject (=A). (2) shows hattalu 'bolt' as object ( O ) and hattalwants 'bolt' as transitive subject:

(We will not pull him back by the cloak.) If the evil of Urhiteššub will be resolved for us by that deed, will the evil be collected from our household? Will in the future the evil of

[^1]Urhiteššub no longer pull us back by the cloak? (NH oracle (Tudhaliya IV), KUB $16.41+$ KBo 54.99 iii 13'-16', CTH 569)

2 EGIR $\sim$ Š $U=m a=k a n$ Afterwards=but=PTCL

| GIS $\boldsymbol{h a t t a l u}(\mathbf{O})$ | tarzuwan | GI paddān- $i$ | dā$-i$ |
| :--- | :--- | ---: | :--- |
| bolt:NOM-ACC.S.N | security | basket-LOC.S | put-3S.NPST |
|  | latch:NOM- |  |  |
|  | ACC.S.N |  |  |


| GIS_hattalw-anza(A) | GIM~an | ${ }^{\text {GIS }}$ SAG.KUL | EGIR~pa | nannā$-i$ |
| :--- | :--- | :--- | :--- | :--- |
| bolt-anza | just as | security latch | back | drive-3S.NPST |

Afterwards she places the bolt (and) security latch in the basket, (swings it over the king and says: "...,) just as the bolt drives back the security latch (...)" (MH/NS ritual, KBo 13.109 iii 1-2, 6-7, CTH 391)

A neuter as transitive subject is impossible ${ }^{3}$ :
$\begin{array}{clllll}3 \dagger & \text { GIS hattalu(A) } & \text { GIM } \sim a n & { }^{\text {GIS }} \text { SAG.KUL } & \text { EGIR } \sim p a & \text { nannā}-i \\ & \text { bolt:NOM-ACC.S.N } & \text { just as } & \text { security latch } & \text { back } & \text { drive-3S.NPST }\end{array}$

Just as the bolt drives back the security latch (...).

This pattern of behavior seems decidedly split-ergative: neuters show ergative behavior by marking the A differently than $\mathrm{S}=\mathrm{O}$, and common gender nouns show accusative behavior, by marking the O differently than $\mathrm{A}=\mathrm{S}$ :

[^2]

But the situation is not that straightforward. The -ants forms tend to take common gender agreement, and that would imply that the -ants form itself is common gender. Thus, Laroche analyzed the suffix as a derivational morpheme -ant- ${ }^{4}$ followed by the nom.s.com. endings $-s /-e s$. Neuter nouns could not remain neuter in A-function, but had to switch grammatical gender. The common gender form served a solely syntactic function, to allow the referents of neuter nouns in A-function. According to this approach the neuter paradigm shows a gap for A-function.

Benveniste (1962) accepted the description of the pattern and the derivational analysis but rejected any syntactic analysis. Both scholars therefore assumed that neuters had to switch grammatical gender in order to function as transitive subject, but according to Benveniste (1962:48-51) the function of -ant- was semantic. It served to individualize or personify its base noun, allowing it to become an active force, and thus to function as transitive subject. The morpheme -ant- therefore created a new lexeme with its own semantics and paradigm. In most cases the derived -ant-lexeme was simply not attested in other cases, while the neuter paradigm, again, had an empty slot for A-function:

|  | COMMON |  | NEUTER |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 'man' | 'personified water' | 'water' |  |
| A | antuhsa-s | wetenant-s | - | - |
| S | antuhsa-s | wetenant-s | watar-ø | S |
| O | antuhsa-n | * wetenant-an | watar-ø | O |
| accusative alignment |  |  | neutral alignment |  |

[^3]Garrett (1990) resumed the debate, and proposed a completely different analysis: -ants was a true ergative case ending within the neuter paradigm, and was the result of the reanalysis of ProtoAnatolian *-anti, an allomorph of the regular ablative-instrumental *-ati. This proposal has been accepted in the grammars and most descriptions of Hittite (e.g., Hoffner \& Melchert 2008:66-7, 72-3; Watkins 2008:15, 19; Fortson 2010:172; Melchert 2011), and has found its way into the linguistics literature on ergativity, where it remains the standard for Hittite (e.g., Aldridge 2017:511, Dixon 1994:187-8, Heine \& Kuteva 2004:180, Legate 2014:199-200). Yet, a sizeable number of Anatolianists holds a different view, as will be expanded upon below.

The topic received a stimulus after the publication of a monograph on syntactic alignment in the Anatolian languages by Patri (2007). Patri rejects both the derivational and ergative hypotheses, and analyzes the suffix -ants as a synchronic ablative. His study has led to a veritable avalanche of studies that unanimously reject both his treatment of the data and his conclusions. This, together with the ergative pattern of behavior of neuters, is the only thing that the field after 2007 agrees upon. Otherwise, it is highly divided regarding the correct morphological analysis and function of the suffix, roughly along the three lines set out above. Resolving the issue is necessary in order to understand the syntactic alignment of the Anatolian languages, and will also have repercussions both for our understanding of the syntax of other Indo-European languages and for the mechanisms that allow ergativity to develop in originally accusative languages.

I will argue that each school of thought is essentially correct, though for different stages of Hittite. The motivation for the use of the derivational morpheme -ant- was originally semantic. Hittite and Luwian used -ant- and-most crucially—also thematization with -a- as Universal Packagers, i.e., as morphological means to turn masses, locations, collectives, and concepts into individuated or count nouns. Although Benveniste (1962:46) seemed to treat individuation of nouns by means of -ant- and thematization as synchronically competing strategies, I will show that this is not the case. Thematization of neuter nouns is a relatively late phenomenon, attested together with individuating -ant- in MH, and it is the only means to individuate in Neo-Hittite $(\mathrm{NH})$ compositions, whereas individuating -ant- is almost exclusively found in OH and MH compositions (section 2.1).

The disappearance of individuating -ant- in NH has of course immediate implications for the remaining forms on -ants in NH : only used for neuter transitive subjects, -ants is now an
inflectional ergative ending in the neuter paradigm. As mentioned above, a sizeable number of Anatolianists does not accept the existence of an ergative inflectional ending in the Anatolian languages. Nevertheless, there is undeniable positive evidence that -ants and its plural -antes are ergative case endings in both MH and NH : in these language stages lexical adjectives take the endings -ants/-antes as well. Given that adnominal agreement is overwhelmingly ad formam, the replacement of the earlier common gender endings $-s$ and -es with -ants and -antes can only mean that the nouns on -ants and -antes are ergatives (see Goedegebuure 2012:297), Lopuhaä fc.) (section 2.3).

There is clear evidence that Luwian -ant(i)- remained a marker of individuation and never developed into an ergative case marker. This must have been the case as well for Proto-Anatolian. In short, Hittite split-ergativity is purely an epiphenomenon, and a rather late development at that.

## 2. Derivational -ant-, ergative -ants, and thematization: a chronological reassessment

The most commonly adduced arguments against -ants as an ergative case ending within the neuter paradigm are the following:

- some common nouns occur with -ant- in agent function: hassa- (GUNNI) c. 'hearth' in (4), happir(iy)a- (URU) c. 'city' in (5b);
- -ant- nouns may occur as intransitive subject: (5a) and (5b);
- -ant- nouns occur in other cases besides the nominative: (6);
- adjectives agreeing with -ant- nouns show common gender inflection: (7) ${ }^{5}$.

These contexts indeed prove that -ant- may function as a derivational mutation morpheme.

4 | tagā[nzipa-s] | huimpa-s | É.ŠÀ~n-anza | GUNNI~anza |
| :--- | :--- | :--- | :--- |
|  | earth-Nom.s.C | h.--NOM.s.C | interior-IND:NOM.s.C | hearth-IND:NOM.S.C

[^4]| 4 halhaldumma[ri-ant-es?] | ${ }^{\mathrm{E}}$ hìla-s | $\mathrm{KÁ}^{\mathrm{HI} . \mathrm{A}}-$ es | arha | tarna- $n[d u]$ |
| :--- | :--- | :--- | :--- | :--- |
| 4 corner-IND-NOM.PL.C | courtyard-NOM.S.C | gate ${ }^{\mathrm{PL}}$-NOM.PL.C | away | release-3PL.IMP |

[May] the ear[th], the huimpa-, the interior, the hearth, the four corners, the courtyard (and) the gates release (the evil things). (MH/MS? ritual, KUB 7.41 i 19-21, CTH 446)

| 5a | [ $n$ u | anza |  | $\left.\left.\mathrm{NA}_{4} \sim a-s\right)\right]$ | $[h \bar{u} w]$ allissan-anzass $=a^{6}$ | [G(IM $\sim a n)]$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | CONN | hot:NO | .s.c | stone-nom.s.c | coal(?)-IND:NOM.S.C=and | as |
|  | weten-i |  | anda |  | taskupai-zzi |  |
|  | water-LOC.s |  | in |  | hiss-3s.nPST |  |

(Throw coal (?) (huwallis n.) and the hot stone in (the water)). Just as the hot stone and the coal (?) will hiss in the water, (then cool off and become silent, ...) (MH/NS ritual, KUB 7.58 i 2'-4', dupl. KUB 45.20 i 19'-20', CTH 426)

## URU-az

city-IND:NOM.S.C

## parn-anzass=a

house-IND:NOM.S.C=and
[UD]U.A.LUM DÙ-ru
ram become-3S.MID.IMP

Let both this town and house become a ram (and in the field let it mount the dark earth) (MH/NS ritual, KUB 41.8 iv 30, CTH 446)
$6 \quad[(n=a s=s a n \quad$ nepis $)-i \quad$ LUGAL~u]-s $n=a s$
CONN=he:PTCL heaven- king-NOM.S.C CONN=he land-IND-LOC.S king-NOM.S.C
LOC.S
${ }^{6}$-anzass=a represents -ants with the enclitic $-y a$ 'and, also'.

He is king in Heaven, he is king on Earth (MH/NS myth, KUB 36.18 ii 13', dupl. KUB 33.115 ii $2^{\prime}$, CTH 364)

(As the snake does not <miss> (its) hole, may also the evil word (idālu=ya uttar n.) return to (that) of its mouth. As the rear wheel does not catch up with (lit. find) [the fro]nt wheel,) let [also] the evil word likewise not c[atch up with the king and queen] ( OH ?/NS prayer, KUB 60.156 rev. 13'-14', dupl. KUB 36.91+KUB 43.68 rev. 11'-12', CTH 389)

On the other hand, one can adduce equally valid arguments against -ant- as a derivational morpheme with personifying, animatizing, or activizing force and for -ants as an ergative (see especially Melchert 2011:161-2). The following two examples contain the neuters hazkarāi and antuhsatar. Their referents are groups of persons, yet they require -ants in A-function:


| INA É.DINGIR~LIM | UGU | ute-nzi |
| :--- | :--- | :--- |
| in temple:GEN.S | upward | bring-3PL.NPST |

But at dawn the hazkarai-women bring the thick breads (and) [...]vessels up to the temple (NH cult inventory, KBo 2.7 obv. 26', CTH 505)

8b nu=mu=kan GIM~an UN.MEŠ~ann-anza $\check{S} A$ d $I$ ŠTAR GAŠAN= $Y A$

| kanes[sū]war | $\check{S ̌ A}$ ŠEŠ=YA=ya | $\bar{a} s ̌ s ̌ u l-a-n$ | au-er |
| :--- | :--- | :--- | :--- |
| favor:ABS.S.N | of brother=my=and | esteem-IND-ACC.S.C | see-3PL.PST |

When the population saw my Lady Ištar's favor and my brother's esteem for me, (they envied me) (NH egodocument (Hattusili III), KBo 3.6 i 26-27, CTH 81)
(4)-(7) are all (copies of) OH or MH documents, while ( $8 \mathrm{a}-\mathrm{b}$ ) are NH , and that is no coincidence. In fact, all evidence that has been adduced against ergativity is based on OH and MH compositions. A chronological assessment of all nouns on -ant- shows that, with a few exceptions, derivational -ant- is indeed restricted to $\mathrm{OH}, \mathrm{MH}$ and compositions from Mursili II, and that post-Mursili II compositions overwhelmingly only show -ants with neuters in transitive subject function.

### 2.1 The chronological distribution of derivational -ant-

The current corpus consists of 67 lexemes ( 162 instances) with forms with -ant- in $\mathrm{OH}, \mathrm{MH}$ and Mursili II compositions, and 17 lexemes (106 instances) in $\mathrm{NH}^{7}$. Thirteen -ant lexemes are derived from a common gender base noun, with only two of those occurring in post-Mursili II NH (the ratio of instances is OH\&MH\&MursII : NH = 19:5). Eight lexemes, marked * in Table 1, are attested in other cases than the nominative, with not a single instance in NH (the ratio of instances is OH\&MH\&MursII : NH = 33:0). Finally, nine lexemes have -ants forms that function as intransitive subject, with again not a single instance in NH (the ratio of instances is $\mathrm{OH} \& \mathrm{MH} \&$ MursII $: \mathrm{NH}=9: 0$ ). Table 1 gives the counts for all tokens of nouns on -ant- that are derived from common gender nouns, and/or are attested with other than nominative case, and/or occur as intransitive subject.

[^5]|  | OH | MH+Murs II | NH |
| :---: | :---: | :---: | :---: |
| Locations or spaces |  |  |  |
| URU-ant- (< happir(iy)a- c.) 'city' | - | 1 | - |
| hassant- (< hassa- c.) 'hearth' | - | 1 | - |
| parnant- (<per n .) 'house' | - | 1 | - |
| * pedant- (< peda- n .) 'place' | - | 1 | - ${ }^{8}$ |
| * utneant- (<utne n .) 'land' | 13 | 10 | - |
|  |  |  |  |
| Masses |  |  |  |
| huwallis(sa)nant- (< huwallissar n .) 'coal (?)' | - | 1 | - |
| wetenant- (< watar n .) 'water' | - | 1 | - |
| * KU̇.BABBAR-ant- 'silver' | - | 2 | - |
|  |  |  |  |
| Collectives ${ }^{9}$ |  |  |  |
| aniurant- (< aniur n .) 'ritual' (collection of acts) | - | 1 | - |
| eyant- ( eeya- n .) evergreen tree ${ }^{10}$ | 1 | - | - |
| tuzziyant- (<tuzzi- c.) 'army, army camp' | - | 4 | - |
|  |  |  |  |
| Body parts (natural sets) |  |  |  |
| * happesnant- (< happessar n .) 'limb' | 2 | - | - |
| ishunauwant- (< ishunau- c.) 'upper arm' | - | 1 | - |
| kalulupant- (<kalulupa- c.) 'digit' | - | 1 | - |
| sankuwayant- (< sankuwai- c.) 'nail' | - | 1 | - |
| tuekkant- (<tuek- c.) 'body' | 1 | 1 | - |
|  |  |  |  |
| Kinship terms and titles |  |  |  |
| * huhhant- (< huhha- c.) 'forefather' | - | 2 | 3 |
| * kaenant- (< kaena-c.) 'in-law’ | - | 1 | - |
| sankunniyant- (< sankunni- c.) 'priest' | - | - | 2 |
|  |  |  |  |
| Other |  |  |  |
| hattullannant- (< hattulatar n .) 'health' | - | 1 | - |
| huimpant- (< huimpa-c.) '?' | 1 | - | - |
| * kistant- (<kast- c.) 'hunger' | 2 | - | - |
| linkiyant ${ }^{\text {-1 }}$ ( $<$ lingai- c.) 'oath, curse' | 1 | 1 | - |

8 The alleged dat.-loc.s. pé-e-da-an- ${ }^{[ } t i^{1}$ in KUB 40.8 i 6 ' (NH, CTH 40), though with clearly visible TI in the duplicate KUB 34.23 i 13, is with CHD P:344a better read as péee-da-an-pát (nu=šmaš pēdan=pat harkir "(The Isuwans who were previously there) kept their own place"). The sign now read as PÁT is different from TI in KUB 40.8 i 7 '.

9 For a definition of collectives, see section 3.2.
${ }^{10}$ The eya-tree is sometimes expressed as a collective denoting a single entity (Hoffner\&Melchert 2008:110 n.152).

| $*$ tapisant- $(<$ tapisa -n.$)$ a vessel | 1 | 1 | - |
| :--- | :--- | :--- | :--- |
|  | 22 | 33 | 5 |

Table 1: secured nouns with -ant- as derivational morpheme.

The table shows that 24 lexemes in $\mathrm{OH}, \mathrm{MH}$ and Mursili II (55 instances) occur with derivational -ant-, as opposed to two lexemes in NH (5 instances). Intuitively this distribution seems to point at the disappearance of -ant- as a derivational morpheme in NH , thus implying that the remaining 101 instances in NH on -ant-, which are all neuters in A-function, are all ergatives. Statistical tests for independence and correlation confirm that the distribution is indeed significant.

Using the Fisher exact probability test ${ }^{12}$ with Table 2 as input we will test whether the null hypothesis that there is no relationship between the status of -ant- and the language stage holds, or whether we should accept the alternative hypothesis that there is such a relationship.

| Status of -ants | Language Stage |  |  |
| :---: | :---: | :---: | :---: |
|  | OH/MH/Murs II | NH |  |
| Derivational suffix | 55 | 5 | 60 |
| Potentially ergative | 107 | 101 | 208 |
|  | 162 | 106 | 268 |

Table 2: Two-tailed Fisher exact test: $p=1.3 \times 10^{-8}$. Phi coefficient $=0.34$.

The $p$-value is the probability of obtaining the observed values (or more extreme values) under the null hypothesis. In many fields, if the $p$-value is less than 0.05 , the null hypothesis is rejected. Because our $p$-value is 0.000000013 , we obviously reject the null hypothesis and accept that the status of -ant- depends on the language stage.

The next question is in what way the language stages and the status of -ant- are correlated. The numbers suggest that derivation correlates with $\mathrm{OH} / \mathrm{MH} / \mathrm{Murs}$ II and ergative with NH. In order to find out if this intuition is supported by the distribution, we need to calculate the Phi

[^6]coefficient, which measures the strength of association between two variables. If the Phi coefficient is higher than 0.3 , there exists a correlation between the parameters of the diagonal cells (i.e., the left-top and right-bottom cells). Our Phi coefficient of 0.34 indicates a moderate positive correlation between derivation and $\mathrm{OH} / \mathrm{MH} / \mathrm{Murs}$ II on the one hand and ergative case and NH on the other hand. It is not mere coincidence that there are no other cases or intransitives on -ant- in NH and hardly any -ant- formations of common gender nouns: derivational -ant- all but disappeared in NH.

### 2.2 The replacement of derivational -ant- by means of thematization

Previous scholars were operating with a much smaller corpus than is currently available, with not enough data to conduct a diachronic assessment. Benveniste (1962:46) considered thematization a synchronic alternative strategy for derivation by means of -ant- (also see Laroche 1962:39). ${ }^{13}$ Garrett (1990:287) assumes thematization was a sporadic phenomenon that was never used for the purely syntactic purpose of allowing neuters in A-function. Neither of these views can be upheld. As I will show in section 4, thematized neuter and common gender -ant- nouns in Afunction alternate with their base nouns in S- or O-function in the same texts. Thematized neuters and common gender nouns with -ant- therefore also show ergative behavior without having ergative case. In other words, ergative behavior does not entail ergative case. Here I will address the chronological distribution of thematized nouns and their -ant-alternatives.

Four of the lexemes discussed above start appearing with the theme vowel - $a$ - in MH/NS. A survey of the remainder of the -ant- nouns shows this to be a consistent pattern (see Table 3).

|  | OH | MH+Murs. II |  | NH |
| :---: | :---: | :---: | :---: | :---: |
| Locations or spaces |  |  |  |  |
| hunhu(n)essar n . 'depth, abyss' ${ }^{14}$ | - | -ant- |  | - $a$ - |
| nepis n. 'sky' | -ant- | - ant- | - $a$ - | - $a$ - |
| per n . 'house' | -ant- | -ant- | -a- | - |
| peda- n . 'place' | - | -ant- |  | $-a-$ |

13 Kassian and Yakubovich (2007:436) and Shatskov (2011:146-7, 152) analyze some of the thematized forms as free-standing genitives. However, cases like nepisan (acc.s.com.), see (17), show that we are really dealing with secondary thematization, and I prefer to apply the same analysis to lexemes with $-a$ - that are not attested with the acc.
14 Meaning according to Willemijn Waal, pers.comm., who will publish a study of this lexeme's new translation (instead of 'wave').

| tunnakis(sar) n. 'inner room' | - | -ant- | $-a-$ | - |
| :---: | :---: | :---: | :---: | :---: |
| Masses |  |  |  |  |
| pahhur n. 'fire' | - | -ant- |  | - $a$ - |
| Collectives |  |  |  |  |
| antuhsatar n. 'population' | - | -ant- | -a- | -ant- |
| lahhurnuzzi- n. 'foliage' | -ant- | - |  | - $a$ - |
| tuzzi- c. 'army, army camp' | - | -ant- | $-a-$ | - |
| warwalan- n . 'offspring' | - | - |  | -ant- -a- |
| Body parts (members of natural sets) |  |  |  |  |
| happessar n . 'limb' | -ant- | -ant- | $-a-$ | - |
| sankuwai- c. 'nail' | - | -ant- | -a- | - |
| Abstract nouns |  |  |  |  |
| assul n. 'well-being' | - | -ant- |  | - $a$ - |
| erman n . 'disease' | -ant- | -ant- | $-a-$ | -ant- -a- |
| hengan n . 'plague' | -ant- | -ant- | $-a-$ | - $a$ - |

Table 3: nouns attested with -ant- and $-a$ -

OH nouns that take -ant- do not take $-a$-. In MH compositions and texts from Mursili II both formations may occur, sometimes even in the same text ${ }^{15}$, but it is always possible to find pairs where the earlier attestation has -ant- but the NH one has - $a$-, compare nepisant- 'sky' (< nepis n.) in MH (9a) versus nepisa- in NH (9b), or GIG-ant- 'disease' in an oracle from Mursili II (10a) versus GIG- $a$ - in a letter to his successor Muwatalli II (10b):

9a nean=za ser nepis-anza ta[r]h-du
CONN=him=REFL above sky-IND:NOM.S.C conquer-3S.IMP

Above let the sky conquer it (i.e., disease) (below let the dark earth conquer (it)) (MH/NS myth, KUB 17.8 iv 9, CTH 457)

| 9b | [nep]is- $\boldsymbol{a}-\boldsymbol{s}=z a$ | $\mathrm{GE}_{6} \sim i$ | $w a<s>$ siya- $t$ |
| :--- | :--- | :--- | :--- |
|  | sky-IND-NOM.S.C=REFL | black:ABS.S.N | dress-3S.PST |

[^7]The sky dressed itself in black. (NH myth, KUB 44.4 rev. 2, CTH 767)

| 10a | d UTU~ŠI | kuit | GIG-anza | parā | tamas-(s)ke-zzi |
| ---: | :--- | :--- | :--- | :--- | :--- |
|  | His Majesty | regarding that | disease-Ind:NOM.S.C | forth | oppress-ITER-3S.NPST |

Regarding the fact that the disease has completely oppressed His Majesty, (...) (NH oracle (Mursili II), KUB 5.6 ii 65', CTH 570)

| 10b | GIG- $a-s=m u$ | $[$ par $\bar{a} ?]$ | tamass-an | har-zi |
| :--- | :--- | :--- | :--- | :--- |
|  | disease-IND-NOM.S.C=me | forth | oppress-PTC:ABS.S.N | hold-3S.NPST |

(I am seriously ill:) the illness keeps me [completely?] oppressed (NH letter (Muwatalli II), KUB 19.5 obv. 5-6, CTH 191)

Further evidence for $-a$ - as replacement of -ant- is provided by the larger fragments among the duplicates of the originally MH Netherworld ritual (CTH 446). Although the two largest fragments, KUB 41.8+ (manuscript C) and KBo 10.45+ (manuscript B) are lateNS and NS, respectively, it is still possible to establish that B contains grammatical innovations that are absent in $\mathrm{C}^{16}$, and that C is closer in language to the $\mathrm{MS}^{?}$ fragment KUB 7.41 (manuscript A ). This turns out to be crucial: B, the modernized version, sometimes shows thematized forms where C and A still have -ant- forms:

[^8]| $\begin{aligned} & \mathrm{C}=\text { KUB } 41.8 \\ & \text { A }=\text { KUB } 7.41 \end{aligned}$ | B = KBo 10.45 (modernized) |
| :---: | :---: |
| -ant- | -a- |
| $\begin{aligned} & {[\ldots] ;} \\ & \text { É.SÀ-na-an-za (i } 20 \text { ) (A) } \end{aligned}$ | É.ŠÀ-aš (i 11') |
| (hal-hal-du-um-ma[-.....]) | $\begin{aligned} & \text { hal-hal[(-du-um-ma)-ri-a]š (i } \\ & \text { 11') } \end{aligned}$ |
| URU-az (iv 30) | URU-aš (iv 31) |
| pár-na-an-za(-aš-ša) (iv 30) | pár-na-aš (iv 31) |
| but: pár-na-aš (i 5') | [...] |
|  |  |
| -ant- | -ant- |
| [...] | PÚ-an-za (ii 23) |
| [...] | ú-i-te-na-an-za (ii 24, ii 33) |
| pár-na-an-za(-aš-ša) (iv 35) | pár-na-an-za (iv 35) |
| ú-e[-te-na-z]a (iv 37) | A-az (iv 38) |
| $a-n i+u$-ra-an-za (iv 38) |  |

Table 4: Comparison of the manuscripts of CTH 446

Not only does the younger duplicate show thematization where the older versions show -ant-, these forms also occur with intransitives, again illustrating that -ant- cannot be ergative here, compare (5b) with (11):


Let both this town and house become a ram (MH/NS ritual, KBo 10.45 iv 31-32, CTH 446)

The chronological distribution of nouns with -ant- and -a- and the fact that modernized versions of older compositions sometimes show $-a$ - where the older version still has -ant-, further validate the conclusion that derivational -ant- disappeared in texts after Mursili II. In those later texts the
morpheme -ants only occurs on neuter nouns in A-function, and has become an ergative inflectional ending. The formal support for this will be presented in the next section ${ }^{17}$.

All cases of nouns on - $a$ - either occur in texts from Mursili II or in MH/NS copies, but not in MS originals. The problem of working with later copies is that they may contain innovations, as the discussion of the relative age of the CTH 446 manuscripts showed. NH copyists may have removed instances of individuating -ant- from older compositions and replaced them with thematized forms. The most prudent conclusion is that -a-certainly replaced derivational -ant- in NH , certainly competed with -ant- in texts belonging to the reign of Mursili II, and perhaps already competed with -ant- in MH.

### 2.3 Agreement patterns in noun phrases

One of the arguments against an ergative interpretation is that adjectives agreeing with -antnouns show common gender inflection (7). But starting in MH we find adjectives on -ants/-antes agreeing with nouns on -ants/-antes, so this same line of reasoning also supports the ergative analysis of -ants/-antes (Goedegebuure 2012:297).

According to Corbett's Agreement Hierarchy, attributive modifiers are the most likely to follow syntactic agreement patterns, with predicates, relative pronouns, and personal pronouns more likely to show semantic agreement (Corbett 2006:206-7). Hittite attributes show the following distribution:

| Attributes | Demonstratives, <br> quantifiers, <br> relatives ${ }^{\mathbf{1 8}}$ | Lexical adjectives <br> in $-\mathbf{s}^{\mathbf{9}}$ | Lexical adjectives <br> in $-\boldsymbol{a n t s}^{\mathbf{2 0}}$ | Total |
| :--- | :---: | :---: | :---: | :---: |
| NH | 5 | 1 | 3 | 9 |

[^9]| MH+Murs II | 18 | 4 | 3 | 25 |
| :--- | :---: | :---: | :---: | :--- |
| $\mathbf{O H}$ | - | 4 | - | 4 |
| Total | 23 | 9 | 6 | 38 |

Table 5: Attributes of -ant- nouns

Five of the six instances of adjectives on -ant- involve idalawant- 'evil'. This would not be relevant if idalawant- would also occur with nouns without -ant-, but that is not the case. Only nouns on -ant- trigger the use of idalawant- ${ }^{21}$, as opposed to the other adjective pairs that show the -ant- form with non-extended nouns.

Unless we want to reject syntactic agreement for adjectives, we have to conclude that -ants is an ergative in these examples (also see Shatskov 2011:152, Lopuhaä forthc). Even though the numbers are small, we see that ergative agreement is already present in MH (12), where it alternates with common gender agreement (7):

([Just as] the wind and rain do not loo[sen] the rock sanctuary from (its) place, ...,) let likewise the evil word [not] loosen [his life?] from (its) place. (MH/MS? ritual, KBo 17.62 +63 iv $9^{\prime}-11^{\prime}$, CTH 409)

In (13) the younger version shows an adjective on -antes whereas the older one still shows the common gender ending -es:

[^10]| 13a | [ki]nun[=a <br> now=but | arahz]en-iēs <br> bordering-NOM.PL.C | utnē-ant-es <br> land-IND-NOM.PL.C | [h]ūmant-es <br> all-NOM.PL.C |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{lclll}\text { KUR.KUR.MEŠS KUR } & { }^{\text {URU }} H[A T T I] & \text { [w]alh-anni-uwan } & \text { dāi-er } \\ \text { land.land.PL } & \text { land } & { }^{\text {city }} \mathrm{Hatti} & \text { hit-DUR-SUPINE } & \text { put-3PL.PST }\end{array}$ |  |  |  |
|  | But now all the bordering lands began to attack the lands of the land of Hatti (MH/MS prayer, KUB $24.4+$ KUB 30.12 rev. 7-8, CTH 376) |  |  |  |
| 13b | kinun=a now=but | arahzen-antes <br> bordering-ERG.PL.N | [utnē-ant]es hūma <br> land-ERG.PL.N all-NO |  |
|  | $\begin{aligned} & \text { KUR }{ }^{\text {URU }} \text { Kİ } \\ & \text { land } \\ & \text { city } \end{aligned}$ | BABBAR-TI | ]-anne-sk-uwan dā-e <br> R-ITER-SUPINE put-3 |  |

But now all the bordering lands began to attack the land of Hatti (MH/NS prayer, KUB 24.3 ii 49'-50', CTH 376)

In sum, the disappearance of -ant- nouns based on common gender stems, in intransitive use, or in the other cases coincided with both the appearance of often the same stems with an additional theme vowel - $a$ - and the restriction of -ant- to transitive subject function for neuters only. This change was accompanied by the decrease and finally disappearance of common gender agreement on adjectives and the rise of adjectives with the endings -ants or -antes in transitive subject function only. The restriction of -ants/-antes to neuters in A-function and the new agreement pattern conclusively prove that -ants and -antes were the ergative endings in the NH neuter paradigm, while MH shows both the ergative ending and the derivational morpheme (in section 4 I will argue that OH only contains the derivational morpheme).

In compositions from the time of Mursili II we still find derivational -ant-, together with ergative -ants and derivational - $a$-, while later texts only contain derivational $-a$ - and ergative -ants. Currently the following neuter lexemes in post-Mursili II compositions are attested with the ergative:
antuhsatar 'population', assu 'well-being', erman 'sickness', eshar 'blood', hannessar ‘judgment', MUNUS.MEŠ̌haz(i)gara(i) 'h. women', idalu 'evil', sannapili 'void', sarawar 'storm clouds?', utne 'land', uttar 'utterance', ${ }^{\text {LÚ.MEŠ walwalla 'lion men', warwalan }}$ 'offspring', and URUDUŠÈR.ŠÈR 'necklace'.

## 3. Derivational -ant- and - $a$ - as Universal Packagers

### 3.1 Previous suggestions

While all instances post-Mursili II and several earlier instances of -ants/-antes must be considered ergative case endings in the neuter paradigm, the remaining cases of neuters in Afunction in OH and MH could be either already ergative or still contain derivational -ant-. The majority of nouns that take -ant- are neuter, so one finds the view that -ant- is a motion suffix that allows the referent of a neuter to turn into a common gender noun and so function as a transitive subject ${ }^{22}$, in other words, it has a strictly syntactic function. Those who still see a semantic function in addition to the syntactic function for either a single morpheme -ant- or for -ant- as synchronically distinct from the ergative case ending have described it as animatizing $^{23}$, personifying and/or individualizing ${ }^{24}$, or activizing ${ }^{25}$.

Animatization or personification is a semantic phenomenon and is not restricted to agenthood or grammatical gender. This would explain why some inanimate common nouns occur with -ant- in agent function (hassa- c. 'hearth' in (4)), why we have -ant- nouns-both common and neuter gender-in intransitive subject function (5a and b), and why -ant- nouns

[^11]occur in other cases besides the nominative (6), although in this example utne clearly is not personified). However, it does not explain why in the same text only some inanimates need to be personified but not all (huimpa- and hila- in (4); pedant- (14a) versus ais (14b)). Personification or animatization might explain why neuter peda- 'place' takes the form pedanti when it is addressed as a person that can eat, drink and rejoice (14a), but why do neuter ais 'mouth', common gender lala- 'tongue' and gaga- 'tooth' - in a similar context-not take -ant- (14b)? This is all the more conspicuous since many body parts, whether neuter or common gender, $d o$ take -ant- (besides the body parts mentioned in Table 1, KUB 9.4 i 20-39 also contains tāpuwassanza 'rib', hargnauwanza 'palm, sole', hāpusanza 'shin-bone', hastianza 'bone', all based on neuters).

| 14 a | pēt-ant-i | $\bar{e} t-\varnothing=z a$ | $[e k u-\varnothing]$ | $n u=z a$ | $d u s k i-s k-i$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | place-IND-VOC.S | eat-2S.IMP=REFL | drink-2S.IMP | CONN=REFL | rejoice-ITER-2S.IMP |

(Afterwards s/he pours fine oil, while speaking as follows:) "O place, eat, [drink] and rejoice! (Neither allow inside another god nor an evil portent!)" (MH/NS ritual, KUB 32.137 ii 2-3, CTH 415)

14b
ais-б
EME $\sim a-s$
tongue-NOM.S.C
gaga-s
tooth-NOM.S.C
sumes azziki-ten
mouth-NOM.S.N
tongue-NOM.S.C
tooth-NOM.S.C you:NOM.PL
eat:ITER-2PL.IMP

O mouth, tongue, tooth, you eat! (MH/MS ritual (Tudhaliya I/II), KBo 15.10 iii 50, CTH 443)

Neuter nouns can also occur with action verbs:

| [É~r-]i=kan | anda | $\overline{\text { asssu }} \boldsymbol{1}_{1}$ | pai-ddu |
| :--- | :--- | :--- | :--- | :--- |
| house-LOC.S=PTCL | into | good:NOM-ACC.S.N | go-3s.IMP |

Let good enter the house, let it seek out the evil in the eyes (and throw them out!) (MH/NS ritual, KBo 10.45 ii 48-49, CTH 446).

A different approach is taken by Teffeteller (2015:170-1) and Josephson (2004). Teffeteller treats -ant- as a derivational morpheme that indicates contingent agency. If a neuter noun needs to become temporarily agentive, it will take -ant-followed by the common gender endings, without actually becoming common gender. According to Teffeteller (l.c.) "[t]he -ant-suffixed neuter noun occupies a place between common gender and neuter, as alternating common and neuter concord attest." Josephson (2004:114) also understands -ant- as agentive, turning neuters into common gender nouns, but presents that function as dependent on a more original singulative and de-collectivizing function.

### 3.2 Countability of count nouns, mass nouns, and collectives

Josephson's suggestion brings us to the taxonomy of nouns as count nouns (individual entities), mass nouns (liquids and substances, but also spaces) and collectives (granular and collective aggregates). These groups can be ranked according to their degree of individuation, with mass nouns at the bottom of the scale, collective in between, and individual entities at the top (Grimm 2012:68). Individuation correlates positively with agency: individuals have more agency than masses and collectives. In section 3.3 I will argue that masses and collectives can be turned into individual entities by means of -ant- and -a-, either because they need to be represented as indivisible wholes or because they need to be assigned agency. The individuators -ant- and $-a$ do not serve to indicate a single member of a group, which is the function of the singulative; they only provide a unit interpretation to a mass or collective (pace Josephson 2004:91, 99, etc.). In this section I will explore the taxonomy of nouns in Hittite (further see Goedegebuure forthc.b).

Although much literature dealing with the semantics of noun phrases primarily focuses on count nouns and masses, there are in fact at least four ways concrete objects can be represented based on the features SHAPE and HOMOGENEITY (Rijkhoff 1991, 2002:50-9). If the referent of a noun has a positive value for SHAPE, it has a definite outline, such as a bike. If a referent has homogeneity, it means that it is divisible, and that the parts all have the same property, such as ice cream. Thus, scooping a portion out of ice cream leads to having a scoop of ice cream; removing a part of a bike does not mean that one suddenly has two bikes. Ice cream is
homogenous, a bike is not. The combination of positive and negative values for shape and homogeneity leads to four types of nouns, called nominal aspects ${ }^{26}$ :

|  | -HOMOGENEITY | +HOMOGENEITY |
| :--- | :--- | :--- |
| +SHAPE | singular object noun | collective noun |
| -SHAPE | sort noun | mass noun |

Table 6: Nominal aspects according to Rijkhoff (o.c.)

In this study a noun is classified as collective when its referent is the sum of minimal parts ${ }^{27}$ (+HOMOGENEITY), as opposed to portions of masses. Having minimal parts also means that a collective has a particular shape (+SHAPE), as opposed to masses. Collectives consist of, for example, groups of people or animals, but also vegetation. Collectives may be grammatically singular (e.g., antuhsatar 'population'), or plural (e.g., hazgarai 'h. women').

In the Anatolian languages masses and collectives overwhelmingly belong to neuter gender, whereas singular object nouns overwhelmingly belong to common gender. In Hittite the distinction between count or singular object nouns and non-count nouns is formally expressed through the type of pluralization and the form of quantification ${ }^{28}$. Count nouns receive the common gender plural endings -es/-us, while collective nouns receive the neuter plural endings $-a$ or $-i$, show vowel gradation, or simply are not marked for plural at all. Mass nouns are

[^12]usually not pluralized ${ }^{29}$. Whereas the common plural counts individuals ${ }^{30}$, the neuter plural counts sets; note that both plurals are distributive. Sometimes the neuter plural indicates items consisting of aggregates of components (Hoffner\&Melchert 2008:83). These aggregates, which are a type of mass, often do not have singulars.

|  | single entity or set | multiple entities or sets |
| :--- | :--- | :--- |
| count noun <br> (+SHAPE, -HOM) | antuhsa- 'person' <br> tessummi- 'cup' | antuhses 'persons' <br> tessummius 'cups' |
| collective noun <br> (+SHAPE, +HOM) | uttar 'utterance = collection of words' <br> partawar 'wing = collection of feathers' <br> hahhal 'shrub = collection of twigs' | uddār 'utterances' <br> partawa 'wings' |
| aggregates <br> (-(?)SHAPE, <br> +HOM) <br> hahhalli 'shrubs' <br> mass noun <br> $(-$ SHAPE, +HOM) wātar 'water' | $\bar{a} s s \bar{u}$ ' 'goods' <br> suppa 'consecrated meat' |  |

Table 7: Hittite nominal aspect and pluralization

Count nouns are directly quantifiable if they occur in groups of four or less (Hoffner\&Melchert 2008:153), while collectives and groups of five or more require a special form of the numeral, namely a derived form on -ant-, or 1-NŪTUM or numeral + TAPAL when written with Akkadograms (Melchert 2000:59-60; Hoffner\&Melchert 2008:159-63; ginš2017). In order to count multiple collectives, the numeral with -ant- receives the neuter plural ending -a for the

[^13]nom.-acc., or any of the other plural endings ${ }^{31}$. The numeral with -ant- is also used to count the individual members of a collective. It then appears in the singular. The suffix -ant- on the numeral clearly makes non-count nouns countable, in other words, it individuates over sets or within sets.

Masses may occur with -ant- or its Akkadographic version when counting portions of water, as in [neku]za mehur 14 TAPAL sehelliya widār dānzi 'At night time they take 14 portions of purifying water' (MS, KBo 24.45 obv. 32 '), but this seems to be quite rare. Liquids and granular aggregates otherwise require measure words such as UPNU 'hand full', hazil(a)- a measure of ca. two liters, etc., etc. $\left(\mathrm{HW}^{2} \mathrm{H}, 541-2\right)$, and all kinds of vessels:

| 16 | 2 UDU.HI.A | 2 BÁN BA.BA.ZA | $3^{\text {DUG }} \boldsymbol{h a}$ a. KAŠ | 1 DUG KAŠ.GEŠTIN |
| :--- | :--- | :--- | :--- | :--- |
| 2 sheep.PL | 2 SŪTU porridge | 3 hanessa beer | 1 vessel wine-beer |  |

They will give at first(?) two sheep, two $\boldsymbol{S} \overline{\boldsymbol{U}} \boldsymbol{T} \boldsymbol{U}$-measures of porridge, three hanessavessels of beer, one vessel of 'wine-beer' as reparation (NH oracle, Msk. 74.57:10-11, CTH 568).

The non-count nouns consist of at least the following categories (Kalniņš 2017:368-72): nouns with collective semantics (per n. 'building complex', suppa 'meat'); natural pairs (sakuwa (coll.) 'pair of eyes'), to which add body parts that are members of natural sets (such as kalulupes c. 'fingers'); masses (wātar, widār n . 'water'). There is therefore considerable overlap between the categories of nouns that are attested with the numeral with -ant- and those that take derivational -ant-/-a-, and within these categories there are a few lexemes that occur both with -

[^14]ant- on the noun and on the numeral: happessar n . 'limb', MUNUS.MEŠ hazgarai $\mathrm{n}{ }^{32}$, kalulupa- c . 'digit', pahhur n . 'fire', per n. 'house', peda- n. 'place', watar n . 'water', URUDUŠÈER.ŠÈR 'chain, necklace'. This overlap is not a coincidence: -ant- on the numeral turns a non-count noun, often a neuter, into a countable entity, though without sacrificing its homogeneity, while -ant- on a noncount noun turns the collective or mass itself into a countable unit, into a non-homogenous entity.

Since individuation, or countability, correlates positively with agency, the lack of countability as attested for Anatolian neuters correlates with a lack of agency, and therefore with the inability to occur as transitive subject. The individuator -ant- remedies the situation, as already argued by Josephson (2004), Goedegebuure (2012), and Rizza (2013), accidentally paving the way for split-ergativity in MH and NH .

### 3.3 Individuation of masses and collectives: -ant-/-a- as Packagers

English non-count nouns can be turned into count nouns by adopting the latter's behavior. For example, three beers denotes three glasses or three different kinds of beer. The individuation, or packaging, is achieved by adding the count plural $-s$ to the noun, by using direct quantification (three beers) or many instead of much (many beers). The Common Anatolian means of turning a collective or mass into a unit is by suffixing -ant- (and in Hittite later $-a$-) to the base noun. This is not the same as counting members within a set or collective, for which the common gender endings are used (Goedegebuure forthc.b). I therefore slightly disagree with Josephson's view (2004:91, 99, etc.) that -ant- is a singulative. The primary function of a singulative is to select one item from a collective, to turn the undifferentiated members of such a set into separate individuals, although singulatives are also used to package masses (Acquaviva 2015:1179). On the other hand, when-ant- is applied to collectives and masses, it applies to the whole collective or mass. This becomes especially clear when, as is often the case, in a single text an -ant- noun refers to the same entity as its base noun, and not to a member or portion of that entity (also see (5a), (7), (22), (25)):

17 nu KUR-ya andan [k]āsza kīs-ati


| DUMU.LÚ.U ${ }_{19}$.LU.MEŠ | DINGIR $^{\text {MES }}$-ess $=a$ | kist-ant-it | harkiya-nzi |
| :--- | :--- | :--- | :--- |
| people | god $^{\text {PL }}$-NOM.PL.C $=a n d$ | hunger-IND-INST | perish-3PL.NPST |

(The mountains dried up. The trees dried up, so the leaf(s) do not come out. The pastures dried up. The springs dried up.) So, there occurred famine in the land: men and gods are perishing because of the famine ( $\mathrm{OH} / \mathrm{MS}$ myth, KUB 17.10 i 17 '-18’, CTH 324)

The lexemes that occur with -ant- in $\mathrm{OH}, \mathrm{MH}$ and the reign of Mursili II with very few exceptions fall in the categories that are non-countable or less countable than individuals ${ }^{33}$. Since -anza as ergative case ending was already present in MH, I have marked those MH lexemes that have tokens with ergative case endings as $\% *$. Neuter lexemes that are agentive or potentially in ergative case because they only appear in A-function and are not accompanied by adjectives are marked $\%$ :

## Liquids, substances and spaces (= mass nouns):

Liquids: eshar 'blood', *ishahru- 'tears', marnuwa- beverage (OH/OS), *milit- 'honey', *sehur ‘urine’ (MH/MS), wātar 'water' (MH/MS)

Substances: *appuzzi- 'fat' (OH/OS), huwallissar 'coal (?)', **gamarsu- ${ }^{34}$ 'feces' (MH/MS), *pahhur ‘fire’ (MH/MS), *sagan ‘oil, fat', taru- 'wood' (MH/MS), *tethessar 'thunder', *erippi- ‘cedar’ (MH/MS), KÙ.BABBAR-i- ‘silver’

Spaces ${ }^{35}$ : annassar 'compound (?)' (OH/MS), hāss $\bar{a}-\mathrm{c}$. ‘fireplace, hearth' (MH/MS?), hilammar 'gate building ${ }^{, 36}$ (OH/MS), hunhu(n)essar 'depth, abyss', luttāi- 'space for seeing $>$ window'

[^15](OH/MS), nepis- 'sky' (MH/MS), peda- 'place', tunnakkessar 'inner room' (MH/MS?), utne'land' (OH/OS), URU- $a$ - c. 'place of trade > city'


#### Abstract

nouns: ${ }^{37}$ assul 'well-being', **erman ${ }^{21}$ 'sickness', *haratar 'offense', haddulatar 'health' (MH/MS), henkan 'plague, death' (MH/MS), idalu- 'evil', *inan 'ailment', kast- c. 'hunger, famine' (OH/MS), kurur- 'war'38 (MH/MS), lingai- c. ‘oath ${ }^{39}$ (MH/MS?), \&papratar ‘impurity’ (MH/MS)


## Collectives (including vegetation):

aniur- 'ritual = collection of acts', antuhsatar 'population', eya- 'yew?', *hahhal- 'shrub', *huidar 'wildlife' (OH/MS), lahhurnuzzi- 'foliage' (OH/OS), per 'household, estate, living quarters’ (OH/MS), *suppal- 'livestock' (MH/MS?), tuzzi- c. 'army, army camp', $\boldsymbol{*} \boldsymbol{*} u^{\prime}$ utar $^{21}$ 'utterance $=$ collection of words' $(\mathrm{OH} / \mathrm{MS})$

## Natural sets (grouped body parts, kin):

happessar 'limb', hapusa(ss)- 'shin-bone', hargnau- 'palm, sole', hastai 'bone(s)', huhha- c. 'grandfather' (MH/MS), ishunau- c. 'upper arm', kaena- c. 'in-law', kalulupa- c. 'finger, toe', sankuwai- c. 'nail', tapuwas- 'side', tuek- c. 'body, (pl.) body parts' (OH/OS)
${ }^{35}$ In English, spaces such as sky and land are considered mass nouns: they do not have a well-defined shape, and a piece of sky or land is still sky or land.
Assignment of hilammar in this category is uncertain. However, if one visualizes the building more as a space in which activities take place than as an object without internal structure, then hilammar belongs here. The same applies to tunnakkessar.
${ }^{37}$ The countability of abstract nouns has not received much attention (Grimm 2012:161). For the time being I assume that Anatolian abstract nouns are not as countable as individual entities. Most of these nouns are not attested with plurals, with the exception of inan, and thus behave like masses.
${ }^{38}$ The neuter plural kururi refers to enemy forces, not to multiple wars.
${ }^{39}$ We need to distinguish between linkiyant- as 'individuated perjury' and linkiyant- as 'possessing the oath > oath deity'. I take the linkiyantes seizing people for transgression of an oath as 'oath deity', not as perjury itself.

## Individual nouns:

*hattalu- 'door latch', *ishiessar 'binding', *samalu- 'apple', *siwal- a sharp tool, *susiyazkel'linch pin', tapisa- a type of vessel, *tuppi- 'tablet' (MH/MS), *NÁ- ‘bed-frame ${ }^{40}, \star$ PÚ- ‘well'

Since cases other than nominative or instrumental are neither ergative nor agentive, they offer the best opportunity to understand why individuated forms were chosen by the speaker. Texts with both base noun and -ant- noun in non-nominative case and texts where the base alternates with a thematized form are rare, but fortunately the few cases (all with utne or nepis) clearly show that the base noun represents the entity as having spatial extent (+homogenous), while the derived noun is an indivisible whole (-homogenous).

The Ullikummi myth contains a juxtaposition of the individuated noun nepisa- 'sky (as an indivisible unit)' and the mass noun nepis 'sky (above one's head as entity with spatial extension and therefore divisible)', and daganzipa- as individuated earth versus tegan as spatially extended earth:

| nepis-a- $\boldsymbol{n}=$ mu=kan | kuwapi | daganzipa- $\boldsymbol{n n}=a$ | ${ }^{\text {ser }}{ }^{1}$ | wet-er |
| :--- | :--- | :--- | :--- | :--- |
| sky-IND-ACC.S.C=me=PTCL | when | earth-ACC.S.C=and | upon | build-3PL.PST |


| $n u$ | UL | kuitki | sagga-hhun |
| :--- | :--- | :--- | :--- |
| CONN | not | something | know-1S.PST |


| w-er=ma | AN~is | kuwapi | teka[nn]=a | URUDU $_{\text {kuruzz-it }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| come-3PL.PAST=but | sky:ABS.S.N | when | earth:ABS.S.N=and | knife-INSTR |

[^16](Ubeluri answered Ea:) When they built the Sky and Earth on me, I did not sense (lit. know) anything. When thereupon they separated Sky and Earth with a knife, that too I did not sense (MH/NS myth, KUB 33.106 iii 40'-43', CTH 345)

Once the sky and earth are perceived as entities that contain a cutting plane, with internal structure therefore, they are not expressed as individuated and indivisible entities nepisa- and daganzipa-, but as the mass nouns nepis and tegan.

The alternation of KUR-eant- and KUR-e in the Song of Silver can likewise be explained as an alternation between the land as indivisible whole and the land with spatial extent. In (6) the Stormgod is king of the land as a whole, with -ant- emphasizing the unity and ignoring the internal structure, whereas in (19) the land must be presented as having internal structure given the roaming that takes place in it:

| KUR~e=as=kan | $[w(a h-a n n a$ | $p \bar{a}-n z a)$ | $\bar{e} s-t a]$ |
| :--- | :--- | :--- | :--- |
| land:LOC.S=he=PTCL | turn-INF | go-PARTIC:NOM.S.C | be-3S.PST |

He (i.e., Kumarbi) [had] gone to roam the land (MH/NS myth, KUB 33.115 ii 11', w. dupl.
KBo 22.80 rt. col. $9^{\prime}$, CTH 364)

Far more often a clear motivation for the use of individuated -ant- eludes us. In such cases the cooccurrence of individuated nouns and nouns that do not need to be individuated might help out: for example, pētanti 'place' (14a) as a space needs to be turned into an individuated noun, but mouth is already an individual noun (14b). More strategies to address this problem will be discussed in the next section.

## 4. Individuating, agentive, or ergative?

The $\mathrm{OH} / \mathrm{MH}$-ant- nouns based on neuters that only occur in A-function could easily be taken as adhering to an ergative pattern and thus provide evidence for ergative case. Unfortunately such ergative behavior is not evidence of ergative case marking.

Neuters that have been thematized by means of $-a$ - and common gender nouns that take -ant- also show ergative behavior. In (20) common gender and individuated tuzzi- in transitive subject function alternates with non-individuated tuzzin in object function:

| $[\ldots]$ | $\boldsymbol{t u z z \boldsymbol { z } - \boldsymbol { a } \boldsymbol { z }}$ | EGIR-pa | ${ }^{\text {GIS }}$ TIR | IṢBAT |
| :--- | :--- | :--- | :--- | :--- |
|  | camp-IND:NOM.S.C | again | ${ }^{\text {wood }}$ forest | seized:3S.PST |

They set up camp facing me in Tiwara (?), [and] the camp/army re-possessed the forest. [...] (MH/NS annals (Tudhaliya I/II), KUB 23.11 iii 16-17, CTH 142)

In (21) individuated pankus henganas (<hengan $\mathrm{n} .+-a-$ ) in transitive subject function alternates with neuter panku hengan in intransitive subject function. In other words, derivational -a-also participates in ergative behavior:

| URU KÙ.BABBAR-za=nas=kan | GAM panku-s markisdauw-as <br> down all-NOM.C.S suddenness-GEN.S |
| :--- | :--- | :--- |
| Hattusa-ABL=us=PTCL |  |

(If general death (panku ÚŠ-an, n., not thematized) does not occur up in Hattusa,) (and if this) general sudden death does not make us flee down out of Hattusa (then let the omen be favorable) (NH oracle, KUB $5.3+$ KUB 18.52 i 47-48, CTH 563)

Unfortunately, neuter resumption of -ant- nouns is therefore also no longer evidence of split-ergativity (as I previously believed). If the sequence panku ÚŠ-an, n. —pankus ÚŠ-as c. is possible, then nothing prevents pankus U'Š-as c. - -at n. in the right setting. In other words, once individuation of a neuter, with gender change, is no longer deemed necessary by the speaker, neuter reference may be resumed. Of course, neuter resumption of -ants forms most likely contributed to the reanalysis of such forms as neuter, paving the way for-ants/-antes as erg.neut. endings.

In order to classify -ants as non-individuating, one needs to show that common gender homogenous entities do not need -ant- in order to function as transitive subject. Fortunately, we have a text that shows exactly that:

| 22 | parn-anza=at <br> house-AGENT:NOM.S.C=it | tarna-u <br> release- 3S.IMP | istarniya-s=at <br> inner-NOM.S.C=it | annasn-anza <br> compound?-AG:NOM.S.C | [t]arna-u release-3s.IMP |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ${ }^{\text {GIS }} \text { lutt-anza=at }$ | tarna-u | wawarkim-a | istarniya-s=at [h]ila-s | tarna-u |
|  | window-AG:NOM.S.C=it r | release--3S.IMP | swivel plate- | inner-NOM.S.C $=$ it courtyard | -NOM.S.C release-3s.IMP |
|  |  |  | ALL.S? |  |  |


| KÁ.GAL=at gatesit | tarna-u <br> release- | hilamn-anza=at <br> gate house- | tarna-u <br> release- | KASKAL.LUGAL=at road. king=it | tarna-u <br> release-3S.IMP |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3s.IMP | AG:NOM.S.C=it | 3S.IMP |  |  |

Let the house release it, let the central compound release it, let the window(s) release it, to (?) the swivel plate; let the central courtyard release it, let the gate release it, let the gate house release it, let the king's road release it. (OH/MS myth, KUB 17.10 iv 9-12, CTH 324)

The neuters per, annassar, luttai and hilammar (22), and uttar (KUB 17.10 iv 6), all take -ants/-antes in A-function, while common gender hila- does not. This distribution looks like ergative behavior but it is also still consistent with -ant- as Packager. In (4) hila-likewise does not take -ant- while common gender hassa- does. The hila-structure seems to be an entity that does not need to be individuated. More importantly, an entity that should have been individuated in order to increase its agency, irrespective of its gender, is kammarā- c. 'fog', a substance and hence mass noun; yet it does not take -ant-:

23 | GIS | luttā-us | kammarā-s | IṢBAT |
| :--- | :--- | :--- | :--- |
|  | window-ACC.PL.C | fog-NOM.S.C | seized |

Fog seized the windows (KUB 17.10 i 5')

Still, annassar is accompanied by the nom.s.com. adjective istarniyas, and -ant- is also attested in the instrumental of cause or perhaps even agency kistantit 'by hunger' (KUB 17.10 i $18^{\prime}, 30^{\prime}$, see (17)). In this text, therefore, -ant- is not yet an ergative case marker, and it is no longer a marker of individuation, but it also had not lost its derivational status. I therefore suggest that this text shows -ant- as a marker of agentivity. But is this an original feature of the OH composition, or a MH innovation? ${ }^{41}$

Individuating -ant- certainly still existed in $\mathrm{OH} / \mathrm{OS}$ as tuekk- c. 'body' and the nonnominative tokens of utniyant- 'land’ (see (25)) show:

24

| nu | $\boldsymbol{t u e} \boldsymbol{k} \boldsymbol{k}$-anza=sis=pat | sarnik-zi |
| :--- | :--- | :--- |
| CONN | body-IND:NOM.S.C=his=just | compensate-3S.NPST |

(If a hippara-man steals, there will be no compensation, they shall [...] him.) His body shall give compensation instead (OH/OS law, KBo 6.2 ii 54, CTH 291)

Individuated mass noun lahhurnuzzi 'foliage' cooccurs with individuated loc.sg. udniyanti (KBo 17.22 iii $4^{\prime}$ ):

| 25 | lahhurnuzziy-ant[(-es=a | nepis) | wemiya(-nzi)] |
| :--- | :--- | :--- | :--- |
|  | foliage-IND-NOM.PL.C=but | sky-NOM./ACC.S.N | find-3PL.NPST |

(The roots of Labarna will find the bottom of the sea,) while the foliage will [find] the sky (OH/OS, KBo 17.22 iii $10^{\prime}-12^{\prime}$, w. dupl. KUB 28.8 (+) KBo 37.48 iii 10’-11', CTH 736)

The other OS instance (appuzzianza 'fat' KBo 25.107:6', w. dupl. VBoT 58 i 14', cooccurring with appuzzi n . in KBo 25.107:4', CTH 323) is individuating, but because CTH 323 does not contain non-nominative -ant-forms nor common gender mass or collective nouns that need to be

[^17]individuated ${ }^{42}$, it can also be understood as just agentive ${ }^{43}$. However, with three $\mathrm{OH} / \mathrm{OS}$ lexemes with individuating -ant-, and no means to positively identify appuzzianza as agentive, I see currently no reason to conclude that OH already showed agentive -ant-.

In MH-Murs. II originals all three functions of -ant- are attested: for the ergative see (12), and for individuation see É.ŠÀ-nanza in Table 4, but also tuzzianza in KBo 2.5 iii 28' (Murs. II, CTH 61), which alternates with thematized tuzzias=mis (idem ii 13). KBo 32.14 (MH/MS myth, CTH 789) shows the same situation as (22), with -ant- as agentive morpheme. While neuters in A-function need to take -ant- (pahhhuenanza ii 7, 8, marlānza GIŠ-ruanza lower edge 69), common gender mass noun URUDU- $a$ - 'copper' does not (marlānza URUDU-as ii 46, URUDU-an ii 53).

In conclusion, when an $\mathrm{OH} / \mathrm{MH}-\mathrm{Murs}$. II text only contains neuter nouns with -anza/-antes in A-function but without the suffix in other cases, and without lexical adjectives, the only evidence to determine whether -anza/-antes is no longer individuating but agentive or ergative is the presence of common gender masses or collectives that do not require -ant- in A-function (22). However, only the presence of ergative adnominal agreement positively determines -anza as ergative case ending.

## 5. The Luwian evidence

Luwian -ant- is attested as Packager in two different uses: to package paired body parts, which are considered collectives, and to allow homogenous nouns as transitive subjects. In order to refer to the set of body parts of one person in Kizzuwatna (=Cuneiform) Luwian, the ending $-a$ is used. If the bodyparts of multiple persons need to be referred to, -ant- turns the set into a count noun, after which it is available for pluralization with -a (cf. IGI.HI.A-wanta $<t \bar{a} w a / i-\mathrm{c}$. 'eye',

[^18]ŠU.MEŠ- $a n t a<\bar{l} s(s a) r a / i-\mathrm{c}$. 'hand', $[p \bar{a} t a] n t a<p \bar{a} t a-\mathrm{c}$. 'foot'. For further discussion see Melchert 2000:61).

Luwian also exhibits ergative behavior of neuter nouns, but, as in Hittite, this does not prove ergative case. Neuter nouns can only occur as transitive subject in their derived forms -antis (sg.) or -antinzi (pl.), which clearly derive from -ant- with the mutation suffix -iand the regular nominative common gender endings $-s$ and -nzi. There are no cases of -antnouns in intransitive clauses nor oblique cases with -ant- (yet), but we do find common gender nouns with -ant- (Kizzuwatna (26) and Iron Age (=Hieroglyphic) Luwian (29, 30)) and possessive adjectives with nominative endings (27, Kizzuwatna Luwian), showing that -antis and -antinzi had not yet developed into ergative case markers in these texts ${ }^{44}$ :

| $\bar{a} s s a=t i$ <br> mouth:NOM-A |  $\bar{e} l h \bar{a}-d u$ <br> wash-3S.IMP  | $\begin{array}{ll}\text { tappas-ant-i-s } & \text { tiya } \\ \text { sky-IND-MUT-NOM.S.C } & \text { earth }\end{array}$ | tiyamm-ant-i-s <br> earth-IND-MUT-NOM.S.C |
| :---: | :---: | :---: | :---: |
| Let Heaven (and) Earth wash (their) mouth(s) (OH?/NS ritual, KUB 9.6 ii 14-15, CTH |  |  |  |
| $[a=w a ? \ldots]$ | $\text { SAG.DU } \sim a s s-i-s$ <br> head-POSS.ADJ-MUT-NOM.S.C | IGI.HI.A~w-ass-i-s <br> eyes-POSS.ADJ-MUT-NOM.S.C | GIG-ant-e-s <br> disease-MUT-NOM.S.C |
| $\begin{aligned} & {[\bar{a} n d] a ?} \\ & \text { into } \end{aligned}$ | tarpī-ta <br> attack?-3s.PST |  |  |

(The Tutelary Deity reports that the Stormgod organized a party, inviting almost all the gods.) [He] did not [call] the sickness of [the he]ad (and) the eyes ([SAG.D]U~assanza IGI.HI.A~wassanza GIG~anza, neuter). § The sickness of the head (and) the eyes attacked(?) [...]... (MH/MS myth, KUB 35.107 iii 17’-18', CTH 764).

[^19]While tiyammantis confirms that Kizzuwatna Luwian -ant- still had individuating force, the next example shows that that was not uniformly the case. In (28) -ant- no longer occurs on common gender nouns that elsewhere in Luwian are individuated (tiyamm(i)- c.) or need to be individuated in Hittite (hassanitti- 'hearth', versus Hitt. hassa- c.). Thus, in this text there is no support for -ant- as individuating morpheme:

## 28

$\S[s] \bar{a}-n d u(w)=a t a$
parn-ant-i-nzi/-antinzi
house-AG-MUT-NOM.PL.C/ERG.PL.N

## [h]ūmmati-s hassanitti-s

 pediment-NOM.S.C hearth-NOM.S.Chuwahhursanti-nzi tiyammi-s 'ta'rus-ant-i-s/-antis (var. [tarus]-ant-i-nzi)
h.-NOM.PL.C earth-NOM.S.C statue-AG-MUT-NOM.S.C/ERG.S.N

Let the houses, the pediment, the hearth, the $h .-$-s, the earth, the statue (var. statues) release them (i.e., the following list of evils) (MH/MS ritual, KUB 35.54 ii 49-iii 1, par. KUB 35.53:8-10 (NS), CTH 758).

This pattern is both congruent with -ant- as marker of agentivity (compare (22)) and with -antis/-antinzi as ergative case markers; without agreeing adjectives we cannot decide between the two.

However, in Iron Age Luwian -ant- was still an individuating morpheme in full force. TELL AHMAR 6 shows -ant- formations of tipas- n. 'heaven', taskwar(i)- c. 'earth' (also see (30)) and hapad(i)- c. 'riverland', but not of watt(i)- c. 'mountain'. We can only explain the presence of -ant- with two of the common gender nouns but not the third one by analyzing -antas Packager:

|"TERRA"-REL+ra/i-ti-sa=ha (DEUS) $w a_{x}-t i-z i$
earth:IND:MUT:NOM.S.C=and mountain:MUT:NOM.S.PL

| (DEUS)HAPA-da-ti-zi | $a-t a ́$ | $\mid t a-s a^{?}-m i-z i$ | DEUS-nízi | \|(LITUUS)á-za-ta |
| :--- | :--- | :--- | :--- | :--- |
| riverland:IND:MUT:NOM.S.c | in(to) | ?:PARTIC:NOM.PL.C | god:MUT:NOM.P | love:3PL.PST |

(Celestial Tarhunt, ..., Šarruma,), Heaven and Earth, the divine Mountains, the divine Riverlands, the... gods loved (me, the first-born child) (late $10^{\text {th }}-$ early $9^{\text {th }}$ c., TELL AHMAR 6 § 2, ed. Goedegebuure forthc.a)


Let Heaven (neut.) and Earth (comm.) X the gods of both Heaven and Earth against him in confrontation (BOYBEYPINARI 2 § 21, ed. Hawkins 2000:337).

The three nouns with -ant- have in common that they are substances without definite shape (in our understanding), masses therefore: if we zoom in on a piece of 'sky', 'earth', and 'riverland', we still consider that part 'sky', 'earth', and 'riverland'. On the other hand, carving out a piece of a well-defined mountain does not lead to another mountain; it results in a piece of rock.
'Mountain' is therefore an individual noun. In order to allow the masses to function as agents, they need to be individuated, irrespective of their grammatical gender.

Since even Iron Age Luwian still had individuating -ant-, we should no longer consider its precursor Hattusa Luwian as the driving force behind the development of the ergative in Hittite (pace the covert suggestion in Goedegebuure 2012:300).

## 6. The minor Anatolian languages

### 6.1 Lycian

Lycian has individuating $-\tilde{V} t-/-V n t-/$, and a developing ergative out of agentive $-\tilde{V} t-$. The use of $-\tilde{V} t$ - with numerals when counting items in a collective shows that $-\tilde{V} t$ - was still productive as a Packager. Herds of animals are marked with the coll.pl. ending - $a$, while the numeral receives $\tilde{V} t$ - followed by $-a$ in agreement with its head (Melchert 2000:60): puwa aitãta am $m a ̃ m a$ 'eight



Agentive/ergative $-\tilde{V} t$ - is only attested with tese n . 'oath':

| 31 | S=ẽne | $\boldsymbol{t e s}-\tilde{\boldsymbol{e} t i}:$ | $q \tilde{a}-\tilde{n} t i:$ | $\boldsymbol{t r} \boldsymbol{m} \boldsymbol{m i l i}-\boldsymbol{j}-\tilde{e} \boldsymbol{t} \boldsymbol{i}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | CONN=him | oath-ERG.PL.N | destroy/seize?-3PL.PRS | Lycian-ADJ-ERG.PL.N |

The Lycian oaths will destroy him (TL 149,10)

| 32 | s=ene | $\boldsymbol{t e s} \boldsymbol{e} \boldsymbol{e} \boldsymbol{t} \boldsymbol{- i}$ | tubei-ti | $\boldsymbol{t r m m i l i}$ |
| :--- | :--- | :--- | :--- | :--- |
|  | CONN=him | oath-AG-MUT:NOM.PL.C | strike-3PL.PRS | Lycian:ADJ.NOM.PL.C |

The Lycian oaths will strike him, (and the court of the body of elders) (TL 135,2)

The alternation of adnominal agreement with and without $-\tilde{V} t(i)$ - should be interpreted as in MH, namely as evidence for the grammaticalization of agentive $-\tilde{V} t(i)$ - into an ergative case ending.

### 6.2. Palaic, Lydian and Carian

The other minor Anatolian languages currently do not provide evidence for ergative -ant-. The morpheme -ant- in Palaic fulāsinants (KBo $19.152+\mathrm{KBo} 27.77$ ii 8 ') is most likely possessive -ant- 'having $f$. bread' (Valério 2009:426). Lydian -ẽt- either derives from the ProtoAnatolian participle (dẽt 'moveable goods' $<* h_{l} i$-ent-) or from possessive *-Vnt- (sfardẽt (i)'Sardian $<$ having Sardis' (compare Hitt. utniyant- 'population $<$ having the land').

Simon (2008:462) suggests a comparison of the Carian morpheme $-\delta$-, which reflects *-nd-, with Hittite and Luwian ergative -ant-. This alleged case ending is attested in the Carian inscription C.xx 2:

33 ýśbiks-ø not: alos $\delta$ ḱarnos $\delta:$ jzp-e mбane/m $\delta a-n-e$
Y.-NOM.s? brought? a. k. J.-DAT.S? to offer?/m.-it-to him?

Ýśbiks brought it to Jzpe, alos $\delta$ ḱarnos $\delta$ (ed. Adiego 2007:161, 284)

Aside from the fact that the uncertainties regarding the analysis are such that we barely understand this inscription, if alos $\delta$ ḱarnos $\delta$ were an ergative, forming the transitive subject together with the personal name Ýśbiks, then the base alos ḱarnos, presumably the city Halikarnossos, should be neuter. But in the Anatolian languages city names are never neuter, thus precluding an ergative analysis. Since, as Simon argues, an ablative is unlikely as well (as proposed by Adiego (2007:319), with further references), we should reject the analysis of $-\delta$ - as a case ending and treat it as a derivational morpheme. The word itself is then a nom.s.c. on $\varnothing$ and is thus part of the subject. Therefore $-\delta$ - /-nd-/ might be the cognate of Hittite and Luwian individuating -ant-. That cities sometimes need to be individuated was already illustrated in (5b) (URU-az = happiri-ant-s). With $-\delta$ - as Packager, the translation is "Ýśbiks, and the city of Halikarnassos, brought to Jzpe $m \delta a n e "$. Alternatively, $-\delta$ - is cognate with possessive -ant-. The formation of alos $\delta$ ḱarnos $\delta$ should in that case be compared with Lydian sfardẽt(i)- 'Sardian < having Sardis', leading to a translation "Ýśbiks, the Halikarnassian, brought to Jzpe mסane". Given the problems still surrounding the analysis of Carian I refrain from making a choice.

## 7. Conclusion

Originally, Anatolian -ant- was not an ergative case ending but a derivational morpheme that turned non-count nouns, such as masses and collectives, into singular or individuated nouns, irrespective of syntactic function. Common gender nouns representing collectives and spaces, such as Hitt. tuzzi- 'army, army camp' or Luw. tiyammi- 'earth' also required -ant- to individuate them if the speaker deemed that necessary. This shows that nominal aspect and not grammatical gender triggered the use of -ant-.

While agentivity was not always the trigger for the use of -ant-, individuation and agency are still highly correlated. Non-count nouns have less agency than count nouns, and are therefore less likely to occur as transitive subject than their count counterparts. In the Anatolian languages non-count nouns were originally even prohibited as transitive subject in Unpackaged form. Only the suffixing of individuating -ant- allowed masses and collectives in A-function. Thus, the contingent agency of individuating -ant- paved the way for a reinterpretation of -ant- as a marker of agency.

This reinterpretation must have coincided with the grammaticalization of the strong correlation between agency and grammatical gender. As the use of -ant- shows, not all common gender nouns ranked high in agentivity, but the reinterpretation of common gender as the gender
capable of agency must have been trivial. At that point common gender nouns no longer needed -ant- as agency marker, and -ant- retreated to neuter gender. This process might have already begun in OH , although OS manuscripts do not provide conclusive evidence for that. Irrespective of the developments in OH , -ant- continued as Packager throughout MH and the reign of Mursili II.

Despite the correlation between individuation and agency, not all situations that call for individuation of a non-count noun also need agency for that noun. There was therefore room for a new marker of individuation once -ant- had become more agentive. Perhaps starting in MH (because we only have NS copies, $-a$ - could be interference from the later language), secondary thematization by means of - $a$ - began to compete for individuation with -ant-, sometimes even alternating with -ant- in the same text.

Agentive -ant- still turned neuters into common gender nouns, as agreement with lexical adjectives shows. However, such -ant- nouns could still be resumed by neuter pronouns. Together with the restriction of -ant- to neuters in A-function, this must have triggered the final step, further grammaticalization into a special case ending for A-function already in MH , with ergative adnominal agreement. Because S and O already received the same marking, we suddenly have ergative alignment for neuters.

There is no evidence that -ant- developed into an ergative case ending in the other Anatolian languages with the exception of Lycian. The Luwic evidence confirms the original status of -ant- nouns as common gender (common gender adjectives, $i$-mutation, common gender endings) and we do have cases of -ant- on common gender nouns, not only in Kizzuwatna Luwian but also in Iron Age Luwian. The Iron Age Luwian material can only be explained as individuating. Luwian therefore never developed an ergative. Lycian on the other hand shows evidence of the grammaticalization of individuating -ant- into ergative -ant-. The meagre corpora of Palaic and Lydian do not contain individuating -ant-, only possessive -ant-, and the Carian material is open to multiple interpretations.

Since the development of an ergative case ending out of individuating -ant- occurred independently in attested Hittite and Lycian, this shows, first, that the ergative cannot be projected back into Proto-Anatolian, and secondly, that NP split-ergativity, a syntactic phenomenon, may have its origins in the semantics of nouns.
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[^0]:    This study feeds into a larger project, Expressing Agency and Point of View: The Core Cases in the Ancient Anatolian Languages (1700-300 B.C.), which will be assisted by an ACLS Fellowship from the American Council of Learned Societies. In the monograph I will present the full data set, which could not be included here.

    I am very grateful to the editors of the volume and the audience of the WeCIEC 2017 for their comments and suggestions, especially Angelo Mercado, Dieter Gunkel and Gašper Beguš for their helpful suggestions regarding the statistical analysis of the data presented here. Of course, I am solely responsible for any errors.
    ${ }^{1}$ Rizza (2014) presents an in-depth discussion of the different opinions on the topic.

[^1]:    2 For the glosses, see the Leipzig Glossing Rules (https://www.eva.mpg.de/lingua/resources/glossingrules.php). In bound transcription ' $=$ ' denotes a clitic boundary, ' - ' a morpheme boundary, and ' $\sim$ ' the boundary between a logogram and syllabogram.

[^2]:    ${ }^{3}$ I accept Melchert's (2017:13) refutation of the neuter sāwar 'sullenness' (KUB 30.34 iv 9 (MH/NS, CTH 400 ) as transitive subject and of handais 'heat' (KBo 3.23 i 6, OH/NS, CTH 24) as neuter (so Goedegebuure 2012:272 n.11, Zeilfelder 2014:200). Zeilfelder (2014:200) lists another neuter, partawar 'wing', in Afunction (KUB 17.10 ii $35^{\prime}-36^{\prime}$, OH/MS, CTH 324), but her example needs to be translated differently, with partawar as object ("Kamrusepa saw him (i.e., the furious Telipinu)" nu=za haranas ${ }^{\text {MUŠEN }}{ }^{\text {partauwa }[r]}{ }^{36}{ }^{\prime} \mathrm{x} \mathrm{x}$ x arnut $n=a n a[r a \bar{e} t]$ "She moved ... the wing/feather of an eagle, and s[topped] him." (so CHD P:198).

[^3]:    4 For the other functions of -ant- see Hoffer\&Melchert 2008:55-6.

[^4]:    5 So e.g., Dardano 2010:176-9, Luraghi 2017:283-4, Zeilfelder 2014:201-2.

[^5]:    7 I have only included attestations occurring in clauses that are fully preserved or that can be reasonably restored. Not included at all are the season and time expressions on -ant- (such as gimmant- 'winter') and marnuwa(nt)-drink. The -ant- of the season expressions is not related to the -ant- under discussion here (HW ${ }^{2}$ H 121). marnuwa(nt)-drink (attested in several non-nominative cases) only occurs in OH and MH ; its presence in a data set that compares OH and MH with NH would skew the distribution of non-nominative cases towards the earlier period.

[^6]:    ${ }^{11}$ Feder (2010:121) cites the -ant-forms of lingai- as linkanza and linkantes, but this is not correct: The forms are linkiyanza and linkiyantes. The only case of linkanza known to me (that is not a participle) occurs in KUB 60.44:9' (OH/NS, CTH 820).
    ${ }^{12}$ I used http://vassarstats.net/tab2x2.html for the calculation of the Fisher's Exact Test and https://apollo.neocities.org/math/phi-coeff.html for the Phi coefficient.

[^7]:    15 E.g., sankuwayas in KUB 9.4 i 27, but sankuwayanza in KUB 9.4 i 36.

[^8]:    16 The following grammatical markers were used to establish the relative age of the fragments: sentence particles, case endings, and (enclitic) pronouns. Sentence particles: -san in C versus innovated -kan in B (C iii 34 -ša-an = B iii 35 -kán, etc.), -asta in C versus innovated -kan in B ( C i $35^{\prime}$ na-aš-ta $=\mathrm{B}$ ii $4 n u$-kán). Case endings: nom.pl.c. -is in C versus innovated -us in $\mathrm{B}(\mathrm{C}$ iv $16 u s ̌$-ki-iš-kat-tal-li-iš = B iv $16 u \check{s}-k i[\check{s}-k a t-] t a l-l i-$ $u \check{s})$. Pronouns: nom. pl. sumes in C versus innovated sumas in B ( C iii 10 šu-me-eš $=\mathrm{B}$ iii $18 \check{s} u$-ma-ǎ̌), acc.pl.com. -us in C versus innovated -as in B (C i 27' nu-uš-ša-an = B i $\left.45^{\prime} n a-a s ̌-k a ́ n\right)$. These changes were not consistent; B retains some older features as well. Interestingly, version C (lateNS), while exhibiting older grammatical features, often uses Sumerograms where the other versions use full Hittite spellings.

[^9]:    ${ }^{17}$ I exclude verbal and anaphoric agreement from the discussion. Because collective neuter singulars may agree with plural verbs (Hoffner\&Melchert 2008:240), plural verbal agreement with -antes forms should not be adduced as evidence against the analysis of -antes as erg.pl.neut. On the other hand, neuter anaphoric agreement with -ant- nouns can no longer be considered evidence for ergative case (see section 4). Both phenomena will be studied in-depth in Goedegebuure forthc.b.
    ${ }^{18}$ Attested: apas, humanza, kas, kuis, kuiski.
    ${ }^{19}$ Attested: arahzena-, ekuna-, idalu-, istarniya-, marlant- (partic.?), suppi-, taruwant- (partic., in NH), wiskiuwant- (partic.).
    ${ }^{20}$ Attested: arahzenant-, idalauwant-.

[^10]:    ${ }^{21}$ With GIG-anza KUB 33.121 ii $17{ }^{\prime}$ (MH/NS, CTH 361), KUB 8.36 ii $10^{\prime}$ (NH, CTH 279); with uddananza KBo $17.62+63$ iv 10 ’ (MH/MS?, CTH 409), KUB 15.1 ii 32-33 (NH, CTH 584), KUB 15.28 iii 11 ’ (NH, CTH 590).

[^11]:    22 Kloekhorst 2008:184 ("If, however, a situation needed to be expressed in which a neuter noun had to function as the subject of a transitive verb, this noun could be "animatized" with a suffix -anza". I assume that the scare quotes mean that Kloekhorst does not actually consider the neuters with -ants as animate beings); Yakubovich 2010:153; 2011:4.

    23 Dardano 2010:180, Laroche 1962:41, Rizza 2010:161. I treat animatization as a category separate from personification in order to capture the difference between, for example, linkiyant- 'animatized perjury' and linkiyant- 'oath god'.
    24 Specifically personifying: Lopuhaä forthc., Melchert 2011:162, Neu 1989:1, Starke 1990:25, 62 (on Cuneiform Luwian), Yakubovich 2011:5. Personifying/individualizing: Carruba 1992 (who also adds "singolativa; collettiva; affettiva o altro ancore", o.c. 70), Shatskov 2011:146, Zeilfelder 2014:204-5. Specifically individualizing: Benveniste 1962:48-51, Oettinger 2001:305, 312, Zeilfelder 2001:171-2. ${ }^{25}$ Luraghi 2017:282.

[^12]:    ${ }^{26}$ Sort nouns will not concern us here. Rijkhoff also discusses two additional categories, general nouns and set nouns, for which one of the features is irrelevant. General nouns are only -SHAPE, set nouns are only +SHAPE (Rijkhoff 2002:52). Jackendoff (1991) uses different parameters (+/- bounded, +/- internal structure), with internal structure being different from homogeneity. This difference results in another distribution of nouns over the four cells: there are no longer sort nouns, while Jackendoff has the additional category of aggregates. I prefer Rijkhoff's organization because it is based on a much larger sample of languages (instead of only English). Some reconciliation might have to take place, however.
    ${ }^{27}$ Minimal parts do not have to have the exact same properties at the individual level (which makes a collective different from masses), but they do need to share the feature of being considered a valid member of the collective: a committee may consist of men and women, but they all need to be appointed member of the committee; the acts constituting a ritual usually consist of speech and physical acts, but they all need to be ritual acts appropriate for the ritual.
    ${ }^{28}$ For further discussion of count and mass nouns and pluralization and quantification, see Rizza 2013:242-8 for Hittite and Bauer 2014:63-116 for Hieroglyphic Luwian.

[^13]:    29 The only neuter mass noun in Hittite that to my knowledge has a plural is wātar 'water', with widār 'bodies of water'.
    ${ }^{30}$ This is different from a collective or distributive reading: in Hittite "the persons (antuhsa-) finished building the raft" (with collective reading) and "the persons are tall" (with distributive reading), the plural of antuhsawould in both cases be antuhses, not antuhsa. Countability seems to be a property of entities in Hittite and does not seem to depend on whether the predicate allows a distributive or collective reading. If a count noun is presented as non-count or neuter, it not only receives the coding of non-count nouns (the ending $-a$ ), it also adopts the syntactic behavior typical of neuters: it can no longer occur as transitive subject, and it no longer triggers plural agreement on the verb.

[^14]:    31 Note how a single set or collective is morphologically marked on the noun as plural, but counted as singular, e.g. ANA 1-NŪTIM sehe[l]liyas witena[s] "for one portion of purifying water (dat.pl.)" (MS, KBo 24.45 rev . 3').

[^15]:    ${ }^{33}$ I have overtly marked those lexemes with tokens with -ant- in OS or MS; unmarked lexemes only occur in NS copies. The classification of the following nouns is necessarily rather subjective.
    ${ }^{34}$ I suggest that gamarsuwants is based on *gamarsu-, a secondary neuter stem extracted from gamarsuwas, gen. of the verbal noun *gamarsuwar n . 'defecation'.

[^16]:    40 If the frame consisted of slats or anything woven, NÁ might be considered a collective.

[^17]:    41 The problem with this particular text becomes moot in case Hittitologists decide to merge OS and MS.

[^18]:    42 The text contains aruna- 'sea'. This is an individual noun despite its spatial extent: taking a portion of a sea does not lead to another sea, just to a portion of water.
    ${ }^{43}$ Lopuhaä (forthc.) has a different view of the semantic function of -ant-, namely as personifying, and thus assumes that there should be a lexical difference between neuters and their -ant-forms. Not detecting such a meaning difference between appuzzi and appuzziant-, he therefore rejects the derivational analysis for appuzziant-. As I have discussed above, personification is not the function of derivational -ant-. The difference in meaning between appuzzi and appuzziant- is not one of 'fat' and 'personified fat' but one of noncount 'much fat' versus count 'a fat, (many) fats'.

[^19]:    44 For more Kizzuwatna Luwian examples see Lopuhaä forthc.

