# The Life Cycle of Adpositions 

## T. Givón



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## Preface

Adpositions are used, universally, to mark the roles of nominal participants in the verbal clause, most commonly indirect object roles such as various locatives, allative, ablative, dative, benefactive, instrumental or associative. With the exception of Pidgins and early Creoles, all languages seem to have such markers which, like all grammatical morphemes, begin their diachronic life as lexical words - in this case either serial verbs or positional nouns. In many languages, however, adpositions also seem to have extended their diachronic life one step further, becoming verbal affixes.

The main focus of this book is the tail-end of the diachronic life-cycle of adpositions. That is, the process by which, having arisen first as nominal-attached prepositions or post-positions, they wind up attaching themselves to verbs. Our core puzzle is thus fairly transparent: How and why should morphemes that pertain functionally to nominals, and begin their diachronic life-cycle as nominal grammatical operators, wind up as verbal morphology?

While the core five chapters of this book focus on the rise of verb-attached prepositions in Homeric Greek, its theoretical perspective is broader, perched at the intersection of three closely intertwined core components of the study of human language: (a) the communicative function of grammar; (b) the balance between universality and cross-language diversity of grammars; and (c) the diachrony of grammatical constructions, how they mutate over time.

While paying well-deserved homage to the traditional Classical scholarship, this study is firmly wedded to the assumption, indeed presupposition, that Homeric Greek is just another natural language, spoken before written, designed as an instrument of communication, and subject to the same universal constraints as all human languages. And further, that those constraints -so-called language universals - express themselves most conspicuously in diachronic change.

Unlike the traditional Classical scholarship, which has relied primarily on the Comparative Method, this study is a methodological hybrid. In analyzing the synchronic variation and text distribution of prepositional constructions in Homeric Greek, it relies primarily on the theory-laden method of Internal

Reconstruction. But it also compares the Homeric data with matching historical data from other languages. Among those, English turns out to be of particular interest, first for being a syntactic mirror-image of Homeric Greek, and second because the very same diachronic process of attaching nominal prepositions to verbs is richly documented in successive written records, from Chaucer's Middle English to the present.

## How do nominal case-markers become verbal affixes?

### 1.1 The functional-syntactic domain of adpositions

The natural functional domain of adpositions, thus also their natural syntactic association and eventual site of cliticization, is the nominal phrase. That is, they seem to, universally, mark the various case-roles of nominal participants in the verbal event clause. While adpositions can on occasion mark the functions of subject/agent (nominative, ergative) and object/patient (accusative, absolutive), they most commonly mark the case-roles - or types of participation - of various indirect objects (so-called 'obliques'). In this capacity, they are associated most typically with two well-known verb/clause types. The first depicts concrete intransitive states or events in which the adpositionally-marked indirect object is the location where the subject is, or the source or goal of the subject's motion, as in e.g. ${ }^{1}$
(1) Intransitive verbs of concrete location or motion:
a. She stayed at home
b. They live in Tulsa
c. They went out of town
d. He ran to the store
e. She comes from a small village
f. They hiked up the slope
g. He slid down the slope

The second verb/clause type depicts bi-transitive events in which the subject/agent causes the motion of a direct object, and the adpositionally-marked indirect object is then either the source or goal of the object's motion, as in e.g.:

[^0](2) Bi-transitive verbs of concrete causation of motion:
a. She put the book on the table
b. They left the horse in the barn
c. They sent him to the store
d. He removed the book from the shelf
e. She pulled him out of the house
f. They led them up a steep hill
g. She pushed him down the stairs
h. He deposited the package at the door

In addition, each of the verb/clause types (1) and (2) above also has more abstract - or metaphorically extended - equivalents, respectively:
(3) More abstract extensions of intransitive type (1):
a. He looked at her
b. She listened to him
c. They learned from books
d. She is in trouble
e. They are at war
f. She ran into some difficulties
g. They descended into oblivion
(4) More abstract extensions of bi-transitive type (3):
a. She gave the book to her best friend
b. He heard it from his boss
c. They sold it on the internet to the highest bidder
d. She told her version to two cops
e. He embroiled them in no end of trouble
f. She talked him out of that nonsense
g. They led the company out of bankruptcy

In verb/clause types (1), (2), (3), (4) above, the adpositionally-marked indirect objects are obligatory event participants. But adpositions can also mark the case-roles of optional participants, ones that are not constrained to particular verb types. Such optional participant roles are, most typically:
(5) Optional participant case-roles:
a. Instrumental: She cut the bread with a knife
b. Associative: She sang with her sister
c. Benefactive: They work for the city
d. Manner: He did it in a great hurry

The morpho-syntactic locus of adpositions may be either pre-nominal, as prepositions, or post-nominal, as post-positions, a distinction that is is often associated with 'basic' VO vs. OV word-order, respectively (Greenberg 1966). ${ }^{2}$ As an example of post-positional marking of indirect-objects in an OV language, consider Ute (No. Uto-Aztecan): ${ }^{3}$
(6) Post-positional case-marking in Ute
a. Locative:
kani-naagh 'uni-'ni
house-in be-imm
'( $\mathrm{s} / \mathrm{he}$ ) is in(side) the house'
b. Locative/allative:
kani-naagh-tukh yuga-puga
house-in-to enter-REM
'(s/he) went into the house'
c. Allative:
kani-vaa-tukhwa paghay-'way
house-at-go walk-IMM
'(s/he) is walking to(ward) the house'
d. Ablative:
kani-vaa-tu-mana-kway paghay-'way
house-at-dir-leave-go walk-IMm
'( $\mathrm{s} / \mathrm{he}$ ) is walking away from the house'
e. Dative:
mamachi-vaa-tu puni'ni
woman-at-DIR look/IMM
'( $s / h e$ ) is looking at the woman
f. Instrumental:
tuachi-'u moghoy'a-m nagha-puga
child-the blanked-with cover-REM
'( $\mathrm{s} / \mathrm{he}$ ) covered the child with a blanket
2. Because of word-order change and different diachronic sources of casemarking adposition, Greenberg's (1966) word-order correlations are often less than perfect (Givón 1971). Thus, while Homeric Greek has highly flexible word-order, its old suffixal nominal case inflections and suffixal tense-aspectmodal system harken back to the older OV word-order of Indo-European (Lehmann 1969, 1974).
3. See Givón (2011, Chapter 4).

## g. Associative:

tuguvu-wa 'u wéeka-puga
friend-with 3s work-REM
'(s/he) worked with her/his friend'
Like all bound grammatical morphemes over their diachronic life-cycle, adpositions eventually become de-stressed, shrink in size, and undergo assimilatory phonetic interactions with their host lexical stem as well as with adjacent bound morphemes. In the process, they become phonologically and semantically irregular 'inflections' on their host lexical stem. Eventually, they are zeroed out at the tail-end phase of their de-grammaticalization. ${ }^{4}$ Such phonetic erosion and growing semantic incoherence can be seen, for example, in the history of the Indo-European suffixal case inflections, leading to their eventual replacement by new generations of case-marking adpositions. Thus, the complex interaction between the old nominal case suffixes of Homeric Greek and the new generation(s) of pre-nominal prepositions that 'govern' them is a classical example of such a cycle - indeed multiple cycles - of grammaticalization, de-grammaticalization and re-grammaticalization. ${ }^{5}$

### 1.2 Locus of cliticization

The morpho-syntactic locus of adpositions vis-a-vis their nominal lexical host, thus Greenberg's (1966) prediction of prepositions in VO languages vs. post-positions in OV languages, is mediated by the adposition's diachronic lexical source. Most commonly, adpositions arise from either serial verbs in a complex verb phrase, or from positional nouns in a complex noun phrase. Typical examples of serial verbs yielding prepositions in VO-ordered languages may be seen in the Niger-Congo family: ${ }^{6}$
(7) a. Accusative 'take':
iywi awá utsi iku
child took door shut
'the child shut the door'
(hist.: 'the child took the door and shut it')
4. See Givón (1971, 1979/2019); Heine and Kuteva (2007); inter alia.
5. The old Indo-European nominal case inflections are the product of condensation of three adjacent nominal suffixes - case, number and gender-markers, a fact that contributed to their eventual irregularity and functional incoherence.
6. For further detail see Givón (1975).
b. Instrumental 'take':
iywi awá otsi iku utsi
child took stick shut door
'the child shut the door with a stick'
(hist.: 'the child took the stick and shut the door')
c. Allative 'go':
dúk móto ámi ka óbyo!
take car this go town
'Take this car to town!'
(hist.: 'take this car and go town!')
d. Allative 'come':
mo mu iwé wá ilé
1s took book come house
'I brought the book to the house'
(hist.: 'I took the book and came house')
e. Dative 'give':
mo mú iwé wá fún e
1s took book come give 2 s
'I brought a book to you'
(hist.: 'I took a book and came and gave you')
f. Benefactive 'help':
mo bá o mí iwé wá ilé
1s helped 2s take book come house
'I brought a book home for you'
(hist. 'I helped you and took a book and came home')
Typical examples of serial verbs yielding post-positions in an OV Niger-Congo language, Ijo, may be seen in (Williamson 1965):
(8) Accusative 'take':
a. erí yé aki-ni u-beé
he thing take-ASP 3 s -say
'he told her/her a thing'
(hist.: 'he took a thing and told her')
b. Instrumental 'take':
erí ogidi akí-ní indi pei-mí
he machete take-ASP fish cut-ASP
'He cut the fish with the machete'
(hist.: 'He took the machete and cut the fish'
c. Allative 'go' and 'come':
erí amá duo you bo-mí
he town go paddle come-asp
'he paddled to town'
(hist.: 'he went to town paddling and came (there)')
d. Locative 'circle':
erí áru-bi oki yoro-mi
he canoe-the swim circle-asp
'he swam around the canoe'
(hist.: 'he swam the canoe and circled (it)'
e. Dative 'give':
eri opuru-mo áki toboú piri-mi
he fish-the take boy give-asp
'he gave the fish to the boy'
(hist.: 'he took the fish and gave it to the boy')
f. Manner 'take':
erí aya baraki akí-ni dúma tun
he new way take-asp song sing
'he sang the song in a new way'
(hist. 'he took a new way and sang the song')
g. Comitative 'join':
erí wo bina óweri mo bo-mi
he his kin man join come-asp
'he came with his kinsman'
(hist. 'he joined his kinsman and came'
The other typical diachronic source of adposition are positional nouns, derived from either body parts or location nouns in a genitive modifier construction. Typically, such positional nouns augment extant adpositions to yield more complex location or motion senses. Over time, such combinations become grammaticalized as complex adposition. Typical examples from English, all at a relatively early diachronic stage, may be seen in:
(9) a. On top of the mountain
b. In the back of the cupboard
c. At the foot of the cliff
d. In front of the house
e. At the bottom of the gorge
f. To the head of the line

Examples of various types of simplification and re-structuring in English may be seen in:
(10) a. inside the can
b. out the window
c. under the horizon
d. below expectations
e. above the clouds
f. aside from that

The fact that positional nouns become pre-nominal prepositions in English has nothing to do, directly, with its VO syntax. Rather, it involves the postnominal position of genitive modifiers vis-a-vis the head noun in the noun phrase. Via re-analysis, the genitive modifying noun becomes the new head noun, now preceded by the de-nominal preposition. In an OV language like Ute, where post-positions arise diachronically from either serial verbs or positional nouns, their post-nominal position is determined by both the OV syntax (for the serial-verb source) and the genitive-head order in the noun phrase (for the positional-noun source). In the examples below, the likely diachronic sources of the post-positions are indicated: ${ }^{7}$

```
(11) a. mamachi ghani
    woman/GEN house
    'the woman's house'
b. kani-naagha-tukhw yuga-puga
    house/o-enter-go enter-rem
    '(s/he) went into the house'
c. kani-vaa-tukhwa paghay-'way
    house/o-go-go walk-IMM
    '(s/he) is walking toward the house'
d. kani-vee-tu puni-'ni
    house/o-go-go see-IMM
    'he's looking at/toward the house'
e. kani-vaa-tu-mana-kway qháaru-puga
    house/GEN-go-go-leave-go run-REM
    '(s/he) ran away from the house'
```

[^1]| f. pe'өqwatu tuka'napu-tuvwa-miya-tukhwa wíli-kya book table/o-descend-go-go <br> fall-ant |  |
| :---: | :---: |
|  | 'the book fell off the table' |
| g. | kani qovaa-va 'uni-'ni |
|  | house/GEN face-go be-IMM |
|  | '(s/he) is in front of the house' |
| h. | kani-túura-va 'uni-'ni |
|  | house/GEN-outside-go be-IMM |
|  | '(s/he) is outside the house' |
| i. | kani turagwaa-naagha-tukhwa yuga-puga |
|  | house/GEN center-enter-go enter-REM |
| j. | '(s/he) went into the center of the house' |
|  | kani tugu-tukhwa 'ura-'ay |
|  | house/GEN sky-go be-IMM |
|  | '(it) is on top of the house' |

Ute post-positions are thus a diachronic mixed bag, coming from either serial verbs or positional nouns. Among those, the longer verb stems still function as verbs, while the mono-syllabic ones can be reconstructed to erstwhile verbs.

### 1.3 Verb-attached adpositions

In the examples cited thus far, the case-role marking adpositions were invariably attached to nominal indirect objects, their presumed natural functional-syntactic domain. But in many languages case-role marking adpositions can also be associated with - or cliticized to - verbs. This is indeed the case in Homeric Greek and other Indo-European languages, as well as a more recent cycle in English. And it is also found in many other unrelated language families. So that a fairly obvious question must now be raised, one that will remain a leitmotif throughout this book: How do case-marking adpositions, whose functional-syntactic domain is typically nominal, wind up as verbal morphology? And further, what is natural about such a - presumably diachronic - process?

Before investigating possible diachronic pathways via which such a counterintuitive development may take place, let us consider first a complex example from Akie, a So. Nilotic language from Tanzania (Koenig et al. 2020). ${ }^{8}$ A strict VO-ordered language, Akie displays both pre-nominal prepositions and

[^2]verb-suffixed case-role markers, perhaps originally prepositions as well. The pre-nominal prepositions are rather limited in number, and are often semantically ambiguous, multi-functional or vague. Thus:
(12) Nominal-attached prepositions
a. Locative nén
a taak-e nen pesye nkáá ayen
1s see-Impf loc day gen two
'I see him in two days'
b. Locative $p a$
pa óseróo
LOC wilderness
'in the wilderness'
c. Asscoative ai
ki ám-ìisyey ai Nkúyaki
1p eat-AP with Nkúyaki
'we eat (together) with Nkúyaki'
d. Instrumental ai
a kee ng'éét-tai korio ai ng'otwee
C RPA come.out-and c with spears
'then they came out with spears'
e. Instrumental nen
till-e pányee nen sílelee
cut-IMPF meat Loc knife
'he cut the meat with a knife'
f. Benefactive (i)nká
náá siing'ow inká óloishó
rel be.good for country
'which is good for the country'
Two Akie prepositions are clearly of positional-noun origin, displaying the telltale sign of the genitive construction, as in:
(13) Nominal-derived positional locatives
a. ká ching' ari táá kaa
npa enter inside gen home
'he enter into the house' (lit. 'entered inside of the house')
b. pút-en paráí taa keeti!
climb-IMP on.top GEN tree
'climb on top of the tree!'

Akie also has case-marking morphemes suffixed to the verb, often ambiguous and sometimes co-existing or alternating with pre-nominal prepositions. Thus consider:
(14) Verb-suffixed adpositions
a. ar-áá taak-ēēn láákwēē paráí taa kopuruēē
pa-1s see-apl child top gen hill
'I've seen the child on top of the hill'
b. i llúú-eyyen rúnkuu láákwēē
$2 s$ hit-APL club child
'you are hitting the child with the club'
c. i llúú-e nen rúnkuu láákwēē

2s hit-IMPF with club child
'you are hitting the child with the club'
d. oo rú-ie-n nen íyu kosi

2 p sleep-assoc loc here
'you-all sleep together in here'
e. ki-rá ál-chi láákwēē amti

1p-pa buy-ben child food
'we bought food for the child'
Lastly, two verb-suffixed case-markers can be sometimes combined together, as in:
(15) a. a ng'útt-in-eyyen ng'úlēē weérii kuúmi

1s spit-dat-APL saliva boys beer
'I spit beer at the boys (for blessing)'
b. ki ng'álaan-chin-toos-ey

1p talk-dat-Assoc-??
'we talk to each other about it'

### 1.4 The typological-diachronic conundrum

Two separate considerations suggest that the association of adpositions with verbs, and their eventual pre- or post-verbal cliticization, is a secondary diachronic product of their original association with nominals. The first consideration concerns the semantics of verb-attached adpositions: With some exceptions due to gradual semantic change, verb-attached adpositions still code - overwhelmingly - the very same prototypical case-role functions of event-clause participants that they code as nominal adpositions: locative, directional, dative, benefactive, associative, instrumental, temporal or manner.

The second consideration involves the cross-language distributional logic of the two morpho-syntactic loci of adpositions, nominal vs. verbal. That is:
a. One can find many genetically unrelated and typologically diverse languages where adpositions are attached only to nominals (e.g. Hebrew, Spanish, Turkish, Japanese, Ute).
b. One can also find many languages where adpositions are attached to both nominals and verbs (Rama, Akie, English, Homeric Greek).
c. But one is hard pressed to find a language where adpositions are attached only to verbs.

The logic of this cross-language distribution is a well known one-way conditional association:
(16) One way conditional association:
"If adpositions in a language are found to be associated with verbs, they will also be associated with nouns; but not vice versa".

The one-way conditional association in (16) has a fairly obvious diachronic interpretation:
(17) Diachronic interpretation of (12)
"Adpositions are first associated with nominals, and only later with verbs".

If we couch the diachronic interpretation (17) of (16) as a scientific hypothesis, could we then look for counter-examples to (16) that would then falsify (17), as is done in normal science? Put another way, can we find a language, or languages, in which case-marking morphemes are attached only to verbs but not to nominals?

At least in principle, one could think of a natural exception to our conditional association (16) and diachronic hypothesis (17). It goes roughly like this:
(18) Potential principled exception to (16), (17):
a. Suppose a language develops first nominal-attached adpositions.
b. Suppose it then goes on to develop verb-attached adpositions.
c. Suppose then, over time, it loses the older generation of - phonetically eroded and functionally incoherent - nominal-attached adpositions through run-of-the-mill de-grammaticalization.
d. But then it would still retain the diachronically younger and functionally more coherent verb-attached adpositions.

As Popper (1934/1959) noted, one could keep trying and failing repeatedly to falsify a hypothesis, practically ad infinitum. And the point where one decides to give up is in principle arbitrary. In the interest of trying, nonetheless, I will describe below two potential counter examples, each suggestive of the principled diachronic exception described in (18) above. The first potential counter-example of this type may be seen in the Campa Arawak languages of S. E. Peru. In these strict VSO-ordered languages, most case-role marking is done by verb suffixes. But a lone, semantically vague locative post-position can be attached to some nominal indirect objects. Let us consider first examples from Machiguenga. In the case of some nominal case-roles, only the verb can bear the marker, as in e.g. (Betty Snell, i.p.c.):
a. Associative I.O.:
o-mag-imo-ig-a-i o-ishinto
3f-sleep-ASSOC-PL-HAB-REAL 3f-daughter
'she was living with her daughters'
b. Benefactive I.O.:
o-gi-ako-t-ak-e-ri i-tineri
3f-wait-BEN-EP-PERF-EP-3m 3m-son.in.law
'she waited for her son-in-law'
c. Allative/dative I.O.:
o-m-p-u-t-e-na no-shinto kamona
3f-IRR-give-ALL-EP-IRR-1 1s-daughter chonta.palm 'my daughters may give to me chonta-palm'

In other instances, the sole, semantically-vague locative post-position -ku marks the nominal indirect object, with its exact sense augmented by the semantically-richer verb, as in:
a. o-a-t-i anta kaara-se-ku

3f-go.to-EP-REAL there garbage-NC-LOC
'she went to the garbage dump'
b. o-pok-i kaara-se-ku

3f-come.to-R garbage-NC-LOC
'she came to the garbage dump'
c. no-m-mag-ak-e-tyo anta kaara-se

1-IRR-sleep.at-R-EP-EX there garbage-NC
'I'll lived at the garbage dump'
In a closely-related language, Asheninka, a more complex situation is observed. One first finds an alternation between the single general locative
post-position -ki and the locative verb-suffix -ant-. The functional value of this alternation corresponds, roughly, to dative shifting (promotion to direct-object). So that in the variant with nominal post-position, the object is interpreted as either indefinite, non-referring or less topical. When the case-role marker is a verb-suffix, on the other hand, the object is interpreted as either definite, referring or more topical. ${ }^{9}$ Thus consider (David Payne, i.p.c.): ${ }^{10}$
a. i-saiki-i mapi-ki

3m-sit-R rock-LOC
'he sat on a rock'
b. i-saik-ant-a-ro mapi

3m-sit-LOC-R-3fo rock
'he sat on the rock'
c. i-ken-i pito-tsi-ki

3m-go.by-R canoe-ABS-LOC
'he went by in a canoe'
d. i-ken-ant-a-ro pito-tsi

3m-go.by-LOC-R-3fo canoe-ABS
'he went by in the canoe'
While the Asheninka post-position $-k i$, like its equivalent $-k u$ in Machiguenga, is semantically vague and under-specified, many intransitive location or motion verbs are semantically rich, and thus supplement the vague 'locative' sense of $-k i$ - without the need for a verb suffix (such as -ant above). Thus:
a. p-iyaat-a-i pi-nampi-ki

2-go.to-REG-R 2-village-LOC 'you returned to your village'
b. i-pinkatharitz-i nampi-tsi-ki

3 m -be.chief.at-R village-ABS-LOC
'he is the chief in the village'
c. pi-nky-e amaaatakomento-tsi-ki

2-go.in-IRR river.boat-ABS-LOC
'(you) went into the river-boat'
The same is also true with semantically-rich bi-transitive verbs that take indirect objects of location or motion and require no verb-suffix case-marking, as in:

[^3](23)
a. j-ominkyag-a-i-ro i-panko-ki 3m-put.in-REG-R-3fo 3m-house-LOC 'he put it back inside his house'
b. j-an-ak-e-ri ir-otsitsi-te towari-tapeshi-ki

3m-leave.in-PFV-MOD-3mo 3m-dog-pos shrub-shade-LOC
'he left his dog in the shade of the shrub'
c. p-oit-e-na pi-yowi-te-ki

2-give.drink.from-IRR-1a 2-clay-pot-pos-LOC
'(you) give me a drink from your clay-pot'
d. j-otyaant-ak-e-ri i-tomi i-panko-ki

3 m -send.to-PFV-MOD-3mo 3m-son i-house-LOC
'he sent his son to his house'
With some bi-transitive verbs, however, an obligatory verb suffix marks the case-role of the indirect object, such as the ablative -pitha-:
a. j-aa-pithat-ak-e-na-ri

3m-take-ABL-PFV-MOD-1a-REL
'(that) he took it away from me'
b. i-kama-pithat-ak-e-ro

3m-die-ABL-PFV-MOD-3fo
'he died on her' ('departed from her')
c. i-shiya-pithat-e-ri

3m-run-ABL-IRR-3mo
'he will run away from him'
Optional indirect-object roles are all marked by verb-suffixes. Thus, for example, the locative -ant- also marks the instrumental (as well as time and purpose), as in:
a. j-otzirit-ak-e-ri

3m-rub-PFV-MOD-3mo
'he rubbed/massaged him'
b. j-otzirit-ant-aka-ri yeenka-ntsi

3m-rub-LOC-PFV-3mo oil-ABS
'he rubbed/massaged him with oil'
Another verb suffix, -imo-, marks the associative, sometime in combination with a directional verb suffix -apaa-, as in:
a. no-may-imot-e-mi pi-panko-ki

1-sleep-Assoc-IRR-2o 2-house-Loc
'I will sleep with y'all at your house'
b. i-katziy-imot-apaa-ak-e-ri

3m-stand-ASSOC-DIR-PFV-MOD-3mo
'he stood with him (having come this way)'
Another verb suffix, the 'applicative' -ako-, marks a group of more abstract case-roles, sometime in combination with directional verb suffixes, as in:
a. n-owashiret-akot-ak-a-ro

1-be.sad-APL-PFV-R-3fo
'I was sad about it'
b. j-amen-akot-apa-ak-e-ro

3m-look-APL-DIR-PFV-MOD3fo
'he looked over/toward it (the land)'
c. oiwara-akot-an-ak-a i-kant-ak-e-ri
spread-APL-DIR-PFV-R 3m-say-PFV-MOD-REL
'what he said spread around (from there)'
d. i-ma-akot-an-ak-e-ro i-yatsinka

3m-sleep-APL-DIR-PFV-MOD-3fo 3m-pain
'he fell asleep in/away from his pain'
Another verb suffix, -went-, marks the benefactive role, as well as 'because', again sometimes in combination with a directional suffix, as in:
a. i-pinkathari-wentz-i-ri nampit-a-ro-ri kiri-shaari

3m-be.chief-ben-r-3m dwell-r-3fo-rel palm-river
'he is chief for those who dwell on the palm-rive'
b. no-kimoshire-wentz-i-ri no-charine-paye

1-be-happy-ben-r-3mo 1-grandchild-PL
'I am happy because of my grandchildren'
c. i-kiss-awakaa-went-an-ak-a-ro

3m-be.angry-REC-BEN-AWAY-PFV-R-3fo
'they were angry with each other because of it'
Lastly, David Payne (i.p.c) notes that in many instances, case-marking verb suffixes have fused with the verb semantically and lost their independent caserole sense, with the combination now appearing semantically arbitrary. Thus consider:
a. applicative -ako-
et-ako- 'love' (e- 'begin')
thonk-ako- 'be poor' (thonk- 'finish')
awis-ako- 'be saved' (awis- 'pass')
kis-ako- 'defend' (kis- 'be angry')
b. benefactive -went-
anta-went- 'work fo' (ant- 'do')
aama-went 'take care of' (aama- 'beware')
nyaa-went- 'speak to' (ny- 'make noise')
aako-went- 'begin doing regularly' (ag- 'take')
pinako-went- 'pay for' (pina- 'have value')
c. associative -imo-
ook-imo- 'be pleasing to' (ook- 'abandon')
kantz-imo- 'be troubling to' (kant- 'say', 'do')
Such a situation of increased semantic arbitrariness has been noted in Germanic and Romance with prepositional prefixes on verbs (see English data further below as well as Chapter 7). Such semantic arbitrariness is indeed the tail-end stage in the diachrony of verb-attached adpositions (see English data below and in Chapter 7, as well as the discussion of Homeric Greek in Chapters 2-6).

There is a fairly straight-forward diachronic interpretation of the Campa Arawak distribution of case-marking morphemes described above, bearing in mind that Campa Arawak languages are currently rigid VSO ordered. First, both the post-nominal locus of the lone nominal post-position $-k u /-k i$ and its semantically bleached meaning are consonant with older diachronic age, tagging $-k u /-k i$ as the sole survivor of an earlier post-positional system, one that grammaticalized during a period of OV word-order.

In contrast, the post-verbal locus of the bulk of case-role markers, as well as their much richer and more specific semantics, are consonant with the current VO syntax, as well as with later grammaticalization. Taken together, the situation in Machiguenga and Asheninka is consonant with the suggestion that these languages developed nominal case-markers first, then shifted to verb-attached case-markers.

A second case that has been suggested as a potential counter-example to our typological/diachronic generalizations (16)/(17) is Kunbarlang, as Australian language (Kapitonov 2019). In this language, there are three nominal-associated prepositions, though only one of them is recognized as such by Kapitonov (2019). The first - 'true' - nominal preposition marks either sort-of-associative
or instrumental indirect objects, and can appear either pre-nominally or as a verb prefix. Thus: ${ }^{11}$
(30) a. Associative, pre-nominal:
kirdimarrk walkki waliman ka-rdulkarrwarribinj
man with axe 3s-be.tired
'the man with the axe is tired'
b. Associative, verb-suffix:
ngayi ngabbard ka-ngan-walkki-rnirdam
NC father 3s-1so-with-placed
'my father placed it with me'
c. Instrumental, pre-nominal:
na-kudji monkey ka-jarrkrdam norno walkki kundulk
nc-one monkey 3 s-lift/Impf snake with stick
'a onkey is lifting the snake with a stick'
The second nominal preposition marks dative/benefactive indirect objects. However, it can be used only with pronouns, never with nouns. Thus consider:
(31) Dative/benefactive, pre-nominal:
a. ninda Bill ka-bun-wuy bi-ngadju
dem Bill 3s-I've-pa dat-3sf/gen
'Bill gave it to him for her'
b. ngayi nga-bareng-minj bi-rnungu

NC 1 s -angry-IMPF DAT-3sm/GEN
'I am angry at him'
c. nganj-lerrk-walkki-wonj bi-rnungu balanda

1s/FUT-word-with-return/NPA DAT-3sm/GEN white.fellow
'I'll translate for him, the white-fellow'
d. kukka ngorro nga-ngunda bi-ngungudbe

3s/nc dem/nc 1s-say/pa dat-2p/Gen
'that's what I said to y'all'
e. kadda-ngunjdje bi-ngaybu...

3p-say/NPA DAT-1s/GEN
'they tell to me...'
Kunbarlang also has, at least in principle, a third nominal preposition, transparently derived from a positional noun in a genitive construction, as in:
11. With the morphological glosses somewhat simplified.
(32) Mary ka-rnay nayi djurra korro kun-bodme-rungu nawalak M. 3s-see/pA nC paper DEM nc-back-3s/GEn child 'Mary found the book behind the child' (lit. 'his back, the child')

In addition to those nominal prepositions, a number of case-role markers appear as verb prefixes. Consider first the dative/benefactive in:
a. ka-ngan-marnanj-yawanj djurra 3s-1s-ben-seek/NPA paper
's/he is looking for a book for me'
b. kabarra-marnanj-ngunda that two mammam...

3d-ben-say/PA that two mammam
'those two mammam said to him...'
c. kadda-marnanj-borrkkidanj njunjuk

3p-ben-dance/PA water
'they danced for water'
In some cases, an alternation is possible between the dative nominal preposition bi- (marking only pronouns) and the dative/benefactive verbal prefix -marnanj-. Thus compare:
(34) a. kadda-worrmeng bi-rnungu

3p-kindle/PA DAT-3s/GEN
'they made fire for him'
b. ka-buddu-marnanj-worrmeng ngob

3s-3po-ben-kindle/PA all
'he made fire for all of them'
c. kunj ka-bum bi-ngaybu ngayi
kangaroo 3 s -kill/pA DAt-1s/GEN NC
's/he killed a kangaroo for me'
d. kunj ka-ngan-marnanj-bum ngayi
kangaroo 3s-1so-ben-kill/pA NC
's/he killed a kangaroo for me'
e. ka-ngun-marnanj-djarrang

3s-2so-ben-eat/pa
's/he ate it on you' (= 'to your detriment')
As noted earlier above, the associative/instrumental nominal preposition walkki 'with' can also be used as a verbal prefix. Thus compare:
a. kadda-bu-djinj walkki rlama

3p-hit-refl/pa with spear
'they were fighting with spears'
b. ka-ngan-balkki-rnay kunbareng nayi djamun

3s-1so-ASSOC-see/pA alcohol NC policeman 'the policeman saw me with alcohol'
c. ka-bun-djarrang nayi drum walkki nayi nguk-rnungu 3s-3so-put/PA NC drum with NC intestine-3sGEN 'we put a drum (on the fire) with its guts'
d. ka-buddu-walkki-baybum nayi nawalak 3s-3po-assoc-leave/PA NC child 's/he left the child with them'

One question that one may ask is - how does a language deal with a wider range of case-roles, especially locative, motion, direction etc., when it has so few nominal and verb-attached case-marking morphemes? As it turns out, Kunbarlang supplies a cogent answer, one reminiscent of Talmy's (1970) observations: the verbs in such a language are semantically rich, incorporating many spatial notions of location, direction or motion. Thus compare:
a. ka-bun-yikalng karlurru

3s-3so-take.from/PA cigarette
's/he took a cigarette from him/her'
b. ninda nganj-ngun-wunj djurra

DEM 1s/FUT-2so-give.to paper
'I will give this book to you'
As was suggested by the Asheninka Example (29) above, the incorporation of case-marking adposition into the verb is, itself, a major mechanism used to enrich verbs with more specific case-role semantic features, just in case they fade away over time. This seesaw of semantic depletion and enrichment will remain one of the leimotifs of our investigation into the diachronic life-cycle of adpositions.

Is the pre-verb position of verb-attached case-markers in Kunbarlang consistent with a particular word-order type? The answer is that it is indeed consistent with an earlier OV order, a suggestion that will be taken up in the next section as well as in several subsequent chapters. In this sense, Kunbarlang is a syntactic mirror image of the VO-ordered Kampa Arawk languages discussed above.

Lastly, both the small size of the dative nominal preposition bi- in Kunbarlang and its restriction to pronouns suggest an older diachronic provenance. Which in turn suggests, albeit tentatively, that the nominal case-markers of Kunbarlang represent an older diachronic stage than its verb-attached case-markers.

### 1.5 Steps toward a diachrony

### 1.5.1 Overview

In the diachrony of grammar as in bio-evolution, suggesting that structure D is the diachronic product of structure A is a rather unsatisfying statement even if true. The real task, and the fun, is in showing - and justifying on general grounds - the gradual step-by-step process by which A became B, then C, then D. Our task is thus not only to identify the diachronic source and product, but also to elucidate the process. And the fact that the steps appear discrete does not obviate the graduality of the process, since each discrete A-to-B step visible post-hoc to the linguist may involve more subtle intermediate variants in the synchronic usage of speakers.

In this section I will survey the use of originally-nominal adpositions as verb affixes in three unrelated languages, English, Kinya-Rwanda (Bantu) and Rama (Chibchan). In the process, possible mechanisms will be suggested by which nominal case-marking adpositions may wind up as verbal operators, or affixes. A fuller survey of the diachronic process in English, where historical textual evidence spanning ca. 500 years is available, will be deferred to Chapter 7. Homeric Greek is a pivotal case here, since the synchronic data reveal multiple usage variants. The text-distribution of such variants, in turn, afford us another perspective on a diachronic change that must have still been ongoing during Homeric times. What is more, while English furnishes evidence of how adpositions are becoming verb suffixes in a VO language, Homeric Greek, in a mirror image similar to Rama, furnishes suggestive evidence of how adpositions became verb prefixes in an OV language.

### 1.5.2 Post-verbal prepositions in English

Since the diachronic process by which English prepositions have become post-verbal 'particles' is surveyed in considerable detail in Chapter 7, further below, the facts will be sketched out here only briefly. English bears clear evidence of two distinct cycles of prepositions becoming verbal clitics. The older cycle, inherited from both the Germanic and Romance vocabulary of English, involves prepositions that have long ago become phonologically fused to the verb and semantically opaque. So that native speakers take them as unanalyzable part of the verbal word. Syntactically, the pre-verbal position of these old prefixes harkens back to the OV syntax of both Latin and Germanic (indeed, Indo-European; Lehmann 1969, 1974), thus similar to Homeric Greek. Common examples of such verbal prefixes in Latin-derived English verbs may be seen in:
(37) Romance prepositions prefixed to English verbs: suggested concrete meaning of old verbal root

| 'close' | 'hold' | 'build' | 'call' | 'press' | 'turn' |
| :---: | :---: | :---: | :---: | :---: | :---: |
| in-clude | ob-tain | con-struct | ex-claim | ex-press | in-vert |
| ex-clude | de-tain | de-struct | de-claim | im-press | ad-verse |
| pre-clude | re-tain | in-struct | re-claim | de-press | re-verse |
| con-clude | per-tain | ob-struct | pro-claim | re-press | con-vert |
| se-clude | con-tain | re-struct(ure) | ac-claim | com-press | tra-verse |
| oc-clude | at-tain |  | pro-claim | op-press | sub-vert |
| en-close | enter-tain |  | dis-claim | sup-press | extro-vert |
| dis-close | abs-tain |  |  |  | per-vert |

(38) 'carry' 'bend' 'pull' 'breathe' 'form' 'throw' 'stand'(?)

| com-port | nd | ract | -spire | re-form | e(x)-ject | de |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ex-port | in-tend | -tract | ire | in-form | in-ject | re-cede |
| im-port | end | act | -spire | de-form | ob-ject | con-cede |
| de-port | dis-tend | tract | -spire | con-form | -ject | suc-ced |
| re-port | at-tend | ract | d)-spire |  | de-ject(ed) | de |
| sup-port |  | sub-tract | per-spire |  | pro-ject | inter |

Common examples of Germanic-derived pre-verbal prepositions in English may be seen in:
(39) Germanic prepositions English verbs
a. For(e): forget, forgive, forego, forlorn, forbid, forsake, foretell, foreclose, forecast, foredoom, forewarn, foreswear, forerunner, foresee, forestall,
b. Over: overcome, overload, overbearing, oversee, override, overlay, overpass, overtake, over-run, overwhelm
c. In: inbreed, inhale, input, income, inlay, instill, install, incur, inflict
d. Out: outgoing, outreach, outlier, outlive, output, outcast, outrank, outrun, outpour, outrage, outflow, outfit, outflank, outgrow, outlet, outlast, outlook, outplay, outreach, outset, outstanding, outwit
e. Under: understand, undergo, underlie, undergird, undermine, underbid, undercut, understate, underwrite, undertake, underline

More recently, English has been undergoing a similar cycle, placing its Germanic nominal prepositions in a post-verbal position, compatible with its current VO syntax. These post-verbal 'particles' still carry lexical stress and even allow some words or morphemes to intervene between them and the verb. What is more, many of them still carry their old semantic sense reminiscent of their pre-nominal case-marking use. This more recent cycle of pre-nominal-to-postverbal re-grammaticalization has been taking place during a period of VO syntax. The post-verbal locus of these prepositions thus presumably reflects the post-verbal position of indirect objects in a VO language. Some simple illustrative examples may be seen in:
(40) Post-verbal English prepositions:

Simple intransitive:
a. The meeting broke up early
b. Her car broke down on the freeway
c. Her skin broke out in a rash
d. It all worked out just fine
e. They worked out regularly
f. She never woke up
g. Let him just shut up

Intransitive with indirect object:
h. So finally he turns up in Las Vegas
i. They turned in for the night
j. They turned out in droves

## Transitive:

k. He worked up a sweat

1. She broke up their engagement
m . They broke him in gradually
n. He broke it down into chunks
o. She shut him up
p. They shut the plant down
q. We shut them out completely
r. He turned the water off
s. She turned in her report

Bi-transitive:
t. He turned it over to her
u. They turned her down for the job
v. We'll make it up to you later
w. They've been hiding it out from her

If, as suggested above, adpositions begin their grammatical life as nominal operators marking the case-roles of indirect objects, how did English prepositions lose their indirect object to become stranded behind the verb? While the more detailed answer to this will be deferred till Chapter 7, several common syntactic processes, all used in highly specific discourse contexts, are known to involve the zeroing-out of objects, either direct or indirect. One of those is the antipassive, where objects are zeroed out because they are predictable from either their anaphoric or generic context. ${ }^{12}$ Consider first zeroed-out direct-objects in:
(41) a. Direct/active: She drank her whiskey
b. Antipassive: She drinks like a fish [= alcohol; generic]
c. Antipassive: He pulled the seltzer out of the fridge and drank [= seltzer; anaphoric]
d. Direct/active: She understood the question
e. Antipassive: She's so smart, she always understands [= whatever; generic]
f. Antipassive: She explained the puzzle, and he understood [= the puzzle; anaphoric]
g. Direct/active: She read the memo
h. Antipassive: She often reads in bed [= books, magazines; generic]
i. Antipassive: It was a terrific novel, she kept reading [= the novel; anaphoric]

In the same vein, the zeroing-out of indirect object nominals may be due to their run-of-the-mill anaphoric context, leaving the preposition stranded post-verbally, as in:
(42) a. The hill was just ahead, all he needed to do was go up [= up the hill]
b. She saw the room was empty, so she went in [= into the room]
c. The door was open, so she went out [= out the door]
d. She came to a low fence and leaned over [= over the fence]
e. She crouched by the bed and looked under [= under the bed]
f. We were at the house when she came by [= by the house]

The anaphoric context may be more constrained and structurally governed, as in the case of indirect-object rel-clauses:
12. See Givón (2018, Chapter 7).
(43) a. the house she lives in
b. the college he graduated from
c. the school she goes to
d. the river they swam across
e. the woman he worked for
f. the guys she socializes with

Lastly, the zeroing out of indirect objects in reL-clauses may also be due to generic predictability, as in:
(44) a. We need something to cut it with [= a sharp instrument]
b. Some day we'll find out who she lives with [= a person]
c. He needed to be treated, urgently, but I don't know who he went to [ $=$ a doctor]
d. She was lost, didn't know where to cut across [= the road, the street, the field]

What I would like to suggest is that the zeroing out of the nominal indirect object in such innocuous contexts of contextual predictability, be they anaphoric or generic, must be part of the diachronic mechanism that left English prepositions stranded as 'particles' behind the verb. And since the indirect object in the VO-ordered English follows the verb, stranded prepositions in English, with their object zeroed out, are indeed expected to become post-verbal operators.

### 1.5.3 Post-verbal incorporation of prepositions in KinyaRwanda: Promotion to DO

KinyaRwanda, a Lake-Bantu VO language, has an 'applicative' system via which various indirect objects can be promoted to direct object, which in a Bantu language (as in English) is morphologically unmarked. Having lost their original nominal perch, the stranded prepositions then suffix themselves to the verb. Thus (Kimenyi 1976):
(45) Dative-benefactive (obligastory promotion):
a. $\quad{ }^{*} \mathrm{DO}=$ patient:
*Yohani y-ooher-eje ibaruwa ku-Maria John 3s-send-asp letter dat-Mary
b. $\mathrm{DO}=$ dative-benefactive:

Yohani y-ooher-er-eje Maria ibaruwa John 3s-send-ben-asp Mary letter 'John sent Mary a letter'
(46) Allative 'to':
a. $\quad \mathrm{DO}=$ patient:
umugore y-ooher-eje umubooyi ku-isoko
woman she-send-ASP cook Loc-market
'The woman sent the cook to the market'
b. $\mathrm{DO}=$ locative:
umugore y-ooher-eke-ho isoko umubooyi ${ }^{13}$
woman 3 s -send-ASP-LOC market cook
'The woman sent to the market the cook'
(47) Locative 'in':
a. $\quad \mathrm{DO}=$ patient
umugore y-ooher-eje umubooyi mu-isoko
woman she-send-asp cook Loc-market
'The woman sent the cook into the market'
b. $\mathrm{DO}=$ locative:
umugore y-ooher-eke-mo isoko umubooyi ${ }^{14}$
woman 3 s -send-ASP-LOC market cook
'The woman sent into the market the cook'
(48) Instrumental 'with':
a. $\quad \mathrm{DO}=$ patient:
umugabo ya-tem-eje igiti $\mathbf{n}(\mathbf{i})$-umupaanga
man 3s-cut-ASP tree INSTR-saw
'The man cut the tree with a saw'
b. $\mathrm{DO}=$ instrument: umugabo ya-tem-ej-eesha umupaanga igiti man 3s-cut-ASP-INSTR saw tree 'The man used the saw to cut the tree'
(49) Manner 'with':
a. $\quad \mathrm{DO}=$ patient:

Maria ya-tets-e inkoko $\mathrm{n}(\mathrm{a})$-agahiinda Mary 3s-cook-asp chicken mann-sorrow 'Mary cooked the chicken with regret'

[^4]b. $\mathrm{DO}=$ manner:

Maria 3s-tek-an-ye agahiinda inkoko
Mary she-cook-mANN-ASP sorrow chicken
'Mary with regret cooked the chicken'
(50) Associative 'with':
a. $\mathrm{DO}=$ patient:
umuhuungu ya-riimb-jye ururiimbi na-umugore
boy 3s-sing-ASP song ASSOC-woman
'The boy sang the song with the woman'
b. $\quad \mathrm{DO}=$ associative:
umuhuungu ya-riimb-an-ye umugore ururiimbi
boy 3s-sing-ASSOC-ASP woman song
'The boy sang with the woman a song'
As one may note, in only two locative cases, (46) and (47), does the actual preposition ( $k u-$, mu-, respectively) become suffixed to the verb, augmented with the vowel -o. In another, the associative (50), the verb suffix -an-is a historic reflex of the preposition na- 'with. ${ }^{15}$

In sum, the mechanism involved in the migration of KinyaRwanda prepositions from their original pre-nominal perch to their post-verbal position is the process, mostly optional, of promotion to DO, a process associated with increased topicality of the erstwhile indirect object. ${ }^{16}$

[^5]
### 1.5.4 Pre-verbal incorporation of post-positions in Rama

A situation that is typologically reminiscent of Homeric Greek may be seen in Rama, a mostly-SOV Chibchan language of Caribbean-coast Nicaragua, with morphologically unmarked subject and direct object, and indirect objects marked by post-positions. In some related Chibchan languages, indirect objects invariably follow the verb; that is, S-DO-V-IO. ${ }^{17}$ In Rama, indirect objects can either precede or follow the verb, with the fronted position reminiscent, at least superficially, of promotion to direct-object. ${ }^{18}$ In addition, the pre-verbal indirect object can shed its post-position, and then also become zeroed out. Whereby the post-position becomes a verb prefix. Consider first this process with dative indirect objects (Craig 1986; Craig and Hale 1987):
(51) a. Post-verbal indirect object:
ngang an-tangi Juan-ya
bed 3 p -gave John-dat
'they gave the bed to John'
b. Pre-verbal indirect object:
ngang Juan-ya an-tangi
bed John-dat 3p-gave
'they gave John a bed'
c. V-prefixed post-position (zero anaphoric direct):

Rama ya-an-tangi
Rama Dat-3p-gave
'they gave (it) to some Rama person'
d. V-prefixed post-position (zero anaphoric indirect object):
ngang ya-an-tangi
bed dat-3p-gave
'they gave (him/her) a bed'

[^6]And similarly with the associative (Tibbits 1987a, 1987b):
(52) a. Pre-verbal indirect object:
nah-u an-siiku
1 s-with 3 p-come
'they came with me'
b. V-prefixed post-position:
sainsaina-dut yu-i-traali
other-pl with-3s-go
'he went with the others'
And likewise with various locative indirect objects:
(53) a. Post-verbal indirect object:
kiskis naing yu-i-siike nguu-ki
tongs DEM with-3s-bring house-in
'he brings the tongs into the house'
b. Pre-verbal indirect object:
kiskis naing beg-ki sut apakuli
tongs Dem bag-in we put
'we put the tong in the bag'
c. V-prefixed post-position:
kiskis naing beg sut ki-apakuli
tongs DEM bag we in-put
'we put the tongs in a bag'
d. Post-verbal indirect object:
an-siiku ipang-su
3p-come island-to
'they come to the island'
e. Pre-verbal indirect object:
ipang-su an-siiku
island-to 3p-come
'they come to the island'
f. V-prefixed post-position (pronominal object):
su-an-siiku
to-3p-come
'they come over (to here)'
Example (53f) above hints at the possibility that converting the erstwhile nominal post-positions into a verb prefix may be an antipassive device in Rama. However, the bulk of the Rama examples of syntactic variation between
noun-suffixed and verb-prefixed adpositions implicate, rather, promotion to direct object, as in KinyaRwanda. Support for this interpretation comes, first, from the text frequency distribution of the presumably 'promoted' construction with verb-prefixed adpositions, as compared to the post-verbal object-suffixed construction. Thus Tibbitts (1987b) compared the text frequency of various case-roles in the two constructions. The results are given in Table (54) below.
(54) Frequency distribution of Rama post-positions:

| Case | OBJ-suffixed |  | V-prefixed |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% |
| dative | 21 | 48.8 | 22 | 51.2 | 43 | 100.0 |
| associative | 36 | 31.6 | 78 | 68.4 | 114 | 100.0 |
| LOC-in | 33 | 89.2 | 4 | 10.8 | 37 | 100.0 |
| Loc-to | 90 | 97.8 | 2 | 2.2 | 92 | 100.0 |

In general, typically human indirect objects - dative, benefactive, associatives tend to be more topical and thus more likely to be promoted to DO, so much so that in many languages (e.g. KinyaRwanda) such promotion is obligatorily. In contrast, non-human indirect objects (locatives, instrumental) tend to be less topical, and are seldom promoted to DO. ${ }^{19}$

Tibbits (1987b) also compared the average anaphoric distance of the two syntactic constructions; that is, the distance in number of clauses backwards from the current occurrence to the last occurance of the referent in the preceding discourse. A referent with a lower AD value is, presumably, cognitively more accessible, thus more topical. ${ }^{20}$ The results, while not fully consistent, again suggest that the morphologically unmarked pre-posed (OV) object, with its post-position prefixed to the verb, is more topical, thus likely to have been promoted to DO. ${ }^{21}$
19. See again Givón (1984). The benefactive case in Rama is marked by a large, diachronically younger post-nominal word (kama or king) that cliticizes neither to the noun nor to the verb.
20. See Givón (ed. 1983; 2018).
21. For a discussion and cross-linguistic applicability of this measure, as well as the cataphoric persistence (CP) measure, see again Givón (ed. 1983; 2018).
(55) Average anaphoric distance (AD) in \# of clauses back to the previous occurrence of the referent

| Case | OBJ-sufffixed | V-prefixed |
| :---: | :---: | :---: |
| dative | 5.1 | 5.0 |
| associative | 8.5 | 1.9 |
| instrument | 10.2 | 3.7 |
| LOC- 'in' | 12.9 | 1.0 |
| LOC- 'to' | 10.8 | 6.5 |

Lastly, Tibbits (1987b) also measured the average cataphoricic persistence of the object in the two syntactic constructions; that is, the average number of times it was mentioned again in following discourse. A referent with a higher CP value is taken to be more important/topical in the discourse. The results, given in (56) below, again suggest that the pre-posed, morphologically-unmarked object, with its erstwhile post-position prefixed to the verb, is more topical. ${ }^{22}$
(56) Cataphoric persistence of the object in the subsequent discourse

| Case | OBJ-suffixed | V-prefixed |
| :---: | :---: | :---: |
| dative | 7.8 | 11.2 |
| associative | 2.6 | 11.8 |
| instrument | 1.1 | 7.5 |
| LOC-'in' | 0.5 | 1.1 |
| LOC- 'to' | 1.3 | 3.0 |

Except for the puzzling distortion in the case of the dative in (55), Tibbitts' results suggest that prefixing of post-positions to the verb in Rama shares some of its functional characteristics with the promotion of indirect to direct objects ('dative shifting'), most likely then coupled with zeroing out of the contextually predictable object.

[^7]
### 1.6 Discussion

Our comparison of the functional distribution of adpositions in English, KinyaRwanda and Rama, while not definitive, is nonetheless suggestive. First, it suggests that the diachronic process of affixation of originally-nominal adpositions to verbs may proceed in three distinct steps:
a. Source construction: Adpositions begin their diachronic life as case-role markers attached to (or associated with) nominals.
b. Intermediate stage: In the appropriate discourse context of anaphoric or generic predictability, the nominal object is zeroed out, and the adposition become detached, stranded or 'free-floating'.
c. Target construction: The adposition then re-attaches itself to the remaining lexical word - the verb.

Our admittedly cursory survey here also suggests a clear syntactic-typological prediction:

- In aVO language, where indirect objects follow the verb (e.g. English, KinyaRwanda, Akie, Campa Arawak), stranded adpositions are more likely to become post-verbal clitics, thus eventually verb suffixes.
- In an OV language, where indirect objects precede the verb (e.g. Rama, Kunbarlang, Proto-Germanic, Prot-Romance), stranded adpositions are likely to become pre-verbal clitics, thus eventually verb prefixes.

The situation in English, where post-verbal prepositions ('particles') continue to bear strong lexical stress, further suggests that our intermediate stage (b) of stranded prepositions can last for quite a while, indeed centuries. The fact that English prepositions are typically de-stressed in their original pre-nominal position conforms to their being the diachronically-older construction.

In the next three Chapters $(2,3,4)$ I will survey in considerable detail the functional-syntactic distribution of prepositions in Homeric Greek, where all three diachronic stages (a), (b) (c) are attested as synchronic variants. In the following two Chapters $(5,6)$ I will survey the functional-syntactic distribution of the so-called 'Augment' verb prefix $e$ - in Homeric Greek, arriving at a startling, non-traditional conclusion - that the 'Augment' $e$ - represents an older generation of pre-verbally-attached prepositions. Finally, in Chapter 7, I will come back to English, survey in more detail the relatively recent - Chaucer to the present - diachronic process by which English prepositions became post-verbal 'particles'.

## Abbreviations of grammatical terms

| ACC | accusative | O | object |
| :--- | :--- | :--- | :--- |
| ALL | allative | P | preposition |
| ASSOC | associative | PA | past |
| ASP | aspect | PL | plural |
| C | conjunction | PP | prepositional/post-positional |
| CAUS | causative |  | phrase |
| DAT | dative | REAL | realis (modality) |
| DEM | demonstrative | REF | referring or reflexive |
| DIR | directional | REM | remote/perfective (tense-aspect) |
| DO | direct object | S | remote past |
| EM | emphasis | sub | subordinator |
| EX | exclusive | V | verb |
| FUT | future | WH | wh-question |
| GEN | genitive | 1 s | first person singular |
| HAB | habitual | $1 s o$ | first person singular object |
| IMM | immediate (tense-aspect) | $1 p$ | first person plural |
| IMP | imperative | $2 s$ | second person singular |
| INF | infinitive | $2 s o$ | second person singular object |
| IRR | irrealis | $2 p$ | second person plural |
| LOC | locative | $3 s$ | third person singular |
| MANN | manner | $3 s o$ | third person singular object |
| MOD | modal | $3 s f$ | third person singular masculine |
| NC | noun classifier | $3 s m$ | third person singular feminine |
| NEG | negative | s | singular |
| NF | non-finite | sf | singular feminine |
| NOM | nominative | sm | singular masculine |
| NP | noun phrase | plural |  |
| NPA | near past |  |  |

## Diachronic baseline:

## Pre-nominal prepositions in Homeric Greek

### 2.1 Introduction

In this chapter I will survey the distribution of Homeric Greek prepositions in what I take to be their natural functional-syntactic slot - as case-markers attached to nominals. As suggested in the preceding chapter, this functionalsyntactic slot is also the diachronic baseline from which Homeric Greek prepositions spread to two other syntactic environments; in order:

- unattached prepositions (so-called 'free standing adverbs'), with their nominal object zeroed out;
- verb-attached prepositions (so-called 'preverbs') following their re-grammaticalization.

In his A Grammar of the Homeric Dialect, Monro (1891) defines prepositions as follows:
"...Prepositions are words expressing some local relations, and capable
of being used as prefixes in forming compound verbs..." (1891, p. 163)
Whether intending or not, such a definition may be taken to mean that the preverbal locus of prepositions in Homeric Greek is their primary syntactic position, and their pre-nominal one secondary.

Prof. Monro further notes that the Classical Greek grammarians considered the appearance of prepositions as independent words - here presumably lumping together their pre-nominal and unattached positions - as a quaint Homeric peculiarity, the product of Tmesis or 'severance' from the verb (root -tm- or -tam- 'cut'):

> "...This is the sense in which the word Tmesis was employed by the Greek grammarians, who looked at the peculiarities of Homer as deviations from later established usage, and accordingly regarded the independent place of the Preposition as a result of 'severance' of the Compound Verb. We may retain the term, provided we understand it
to mean no more than the fact that two elements which formed a single word in later Greek were still separable in the language of Homer..." (ibid., 164)

Prof. Monro thus takes for granted that the writing conventions of both Homeric and Classical Greek, where pre-nominal prepositions are written as independent words but pre-verbal prepositions are written as part of the verb, represented a difference in real usage. From a diachronic perspective, the very notion of 'severance' is of course utterly upside down - grammatical morphemes begin their diachronic life as separate words, and only later cliticize to other lexical stems, rather than the other way around.

In a more recent grammar of Classical Greek (van Emde Boas et al. 2019), prepositions are defined first syntactically:
"...Greek prepositions may be accompanied by (pro)nominal constituents in the genitive, dative or accusative. Together with this constituent they form a prepositional phrase...These can be used to indicate spatial, temporal or more abstract relationships..." (p. 383; boldfacing added)

What follows is an exhaustive discussion of the highly unpredictable, excep-tion-riddled usage of suffixal case of the nominal indirect object 'governed' by the preposition, as well as of the equally unpredictable effect that the choice of such nominal case may have on the exact meaning of the preposition. Both are enduring features of all Classical Greek grammars, whether written by Classicist or general linguists. ${ }^{1}$ They are also classic examples of how earlier morpho-syntactic regularity goes gradually wild and then wilder, as successive diachronic changes pile one on top of the other - as the old system of suffixal case-marking was replaced, gradually and piecemeal, by the emerging new generation of pre-nominal prepositions.

Pre-verbal prepositions, so-called 'preverbs', are discussed rather briefly in van Emde Boas et al. (2019) under the heading of "Compound verbs formed by prefixation":
"...A very large number of compound verbs are formed by prefixation, i.e. by prefixing one or more prepositions (pre-verbs) to a simplex verb or a de-nominative verb..." (ibid., p. 276)

[^8]The affixation of prepositions to verbs, even when such pre-verbal prepositions continue to maintain their case-marking function vis-a-vis a nominal indirect object in the clause, does not seem to the Classicists as a peculiar fact in need of explanation, diachronic or otherwise.

Unattached prepositions, the so-called 'free standing adverbs' associated with neither nominal objects nor verbs, are described by van Emde Boas et al. (2019) in two succinct lines:
"...In compound verbs a post-positive particle (such as te, de, men, wn etc.) may separate the prefix from the verb...this is called tmesis..." (p. 304)

The authors thus take it for granted that the unattached preposition was earlier part of the verb and is still syntactically associated with it. The fact that in Homeric Greek such 'severed' prepositions may be separated from the verb not only by a 'post-positive particle' (or two) but also by one or more lexical words is somehow left unmentioned. As is the possibility that these 'severed' prepositions are a diachronically older construction than pre-verbal prepositions.

In A.Willi's Origins of the Greek Verb (2018), perhaps the most admirable book in the recent Classicist canon, the term 'preposition' is never used and is not found in the index. It is subsumed, rather, under the discussion of compound verbs and the 'Augment' (Chapter 7, Section 7.4., "Augmentation in compound verbs"), where prepositions ('preverbs') are discussed only in their pre-verbal capacity. No titled section is dedicated to either, nor to the possible relation - be it diachronic or functional - between pre-verbal and pre-nominal prepositions, or unattached ones ('free standing adverbs'). Tmesis, while listed in the index, is invisible in the text. However, Willi (2018) makes the following tantalizing observation about the potential interaction between the 'Augment' and 'preverbs':
> "...Another formal tendency of Homeric augmentation has been studied even earlier: (ii) verb forms with preverb [= preposition] are much more often augmented than forms without preverb..." (ibid., p. 361; bracketed material added) ${ }^{2}$
2. This observation is credited to Dottin (1894), and is listed among the multitude of possible hypotheses - functional, structural, historical-comparative about what motivated the use of the pre-verbal 'Augment' vowel in Homeric Greek (and elsewhere in Indo-European). See further discussion in Chapter 5, below.

This interiguing coincidence, which most Classicist grammarians have chosen to ignore, will be re-examined in Chapters 5 and 6 below, when the functional distribution of the so-called 'Augment' vowel $e$ - and its diachrony will be discussed.

This chapter together with the next two aim to investigate the diachronic process via which the initially pre-nominal prepositions of Homeric Greek wound up also appearing pre-verbally. The method I propose to pursue diverges radically from the Classicist obsession with Comparative Reconstruction of Indo-European proto forms, that is, the Comparative Method (CM). I will consider three types of synchronic usage data that are readily available in the Homeric text:

- synchronic variation of attested forms
- synchronic variation in the communicative use of forms
- quantitative text-distribution of both the variant synchronic forms and their use.
From such usage data, the step-by-step process of diachronic change, rather than remote proto-forms, is the goal of the reconstruction.

The method of Internal Reconstruction (IR) pursued here, and the theoretical approach that underlies it, are hardly novel, having been described and practiced by illustrious forebears such as F. Bopp, H. Paul, A. Meillet and O. Jespersen, inter alia. ${ }^{3}$ One of its most salient features is that, unlike the Comparative Method, it relies heavily on language universals and on what is known about typological diversity, with data ranging widely outside the narrow confines of a single family. Within this approach, one can identify and then test hypotheses about the complex diachronic process via which Homeric prepositions became pre-verbal clitics, a process that must have been still ongoing during Homeric time.

[^9]
### 2.2 Phonological and grammatical transciption: Caveats and apologia

The transcription system I have elected to use here needs to be explained and justified. In order:
a. Letters of the alphabet: My phonetic transcription of the Greek alphabet is relatively transparent, and in the main is akin to the one used by Luraghi (2003) and Zanchi (2019), albeit with a number of caveats that may not gain the approval of die-hard Classicists. I have used /ë/ for all text occurrences of $/ \eta /($ eta $)$, glossing over the rather obvious fact that it co-varies, perhaps originally as an allophone, with both / $\alpha /($ alpha) and /e/ (epsilon). In the same vein, I used /w/ for all occurrences of omega, disregarding the fact that in almost all instances it co-varies, perhaps originally as an allophone, with /o/ (omicron).
b. Vowel elision: The rule of vowel elision in the Homeric text is fairly transparent but not $100 \%$ consistent in its application. Essentially, the final vowel of a word is elided before a vowel-commencing word. To the extent possible, my transcription marks the elided vowels in parentheses (e.g. (-a), (-e), (-i) etc.). In most cases, the identity of the elided vowel is fairly obvious. In the relatively few cases where it was not, I apologize if my guesses missed the mark.
c. Accents and other diacritics: I have chosen to dispense with marking most of the diacritics, and in defense of this choice will defer to a modern expert:
"...the invention of the Greek accentuation system dates back to the Hellenic period.....(3rd to 2nd Centuries BC), which means at least about five centuries after the Homeric period (8th Century BC)... Hellenistic philologists are likely to have projected their accentuation rules back onto the Greek of the Homeric period....the precise [phonetic] significance of acute, grave and circumflex diacritics remains in question..." (Zanchi 2019, p. 175)
In the case of the word-initial diacritic / $\mathcal{Y} /$ that marks either a word-initial /h/ or some reconstructed ghost 'laryngeal' - a great obsession with 19th Century comparativists - I have elected to mark it as /h/ whenever feasible, noting all along that its use in Homeric writing is often inconsistent. The very existence of a real consonant there is challenged by the fact that it does not block the application of the vowel elision rule (see (b) above). While the Classicist grammarians spend an inordinate amount of descriptive ink on these diacritics and
their presumed significance for the Homeric meter (e.g. Monro 1891, Smyth 1920; van Emden Boas et al. 2019, Willi 2018, inter alia), these diachritics are largely irrelevant to the topic under discussion here.
d. Hyphenation and word divisions: My hyphenation practices are minimalist, splitting words internally only when morpheme identification and boundaries are reasonably clear, leastwise to me. The hyphenation between the first three pre-verbal morphemes - prepositions ('pre-verbs'), the 'Augment' vowel $e$-, and the reduplicated first syllable - are reasonably transparent. The problems of identifying morphemes and their boundaries, however, are much more acute with post-verbal morphology, where the decaying old tense-aspect-modality system has engenders an unholy mess, one that Classicists grammarians insist on interpreting a still-coherent, viable, rule-governed system. Since the tense-aspect system is largely irrelevant to the topic under discussion here, I have elected to largely ignore it here with an exception made for the finite person-cum-number suffixes and the fairly regular non-finite (nominal-derived) suffixes. I have also recognized with hyphenation two more-recently-grammaticalized imperfective suffixes, both transparently derived from 'be'-like verbs: -ont/-ant/-ent and -me(i)n.
e. Word status: In Homeric Greek, many items that are probably unaccented clitics are still written as independent words, a practice reflecting the wellknown conservatism of writing systems. In this connection, one may note Zanchi's (2019) observation concerning the 'syntactic freedom' of Homeric writing:
> "...Such syntactic freedom results in a great deal of uncertainty regarding both the morphological status (clitic vs. independent words) and the parts of speech [designation] of preverbs (free-standing adverbs), [nominal] adpositions, or preverbs proper..." (2019, pp. 174-175; bracketed material added)

For the purpose of this study, I have elected to hyphenate both the pre-verbal prepositions ('preverbs') and the nominal adpositions, be they prepositions or post-positions, in spite of the fact that pre-nominal prepositions are written as separate words in the Homeric text.
f. Nominal case endings: In the morphological glosses (transcription midline) of the Homeric text, I have elected to mark nominal case-ending only sparsely. As all Classical grammarians have noted, the 'government'
of nominal case by prepositions is an integral part of the formal grammar, as well as a contributor to the semantic subtleties of Homeric prepositions. However, both the highly decayed suffixal case system of Homeric Greek and its complex interaction with the prepositions represent, much like the tense-aspect system, the tail end of a grammaticalization cycle. At this terminal stage, where decayed old systems are being replaced by vigorous new ones, irregularity and unpredictability abound at both the phonological and semantic level. ${ }^{4}$ For all these and other infractions, I offer my sincere apologies. Mea maxima culpa.

### 2.3 The Homeric text

The Homeric text I used in this study is the Loeb Classical Library bilingual edition of the Iliad, translated by A. T. Murray (1924). I chose this text primarily for the well-known fidelity of the Greek texts in the Loeb editions, as well as for the facing-page English translation. Alas, Murray's English rendition of Homer turns out to be one of the worst translation jobs I have ever encountered. His over-burdened 'elevated' vocabulary and choice of archaic grammar and style do justice neither to the original Homeric intent nor to Twentieth Century English. For my money, Murray's English version of Homer is a true monster of faux Classicism, and a disgrace to the publisher. It was thus a considerable struggle to try and decipher the oft-down-to-earth meaning of the Homeric text, not only the lexicon and grammar but also the coherence structure of the text. For the purpose of this chapter, all the instances of pre-nominal prepositions (and the few post-positions) in Books I, II of the Iliad were identified, and their distribution studied (see Appendix 1).

[^10]
### 2.4 Pre-nominal prepositions in the Homeric text

### 2.4.1 Preamble

The 18 prepositions found in the Homeric text investigated here (Iliad, Books I, II) were (with their total occurrences in the pre-nominal position in our text given in parentheses): ana- (7), kata- (33), en(i)-(52), ex-/-ek- (29), huper- (4), hиро- (20), eis-/es-/ei- (24), apo- (17), epi- (50), peri- (12), para(25), pro(s)-/proti- (17), sun- (18), meta- (13), ama- (8), amfi- (12), dia- (6), anti(os)- (1), for a total of 319 instances. The use of each preposition in its pre-nominal position is illustrated below with a number of fairly typical examples. Since some of the prepositions cover a considerable semantic range, their more concrete senses are assumed, on general grounds, to have been the older (Hopper and Traugott 1982; Heine and Kuteva 2007; inter alia). A more extensive discussion of the semantics of Homeric prepositions may be found in Luraghi (2003), Imbert (2008) and Zanchi (2019). ${ }^{5}$
5. The considerable semantic range covered by most Homeric prepositions is attributed in the Classicist grammatical literature, at least in part, to the their interaction with the suffixal case-marking of the nominal object 'governed' by the prepositions. This is a fascinating topic that begs for a diachronic interpretation and, eventually, theory-guided internal reconstruction. As noted in Chapter 1, case-marking adpositions arise from two universal diachronic sources, serial verbs and positional nouns. Thus, if an adposition begins its diachronic life as the serial verb 'take', a transitive verb that typically becomes an accusative or instrumental case-marker, its nominal object in a case-marking language will display the accusative case. If it begins its diachronic life as the serial verb 'give', which typically becomes a dative/benefactive case-marker, then its nominal object is likely to display the dative/benefactive case. While if it begins its diachronic life as the serial verb 'go', 'come', 'enter' or 'exit', its nominal object is most likely to display an allative, ablative, ingressive or egressive case, respectively. If, however, the preposition began its diachronic life as a positional noun in a genitive construction, as in e.g. 'on top of the mountain', 'at the foot of the cliff', 'in front of the house' etc., one would expect its object, the erstwhile genitive modifier, to be marked with the genitive case. Such general considerations can serve as guidelines - necessary but hardly sufficient - for universals-guided internal reconstruction.

### 2.4.2 Examples of the use of individual pre-nominal prepositions

## a. ana-'up','upward'

The use of ana- as a stative locative (non-motion, non-directional) casemarker may be seen in:
(1) nouson ana-straton wrs-e kakën
plague up-camp raise-3s evil/Acc
'he raised an evil plague up/about the camp'
(2) ta de ep(i)-wkhe-to këla theoio pantë ana-straton eurun 3p de on-go-NF shafts god/GEN all on-camp wide Akhaiwn
Achaeans/GEN
'and the god's shafts went all over /up the wide Achaeans' camp'
(3) okhthës-an de ana-dwma Dios theoi Ouraniwnes
troubled-3s de up-hall Zeus gods Heavenly 'and the heavenly gods up at Zeus' palace were troubled'

However, a common pre-verbal use of ana-may suggest the directional sense of 'upward', as in:
(4) toisi de an(a)-ista-men-os met(a)-e-f-ë podas wkus Akhilleus 3p de up-stand-be-NF with-to-speak-3s feet swift Achilles 'then, standing up, swift-footed Achilles spoke to them'
b. kata-‘down', 'downward'

The more concrete directional or motion sense of kata- may be seen in:
(5) b-ë de kata-Oulumpoio khwo-men-on kër
go-3s de down-Olympus angry-be-nf heart 'and he went down to Olympus angry at heart'

But many more abstract extended senses are also attested, as in:
(6) hëos ho t(a)-auta hwrmain-e kata-frena kai kata-thumon while 3 s 3 s -DEM $/ \mathrm{p}$ ponder-3s down-mind and down-soul 'while he thus pondered these in (his) mind and in (his) soul'
(7) kai makho-mën kata-em(e) auton ego and fight-1s/be down-1s DEM/s 1 s 'and in fighting I (took part) as my own man'
CNO.1.1.

Again, a common pre-verbal use suggests a more concrete directional sense, here with kata-followed by the 'Augment' $e$-: ${ }^{6}$
(8) kai hra paroi-th(e) autoio kath(a)-e-ze-to dakru khe-ont-os and hra front-loc dem/s down-in-sit-nf tears shed-be-nf 'and (she) sat down before him as he was shedding tears'

## c. en(i)- 'in', 'inside', extended to 'at'

Typical concrete stative uses of en(i)- may be seen in:
(9) stemmata ekh-wn en-khersin hekë-bolon Apollwnos
fillets have-nf in-hands far-striking Apollo/gen 'holding in (his) hand the fillets of far-striking Apollo'
(10) prin min kai gëras ep(i)-e-is-in hëmeterw eni-oikw, before MIN and old.age on-to-come-NF 1 p in-house en-Argei in-Argos
'before old age comes up to her in our house, in Argos'
A more abstract extended sense, most likely due to the abstract nominalized object ('honor'), may be seen in:
(11) epei ou po-th(e) homoiës em-more timës skëptoukhos basileus then NEG WH-TE equal in-portion honor sceptered king 'for the sceptered king (is) never equal in (his) apportioned honor'

The more dynamic motion sense of 'into' in (12) below is probably due to the directional sense of the verb itself ( $-a g$ - 'lead to', 'bring to'), further augmented here by the locative post-position -de 'to': ${ }^{7}$
(12) tën de di(a)-e-pratho-men te kai ëgo-men en-tha-de panta (I.367) 3 sf de through-ex-sacklp TE and bring-1p in-3s-to all 'and we sacked it completely and brought all (the spoils) into here'
6. As I will suggest in Chapter 6 , further below, this may be a case where the older sense of the 'augment' $e$ - as en- 'in/at', thus 'sit at', is supplemented by the directional kata- 'downward', yielding the combined sense of 'down at'.
7. Two directional post-positions, -the( $n$ ) 'from' and -de to', are used throughout the Homeric text, following either nouns or pronouns. Their alternation with the prepositions apo- 'from' and eis- 'to', respectively, is unpredictable.

## d. ex-/ek- 'out(of)','from', extended to agentive 'by'

Typical examples of the concrete sense of ex-/ek- as 'out', 'from' or 'away from' may be seen in:
(13) e-lke-to $\mathrm{d}(\mathrm{e})$ ek-koleoio mega xifos ex-draw-NF DE ex-sheath/GEN big sword 'drawing his big sword out of its sheath'
(14) kai men toisin ego meth(a)-omile-on ek-Pulos e-lth-wn and men $3 p$ 1s with-gather-NF ex-Pylos to-come-nF 'with those (men) I met together when I came (here) from Pylos'

Augmentation of the dynamic motion sense of ex- by a locative post-position, as in (12) above, may be seen here with -the ( $n$ ) 'from', as in:
(15) touto gar ex-eme-then ge met(a)-athanatoisi megiston tekmwr DEM/s FOR ex-1s-from EM with-immortals best end 'for this is, from me among the immortals, the best sign'

A more abstract sense extension to the agentive 'by' may be seen in:
(16) Trwessi de këde ef(i)-ë-pt-ai ek-Dios

Trojans de woes over-to-hang-Irr ex-Zeus 'and woes should hang over the Trojans by/from/because of Zeus'

## e. eis-, es-, ei-'to'

The sense of concrete motion imparted by this preposition may be seen first with intransitive motion verbs, where it sometimes mirrors the use of the post-position -de 'to':
(17) hë de Oulumpon-de be-bëk-ei, domat(a) es-aigo.khoio Dios (I. 221) 3sf de Olympus-to cv-go-3s home to-aegis.carry Zeus 'and she took off to Olympus, to the home of aegis-bearing Zeus'
(18) autar Odusseus es-Khrusën ikan-en
c Odysseus to-Chryse come-3s 'then Odysseus came to Chryse'

With the same dynamic motion sense, this preposition is also used with bi-transitive transfer verbs, as in:
(19) ag-ein th(e) hierën hecatombën es-Khrusën
lead-Inf TE sacred hecatombs to-Chryse 'and leading/taking a sacred hecatomb to Chryse'

Given a proper context, both the object ('sea' in (20) below) and the verb ('launch') may impart the added sense of 'in', thus: ${ }^{8}$
(20) nun $\mathrm{d}(\mathrm{e})$ ag-e nëa melainan e-russo-men-en eis-hala now DE come-IMP, ship black in-launch-1p/IRR-?? to-sea dian
bright
'but come now, let us launch the black ship into the bright sea'
And a more abstract sense of direction or purpose may be imparted in the appropriate context, perhaps by a more abstract nominalized object (here 'battle' or 'fighting'), as in:
(21) ou-te po-t(e) es-polemon ama-law thwrëkhthën-ai

NEG-TE wh-TE to-battle with-host arm-IRR
'never arm yourself in any way for/to battle with the hosts'

## f. apo-'from','away from'

The more concrete and no doubt older ablative motion sense of apo- may be seen in:
(22) hë men epei-ta eis-ala al-to batheian ap(o)-aiglë-ent-os

3sf men then-3s to-sea leap-Nf deep from-gleam-be-nf
Olumpou
Olympus
'then she leaped into the deep sea from gleaming Olympus'
This concrete sense of motion is just as apparent with bi-transitive transfer verbs, as in:
(23) hrips-e podos te-tag-on apo-bëlou se-spesioio catch-3s foot CV-throw-NF from-threshold cv-rot(?)/GEN 'he caught (my) foot, pitching (me) off/from the threshold of heaven'

And similarly in (24) below, where apo-marks both the noun and the verb. Such double marking may represent a transitional stage in the transfer of prepositions from the nominal indirect object to the verb:

[^11](24) gluku nektar apo-krëtëros af(o)-uss-on
sweet nectar from-bowl from-draw-NF
'drawing sweet nectar from/out of the bowl'
Lastly, a slightly more abstract sense of apo- may be seen in:
(25) alla apo-thumou mallon emoi est-ai,
but from-heart more 1 s be-IRR
'but (it) will be further from my heart',

## g. epi-‘on','upon', 'over'

The presumably older more concrete sense of epi- is probably the static 'on'/'upon', as in:
(26) e-klanx-an de ara oistoi ep(i)-wmwn khwo-men-oio
ex-rattle-3p DE ARA arrows on-shoulder angry-be-nf/GEN 'and the arrows rattled out on (his) shoulder in his anger'
(27) ei po-te toi khari-ent-o epi-neon e-reps-a
if WH-TE 2 s please-be-NF on-shrine to-roof-nf
'if ever, pleasing you, I have put a roof over/on a shrine'
(28) kartistoi dë keinoi epi-khthoniwn traf-en andrwn
strongest DE REF on-earth/GEN reared-3p men
'they were the mightiest of (all) men reared upon the earth'
But more abstract senses of epi- abound, perhaps presaging a similar polysemy in its pre-verbal use, as in:
(29) krateron de epi-muthon e-tell-e
strong DE on-words to-order-3s
'and he commanded (him) with stern words'
(30) ai ken pws e-thelë-sin epi-Trwesin arëx-ai
if Ken wh to-want-nf/PL on-Trojans help-IRR
'and wish that he might somehow (give) help (to) the Trojans'
and wisit trat ne ing somenow (give) nep (to) tre iojall

An extension toward the more directional sense 'to', perhaps presaging the common allative use in the Classical dialect, may be seen in:

[^12]
## h. peri-‘over','above','about','around'

The more concrete sense of peri- may be seen in:
(32) alla ho-de anër e-thel-ei peri-pantwn em-men-ai allwn but 3 s -de man to-want-3s/hab over-all in-be-IRR others 'but this man wants to be above/over all others'
(33) knisë de ouranon ik-en helisso-men-ë peri-kapnw
fat DE heaven come-3s swirl-be-NF over-smoke
'and (the smell of) the fat went up to heaven, swirling over the smoke'
A more extended locative sense of 'around' or 'about' may be seen:
(34) toi de wka thew hierën hekatombën hexeiës e-stës-an
$3 p$ De fast gods holy hecatombs ordered to-stand-3p
eu-dmëton peri-bwmon
ver-built around-altar
'and they quickly set the gods' holy hecatombs in order around the well-built altar'

And more abstract extensions may also be seen in:
(35) aipsa toi haima kelainon e-hrwes-ei peri-douri
fast 2 s blood dark ex-flow-3s/IRR over-spear 'your dark blood will flow out quickly about (my) spear'
(36) nun de ama $t(e)$ wku-moros kai oizuros peri-panton now de with TE fast-death and sorrow over-all e-ple-o
to-order-2s/IRR
'but now you are doomed to quick death and sorrow above all'
(37) ou men formiggos peri-kalleos, hën ekh(-e) Apollwn
neg men lyre over-beautiful 3sf hold-3s Apollo 'nor (did they lack) the beautiful lyre, which Apollo held'

Lastly, one may find peri- combined with another preposition to yield a temporal sense, a doubling up that is much more common in the pre-verbal slot (see Chapter 3). That is:
(38) hemeis $d(e)$ amphi-peri-krënën hierous kata-bwmous e-rdo-men $1 p$ DE about-around-spring holy down-altars to-offer-1p 'round about spring we offered (sacrifice) on the sacred altars'(II.305)

## i. para- 'by','next to','near'

Most of the examples of para- in our Homeric text involve the no-doubt older, more concrete locative sense of 'by', 'near' or 'next to', as in:
(39) më se, geron, koilësin ego para-nëusi ki-khei-w
neg 2 s old.man hollow 1 s by-ships cv-find-1s 'let me not, old man, find you by the hollow ships'
(40) tw de a-e-k-ont-e bat-ën para-thin(a) halos a-trugetoio 3d DE NEG-to-??-be-NF go-3p by-shores sea NEG-rest/GEN 'and the two went reluctantly by the shore of the restless sea'

A possible shift to the still-concrete sense of 'with', perhaps prompted here by the verb, may be seen in:
(41) prin ti-(e)na par(a)-Trwwn alokhw kata-koimesen-ai before wh-one by-Trojans/GEN wives down-lie.to.sleep-IRR 'before he had laid down with some of the Trojan wives'

And a less common shift to a more abstract agentive sense of 'by' or 'from' may be seen in:
(42) par(a)-Dios aigio-khoio sun-angelië elegeinë
(II.787) by-Zeus aegis-bear with-message reproaching '(sent) by Zeus the aegis-bearer with a reproachful message'
j. pro(s)- 'in front of,','before','toward,' 'to', extended to'through/by/with'

The no-doubt older and more concrete locative sense of pros- may be seen in:
(43) tw de autw marturoi est-wn pros te thewn makarwn

3d De DEM/s witnesses be-NF before TE gods blessed 'let those two be witnesses to this before the blessed gods'

And likewise in the three consecutive occurrences in:
(44) oi te themistas pros-Dios airua-tai, pros te thnëtwn 3 p TE customs before-Zeus guard-IRR before TE mortal anthrwpwn,
men
'they who may guard(?) the customs before Zeus, and before mortal men, kai pros-tou basilëos apëneos, and before-3s king ruthless and before the ruthless king'

An extension to the dynamic allative sense 'to' can be seen in (45) below, in this case perhaps induced by the 'augmented' motion verb 'go', ${ }^{9}$ where prosalternates with the old allative case-ending on Zeus:

$$
\begin{array}{ll}
\text { (45) } & \text { Dii terpi-keraunw e-i-mi, autë pros-Olumpon agannifon } \\
\text { Zeus/all throw-bolts to-go-1s DEM/s to-Olympus snowy } \\
\text { 'I will go to Zeus the bolt-thrower, to (that) snowy Olympus' (I.419/20) }
\end{array}
$$

A more abstract extension, in the context of a manner adverb, may be seen in:

> (46) ë men moi pro-phrwn epesin kai khersin arëz-ein c men me to-heart/ACC words and hands defend-INF 'to defend me with stout-hearted words and hands'

## k. dia-'through'

The more concrete and no-doubt older motion sense of dia-, not very frequent in its pre-nominal position, may be seen in:
(47) hos id-on Hëfaistos dia-dwmata poi-pnu-ont-a as see-nf Hephaestos through-hall cv-breathe-be-nf 'as they saw Hephaestos huffing through the palace'
(48) apo-khalkou thespesioio aiglë pam-fanows-a dia-aitheros ouranon from-bronze dazzling glare all-seen-NF through-sky heaven ik-e
(II.457/8) come-3s
'and the dazzling all-visible glare of their bronze came through the sky unto the heavens'

A more abstract temporal sense may be seen in:
(49) theios moi en-(h)upnion ë-lth-en Oneiros ambrosiën dia-nukta; god 1 s in-sleep to-come Dream ambrosial through-night 'the god Dream came to me in my sleep through the ambrosial night'

Further abstraction in the context of a manner adverb may be seen in:

[^13](50) Trwesi te kai Danaoisi dia-krateras husminias

Trojans TE and Danaans through-strong fights
'(and he aimed to bring woes) upon the Trojans and Danaans through stubborn fights'

And further abstraction yet may be seen in:
(51) oi Hrodon amf(i)-e-nem-ont-o dia-trikha kosmes-ent-es 3p Rhodes about-in-live-be-NF through-three assemble-be-NF/PL 'and those who dwelled about Rhodes were divided into three'(II.655)

## l. meta-‘with','among,',about'

The presumably older, more concrete sense of meta- was probably the locative 'among', thus subsuming a plural object, as in:
(52) kai ta men eu dass-ant-o meta-sfisin uies Akhaiwn
and 3 s men ver give-be-NF among-ref/p sons Achaeans/Gen 'and the sons of the Achaeans distributed it fairly among themselves'
(53) hosson egw meta-pasin a-timotatë theos e-imi
$3 \mathrm{~s} /$ like 1 s among-all NEG-honored.most god be-1s 'how among all I am the least honored god'

This concrete sense, initially with a plural object, extends easily to the associative 'with', as in:
(54) hë de Oulumpon-de be-bëk-ei... meta-daimonas allous; (I. 221/2) 3sf de Olympus-to cv-go-3s with-gods others 'and she took off to Olympus... (to join) with the other gods'
(55) Zeus gar ex-Wkeanon met(a)-amumonas Aithiopëas khthizos Zeus for ex-Ocean with-blameless Ethiopians yesterday e-b-ë
ex-go-3s
'for Zeus went away yesterday from (the) Ocean with the blameless Ethiopians'

Another extension, still concrete and with the implicit plural object, is just as natural:
(56) kai to-te epeita an(a)-ag-ont-o meta-straton euron Akhaiwn and 3 s -Te then up-lead-be-NF with-camp wide Achaeans/Gen 'they set sail ('led up') about the wide camp of the Achaeans' (I.478)

And extension to a more abstract sense may be see in the context of temporal adverb, as in:
(57) alla te kai met(a)-opis-then ekh-ei koton but TE and with-later-from have-3s/HAB resentment 'yet later on he bears malice'

## m. sun-‘with’ (associative)

One finds the use of sun- 'with' first with plural human indirect objects, thus as an associative marker, as in:
(58) ou-te kholon ien-ai sun-aristëssin Akhaiwn, neg-TE anger go-IRR with-best/pl Acheans/Gen 'nor (would you) go on ambush with the best of the Achaeans'

With inanimate objects, the sense may veer toward the instrumental, as in:
(59) oika-de i-men sun-nëusi korwnisin, home-to go- $1 \mathrm{p} /$ IRr with boats beaked '(so that) we go home with (our) beaked ships'

And the two senses, associative and instrumental, are not kept apart in the somewhat peculiar conjunction reduction in:
(60) oika-de i-wn sun-nëusi te sës kai sois hetaroisi
home-to go-NF with-ship/pl Te 2 s and 2 s associates
'go home with your ships and your associates'
The plurality of the object seems to extend, on occasion, to the sense of 'among' or 'together', as in:
(61) soi koilës para-nëusi bareias keiras ep(i)-ois-ei sum-pantwn 2s hollow by-ships heavy hands on-lay-3s/IRR with-all Danawn
Danaans
'(no one) by the hollow ships will lay heavy hands on you among all the Danaans'
(62) ë po-te Akhilleos po-thë ixe-tai uias Akhaion sum-pantas C wh-Te Achilles wh-Te long.for-IRr sons Achaeans with-all '(when) some day the sons of the Achaeans all together will long for Achilles'
n. ama-'with'

The most consistent use of ama- as an associative marker may be seen in:
(63) hë de a-e-kous-a ama-toisi gunë ki-en

3sf DE NEG-to-want(?)-NF with-3p woman come-3s
'and she, the woman, reluctant, came with them'
(64) autwn ë-de hippou, oi am(a)-Atreidësin ep(i)-ont-o DEm/p C-de horses/gen 3p with-Atreidae on/follow-be-nf 'they and (the) horses, who followed with the sons of Atreus' (II.762)

An extended usage almost akin to the conjunction 'and' may be seen in:
(65) Zeus de e-on pros-dwma, theon de ama-pantes an(a)-e-st-an Zeus de go-nf to-house gods de with-all up-in-stand-3p 'and Zeus went to (his) house, with all the Gods standing up together'

And an extension toward a directional or even manner sense may be seen in:
(66) ou-de ti hoi-de noës-ai ama-prossw kai opissw neg-de wh 3 s -de think-IRR with-before and behind 'and would not think either forward or backward'

## o. amfi(s)-'about','around','near', extended to 'with'

The more concrete and no doubt older locative sense of amfi(s)- may be seen in:
(67) tous de kata-prumnas te kai amf(i)-hala e-ls-ai Akhaious 3p DE down-sterns TE and about-sea in-pen-Irr Achaeans 'may he pen the Achaeans down by the sterns (of their boats) about the sea'
(68) ou gar et(i) amphis-Olumpia dwmata ekh-ont-es athanatoi NEG FOR SUB about-Olympus homes have-be-nf/pl immortals fraz-ont-ai
argue-be-NF/PL
'for the immortals who have homes about Olympus are no longer arguing'

The doubling of amfi- with peri- 'around' seems to reinforce the older loca-tive-to-temporal sense:
(69) hemeis $d(e)$ amfi-peri-krënën hierous kata-bwmous e-rdo-men 1 p DE about-around-spring holy down-altars to-offer- 1 p 'it was round about spring that we offered upon the sacred altars' (II.305)
A more abstract extension imparts a sense of manner adverb, as in:
(70) mëneos de mega frenes amfi-melainai mi-mpl-ant-o rage DE big heart with-black Cv-full-be-NF '(with) his great heart full of/with black rage',

And the use of both the concrete and abstract senses in the same clause may be seen in:
(71) hidrws-ei men teu telamwn amfi-stëthesfin aspidos wet-3s/IRR MEN 2 p baldric about-chests shield/GEN amfi-brwtës, about-mortals/GEN
'let the baldric of the shields over your chests be wet with (the sweat of) mortal men'

## p. hupo-'under', extended to agentive 'by'

The more concrete and no doubt older sense of hupo-, 'under' can be seen in:
(72) possi d(e) hupo-liparoisin e-dësa-to kala pedila
feet DE under-shining to-bind-NF fair sandals 'and under his shining feet he had bound (his) fair sandals'
(73) kalë hupo-platanistw, ho-then hre-en aglaon hudwr good under-plane.tree $3 s$-from flow-3p bright waters 'under a fair plane tree, from where bright waters flow'

An extension to a directional motion sense of 'down to' can also be seen, perhaps conditioned by the motion-verb context, as in:
(74) hossoi am(a)-Atreidës hupo-Ilion ë-lth-wn
$3 p$ with-Atreides under-Ilios to-come-NF
'those who came down to Ilios with the son of Atreus'
And a more abstract extension, to agent-of-passive-, may be seen in:
(75) eu-te an polloi huph(o)-Hectoros andro-fonoio thnësk-ont-es

VER-TE AN many under-Hector man-slaying die-be-NF/pl
pi-ptw-si
CV-fall-NF/PL
'and verily many shall fall dead under man-slaying Hector'
(76) amfi de nëes smerdaleon koa-bës-an ausant-wn hup(o)-Akhaiwn about DE boats wondrous echo-go-3s shout-nF under-Achaeans 'and about them the boats resounded wondrously at the shouting of/by the Achaeans'

## q. huper-'above','over'

Of the four instances of huper- in our counted text (Iliad, Books I, II), only one displayed the more concrete, presumably older, sense of 'above' or 'over', as in:
(77) st-ë d(e) ara huper-kefalën Nëlëio uii e-oik-ws
stand-3s de ara above-head Neleus/gen son to-be.like-NF 'and he stood over/above his head in the likeness of the son of Neleus'

Other instances display fairly plausible abstract extensions, as in:
(78) uios huper-thumoio Korwnou Kaineidao
son above-heart/gen Coronus/gen, Caenus/GEn
'son of high-hearted Coronus, son of Caenus'
(79) en-tha ken Argeioisin huper-mora nost-os e-tukhth-e
in-3s Ken Argives above-part return-nf to-make-3p
'then the Argives would have succeeded in making (their) return home above and beyond the ordained'

While a more abstract extension yet may be seen in:

> (80) hierën hekatombën hrex-ai huper-Danawn
> sacred hecatombs offer-IRR above-Danaans
> 'to offer sacred hecatombs on behalf of the Danaans'

## r. anti(os)-'against','facing','across from'

Only a single occurrence of anti- as a pre-nominal preposition was found in our 2-books counted text:
(81) oi te ëpeiron exh-on ë-de anti-perai e-nem-ont-o

3 s TE mainland have-NF C-DE against-islands in-live-be-NF 'and those who held the mainland and lived across the islands'

### 2.5 Quantitative text distribution

### 2.5.1 Functional-syntactic distribution of pre-nominal preposition

We can take it for granted, perhaps by definition, that pre-nominal prepositions in the Homeric text are used to mark the case-role of event participants, here various indirect objects. It is nonetheless of some interest to see how these preposition-marked indirect objects distribute in the three main functional-syntactic classes discussed in Chapter 1, above:
a. intransitive verbs with an obligatory indirect object (whether concrete or abstract)
b. bi-transitive verbs with an obligatory indirect object (whether concrete or abstract)
c. optional indirect objects regardless of verb-type

The text-locations of all instances of these three categories in Book I of the Iliad are given in Appendix 3. Examples of the three categories are given below.

## a. Pre-nominal prepositions used with intransitive verbs with an obligatory indirect object (either concrete or abstract)

Typical examples of this category, first with concrete locative indirect objects, may be seen in:
(82) b-ë d(e) a-ke-wn para thi-(e)na polu-floisboio thalassën, go-3s DE NEG-talk(?)-NF by WH-one very-noisy/GEN sea 'so he went, silent, by the much-resounding sea'
(83) b-ë de kata-Oulumpoio khwo-men-on kër go-3s DE down-Olympus angry-be-NF heart 'and he went down to Olympus (being) angry at heart'
(84) kai men toisin ego meth(a)-omile-on ek-Pulos e-lth-wn
and MEN 3p 1s with-meet-NF ex-Pylos ex-come-nf 'with those (men) I met together when I came from Pylos'
(85) kai gar t(e) ona ek-Dios est-in
and FOR TE dreams ex-Zeus be-nf/pl
'for dreams are from Zeus'
(86) mëneos de mega frenes amfi-melainai mi-mpl-ant-o
rage DE big heart with-black cV-full-be-NF 'and his heart was full of/with black rage'
(87) tou kai apo-glwssës melitws glukiwn hre-en aud-ë

3 s and from-tongue sweet honney/of flow-3s speak-NF 'from his tongue flowed speech sweeter than honey'

More abstract senses of the prepositions may be seen in:
(88) horo-wn epi-oinopa ponton
look-NF on-wine sea
'looking upon the wine-red sea'
(89) ai ken pws e-thelë-sin epi-Trwesin arëx-ai
if Ken wh to-want-nf/pl on-Trojans help-IRR 'and wish that he might somehow help (to) the Trojans'
(90) se filën per eous-an en-ofthalmoisin

2s dear тно be-nf in-eyes
'though you are dear to/in my eyes'
b. Prenominal prepositions used with di-transitive verbs with an obligatory indirect object (either concrete or abstract)

Typical examples of this category, first with concrete locative indirect objects, may be seen in:
(91) nouson ana-straton wrs-e kakën
plague up-camp raise-3s evil
'(he) raised an evil plague about/up the camp'
(92) stemmata ekh-wn en-khersin hekë-bolon Apollwnos
fillets have-NF in-hands far-strikeing Apollo/gen
'holding in hand the fillets of far-striking Apollo'
(93) më se, geron, koilësin ego para-nëusi ki-khei-w

NEG 2 s old.man hollow 1 s by-ships cv-find-1s
'let me not, old man, find you by the hollow ships'
(94) tw gar epi-fresi thëk-e thea leukw-lenos Hërë

3 s FOR on-heart put-3s goddess white-armed Hera 'for the white-armed goddess Hera put it in/upon his heart'
(95) nëa melainan e-russo-men-en eis-hala dian
ship black in-launch-1p/IRR-?? to-sea bright
'let us launch the black ship into the bright sea'

More abstract senses of the prepositions may be seen in:
(96) wkh(a) hekaton-kheiron kalesas-a es-makron Olympon
fast hundred-hand call-NF to-high Olympus
'when you called quickly the one with hundred hands to high Olympus'
(97) $\mathrm{t}(\mathrm{a})$-ofra $\mathrm{d}(\mathrm{e})$ epi-Trwesi tith-ei kratos,
$3 s$-sub de on-Trojans put-2s power
'so far you have conferred strength upon the Trojans'
c. Pre-nominal prepositions used with optional indirect objects regardless of verb-type

Many optional indirect objects in the Homeric text are run-of-the-mill concrete locatives, as in:
(98) prin min kai gëras ep(i)-e-is-in hëmeterw eni-oikw, before min and old.age on-to-come-NF 1 p in-house en-Argei
in-Argos
'before old age comes upon her in our house, in Argos'
(99) emeu zw-(o)nt-os kai epi-khthoni derko-men-oio

1s live-be-NF and on-earth sight.power-be-GEN 'while I am alive and have power of sight on (this) earth'
(100) kai nun en-Danaoisi theo-prope-wn agoreu-eis and now in-Danaans god-prophesy(?)-NF declaim-2s 'and now in (the midst of) the Danaans, you declaim, prophesizing'

Others express diverse optional roles, such as purpose and associative in:
(101) ou-te po-t(i) es-polemon ama-law thwrëkhthën-ai

NEG-TE WH-WH to-battle with-host arm.self-IRR '(you) never arm yourself for battle with the hosts'

Or instrumental, as in:
(102) oika-de i-men sun-nëusi korwnisin
home-to go-1p/irr with boats beaked 'that we go home with (our) beaked ships'
Or manner adverb, as in:
(103) krateron de epi-muthon e-tell-e
strong DE on-words to-order-3s
'and commanded him with stern words'

Or temporal adverb, as in:
(104) hos to-te men pro-pan ëelion kata-dunt-a dain-unt-(o) (I.601) so 3 s -TE MEN for-all sun down-sink-NF dine-be-NF 'and so for the whole day till sunset they kept feasting'

For the sake of later comparison with pre-verbal and detached prepositions, the quantified distribution of prepositional phrases in our three functional-syntactic classes is given in Table (105) below, counting all text examples in Book I of the Iliad.
(105) Quantified text distribution of pre-nominal prepositions in the three functional-syntactic classes (Iliad, Book I)

| Class |  | N |  | \% |
| :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |
| a. intransitive |  | 53.7 |  |  |
| b. bi-transitive |  | 35 |  | 22.8 |
| c. optional |  | 64 |  | 42.5 |
| total: | 152 | 100.0 |  |  |

### 2.5.2 Pre-verbal (OV) vs. post-verbal (VO) prepositional phrases

It was suggested earlier (Chapter 1) that the position of the adpositionallymarked indirect object vis-a-vis the verb - OV vs. VO - determines the position of detached adpositions after their nominal object has been zeroed out, and thus also the ciliticization position--pre-verbal vs. post-verbal, respectively - of adpositions on the verb. Typical examples of pre-verbal (OV) indirect objects in our Homeric text are:
(106) kai men toisin ego meth(a)-omile-on ek-Pulos e-lth-wn and men 3 p 1s with-meet-NF ex-Pylos ex-come-nf 'with those (men) I met together when I came from Pylos'
(107) ë men moi pro-phrwn epesin kai khersin arëz-ein
c men me to-heart/ACC words and hands defend-Inf 'to defend me with stout-hearted words and hands'
(108) kai gar $t(e)$ ona ek-Dios est-in and FOR TE dreams ex-Zeus be-NF/pl 'for dreams are from Zeus'
(109) mëneos de mega frenes amfi-melainai mi-mpl-ant-o
rage DE big heart with-black Cv-full-be-NF 'and his heart was full of/with black rage'
(110) tou kai apo-glwssës melitws glukiwn hre-en aud-ë

3 s and from-tongue sweet honey/of flow-3s speak-NF 'from his tongue flowed speech sweeter than honey'

Typical examples of post-verbal (VO) indirect objects may be seen in:
(111) b-ë de kata-Oulumpoio khwo-men-on kër go-3s de down-Olympus angry-be-nf heart 'and he went down to Olympus angry at heart'
(112) horo-wn epi-oinopa ponton
look-NF on-wine sea
'looking upon the wine-red sea'
(113) nëa melainan e-russo-men-en eis-hala dian
ship black in-launch-1p/IRR-?? to-sea bright 'let us launch the black ship into the bright sea'
(114) hierën hekatombën hrex-ai huper-Danawn
sacred hecatombs offer-IRR above-Danaans
'to offer sacred hecatombs on behalf of the Danaans'
The quantified text distribution of the two orders of indirect objects in Book
I of the Iliad is given in Table (115) below.
(115) OV vs. VO order of preposition-marked indirect object (Text: Iliad, Book I)

| Order | N | \% |
| :---: | :---: | :---: |
| OV | 83 | 54.9 |
| VO | 68 | 45.1 |

While Homeric Greek word-order is highly flexible, it is easily reconstructible, like Indo-European in general, to an earlier SOV order (Lehmann 1969, 1984; Givón 1979, Chapter 7). More to the point, it is not known to what extent the word-order in the written Homeric dialect, and the ca. $55 \%$ of pre-verbal (OV) indirect objects, reflects word-order in the contemporary spoken language. Since the advent of the pre-verbal cliticization of prepositions is, most likely, considerably older than the written Homeric dialect, the frequency of
the OV order in earlier times, most likely even higher, was more relevant to the emergence of the pre-verbal prepositions seen in Homeric Greek. At the very least, then, the ca. $55 \%$ OV order of preposition-marked indirect objects in the Homeric text is compatible with the suggested correlation between OV order and pre-verbal cliticization of preposition, once their nominal object has been zeroed out.

### 2.5.3 Text frequency of nominal-attached vs. verb-attached prepositions

For the sake of later comparison with verb-attached and free-floating detached - prepositions in Homeric Greek, it would be of some interest, lastly, to compare the overall text frequency of the pre-nominal vs. pre-verbal prepositions. Studying such a distribution has obvious bearing on one fundamental question we will eventually need to answer:
> "What is the relative functional load of the two prepositional constructions in marking the case-role of clause participants in Homeric Greek the presumably older pre-nominal construction, and its pre-verbal presumed diachronic derivative?"

For this purpose, all text occurrences of the two constructions in Books I, II of the Iliad were counted. The occurrence of two or three prepositions on the same verb was counted as a single instance, though in some cases each of those prepositions no doubt pertains to a different indirect object in the clause. Detached ('free adverbial') prepositions were not counted here, and will be dealt with in Chapter 4, below. Lastly, pre-verbal prepositions were counted regardless of whether they did or did not precede the so-called 'Augment' $e$-, a construction that will be discussed in Chapters 5, 6 below. ${ }^{10}$

The text distribution of pre-nominal vs. pre-verbal prepositions is given in Table (116) below.
10. In the first 6 books of the Iliad, there were 686 instances of pre-verbal prepositions that did not precede the 'augment' $e$-. Of those, 35 involved two prepositions prefixed to the same verb, and 11 involved three. The total number of prepositions preceding $e$ - in the same 6 books was 396 .
(116) Text distribution of pre-nominal vs. pre-verbal prepositionsin the Homeric text (Text: Books I, II of Iliad)

| Syntactic context | N | \% |
| :---: | :---: | :---: |
| Pre-nominal: | 342 | 45.4 |
| Pre verbal alone: | 276 |  |

Pre-verbal preceding $e$-: ..... 136
Total pre-verbal: ..... 41254.6

| Total: | 754 | 100.0 |
| :--- | :--- | :--- |

While this distribution is incomplete, in that it counts neither detached prepositions nor the 'Augment' $e$ - by itself, it suggests that if pre-verbal Homeric prepositions performed the same case-marking functions as their pre-nominal equivalents, they certainly began to claim a greater functional load by the time the Homeric text was put to parchment.

### 2.6 Summary

If pre-nominal case-marking prepositions are indeed the diachronic precursor of pre-verbal prepositions in Homeric Greek, as all general functional and typological considerations seem to suggest, then the data surveyed in this chapter set up both a qualitative and a quantitative baseline for a subsequent comparison with pre-verbal prepositions (Chapter 3), detached ('free adverbial') prepositions (Chapter 4), and the so-called 'Augment' vowel $e$ - (Chapters 5, 6). What is important to note, in particular, is that preposition-marked indirect objects in the Homeric text are distributed - at the level of $100 \%$ (see Table (105) above) - in the three functional-syntactic categories that form the universal context of nominal case-marking adpositions in other languages (Chapter 1). Homeric Greek appears, so far, to be a typical human language.

Lastly, the higher prevalence of the pre-verbal (OV) order of indirect objects in the Homeric text is certainly compatible with such nominal indirect objects being the diachronic source construction, first of detached ('free adverbial') prepositions, and then in due course of pre-verbal prepositions ('pre-verbs').

## Abbreviations of grammatical terms

| ACC | accusative | P | preposition |
| :---: | :---: | :---: | :---: |
| ALL | allative | PL | plural |
| Assoc | associative | PP | prepositional/postpositional |
| ASP | aspect |  | (phrase) |
| C | conjunction | REF | referring/reflexive |
| CAUS | causative | S | subject |
| CV | reduplicate first syllable | SUB | subordinator |
| DAT | dative | тно | though |
| DEM | demonstrative | V | verb |
| DO | direct object | VC | reduplicate first syllable |
| EM | emphasis | VER | intensifier |
| FOR | because | WH | WH-question |
| FUT | future | 1 s | first person singular |
| GEN | genitive | 1 p | first person plural |
| HAB | habitual | 2s | second person singular |
| IMP | imperative | 2p | second person plural |
| INF | infinitive | 3s | thirst person singular |
| IRR | irrealis | 3fs | third person singular masculine |
| LOC | locative | 3 ms | third person singular feminine |
| MANN | manner | S | singular |
| NEG | negative | sf | singular feminine |
| NF | non-finite | sm | singular masculine |
| NOM | nominative | p | plural |
| O | object |  |  |

## Appendix 1. Text locations of pre-nominal preposition (Books I, II of Iliad)

ana- 'up', 'upward'
I.10, 53, 384, 570, II.36, II.250, II. 575 [7]
kata- 'down', 'downward'
I.44, 136, 193, 271, 286, 409, 413, 422, 429, 484, 487, 555, II.3, 47, 99. 130, 163, 167, 211, $214,345,362,398,409,427,438,439,470,560,668,699,779,803$ [33]
en(i)- 'in(side),' 'into'
I. $14,30,82,109,155,235,237,251,278,297,367(!), 376(!), 396,397,433,441,446,520$, 566, 585, 587, II.19, 137, 142, 161, 175, 177, 202, 226, 237, 274, 301, 397(en-tha 'there/then'), 417, 454, 461, 462(en-tha 'there/then'), 467, 473, 483, 549, 551, 610, 661, 688, 719, 721, 766, 771, 782, 821 [50]
ex-/ek- 'out(side)', 'out of', from'
I. $63,194,223,268,269,270,525,534,580$, II.32, 41, 69, 131, 146, 197, 230, 273, 557, $525,654,659,690,744,748,849,852,857,862,877$ [29]
eis-, es-, ei- 'to', 'toward' (dynamic/motion)
I. $99,141,221,226,314,366,402,431,435,490,491,532$, II.9, $92,126,140,158,174$, 303, 454, 464, 667, 752, 832 [24]
apo- 'from', 'away from'
I. $98,249,529,532,541,563,591,598$, II.162, 178, 233, 287, 292, 457, 464, 659, 755 [17] epi- 'on', 'over', onto, 'to'
I.25, 39, 46, 55, 88, 126, 219, 266, 272, 306, 326, 350(!), 350(!), 371, 382, 408, 437, 440, $461,462,485,509,536,559$, II.6, 89, 159, 168, 218, 263, 308, 353, 381, 394, 424, $472,523,526,553,613,616,643,665,687,765,788,797,808$ [=50]
peri- 'about', 'around', 'over' (static)
I. 287, 303, 317, 417, 448, 603, 607, II.305, 416, 750, 757, 831 [48]
peri- 'about', 'around', 'over'
I.287, 303, 317, 417, 448, 603, 607, II.305, 416, 750, 757, 812, 831[13]
para- 'by, 'next to,' 'near'
I. $26,34,89,174,305,316,327,344,347,358,415,463$, II.54, 297, 355, 392, 522, 596, 604, 711, 725, 773, 775, 787 [24]
pro(s)-, proti- 'before', 'in front of' > 'toward', 'to' > 'through/by/with'
I.77, $150,160,238,338,339,340,420,494,533,543,601,609$, II. $59,493,588,801$ (proti-) [17]
dia- 'through'
I.72, 600, II.40, 57, 458, 655 [6]
meta- 'with', 'among', 'about' (pl. object)
I. $82,221 / 2,368,423,478,503,516,525,550,553$, II.267, 376, 673 [13]
sun- 'with'
I. $89,170,179,183,227,240,325,389$, II. $74,140,187,218,236,293,339,372,567,787$ [18] ama- 'with'
I. $343,348,495,533$, II. $577,745,762,822$ [8]
amfi- 'about', 'around', 'near', 'with' (manner ADV)
I.103, 409, II.30, 67, 305 (x2!!), 388, 417, 428, 533, 544, 751, 782 [12]
hupo- 'below', 'under'
I.148, 242, II.44, 216, 245, 249, 307, 334(by-PAS), 374(by-PAS), 492, 505, 603, 673, 728(by), 742 (by), 784, 820, 860(by-PAS), 866, 874(by-PAS) [20]
huper- 'above', 'over'
I.444, II.20, 155, 746 [4
anti(o)- 'facing', 'in front of
II. 635 [1]

## Appendix 2. Text locations for pre-nominal preposition (Books I, II of Iliad)

I. $10,14,25,26,29 / 30,34,39,44,46,53,55,63,71 / 72,77,82,82,88,89,89,98,99$, $103,109,136,141,148,150,155,159,170,174,179,183,193,193194,219,221$, $221 / 22,223,226,226,227,235,237,238,240,242,249,251,266,268,269,270$, $271,272,278,286,287,297,303,305,306,314,316,317,325,326,327,343,344$, $347,348,350,349,350,358,358,366,367,370 / 71,382,384,389,389,396,397$, $402,408,409,409,413,415,417,419 / 20,423,423,423,431,433,435,435,437$, $440,441,444,446,448,461,462,463,478,484,485,485,487,490,490 / 91,494$, $495,503,509,516,520,525,525,529,532,532,533,533,534,536,541,543,550$, $553,555,559,563,566,570,580,584,585,587,592,598,600,601,601,602 / 03$, 607, 607, 609 [151]
II. $3,6,9,19,20,30,32,36,40,41,44,47,54,57,59,67,69,74,89,92,99,126,130$, $131,137,140,140,142,146,155,158,159,161,162,163,167,168,174,175,177$, $178,187,197,202,211,214,216,218,218,226,230,233,236,237,245,249,250$, $263,267,273,274,287,292,293,297,301,303,305,305,307,308,334,339,345$, $353,355,362,372,374,376,381,388,392,397,398,409,416,417,417,424,427$, $438,439,454,454,457,458,460,461,462,464,464,467,472,473,492,493,494$, $505,522,523,525,526,533,533,544,557,567,575,483,549,551,577,588,596$, $603,604,610,613,616,635,643,654,655,659,659,665,667,668,673,673,687$, $688,690,699,711,719,721,725,728,742,744,745,746,748,749,750,751,752$, $752,755,757,762,765,766,771,773,775,779,782,782,784,787,787,788,797$, 801, 803, 808, 812, 820, 821, 822, 831, 832, 849, 852, 857, 862, 866, 874, 877 [192]

## Appendix 3. Text locations for the functional-syntactic categories of preposition-marked indirect objects (Text: Iliad, book I)

a. Intransitive verb with obligatory IO:
I. $34,39,44,46,53,63,103,136,174,221,221,249,269,270,272,287,306,317$, $327,347,350,349 / 50,358,358,366,370 / 71,384,408$ (abst.), 413, 415, 419/20, 423, $431,437,478,484,487,490,490 / 91,494,529,532,532,533,536,541,563,566,470$, 587 (abst.), 592, 600, 602/03, 609 [54]
b. Bi-transitive verb with obligatory IO:
I. $10,14,26,55,71,82,98,98,141,159 / 60,193,193,194,219,235,297,314,367$, 368, 382, 389, 402 (abst.), 409, 433, 435, 440, 441, 448, 461, 463, 485, 509 (abst.), 580, 584/85, 598 [35]
c. Optional IO (any verb type):
I. 25(mann.), 29/30, 30, 71/72, 77, 82, 88, 89, 89, 109, 148, 150(mann.), 155, 170(instr.), 179, 183(assoc.), 221/22(assoc.), 223, 226, 227, 237, 238, 240, 242, 251, 266, 268 (mann.), 271, 278, 286, 303, 305, 316, 325 (assoc.), 326 (mann./instr.), 343 (mann.), 344, 348 (assoc.), 389, 396, 397, 409, 417 (mann.adv.), 423 (assoc.), 423 (purp.), 435 (instr.), 444 (abstr.), 462, 495, 503, 516, 520, 523, 525 (abstr.), 533, 534, 543 (mann. av.), 550 (mann.adv.), 553 (mann.), 555, 559, 601 (tm. adv.), 601 (tm. adv.), 607 (mann.), 607 (mann.) [63] Total: 152

## Diachronic target: <br> Pre-verbal prepositions in Homeric Greek

### 3.1 Preamble

In the preceding chapter we surveyed the functional and syntactic distribution of pre-nominal prepositions in Homeric Greek, the presumed diachronic source construction of pre-verbal prepositions (so-called 'preverbs'). We noted first that all general theoretical considerations suggest that the original functional niche of case-marking adpositions is, transparently, nominal; and that the functional-syntactic distribution of pre-nominal prepositions in the Homeric text fully conforms to such a premise. We also noted that the high frequency of pre-verbal (OV-ordered) preposition-marked indirect objects in the Homeric text, a frequency that was probably much higher in the earlier precursor(s) of the Homeric dialect, conforms to the pre-verbal position of verb-attached prepositions in Homeric Greek, as in other Indo-European languages.

In this chapter we turn to investigate the diachronic target construction in the diachronic life cycle of adpositions, the pre-verbal prepositions ('preverbs') of Homeric Greek. Given what we noted in the preceding chapter about the rather transparent case-marking function of Homeric pre-nominal prepositions, and given their near-obligatory occurence in the well-known contexts where indirect objects of various semantic roles tend to appear, we have thus set the base-line for comparing the functional-syntactic distribution of pre-nominal vs. pre-verbal preposition. When such a comparison is done, we will be in a better position to understand the process of diachronic change, in function as well as structure.

### 3.2 Functional-syntactic categories

For the purpose of this section, all instances of pre-verbal prepositions in Books I, II of the Iliad were identified, and their semantic and syntactic behavior then studied. The complete list of their text locations, is given in Appendix 1. The semantic/syntactic behavior of pre-verbal prepositions was divided into four categories, ranked in terms of the assumed order of diachronic change,
with text locations in the first 6 books of the Iliad given in Appendix 2. The four categories are:
a. Nominal indirect object overtly present in the clause: The nominal indirect object whose case-role is marked by the pre-verbal preposition is overtly present in the same clause or in the directly preceding clause. The pre-verbal preposition is semantically transparent, and its semantic case-role corresponds closely to that found in its pre-nominal counterpart (Chapter 2). This category of pre-verbal prepositions thus involves a relatively superficial change from the pre-nominal source construction, with the preposition having switched from its - diachronically original - pre-nominal locus to its terminal pre-verbal one.
b. Nominal indirect object not overtly present in the clause, but still anaphorically or generically accessible: The nominal indirect object has been zeroed out, but is contextually accessible, either generically within the same clause or anaphorically in the directly preceding clause(s). And the pre-verbal preposition marks the same semantic case-role as in (a) above.
c. Nominal indirect object not overtly present, and not contextually accessible; but there is still a transparent semantic association of preposition and verb: The semantic value of the preposition is still transparent, and is fairly close to its sense in the pre-nominal construction. But the preposition is semantically absorbed to the verb, which is most commonly an intransitive location or motion verb.
d. Semantic arbitrariness: The preposition does not reflect its original prenominal sense any more, so that its use has now become semantically arbitrary. The presence or absence of a nominal indirect object in the clause is unpredictable and irrelevant.

As suggested above, the order of the categories (a) through (d) above is intended to reflect the gradual diachronic drift of the semantic and syntactic patterns, with category ( d ) being the terminal point in which the preposition is semantically fused to the verb, and where the overt presence or absence of a nominal indirect-object is irrelevant. This suggested continuum, inferred from the synchronic distribution of the variants in the Homeric Greek text, turns out to correspond closely to the stage-wise diachronic rise of post-verbal prepositions in English (Chapter 7).

In the main, instances of our first two syntactic/semantic categories tend to involve verbs that typically take indirect objects, falling into the by-now-familiar three syntactic categories noted for pre-nominal preposition (Chapter 2):

- intransitive verbs of location or motion ('be at/in', 'go to' 'come from') or their more abstract equivalents ('look at', 'listen to', 'hear from')
- bi-transitive verbs of transfer ('put $x$ in', 'take $x$ away/out', 'insert $x$ into') or their more abstract equivalents ('give x to', 'ask x from', 'show x to')
- optional case-roles, such as locative, instrumental, associative, benefactive or manner, regardless of verb-type.

The use of the various pre-verbal prepositions in their clausal context in Homeric Greek is illustrated below with fairly representative example from our Homeric text.
a. ana-

A very common instance in our Homeric text, belonging to category (c) above, shows no nominal indirect object present, while the preposition, now meaning 'upward' is incorporated into the meaning of the intransitive motion verb:
(1) toisi de an(a)-ista-men-os met(a)-e-f-ë podas wkus Akhilleus 3p DE up-stand-be-NF with-to-speak-3s feet swift Achilles 'then, standing up, swift-footed Achilles spoke to them'

The next example represents the tail-end category (d), where a nominal object is present, but the sense of the preposition is semantically arbitrary, and certainly not predictable from the meaning of the preposition in its original pre-nominal context:

> (2) eu-kho-men-os Danaoisi theo.propias ana-fain-eis
> VER-pray-be-nf Danaeans god.oracles up-say-2s
> 'pray and pronounce oracles to the Danaans'

The same semantically unpredictable use of ana-, thus category (d), may be seen in (3) below, where an object of the verb 'order' is technically present. This contrasts with the syntactically and semantically coherent use of the other pre-verbal preposition, apo- 'from', prefixed to a verb created from the noun luma 'impurities', thus our category (c):
(3) laous de Atreidës apo-lumaines-thai an(a)-wg-en, hosts/GEN DE Atreides from-impurity-IRR up-order-3s 'and the son of Atreus ordered the hosts to rid themselves of impurities'

## b. kata-

Example (4) below exposes some of the indeterminancy involved in making categorial assignment here, with a possible overlap between categories (b) and (c). The sense of 'down' is certainly part of the meaning of 'swallow', thus suggesting our category (c). But 'swallow' also carries, on generic grounds, an implicit sense of a generically-predictable zeroed-out object ('down his stomach'), thus our category (b).
(4) ei per gar te kholon ge kai aut(o)-ëmar kata-pe-ps-e if tho For te anger em and this-day down-CV-swallow-3s 'for even if he swallowed down his anger today'

The sense of 'down' is incorporated into the meaning of the intransitive motion verb 'sit' in (5) below, thus our category (c):
(5) ëmos de Hëelios kat(a)-(h)ed-u
when de Sun down-sit-NF
'then when the sun went down'
And likewise in the even more typical (6) below:
(6) kai hra akeousa kath(a)-ës-to ${ }^{1}$ and hra silent down-sit-NF 'and (she) sat down in silence'

In (7) below, the object 'head' is implicit and generically predictable in 'nod/ bow down', suggesting again an overlap between our categories (b) and (c):
(7) nëmetres men dë moi hupo-skhe-o kata-neus-on, truthfully MEN DE 1 s under-vow-IMP down-nod-nF 'promise this to me and bow your head down (in affirmation)'
c. en(i)-

An example close enough to our category (a) may be seen in (8) below, with the nominal object still present and the sense of 'in(side)' or 'among' fairly transparent:

[^14](8) alla ouk Atraeidë Agamemnoni en-dan-e thumw
but neg Atreides Agamemnon in-please-3s soul
'but (this) did not please Atreides Agamemnon in his heart/soul'
And likewise:
(9) a-sbest-os $d(e) \operatorname{ar}(a)$ en-wr-to gelws makaroisi NEG-quench-NF DE ARA in-rise-NF laughter blessed/PL theoisin
gods/acc
'then unquenchable laughter arose among the blessed gods'
A zeroed-out object, thus our category (b), may be seen in (10) below, with the object 'in place' generically inferred in context:
(10) boulo-m(ai) egw laon soon em-men-ai ë ap(o)-oles-thai
want-1s 1 s hosts safe in-stay-IRR C from-die-IRR
'I myself would prefer that the hosts stayed safe (in place) rather than perish'

Total semantic arbitrariness, thus our category (d), may be seen in both (11) and (12) below:
(11) ho de Atreidën en-ariz-oi ${ }^{2}$

3s de Atreus'son in-kill-3s/IRR
'and (he should) slay the son of Atreus'
(12) hos ekhe-wn em-pe-fuui-a kai e-ire-to deuteron autis 3s hold-nF in-Cv-cling-nf and to-ask second DEm/3sm
'holding him (and) clinging (he) again asked'

## d. ex-/ek-

A fairly transparent directional motion use of $e k$-, with the object overtly present as the pronoun 'him', thus our category (a), may be seen in (13) below:
(13) ho d(e) idnwth-ë, thaleron de hoi ek-pes-e dakru

3s de cower-nf big De 3s ex-fall-3p tears
'and he cowered down, and big tears fell out of him'

[^15]And likewise, perhaps still category (a):
(14) Pëleidë, pantwn ek-paglotat(-a) andrwn

Peleus'.son all/gen ex-violent.most-NF men/GEN 'the son of Peleus, the most violent out of all men'

In the next example, the zeroed-out object is either anaphorically predictable ('the hut'), thus category (b), or the directional sense 'out' may have been incorporated into the bi-trantitive verb, thus category (c):
(15) alla ag-e, dio-genes Patroklees, ex-ag-e kourën
but come-IMP god-born Patroclus ex-lead-IMP girl/ACC
'but come, Zeus-born Patroclus, bring the girl out (of the hut)'

## e. e(i)s-/ei-

The pre-verbal use of eis- covers a broad semantic range. In (16) below, the sense is close enough to the original allative 'to', and the object is present, thus our category (a). But the object ('arms') is still marked by a pre-nominal preposition, albeit a different one, epi- 'on':
(16) epi-teukhea d(e) es-seu-ont-o
on-arms DE to-rush-be-NF
'and (they) rushed to arms'
A relatively minor semantic shift in (17) below leaves the allative sense of $e i(s)$ - nearly intact, perhaps still in our category (a), with the object ('scepter') overtly present:

> (17) ei-le-to de skëptron patrwion
> to-grab-NF DE scepter/ACC father/GEN/ACC
> 'and he grabbed at/toward his father's scepter'

In the next example, the object is clearly present but the allative sense of 'to' is somewhat eroded:
(18) pauros de oi ei-pe-to laos
few DE 3s to-follow-nF host
'(only) a few people followed (after) him'
In some cases, there seems to be a shift from the allative to a purpose use, pertaining the verbal complement, a widely observed shift (viz. English, Chapter 7), as in:
(19) osse de oi puri lampeto-wnt-i ei-kt-ën
eyes DE 3p fire shine-be-nF to-kill-nF/ACC
'his eyes blazing fire (aiming) to kill'
(20) khalepoi toi es-ont(-o) alokhw per eous-a
hard/pl $2 \mathrm{~s} / \mathrm{dat}$ to-be-nf wife tho be-nf
'they will be hard for you to know, though you be my wife'
In other instances, the allative sense of eis- may be elaborated by combining with another pre-verbal preposition, as in the (21) below, still a fairly transparent usage, thus our category (a):
(21) parthenos aidoië, huper-oiwn eis-ana-bas-a
maiden honored above-alone(?) to-up-go-NF
'an honored maiden, when she went up to her upper (chamber?)'

## f. apo-

A totally transparent use of apo-, marking both the nominal object and the verb, thus our category (a), may be seen in (22) below, perhaps an early stage of our diachronic drift:
(22) gluku nektar apo-krëtëros af(o)-uss-on
sweet nectar from-bowl from-draw-NF
'drawing sweet nectar from the bowl'
able from the generic context, thus category (b), may be seen in:
(23) alla kakws af(o)-i-ei
but bad from-go/send-3s
'but he sent him away (from there) harshly'
Another instance of a zeroed-out object, predictable from the anaphoric context and thus our category (b), may be seen in:
(24) aps apo-nostes-ein ei ken thanaton ge fugoi-men
back from-return-INF if Ken death/ACC Em flee-1p/irr
'to return (empty handed) from (the battle) even if we escape death'
The ablative sense of apo- is just about faded away in the next two examples, to the point where their use seems sychronically arbitrary, thus our category (d). Though supplementation with the semantically more transparent ei(s)- in (25) may have repaired the usage somewhat:
(25) ap(o)-ei-lës-w de toi hw-de
from-to-warn-1s DE 2s so-DE
'I am warning (to) you thus'
(26) boulo-m(ai) egw laon soon em-men-ai ë ap(o)-oles-thai
want-1s 1 s hosts safe in-stay-IRR C from-die-IRR
'I myself would prefer that the hosts stayed safe (in place) rather than perish'

Finally, the frequent formulaic triple combination below is commonly used for 'answer', 'respond', where 'to' is perhaps historically justified as pointing to the dative recipient, 'from' a bit less so as perhaps pointing to the source/speaker, while 'with' is rather opaque:
(27) ton de ap(o)-am(a)-ei-bo-men-os pros-e-ph-ë podas wkus

3s DE from-with-to-answer-be-NF to-to-say-3s feet fast
Akhilleus:
Achilles
'then responding to him, swift-footed Achilles said'

## g. epi-

A fairly transparent use epi-, with the nominal object present in the clause, thus our category (a), may be seen in (28) below, with the more stative sense of 'on' augmented by the motion verb 'go':
(28) ourëas men proton ep(i)-wkhe-to
mules MEN first on-go-NF
'first he pounced upon the mules'
And likewise with a bi-transitive cause-motion verb:
(29) autar epei-ta autoisi belos ekhe-peukes ef(i)-i-eis
but then-3s DEM/p missives have-piercing/PL on-go/send-3s
ball(-e)
throw-3s
'but then he let-fly piercing missives upon them'
A wide range of extended directional allative uses are also attested with the object overtly present, thus again our category (a), as in:
(30) histon ep(i)-oikho-men-ën
loom/acc on-walk-be-3s
'as she walks about the loom'

And the allative sense can also be reinforced by combining epi- with $e(i) s-$, as in:
(31) feug-e mal(a), ei toi thumos ep(i)-es-su-tai
flee-IMP more if $2 \mathrm{~s} /$ DAt heart on-to-order-IRR 'go ahead, flee, if your heart may so orders (upon) you'
(32) w moi, an-aideiën epi-ei-men-e, kerdale.fron oh 1s/DAT NEG-shame on-to-stay-NF crafty.mind 'oh me, you persist in/toward shamelessness, crafty-minded one'

Lastly, one can also find cases where the object is zeroed out and predictable from the anaphoric context, thus our category (b), as in:
(33) ou-te ar(a) ho ge eu-khwles epi-me-mfe-tai
neg-te ara 3 s em ver-vows on-cv-blame-IRR 'it is not for (our) strong vows that he may (put the) blame upon (us)'

## h. peri-

A semantically transparent use of the pre-verbal peri-, with the object overtly present, thus our category (a), may be seen in an intransitive clause in:
(34) alla su, ei dunass-ai ge, peri-skhe-o paidos heoio
but $2 s$ if can-IRR EM about-watch-IMP boy $2 \mathrm{~s} / \mathrm{GEN}$
'but you, if you at all can, watch over your boy'
Semantic incorporation of the prepositional sense into the intransitive verb, thus our category (c), may be seen in:
(35) hemin $\mathrm{d}(\mathrm{e})$ einatos est-i peri-trope-wn eni-autos

1 p DE ninth be-NF about-turn-NF in-DEm/s
'(but) for us it is the turning around of the ninth (year) in this'
And a semantically arbitrary use of peri-, thus category (d), may be seen in (36) below, with the pre-nominal preposition eni- 'in' not much help:
peri-tello-men-wn eni-autwn,
about-make.pass-be-nF in-DEM/p
'in order to make thing turn out in their (favor)'

## i. para-

A fairly transparent locative sense of para-, 'by' or 'next to', with the object overtly present thus our category (a), may be seen in:
(37) autar ho mënie neusi parë-men-os wku-poroiosi
but 3s wrathful boats by-stay-nF swift-traveling/pl
'but he in his wrath remained by the fast-sailing ships'
The object may also be zeroed out due to its anaphoric predictability (here in the preceding clause), thus our category (b), as in:
(38) ton de aganois epeessin e-rëtusask-e, para-st-as

3s DE gentle words ex-restrain-3s by-stand-NF 'and he restrained him with gentle words, standing by (him)'

A semantic shift to a directional - dative or benefactive - sense is common, as in - still in our category (a):
(39) kai po-te toi tris tossa par(a)-esse-tai aglaa dwra and Wh-TE $2 \mathrm{~s} / \mathrm{DAT}$ three such/PL by-be-IRR glorious gifts 'then thrice as many such glorious gifts will be yours (= for you)'(I.213)
(40) mëtri de egw para-fë-mi
mother/dat de 1s by-speak-1s 'so I shall speak to (advise) my mother'

But a semantically arbitrary use of para-, thus our category (d), is also seen, as in:
(41) me se par(a)-eip-ë arguro.peza Thetis

NEG 2s by-say-NF silver.foot Thetis
'lest silver-footed Thetis may beguile you'

## j. pro(s)-

A concrete allative use of pro(s)- with a bi-transitive verb may be seen in (42) below, where the object is overtly present, thus our category (a), and is also marked by the old allative case ending:
(42) pola de ifthimous psykhas Aidi pro-iaps-en herwwn many de valiant souls Hades/all to-send-3s warriors/Gen '(and) sent many valiant souls of warriors to Hades'

Such reinforcement by the old nominal case suffix is common when its meaning is still reasonably transparent, as is often the case with the allative/dative suffix.

A common formulaic use of pro(s)- as a dative, a common shift from the older allative sense, may be seen in (43) below, with the object zeroed and predictable from the anaphoric context, thus our category (b):
(43) kai min fones-as epea ptero-ent-a pros-ëud-a: and MIN speak-NF words wing-be-nf to-speak-nF 'then speaking, he said winged words (to her)'

But the semantic shift may be greater, with the object still overtly present, thus still our category (a):
(44) kai gar hra Klutaimnëstrës pro-be-boul-a kouridiës alokhou and for hra Clytemnestra for-cv-want-nf wedded wife 'because I prefer (her) to/over Clytemnestra, my wedded wife' (I. 113)

A dative-like sense, with a zeroed-out anaphoric object, thus our category (b), may be seen in:
(45) touneka oi pro-theou-sin oneidea muthësas-thai?
caus 3p to-make-pl abuses speak-IRR 'do they thus let (him) speak utter nonsense?'

And an equally plausible shift to benefactive may be also seen, reinforced here by the causative eineka ('because of', 'for the sake of'), with the object present, thus perhaps still our category (a):

> ho sfwi pro-i-ei Brisëidos eineka kourës
> 3s ReF for-go/send-3s Brises/GEN CAUS girl
> 'who sent you for the sake of the girl, Brises' daughter'

Lastly, semantic incorporation of the preposition into the verb, thus perhaps our category (c), may be seen in:
(47) autar epei hra eu-x-ant-o kai oulokhutas pro-bal-ont-o C then HRA VER-pray-be-nf and barley to-throw-be-nF 'then when they had prayed and cast forth (the) barley (grain)' (I.458)

## k. dia-

The semantically transparent use of the pre-verbal dia- with the object overtly present, thus our category (a), may be seen in (48) below. However, the sense of the following epi- is less than transparent:
(48) hws ho ge koiranewn $\operatorname{di}(\mathbf{a})-\mathrm{ep}(\mathrm{i})$-(i)-e straton
so 3s EM masterful through-on-go-3s camp/aCC
'so (saying), he went masterfully through the camp'

Semantic incorporation of the preposition into the verb, thus our category (c), may be seen in (49) below, where the sense of the added ana-is synchronically rather arbitrary:
(49) en $\mathrm{d}(\mathrm{e})$ hoi ëtor stëthessin lasioisin di(a)-an(a)-dikh-a in DE 3 s heart breast shaggy through-up-two-NF mermëriz-en
murmured-3s
'and in his shaggy breast his heart, divided through, murmured'
A fairly predictable combination of dia- with $e(i) s-$, with the object overtly present, thus our category (a), may be seen in (50) below, with further semantic contribution, perhaps, from the detached preposition sun-:
(50) sun të paifassous-a di(a)-es-su-to laon Akhaiwn
with TE dazzle-NF through-to-rush-NF hosts Achaeans 'dazzling, rushing through the hosts of the Achaeans'

And a more arbitrary sense of the preposition, perhaps already semantic incorporated into the verb and thus our category (c), may be seen in:
(51) Lurnesson dia-porthes-as kai teikhea Thëbës

Lyrnessus/acc through-ruin-nf and walls Thebes/gen 'having (thoroughly) wasted Lyrnessus and the walls of Thebes'

## I. meta-

A fairly predictable use of the pre-verbal meta- 'with'/'among' with the object overtly present, thus category (a), may be seen in:
(52) kai men toisin ego meth(a)-omile-on ek-Pulos e-lth-wn and men $3 \mathrm{p} / \mathrm{Acc} 1 \mathrm{~s}$ with-meet-nf ex-Pylos ex-come-nf 'and with those (men) I met when I came from Pylos'

A slight semantic shift to 'together' may be seen in (53), (54) below, where the object is zeroed out but inferred from the anaphoric context, thus our category (b):
(53) all(a) ë toi men $t(a)$-auta meta-fraso-me-tha
but c 3 p MEN 3p-dem/p with-tell-1p-fut
'but as for these things, let us reckon them together'
(54) oi de histon stës-ant-o ana th(e) histia leuka 3p de mast stand/CaUs-be-NF up TE sails white met(a)-ass-an
with-spread-3p
'so raising the mast, they spread up white sails together'
The meaning may shift in other directions, in (55) below with a object still present as a ReL-pronoun, thus our category (a):
(55) twn ou ti meta-treps-ë ou-de alegiz-eis

3p NEG WH with-turn-NF NEG-DE concern-2s
'to which you pay no heed, nor concern yourself with'
And the object may be zeroed out but predictable from the anaphoric context, thus our category (b), as in:
(56) ou gar pauswle ge met(a)-esse-tai

NEG FOR pause EM with-be-IRR
'for there should be no pausing among (us)'
m. sun-

The semantically transparent, presumably older associative sense of sun-, with the object overtly present and thus our category (a), may be seen in:
(57) su de sun-the-w kai moi omoss-on
$2 s$ de with-think-IMP and 1s/Dat swear-nf
'but you do reflect and swear to/with me'
(58) ho-ti hoi sum-frasa-to boulas arguro-pezas Thetis,

3s-wh 3s/Dat with-talk-nf counsel silver-foot Thetis
'how silver-footed Thetis took counsel with him'
A subtle semantic shift to joint inanimate participants, both subject and object, may be seen in:
(59) ou-de ho ge Pëneiw sum-misge-tai argur.odinë neg-de 3s em Peneius with-mix-IRR silver.waves 'yet it would not mix its silver-waves with the Peneius (river)'

A more pronounced semantic shift to an instrumental sense may be seen in (60) below, with the zeroed-out object ('rope'?) predictable on generic grounds from the verb 'tie', thus our category (b):
(60) ho-ppo-te min xun-des-ai Olumpioi ë-thel-on alloi

3 s -wh-TE MIN with-tie-NF/PL Olympians to-want-NF others
'when the other Olympians wanted to put him in/with (bonds)'
Lastly, a shift to the sense of 'together', reminiscent of meta-, may be seen in (61) below, with the preposition semantically incorporated into the verb, thus our category (c), although the object ('them') is still present, perhaps still our category (a):
(61) tous ho ge sun-kales-as, pukinën artune-to boulën

3 p 3 s GE with-call-NF cunning contrive-NF plan
'and having called them together, he contrived a cunning plan'

## n. ama-

Of the four instances of pre-verbal ama- in our counted text, none reflects the presumed associative sense attested in the pre-nominal use of ama(Chapter 2). Three involve the frozen formulaic use in 'answer', 'respond', thus our category (d), combined there with the perhaps semantically more transparent $e i(s)$-, as in:
(62) ton de am(a)-ei-be-to anax andrwn Agamemnwn

3s de with-to-answer-nf king men/Gen Agamemnon
'then Agamemnon king of men answered him'
(63) ton de ara hupo-blëd-en ëm(a)-ei-be-to dios Akhilleus

3 s DE ARA under-throw-3s with-to-reply-nf godly Achilles
'(then) godly Achilles interrupt him and answered'
The fourth may still reflect the plural object sense of 'together', seen in metaand sun- above, thus perhaps our category (c):
(64) më-d(e) eti dëron am(a)-ballw-me-tha ergon NEG-DE SUB long.time with-throw-1p-fut work 'let us not together put off the work much longer'

## o. amfi-

The concrete locative sense of 'about', 'over' or 'around' is well preserved in all the seven instances of the pre-verbal amfi- in our counted text, with the object overtly present in some, thus our category (a), as in:
(65) kluth-i meu, arguro-tox(a?) hos Khrusën amfi-be-bëk-as hear-IMP 1 s silver-bowed 3 s Chryse/acc about-cv-go-nF 'hear me, silver-bow (bearer) who goes/stands over Chryse'
(66) oi te Anemoreian kai Huampolin amfi-nem-ont-o

3p te Anemoreia and Hyampolis/acc around-dwell-be-nf 'and those who dwelled around Anemoreia and Hyampolis'
(67) khlainan $t(e)$ ë-de khitona, ta $t(e)$ aidw amfi-kalupt-ei; cloak TE C-DE tunic 3 p TE shame about-cover-3s/HAB 'your cloak and tunic too that cover over your nakedness'

The locative sense is still transparent when the object is zeroed out in an anaphorically-predictable context, thus our category (b), as in:
(68) mëter d(e) amfi-pota-to
mother DE about-flutter-NF
'and the mother fluttered about (the nest)'

## p. hupo-

The presumably older locative sense of hupo- 'under', 'beneath' is still transparent in some instances of its pre-verbal use, with the object overtly present, thus our category (a), with the verb imparting a motion sense, as in:

> (69) bwmou hup(o)-aiz-as
> altar under-dart-NF
> 'darting beneath the altar'

A directional sense may also be added by combining hupo- with ei(s)- 'to', as in (70) below, with both subject and object implicit/anaphoric, thus our category (b), as in:

> (70) hup(o)-ei-rekh-on Hëfaistoio under-to-do-NF Hephaestus/GEN '(they) held (them) down to (the fire) of Hephaestus'

Finally, the sense of hupo- may become synchronically arbitrary or frozen, thus our category (d), as in:
(71) ton de ara hupo-blëd-en ëm(a)-ei-be-to dios Akhilleus 3s de ara under-throw-3s with-to-reply-nf godly Achilles '(then) godly Achilles interrupt him and answered'
(72) ei te pseudos hupo-skhe-is, ei ti kai ou-ki if te false under-vow-3s if wh and neg-Ki 'whether he vowed falsely, or perhaps not'

## q. huper-

The two lone instances of pre-verbal huper- 'above' in our counted text are semantically fairly transparent but syntactically marginal, with no sense of an object participant, thus perhaps our category (c):
(73) hës huper-opliës-e takh(a) an po-te thumon oless-ë

3 sf above-scorn-Nf fast an wh-TE soul die-NF 'it is (because of) his arrogance that his soul may soon die'
(74) autw pou Dii mell-ei huper-men-ei filon ein-ai

DEM/s wh Zeus must-3s above-stay-3s pleasure be-IRR 'this must be the pleasure of Zeus the over-powerful'

## r. anti(o)-

This marginal member of the preposition class is perhaps still evolving from an adverbial meaning 'facing', 'opposing', with only two pre-verbal instances in our counted text. In both, an object is overtly present. In the first, the preposition is semantically less transparent, thus marginally in our category (a). In the second, it is semantically more transparent, thus perhaps again in our category (a):
(75) histon ep(i)-oikho-men-ën kai emon lekhos antio-ws-an
loom/Acc on-walk-be-3s and 1s bed facing-meet-3p
'as she walks about the loom and shares my bed'
(76) argaleos gar Olumpios anti-feres-thai
hard For Olympian face-carry-IRR
'for the Olympian is hard go against'

### 3.3 Quantitative text distribution

### 3.3.1 Text distribution of pre-nominal vs. pre-verbal prepositions

It is of interest, first, to compare the general text distribution of individual prepositions in their pre-nominal vs. pre-verbal positions, in order to assess the extent to which their functional load had shifted from its original nominal case-marking function to its evolving - diachronically later - function as a pre-verbal operator. The quantitative distribution of both categories in Books I, II of the Iliad are given in Table (77) below.
(77) Comparative text distribution of pre-nominal vs. pre-verbal prepositions

| Preposition | Pre-nominal |  | Pre-verbal |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% |
| ana- | 7 | 26.9 | 19 | 73.1 | 26 | 100.0 |
| kata- | 34 | 70.8 | 14 | 29.2 | 48 | 100.0 |
| en(i)- | 52 | 69.3 | 23 | 31.7 | 75 | 100.0 |
| ex-/ek- | 29 | 61.7 | 18 | 38.3 | 47 | 100.0 |
| e(is)-/ei- | 24 | 75.0 | 8 | 25.0 | 32 | 100.0 |
| apo- | 17 | 29.8 | 40 | 70.2 | 57 | 100.0 |
| epi- | 50 | 51.5 | 47 | 48.5 | 97 | 100.0 |
| peri- | 13 | 72.2 | 5 | 27.8 | 18 | 100.0 |
| para- | 24 | 77.4 | 7 | 22.6 | 31 | 100.0 |
| pro(s)- | 14 | 45.1 | 17 | 54.9 | 31 | 100.0 |
| dia- | 6 | 46.1 | 7 | 53.9 | 13 | 100.0 |
| meta- | 13 | 68.4 | 6 | 31.6 | 19 | 100.0 |
| sun- | 18 | 72.0 | 7 | 28.0 | 25 | 100.0 |
| ama- | 8 | 72.7 | 4 | 27.3 | 12 | 100.0 |
| amphi- | 13 | 61.9 | 7 | 38.1 | 21 | 100.0 |
| hupo- | 20 | 76.9 | 6 | 23.1 | 26 | 100.0 |
| huper- | 4 | 66.6 | 2 | 33.4 | 6 | 100.0 |
| anti(o)- | 1 | 50.0 | 2 | 50.0 | 2 | 100.0 |
| total: | 347 | 59.2 | 239 | 40.8 | 586 | 100.0 |

As can be seen, there is a wide variation among the 18 prepositions studied, with many retaining a substantial portion of their - presumably original -pre-nominal use, while a few appearing more frequently in their pre-verbal position. How this variation correlates with semantic/syntactic factors is not yet clear. Overall, the distribution is ca. $60 \%$ pre-nominal (older stage) vs. $40 \%$ pre-verbal (later stage). Whether such a distribution suggests that the change is still ongoing during Homeric times or has arrived at its terminal equilibrium point is not easy to assess.

One may note, however, that a major portion of the data was not counted here - the pre-verbal prepositions preceding the 'Augment' vowel $e$-. Those will be discussed in Chapter 5, below, where the usage frequency figures given in (77) above will be re-computed, and may suggest a more advanced point along the diachronic continuum - given that the text-frequency of pre-verbal prepositions will be readjusted upward.

### 3.3.2 Text distribution of the semantic/syntactic types of pre-verbal prepositions

Another way of assessing the gradual progression of the diachronic change studied here is by observing the text distribution of the four functional-syntactic categories of pre-verbal prepositions in our text. The four categories are, recall:
a. Object overtly present in the clause: The nominal indirect object associated with the preposition is overtly present in the same clause or in the directly preceding clause; the pre-verbal preposition is semantically transparent, and signals the same semantic case-role as in its pre-nominal counterpart.
b. Object zeroed-out but contextually accessible: The nominal indirect object is not overtly present, but is still accessibly from either the anaphoric or generic context. And the pre-verbal preposition marks the same semantic case-role as in (a) above.
c. Semantic incorporation of preposition into the verb: The nominal indirect object is zeroed out as in (b), but is not anaphorically or generically accessible. However, the semantic value of the preposition is still transparent, and is fairly close to its original pre-nominal sense. The preposition is thus semantically incorporated into the verb.
d. Semantic arbitrariness of the preposition: The preposition does not reflect its original pre-nominal sense, and has become semantically arbitrary. The presence or absence of a nominal indirect object is unpredictable and irrelevant.

The text distribution of the four semantic/syntactic categories of pre-verbal prepositions are given in Table (78) below, with the text instances listed in Appendix 2, below. The counted text consists of Books I, II, III, IV, V, VI of the Iliad.
(78) Quantitative text distribution of functional-syntactic categories of pre-verbal prepositions

| Category | N | \% |
| :---: | :---: | :---: |
| a. | 353 | 50.9 |
| b. | 97 | 14.0 |
| c. | 102 | 14.7 |
| d. | 141 | 20.4 |
| total: | 693 | 100.0 |

If one were to accept the hypothesis that our four semantic/syntactic categories (a) through (d) represent a diachronic continuum in the change from pre-nominal to pre-verbal prepositions, then the distribution in Table (78) above suggests that ca. $65 \%$ of the use of pre-verbal prepositions in the Homeric text - categories (a) and (b) combined - is still fairly close to the original -pre-nominal - point of origin. In these two categories, the semantic range of the preposition is still fairly close to its pre-nominal case-marking use, and the nominal indirect object is either overtly present, or contextually accessible from the anaphoric or generic context. A much smaller portion of the sample, the ca. $\mathbf{2 0 \%}$ of category (d), have arrived at or near the terminal point of our suggested diachronic continuum, with both the semantics and the syntax of the usage now largely arbitrary, with the preposition thus fully merged with the verb. A smaller yet portion of the sample, lastly, the ca. $15 \%$, in category (c), presumably represent a transition stage, where the semantic value of the pre-nominal preposition is still reflected in the compound verb, but the syntax has already changed.

### 3.4 Interim summary

The quantitative distribution in (77) and (78) above are, of course, subject to the same caveat noted above - that our count did not include pre-verbal prepositions that precede the 'Augment' vowel $e$-. The impact of those instances on our understanding of the overall diachronic process will be assessed in Chapters 5, 6 below.

While fully comparable distributional data are not available for Rama (Chapter 1), Homeric Greek, with ca. $\mathbf{2 0 \%}$ of its prepositional population at or near the end-point stage of our proposed diachronic continuum, seems to be nearer the end point of the continuum than Rama. That endpoint, characterized by semantic fusion of the preposition to the verb and a corresponding
re-alignment of clausal syntax, may be seen in the old pre-verbal prepositions found in modern Romance and Germanic languages. It will be discussed further in Chapter 7, below.

## Abbreviations of grammatical terms

| ACC | accusative | P | preposition |
| :---: | :---: | :---: | :---: |
| ALL | allative | PL | plural |
| ASSOC | associative | PP | prepositional/postpositional |
| ASP | aspect |  | (phrase) |
| c | conjunction | REF | referring/reflexive |
| caus | causative | S | subject |
| cv | reduplicate first syllable | sub | subordinator |
| DAT | dative | тно | though |
| Em | demonstrative | v | verb |
| DO | direct object | vc | reduplicate first syllable |
| em | emphasis | VER | intensifier |
| FOR | because | wh | wh-question |
| fut | future | 1 s | first person singular |
| En | genitive | 1 p | first person plural |
| нав | habitual | 2 s | second person singular |
| IMP | imperative | 2p | second person plural |
| INF | infinitive | 3 s | thirst person singular |
| IRR | irrealis | 3sf | third person singular masculine |
| Loc | locative | 3 sm | third person singular feminine |
| MANN | manner | s | singular |
| NEG | negative | sf | singular feminine |
| NF | non-finite | sm | singular masculine |
| Nom | nominative | p | plural |

o object

## Appendix 1. Text locations of pre-verbal preposition (Iliad, books I, II)

ana-
I. 58, $87,191,236,305,387,450,478,584,586,611$; II. 27, 34, 276, 380, 398, 694 [19]
kata-
I. $81,475,514,524,527,569,582,592,601$; II. 191, 233, 350, 355, 41 [14]
en(i)-
I. 24, 33, 117, 191, 378, 513, 534, 599; II. 42, 80, 215, 245, 248, 436, 490, 496, 499, 526, 572, 591, 605, 719 (-N, -V), 783 [23]
ex-/ek-
I. $19,146,164,337,363,451,518$; II. 113, 133, 227, 266, 286, 288, 357, 432, 480, 483, 483, 600, 806 [18]
e(i)s-/ei-
I. 104, 181, 546; II. 46, 215, 514, 675, 808 [8]
apo-
I. $25,35,48,60,84,97,117,128,130(x 3), 134,161,181(\mathrm{x} 2), 182,215(\mathrm{x} 3), 230,268$, 285(x3), 313, 314, 379, 422, 430, 515, 522, 526, 560(x3), 598(?); II. 113, 120, 161, 177, 269, 288, 361, 369 (x3), 391 (x2), 702, 772, 877 [40]
epi-
I. $31,50,51,65,89,93,149,173,218,265,295,335,376,383,388(x 2), 455,464,471$, 515, 526, 534, 565, 569; II. 10, 25, 62, 109, 143, 198, 225, 229, 259, 275(x2), 282, 335, 354(x2), 359, 409, 427, 455, 611, 668, 754, 802, 850 [47]
peri-
I. 295, 393, 466; II. 295, 551 [5]
para-
I. 213, 488, 555, 579; II.189, 244, 485 [7]
pro(s)-
I. 113, 201, 291, 336, 458, 539; II. 7, 238, 251, 396, 421, 463(x2), 464, 555 [14]
dia-
I. 189; II. 126, 207, 450, 473, 474, 691 [7]
meta-
I. 140, 160, 269, 480; II. 386, 481 [6]
sun-
I. 176, 399, 538, 540; II. 55, 382, 753 [7]
ama-
I. 172, 292, 604; II. 436 [4]
amfi-
I. 37,451 ; II. 262, 315, 521, 525, 574 [7]
hupo-
I. 292, 514; II. 310, 312, 349, 426 [6]
huper-
I.205, II. 116 [2]
anti(o)-
I. 31, 589 [2]

## Appendix 2. Text locations of the four semantic/syntactic categories of pre-verbal prepositions

 (text: Iliad, books I, II, III, IV, V, VI)a. Nominal argument is overtly present in the same or directly-preceding clause; semantics of preposition similar to the pre-nominal pattern
I: $19,24,31,31,33,37,48(\mathrm{x} 2), 50,65,76,84(\mathrm{x} 3), 89,97,113,126,129,130(\mathrm{x} 3)$, $134,161,164,172(x 2), 173(x 2), 182(x 2), 182,191,213,215(x 3), 216,218,230,269$, 275, 285(x3), 291, 292(x2), 295, 313, 314, 335, 336, 378, 393, 422, 430, 451, 455, $465,469,471,478,480,483,488,513,529,538,539,540,555,560(x 3), 565,569$, 576, 582, 598(!), 599, 604(x2)

II: 10, 25, 27, 46, 55, 62, 64, 113, 133, 143, 189, 198, 207, 215, 225, 229(?), 234, 238, $244,248,251,249,262,266,275(?), 282,310,312,335,354(\mathrm{x} 2), 369(\mathrm{x} 3), 391,396$, 410, 414, 426, 436, 450, 455(?), 464, 474, 480, 481, 483, 483, 484, 485, 490, 496, $499,514,521,525,531,572,574,591,605,675(?), 691,702,719,753,754,772$, 802, 808, 850, 877

III: 19, 42, 46 59, 64, 69, 89, 165, 177, 191, 196, 199(x2), 199, 228(x2), 249(?), 252, 265, 269(?), 295, 344, 348, 350, 359, 363, 369, 370, 399, 418, 432, 437(x2), 448, 453(?), 458

IV: 4, 5(x2), 50(x2), 62(x2), 64, 66, 71, 88, 94, 107, 108, 126, 133, 156, 177, 183, 188(x3), 190, 217, 218, 230, 249, 256, 284, 308, 312, 317(x2), 342, 356, 369, 412, $423,444,446,463,463,471,475,508,532$

V: 2,18, 21, 22(x2), 30, 35, 36(N-be), 39, 46, 47, 56, 105, 119, 127, 142, 149, 155, 157, 183, 192(rel), 203, 204(!), 212, 215, 221, 222, 227, 234, 235, 242, 247, 255, 263, 269, 284, 306, 323, 328, 330, 332, 336, 337, 375(x2), 381(x2), 389, 418, 422, 423, $432,433,438,445,454,479,492,514,516,567,570,591,597,632,636,662,685$, 698, 700, 713, 725, 726, 736, 750, 764(x3), 765, 772, 774, 793, 807, 808, 814(x3), 816, 824, 825(x2), 848, 860, 861, 870, 871, 878, 879, 884, 902, 902
VI: $39,53,57(x 2), 60(x 2), 75,87,96,99,100,120,128,136,144,163,208,214$, 230(x3), 235(x2), 244, 263(x2), 277, 285, 291, 296(x2), 321, 328, 336, 337, 343, 346, 355, 359(x2), 361, 388(x2), 388, 393, 399, 405, 409, 412, 419, 435, 458, 475, 487, 493, 499, 507, 508, 520
b. Nominal argument is implicit, as either anaphoric or generic zero in the same or directly-preceding clause(s); semantics of preposition similar to the pre-nominal pattern
I: $25,35(\mathrm{x} 2), 51,58,60,117,149(\mathrm{x} 2), 171,201,285(\mathrm{x} 3), 337,363,376,379,466$, 522, 526, 593

II: 7, 113, 146, 226, 228, 269, 288, 316, 361, 382, 421, 475, 485, 555, 600, 611, 619, 783(rel),806

III: $7,16,39,62,65,171(x 2), 213,285,313,378,447,459$
IV: 10, 24, 29, 41(rel), 79, 142, 192, 203, 212, 229, 233, 272, 274, 326, 337, 394, 426, 486, 520, 523, 527

V: 12, 20, 44, 123, 139, 192, 223, 238, 288, 297, 335, 515, 526, 598, 620, 622, 682, 716, 728, 836 [total: 20]

VI: 17(x2), 85, 149, 251, 332(x3), 363(x2), 379, 618
c. Fairly transparent semantic presence of the preposition in the (intransitive) verb; presence of indirect object unpredictable
I: $81,104,189,236,247,305,312,313,383,387,450,459,475,514,515,524,527$, $534,569,584,586,592,592,601$

II: 109, 191, 276, 288, 295, 315, 350, 355, 357, 398, 429, 432, 463(x2), 493, 685, 694 III: 84, 98, 102, 106, 107, 166, 209, 216, 275, 277, 277, 281, 342, 346, 355, 362, 379, 394, 415, 419, 426

IV: $9,53,112,133,149,170,224,263,332,340,426,450$
V: 15, 26, 90/91, 98, 107, 109, 167, 174, 254, 254, 294, 343, 476, 489, 499, 508, 643, 720, 720, 751

VI: 83, 185, 148, 182, 194, 202, 257, 296, 360, 480, 494
d. Tail-end of change: semantically \& syntactically unpredictable

I: $25(\mathrm{x} 2), 87,117,128,140,160,201,268,287,353,464,466,480,514,515,518$, 550, 555

II: $34,116,120(?), 126,161,177,215,233,245,286,286,349,359,380,386,409$, 427, 436, 475, 526, 551, 668

III: 12, 44(viz. 40, 41!), 125, 207(x2),210(x2), 212, 215, 220, 243, 322, 338, 355, 379, 450

IV: 6, 32, 40, 42, 47, 253, 287, 300, 305, 374, 404, 488(x2), 494, 51
V: 43, 59, 60, 104, 138, 142, 150, 151(x2), 155, 164, 168, 240, 285, 311, 319, 329, $382,388,402,425,436,481,502,505,623,633,648,675,677,697,702,716,751$, $758,761,794,803,816,383,886,892,899,901,903$

VI: 20, 26, 30(x2), 36(x2), 61, 68, 81, 93, 115, 128, 170, 223, 265, 274, 322, 334, 340, 353, 364, 409, 410, 439, 439, 444, 444, 456, 488, 489, 491, 495, 502

## Detached ('severed') prepositions in Homeric Greek

### 4.1 Recapitulation

In the preceding two chapters we investigated the functional and syntactic distribution of Homeric Greek prepositions, focusing on the presumed diachronic source and the diachronic target constructions; respectively:

- nominal-attached, thus pre-nominal prepositions
- verb-attached, thus pre-verbal prepositions

But our diachronic hypothesis about the life-cycle of adpositions, presented originally in Chapter 1 and suggested by data from multiple languages, also assumed an intermediate stage, where the preposition-marked nominal indirect object is zeroed out in contexts of anaphoric or generic predictability. Whereby the preposition becomes detached ('stranded'), and eventually cliticizes to the verb.

In Chapter 3, we set up four categories on a diachronic continuum in an attempt to assess the functional-syntactic behavior of pre-verbal prepositions, our suggested target diachronic stage. The four categories were, in diachronic order:
a. Nominal indirect object still overtly present in the same clause as the detached preposition, which still seems to mark its semantic case-role. And that semantic role corresponds closely to that found in the preposition's pre-nominal use (Chapter 2).
b. Nominal indirect object is not overtly present in the same clause, but is anaphorically or generically predictable in context. The detached preposition still marks the semantic case-role of the zeroed-out nominal object, as in (a) above.
c. Nominal indirect object is neither overtly present in the clause nor contextually accessible, but the semantic value of the preposition is still transparent and fairly close to its original sense in the pre-nominal construction. The preposition is semantically incorporated into the verb.
d. Semantic arbitrariness: The preposition does not reflect the original sense of its pre-nominal use, and has become semantically arbitrary.

We will begin the discussion here by surveying some typical examples of detached prepositions in the Homeric text, noting some of their main structural and semantic features.

### 4.2 Detached prepositions: A preliminary survey

Detached prepositions in Homeric Greek, those so-called 'free adverbials' that were traditionally assumed to be the product of Tmesis ('severance'), display a tantalizingly similar syntactic/semantic behavior as the pre-posed post-positions of Rama (Chapter 1). Most often, they are stranded somewhere before the verb but not adjacent to it, and often rather early in the clause. In that rather peculiar syntactic position, they are most commonly followed by one or more of the second-position particles (Monro 1891, Chapter 8). ${ }^{1}$ In some instances, the indirect object nominal to which the detached preposition seems semantically relevant - that is, whose case-role it still marks - is overtly present in the clause, and thus can be counted in our functional-syntactic pattern (a) above; as in e.g.:
(1) en $\mathrm{d}(\mathrm{e})$ hoi ëtor stëthessin lasioisin di(a)-an(a)-dikh-a
in DE 3s heart breast shaggy through-up-divide-NF mermëriz-en
murmured-3s
'and in his shaggy breast his heart, divided through, murmured'
While the detached preposition en 'in' in (1) clearly pertains to 'his shaggy breast', it is not adjacent to it. In comparison, the pre-verbal dia- 'through' is semantically incorporated into the verb 'divide' and pertains to no discernible indirect object. While ana- 'up', closer to the verb stem and thus most likely diachronically older, ${ }^{2}$ seems semantically arbitrary.

Consider next (2) below, where a pronoun intervenes between the detached preposition ex- 'from' and the particle $d e$, and where ex- is semantically relevant to an implicit, zeroed-out time adverbial, thus our category (b) above; while the pre-verbal dia- 'through' seems semantically arbitrary.

[^16](2) ex ou de ta prota dia-stët-ën ëris-ant-e
ex 3s DE 3s first through-stand-3p figh-be-NF
'from (the time) when they first stood apart fighting'

Consider next the chain of clauses beginning with (3) below, all with detached prepositions. In (3), the nominal object of both detached prepositions, 'the ship', is implicit from the directly-preceding narrative context as 'on board of the ship', thus our category (b):
(3) en $\mathbf{d}(\mathrm{e})$ eretas epitëdes agairo-men, es $\mathrm{d}(\mathrm{e})$ hecatombën in DE rowers sufficient/PL gather-1p/IRR to DE hecatombs theio-men
put-1p/irR
'and let's gather in (the ship) fine rowers, and put the hecatomb into (the ship)'

The same implicit object, 'the boat', is also the implicit object of ana 'on' in (4):
(4) an(a) d(e) autën Khrusëida kalli-parënon bëso-men up de dem/sf Chyses'.daughter fair-cheeked go/caus-1p/IRR 'and let us put upon (the boat) Chryses' fair-cheeked daughter' (I.143)

While the implicit object of eis- 'to' in (5) seems to be 'the others on board':
(5) eis de tis arkhos anër boulë-for-os est-w
to De wh commander man councel-bear-nf be-3s/irR
'and let whoever may be in command give counsel to (the others on board)'

In all of these instances, the sense of the detached preposition is fairly close to its original sense as a nominal case-role marker (Chapter 2).

The zeroed-out object of the detached preposition may also involve a rel-clause anaphora, as in (6) below. This is also an example of a detached preposition that is not followed by a second-position 'particle':
(6) kai de moi geras autos af(o)-aireses-thai ap(o)-eil-eis and DE me prize DEM from-take-IRR from-threaten-2s
'and you threaten to take away my own prize
hw epi polla mogës-a
3 s over much toil-NF
over which (I) have toiled so much'

Consider next a more complex case, where the preposition ana- 'up(ward)', here not followed by a 'particle', directly precedes the nominal object 'scepter', and thus appears on the surface to be an example of the pre-nominal - rather than detached - preposition:
(7) khrusew ana skëptrw, kai lisse-to pantas Akhaious
gold up scepter and pray-NF all Achaeans
'and (holding up) a golden scepter as he prayed to all the Achaeans'
But ana 'up' here is not semantically relevant to the adjacent nominal object, 'scepter', but rather to the verb ekh-wn 'holding up' in the preceding clause (I.14), where 'scepter' is the direct object, thus our semantically-coherent category (c). What is more, the semantic incorporation of ana- 'up' into the verb 'pray' is near-formulaic, indicating either the upward direction of prayer, or of the object - in this case 'scepter' - being held up during prayer. That formulaic use of 'pray up' is seen in (8) below, with no nominal object present:
(8) te-tlath-i, mëter emë, kai ana-skhe-o këdo-men-ë per cV-cheer-IMP mother 1 s and up-pray-IMP grieve-be-nf тно 'cheer up, my mother, and pray up even though grieving'

In the same vein, consider the detached preposition kata- 'down' in a clauseinitial position in:
(9) ë toi ho ge hws eip-on, $\operatorname{kat}(a) \operatorname{ar}(a)$ e-ze-to, c 3 s 3 s em so speak-nf down ara in-sit-nf 'having spoken this, he sat down'

Such use of a detached preposition fully parallels the near-formulaic pre-verbal incorporation of kata- into the same verb 'sit', as in:
(10) kai hra a-keous-a kath(a)-ës-to
and hra neg-voice-nf down-sit-NF
'and (she) sat down in silence'
As in the case of pre-verbal prepositions (Chapter 3), the sense of prepositions that are semantically incorporated into the verb, our category (c), may drift gradually into arbitrariness, thus our category (d). Such semantic arbitrariness can also be found, albeit less frequently, in detached prepositions. In this context, consider (11) below:
(11) e-ze-to epei-t(a) ap(o)-an(a)-euth-e newn meta de ion ex-sit-nf then-3p from-up-apart-3s boats with DE arrow e-ëk-e
ex-shoot-3s
'then he sat away from the ships (and) shot out (with) an arrow'
The sense of 'out', 'off', 'away from', implicit in 'shoot' in (11) above, is perhaps still echoed by the phonologically-eroded 'Augment' $e$ - - presumed to have originally been ex- (see Chapters 5, 6 below). But the detached preposition meta'with'/'among'/'about' is semantically nigh arbitrary, ${ }^{3}$ thus our category (d).

In some instances, the detached preposition is not only fronted, but nearly adjacent to the verb - except for the second-position 'particle'. Thus consider (12), (13) below, both clear instances of our syntactic/semantic category (b), with a zeroed-out but anaphorically predictable nominal object:
(12) ë-lth-e $\mathrm{d}(\mathrm{e})$ Athënë ourano-then, pro gar ë-k-e thea ex-come-3s DE Athena heaven-from to FOR to-send-3s goddess leuko-lënos Hërë
white-arm Hera
'Athena came from heaven, for the white-armed goddess Hera sent her to (heaven)'
(13) thambëth-en $\mathrm{d}(\mathrm{e})$ Akhileus, meta de e-trape-to wonder-3s DE Achilles, about de ex-turn-NF 'and Achilles wondered, and turned about (himself)'

One may consider such near adjacency of the preposition to the verb as a late stage in the eventual pre-verbal incorporation of prepositions.

A fairly coherent sequence of two detached prepositions can be seen in (14) below, where the first one, $e k$ - 'out', is semantically incorporated into the verb 'speak out', thus our category (c); while the zeroed-out object of epi- 'over' is still anaphorically predictable from the immediate context, thus our category (b):
> alla ek toi e-re-w kai epi megan orkon omou-mai but ex $2 \mathrm{~s} /$ DAt to-speak- $1 \mathrm{~s} / \mathrm{Fut}$ and on great oath swear-1s 'but I shall speak out to you, and swear a great oath over (what I spoke)'

[^17]In many instances, the detached preposition precedes a verb that is already augmented by $e$-, as in (12), (13) and (14) above. A complex case of that type may be seen in (15) below, where the sense of 'off'/'from' is presumably imparted by the 'Augment' $e$ - itself, assumed to have been ex-. While the detached peri 'about' supplements the verb with the sense of 'all over':
(15) peri gar $\operatorname{hr}(\mathrm{a})$ he khalkos e-leps-e
about FOR HRA 3 s bronze ex-strip- 3 s
'for the bronze had stripped it off all over'
This semantic interaction between the 'Augment' $e$ - and the stranded preposition is, most likely, a diachronic precursor of the common pattern of augmenting the meaning of the phonologically eroded $e$ - with new pre-verbal prepositions (see Chapters 5, 6, below).

The detached preposition peri 'about' in (16) below appears first pre-nominally, where it pertains semantically to the overtly-present object, 'the Danaans' council', thus our category (a). In the next clause, peri- appears pre-verbally, presumably pertaining to an implicit 'here', thus our category (b):
(16) oi peri men boulën Danawn, peri de est-e makhesth-ai 3p about men council Danaans/GEN about DE be-3p fight-NF/PL
'(you two) around the Danaans' council, who are fighting around (here)'

Lastly, in a few cases the detached preposition appears directly in front of the verb without an intervening 'particle', perhaps a inconsistency in the Homeric writing. However, the preposition is semantically relevant to an anaphorically zeroed-out object, thus our category (b):
(17) oi hoi pros-then ama traf-en ë-de e-gen-ont-o en-Pulw

3 p 3 s before-LOC with raised(?)-3p C-DE to-born-be-NF in-Pylo
ëgatheë
sacred
'who before that were reared with (him), having been born in sacred Pylos'

### 4.3 Pre-verbal vs. post-verbal detached prepositions

As noted in Chapter 1 above, one intriguing syntactic construction found in Rama, and suggested as an intermediate diachronic stage between nominal-attached and verb-attached adpositions, is a clause with a detached post-position; shorn of its nominal indirect object and stranded before the verb - but cliticized
neither to a nominal object nor to the verb. In Rama, as we noted, this construction was perhaps the product of two well-known syntactic processes:

- The fronting of more topical indirect objects, perhaps akin to 'dative shifting.' ${ }^{4}$
- Zeroing out of the fronted object in a context of anaphoric or generic predictability.

It would thus be of interest to see the text frequency distribution of detached prepositions in the Homeric text - pre-verbal vs. post-verbal. On typological grounds, recall, one would predict the predominance of the OV order, since prepositions eventually attach pre-verbally.

In all the examples of detached prepositions cited above, the preposition preceded the verb (OV). As it turns out, only in a remarkably few examples in the Homeric text does a detached preposition follow the verb (VO); and those examples are all problematic. Thus, for example, in (18), (19), (20) below, the detached preposition, marked by the conjunctive 'particle' te, precede a nominal and clearly marks its case-role:
(18) Pëleidës men epi-klisias kai nëas eisas ë-i-e Peleides MEN on-huts and ships equal to-go-3s 'and the son of Peleus went then to (his) hut and shapely ships
sun te Menoitiadë kai hois hetaroisin with te Menoetius and 3s/pl companions with Menoetius and his companions'
(19) tw de autw marturoi est-wn pros te thewn makarwn 3d De dem/s witnesses be-nf before te gods blessed 'let them two be witnesses to this before the blessed gods
pros te thnëtwn anthrwpwn (I.338/9)
before te mortal men
and before mortal men'
(20) ei sfoin ta-de panta puthoia-to marna-men-oiin
if Ref 3p-de all hear-NF fight-be-NF/PL 'if they had all heard these (tales of) your fighting
oi peri men boulën Danawn
3p about men council Danaans/GEN
around the Danaans' council'

[^18]In one example, the clause is verbless and separated by a comma from the preceding clause that contains the relevant - anaphorically-predictable - pronoun:
(21) en-tha kath(a)-e-ud-e ana-b-as, para de khruso-thronos Hërë. in-3s down-to-sleep(?)-3s up-go-nf by de gold-throne Hera 'he went to sleep down there, with golden-throned Hera beside (him)'

Lastly, in a few instances, the detached preposition appears in a verbless clause, as in (21) above. However, the detached preposition appears before a nominal object, and indeed marks its case-role, as in:
(22) ou (a)ma gar Apollwna Dii-filon, hw te su Kalkhan neg with for Apollo Zeus-dear 3s te 2s Calchas 'for no one, by Apollo dear-to-Zeus, to whom you Chalcas eu-kho-men-os Danaoisi theo.propias ana-fain-eis ver-pray-be-nf Danaeans god.oracles up-say-2s pray and pronounce oracles to the Danaans'

The text location of all detached prepositions in the first 6 books of the Iliad are listed in Appendix 1, below. The text location of pre-verbal (OV) vs. post-verbal (VO) detached prepositions in the Book I of the Iliad are listed in Appendix 2. The quantitative text distribution of the two orders in Book I of the Iliad is given in Table (23) below, compared with the OV vs. VO order of nominal indirect objects (see Chapter 2).
(23) Pre-verbal vs. post-verbal position of detached prepositions as compared to nominal indirect objects (Iliad Book I)

| Order | Detached prepositions |  | Nominal IO |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% |
| pre-verb | 47 | 92.1 | 83 | 54.9 |
| post-verb | 4 | 7.9 | 68 | 45.1 |
| total: | 51 | 100.0 | 151 | 100.0 |

The comparison is indeed striking. The order of nominal indirect object vis-a-vis the verb is already biased - at ca. $55 \%$ pre-verbal (OV) order. With detached prepositions, the percentage of pre-verbal position goes exponentially higher, to $\mathrm{ca} . \mathbf{9 2 \%}$; and given the problem with the post-verbal (VO) position, the percentage is probably higher. Detached prepositions in the Homeric text
are thus poised - even more than preposition-marked nominal indirect object - in the right syntactic position to become pre-verbal clitics. All that is still missing is the zeroing out of their nominal indirect object in contexts of anaphoric or generic predictability.

### 4.4 Quantitative text distribution of functional-syntactic patterns of detached prepositions

In Chapter 3, above, we investigated the functional-syntactic distribution of pre-verbal prepositions, trying to determine how many of them still retained the functional and syntactic coherence displayed in their pre-nominal position, the diachronic source construction. We recognized four semantic/syntactic patterns, recapitulated once again below, and suggested that they represented a diachronic continuum in the life-cycle of Homeric prepositions. That is:
a. Object is overtly present in the clause: The nominal indirect object is overtly present in the same clause or in the directly preceding clause; the pre-verbal preposition is semantically transparent, and its semantic case-role matches closely that of its pre-nominal counterpart.
b. Object is zeroed out but predictable from context: The nominal indirect object is not overtly present, but is predictable from either the anaphoric or generic context. The pre-verbal preposition still marks the same indirect-object case-role as in its pre-nominal use (a) above.
c. Transparent semantic association of preposition and verb: The nominal indirect object is zeroed out as in (b) above, and is not accessible from the anaphoric or generic context. But the semantic value of the preposition is still coherent, and is fairly close to its original pre-nominal sense. The preposition is thus semantically incorporated into the - mostly-intransitive location or motion - verb.
d. Semantic arbitrariness: The preposition does not reflect its original pre-nominal meaning, and has become semantically arbitrary. The presence or absence of a nominal indirect object is unpredictable and irrelevant.

The first two patterns, (a) and (b), are both semantically and syntactically coherent, corresponding fully to the pre-nominal diachronic source construction. In the third (c), the old semantic sense of the preposition is still retained, but it does not any more pertain to a nominal indirect object. In the fourth pattern (d), both the semantics and the syntax have been restructured. Representative examples of the four patterns in clauses with detached prepositions are given in order below.

Consider first examples of pattern (a), in which both semantics and syntax correspond to the presumably older pattern of pre-nominal prepositions.
(24) ek de ag-ag-e klisin Brisëida kalli-parëon
ex de vc-lead-3s hut Briseida fair-cheek
'(and he) led fair-cheeked Briseida out of the hut'
(25) amfi $d(e)$ ara wmoisin bale-to xifos arguro-ëlon
about de ara shoulders throw-nf sword silver-stud
'and about his shoulder he threw his silver-studded sword'
A syntactic sub-pattern of this category is found when the indirect object is present as a fronted pronoun - followed by the detached preposition. Ten of those are found in near-succession in a rather formulaic section of the text, where Homer digresses from the action narrative to list those who accompanied sons of Atreus to Ilios, as in:
(26) toisi $\mathbf{d}(e)$ ama tessarakonta melainai nëes $\mathrm{ep}(\mathrm{i})$-ont-o

3p DE with forty black/pl ships on-be-NF
'and with them came forty black ships'
(27) toisi d(e) am(a) Eurualos tritatos ki-en, iso-theos fws,
$3 p$ de with Euryalus third come-3s like-god man 'and with them came third Euryalus, godlike warrior',

Representative examples of our functional-syntactic pattern (b), in which the indirect object is zeroed out but is accessible from the anaphoric or generic context, may be seen in multiple examples below, with the first one showing pattern (a) above followed directly with pattern (b):
(28) oi peri men boulën Danawn, peri de est-e makhesth-ai 3p about Men council Danaans/gen about de be-3p(?) fight-nf/pl '(you two) around the Dannans' council, who are fighting about (here)'
(29) en $\mathbf{d}(\mathrm{e})$ eretas epitëdes agairo-men, es $\mathbf{d}(\mathrm{e})$ hecatombën in DE rowers sufficient gather-1p/IRr to DE hecatomps theio-men
take-1p/IRR
'and let's gather in (the ship) enough rowers, and take the hecatomb to (there too)'
(30) an(a) d(e) autën Khrusëida kalli-parënon bëso-men (I.143) up de dem/sf Chyses'.daughter fair-cheeked go/caus-1p/IRR 'and let us put upon (it, the ship) Chryses' fair-cheeked daughter'
(31) ek de e-l-on Atreidë Khrusëida kalli-parëon
ex de ex-take-nf Atreides Chyseida fair-cheek
'but they took from (me) fair-cheeked Chryseida for the son of Atreus'
(32) pro gar ë-k-e thea leuko-lënos Hërë
to FOR to-send-3s goddess white-arm Hera
'for the white-armed goddess Hera sent (her) to (there)'
(33) pro me ep(i)-e-mps-en anax andrwn Agamemnwn
forth 1 s on-to-send-3s king men/gen Agamemnon
'Agamemnon, king of men, has sent me over/to (here)'
On occasion, the anaphora involves a reL-clauses structure, as in:
(34) hw epi polla mogës-a

3s over much toil-nf
'(the prize) over which I toiled so much'
Another rel-clause example involves the preposition entos, a larger 'adverbial' version of en- 'in', which directly precedes the verb without an intervening 'particle', with the preposition here semantically relevant to 'the strong Hellespont':
(35) hossous Hellesponto agarroos entos e-erge-ei;

3s/like Hellespont strong in in-work-3s/нав
'such as the strong Hellespont encloses in (it)'
And the zeroed-out indirect object can be present as a pronoun, with no particle following the detached preposition, which is thus directly adjacent to the verb: ${ }^{5}$
(36) oi hoi pros-then ama traf-en

3 p 3s before-from with raised(?)-3p
'(they) who before that were reared with him'
Representative examples of our pattern (c), where the semantics of the preposition is still fairly intact but the syntax has been disrupted, can be seen below, with the first example showing pattern (c) first, followed directly by pattern (b):
(37) alla ek toi e-re-w kai epi megan orkon
but ex 2s/DAT to-speak-1s/FUT and over great/ACC oath/ACC
omou-mai
swear-1s
'but I shall speak out to you, and swear a great oath over (it)'

[^19](38) ë toi ho ge hws eip-on, $\operatorname{kat}(a) \operatorname{ar}(a)$ e-ze-to
c 3 s 3 s em so speak-nf down ara in-sit-nf 'having thus spoken to him, he sat down'
(39) alla ek toi e-re-w
but ex $2 \mathrm{~s} / \mathrm{dat}$ to-tell-1s
'but I will speak out to you about it'
(40) oi de histon stës-ant-o ana th(e) histia leuka met(a)-ass-an

3p de mast stand-be-NF up TE sails white with-spread-3p
'and raising the mast, they spread up white sails'
(41) kata de prumnësi e-dës-an
down DE stern.cables to-tie-3p
'they tied down the stern cables'
Lastly, examples of our pattern (d), the most arbitrary both semantically and syntactically, may be in:
(42) khrusew ana skëptrw kai lisse-to pantas Akhaious
gold up scepter and pray-NF all Achaeans
'and a golden scepter as he prayed up to all the Achaeans'
(43) e-ze-to epei-t(a) ap(o)-an(a)-euth-e newn meta de ion
ex-sit-NF then-3p from-up-??-3s boats with DE arrow
e-ëk-e ${ }^{6}$
ex-shoot-3s
'then he sat away from the ships (and) shot out an arrow'
(44) ei de po-te es ge mian bouleuso-men
if DE WH-TE to EM one counsel-1p/IRR
'so if some day we may be (= arrive) at one counsel'
(45) Quantitative text distribution of the functional-syntactic patterns of detached vs. pre-verbal prepositions (Books I, II of Iliad)

| Pattern | Detached |  | Pre-verbal |
| :---: | :---: | :---: | :---: |
|  | N | \% | \% |
| a. | 42 | 41.7 | 50.9 |
| b. | 40 | 38.8 | 14.0 |
| c. | 16 | 15.5 | 14.7 |
| d. | 5 | 4.0 | 20.4 |
| Total: | 103 | 100.0 | 100.0 |

Text distribution patterns are not always easy to interpret, given that they are - and rightfully so - embedded in specific theoretical questions one would like to ask, or hypotheses one entertains in response to these questions. Our question, or puzzle, recall, has been: "How do prepositions, whose natural functional domain is marking the case-role of nominal indirect objects, wind up affixed to verbs?" The hypothesis suggested at the outset was that in Homeric Greek, clauses with detached ('severed') prepositions served as an intermediate - diachronic bridge--construction between the diachronically older stage of pre-nominal prepositions and the terminal stage of pre-verbal prepositions.

The text-frequency data in Table (45), while not proving the hypothesis, are fully compatible with it. ${ }^{7}$ Patterns (a) and (b) taken together, the ones corresponding to the diachronic source construction of prepositionally-marked nominal indirect objects, take ca $80 \%$ of the sample in our proposed intermediate stage of clauses with detached prepositions, but only ca. $65 \%$ of the final stage of clauses with pre-verbal prepositions. In contrast, pattern (d), where the semantics of the preposition has become arbitrary, register only $4 \%$ of the population of our presumed intermediate diachronic stage of clauses with detached prepositions, but $\mathbf{2 0 \%}$ of the presumed final stage of clauses with pre-verbal prepositions. ${ }^{8}$

[^20]Lastly, the text-frequency data in (44) also conforms with the well-known observation that grammaticalization most commonly involves de-semantization, that is, increased arbitrariness of meanings (Hopper and Traugott 1982; Heine et al. 1991; Bybee et al. 1994; Heine and Kuteva 2007).

### 4.5 Detached prepositions and second-position 'particles'

As noted above, detached prepositions in Homeric Greek are often followed by one or two of the second-position 'particles'. While those 'particles' are most commonly written as separate words, there is little doubt that they were clitics on the preceding word or morpheme. And in fact, the most common ones, de and te are often written as the second part of a bi-syllabic word. The question that naturally comes up here is, do these particles hint at the communicative function of detached prepositions?

On general grounds, the typical second-position locus of the 'particles' in the Homeric Greek clause clearly suggests that they partake in the grammar of clause chaining. However, the topic is much too complex and thus outside the scope of this chapter. In Monro's (1891) extensive chapter on the use of the 'particles', the majority of them are described as imparting the sense of either surprising new information, contrast, counter-expectation, emphasis, or thematic or referential discontinuity. This is indeed a familiar cluster of related functions in the grammar of clause chaining,' suggesting that the discourse context for fronting detached prepositions whose nominal object has been zeroed out may involve, somewhat incongruously, both referential predictability of the nominal object - hence the zeroing out, but still some other informational unpredictability in the clause - hence the fronting and attached particles.

While a comprehensive analysis of the discourse function of the second-position 'particles' is outside the scope of the discussion here, it would still be of interest to determine the text frequency of the detached prepositions that are marked by the 'particles', as against those who appear without them. For this purpose, the 47 clauses in Book I of the Iliad counted in Table (23) above as having pre-verbal detached prepositions ${ }^{10}$ were divided into those coming with vs. without a following 'particle'. The results are listed in Table (46) below.
9. For a relevant discussion of the grammar of clause chaining see Givón (2020, Chapter 7).
10. As noted earlier above, the status of 4 clauses with post-verbal detached preposition was doubtful.
(46) Text distribution of detached preposition with or without second-position particles

| Category | N | \% |
| :---: | :---: | :---: |
| with particle | 34 | 72.3 |
| without particle | 13 | 27.7 |
| total: | 47 | 100.0 |

One way of interpreting this distribution is that the original construction for detached prepositions was fronting them in the context of some contrast, emphasis or discontinuity, thus the use of the 'particles'. And that the smaller fraction without the 'particles' represent a later diachronic stage, where the detached prepositions lost their earlier communicative function and were now poised to cliticize in front of the verb.

### 4.6 Overall functional load of the various prepositional constructions

If detached prepositions constitute an intermediate diachronic stage between the original pre-nominal pattern and the terminal pre-verbal one, it would be of interest to compare the overall text distribution of all three prepositional constructions in the Homeric text. Table (47) below summarizes this comparative distribution in Books I, II of the Iliad.
(47) Text distribution of detached vs. pre-verbal prepositions

| Category | N | \% |
| :---: | :---: | :---: |
| pre-nominal | 333 | 40.8 |
| detached | 105 | 12.8 |
| pre-verbal alone | 236 |  |
| pre-verbal plus 'Augment' $e$ - | 141 |  |
| total pre-verbal: | 377 | 46.4 |
| total: | 815 | 100.0 |

It is again not altogether clear how this text distribution should be interpreted. In terms of gross functional load, the two terminal points in the diachronic continuum taken together, pre-nominal and pre-verbal prepositions, share the bulk of the functional load of prepositions in verbal clauses - 87.2\%.

Our presumed intermediate stage, detached ('severed') preposition, comprises a relatively small portion of the sample $\mathbf{- 1 2 . 8 \%}$. If one accepts that the diachronic change under discussion here - the rise of pre-verbal from pre-nominal prepositions - was still ongoing during the period when Homeric Greek was spoken, then perhaps the text distribution in (47) make sense. Our proposed intermediate stage - detached ('severed') prepositions - represents a temporary way station, where prepositions pass on their way from a stable original stage to a stable terminal stage.

### 4.7 Discussion

In this chapter as well as in the preceding two, I attempted to approach Homeric Greek as just another natural - indeed spoken - language, whose considerable synchronic variation, as Bill Labov used to remind us, hints at either ongoing diachronic change, or at traces of past changes. ${ }^{11}$ The Homeric Greek data suggest that the migration of prepositions from their presumably original nominal case-marking locus to their pre-verbal site proceeded in three syntactic steps:
i. Initial: pre-nominal prepositions marking pre-verbal (OV) indirect objects
ii. Intermediate: detached prepositions whose nominal indirect object has been zeroed out in contexts of anaphoric or generic predictability
iii. Final: pre-verbal clitics ('preverbs')

The Homeric data further suggest that, in parallel with the syntactic re-positioning of prepositions, a 4 -stage semantic realignment also took place, comprising four recognizable diachronic stages:
i. Initial: The preposition marks nominal case-roles, as in the original pre-nominal construction (i).
ii. Intermediate-i: The nominal object of the preposition is zeroed-out, leaving the preposition detached or 'stranded' (ii), while still marking nominal case-roles
iii. Intermediate-ii: The preposition is re-attached to the verb, with a still-coherent semantic association with the verb, fairly close to its original casemarking sense.
iv. Final: The pre-verbal preposition's association to the verb becomes, gradually, semantically arbitrary.

[^21]In general outline, these two diachronic observations - or hypotheses conform to what was noted in Rama (Chapter 1), a more conservative OV language. In this connection, the text distribution of the OV vs. VO order for both nominal indirect objects and detached prepositions in the Homeric text is indeed striking:

- Preposition-marked nominal indirect objects, our presumed diachronic source construction, appear pre-verbally (OV) at the level of ca. $55 \%$ in the Homeric text.
- Detached prepositions, the intermediate stage and thus the immediate precursors of pre-verbal prepositions, appear pre-verbally (OV) at the level of over $\mathbf{9 0 \%}$ the Homeric text.

As noted in Chapter 1, the two main syntactic conditions for the rise of preverbal prepositions in an OV language like pre-Homeric Greek are:

- zeroing out of the nominal object; and
- pre-verbal position of the detached ('severed') preposition

Both conditions are satisfied in the Homeric text.
There remains the thorny issue of the Homeric writing system, and to what extent it reflects the exact word status of grammatical operators (cf. Zanchi 2019), including prepositions: Are they independent stress-bearing words, or are they unstressed clitics attached to lexical words such as nouns, verbs or adjectives? The Homeric writing system renders prepositions as independent words when they appear pre-nominally, presumably the oldest construction, as well as when they are detached ('severed'), our presumed intermediate diahronic stage. In contrast, pre-verbal prepositions, presumably the youngest stage on our diachronic continuum, are written as part of the verbal word. Since in the diachrony of grammar - all other things being equal - younger constructions tend to show less cliticization (or co-lexicalization) of would-be morphemes than older constructions, the puzzle of the Homeric writing system is real. It may call into question to what extent the Homeric writing conventions, codified $5-6$ centuries after Homer, reflect the facts of the spoken Homeric language. ${ }^{12}$
12. In general, written language is more conservative than spoken language, and thus tends to represent older stages of the language. Thus in English, prepositions and articles, on the one hand, and anaphoric pronouns and verbal auxiliaries, on the other, are still written as independent words. This is in spite of the fact that by criteria of lexical stress, adjacency and word intonation contours all pertaining to the spoken language - they are already clitics on nominals or verbs, respectively.

## Abbreviations of grammatical terms

| ACC | accusative | P | preposition |
| :---: | :---: | :---: | :---: |
| ALL | allative | PL | plural |
| ASSOC | associative | PP | prepositional/postpositional |
| ASP | aspect |  | (phrase) |
| C | conjunction | REF | referring/reflexive |
| caus | causative | S | subject |
| cv | reduplicate first syllable | sub | subordinator |
| DAT | dative | тно | though |
| DEm | demonstrative | v | verb |
| DO | direct object | vc | reduplicate first syllable |
| EM | emphasis | VER | intensifier |
| FOR | because | wh | wh-question |
| FUT | future | 1 s | first person singular |
| GEN | genitive | 1 p | first person plural |
| нAB | habitual | 2 s | second person singular |
| IMP | imperative | 2p | second person plural |
| INF | infinitive | 3 s | thirst person singular |
| IRR | irrealis | 3sf | third person singular masculine |
| Loc | locative | 3 sm | third person singular feminine |
| mann | manner | s | singular |
| NEG | negative | sf | singular feminine |
| NF | non-finite | sm | singular masculine |
| NOM | nominative | p | plural |
| о | object |  |  |

## Appendix 1. Text locations of detached prepositions (Text: Iliad, books I, II, III, IV, V, VI)

I.6, I.15, I.48, I.68., I.86, I.101, I.142, I.142, I.143, I.144, I.156/7, I.162, I.188, I.195, I.199, I.204, I.208, I.233, I.233, I.236, I. 251 (!!-prox), I.252, I.258, I.258, I.307, I.309, I.309, I.310, I.311, I.328, I.338, I.339, I.346, I.369, I.417, I.424, I.436, I.436, I.437, I.438, I.439, I.442, I.460, I.462, I.465, I.475, I.480, I.481, I.482, I.486, I.493, I.572, I.578/9, I.611 [54]
II.19, II.39/40, II.43, II.45, II.76, II.91(PP), II.93, II.95, II.100, II.208, II.148, II.154, II.156, II.183, II.256, II.261, II.278, II.279, II.281, II.310, II.317, II.326, II.333, II.379, II.389, II.413, II.413, II.423, II.446/7, II.450, II.465/6, II.477, II.524(PP), II.534, II.545(PP), II.556(PP), II.565(PP), II.568(PP), II.578, II.588, II.630(PP), II.637(PP), II.644(PP), II.692, II.710(PP), II.737(PP), II.747(PP), II.759(PP), II.809, II.845, II. 54 [51]
III.34, III.44(PP), III.91, III.113, III.135, III.142, III.143, III.261, III.261, III.262, III.268, III.292, III.294, III.311, III.311, III.312, III.325, III.339, III.357, III.363, III.367, III.382, III.384, III.398, III.440, III.461, III. 2 [27]
IV.63, IV.79, IV.90, IV.116, IV.135, IV.138(x2), IV.157, IV.161, IV.161, IV.173, IV.201, IV.211, IV.218, IV.221, IV.257, IV.269, IV.274, IV.279, IV.328, IV.330, IV.366, IV.367, IV.375, IV.421, IV.425, IV.431, IV.447, IV.447, IV.460, IV.497, IV.505, IV.525, IV.529, IV. 538 [35]
V.41, V.57, V.81, V.99, V.101, V.112, V.125, V.147, V.178, V.194, V.207, V.214, V.264, V.281(x2), V.283, V.292, V.299, V.307, V.310, V.314, V.317, V.346, V.347(PP), V.369, V.372, V.401(PP), V.405(PP), V.416, V.451, V.465, V.466, V.505, V.506, V.538(x2), V.548, V.566, V.582, V.591, V.599, V.602/3(x2), V.608, V.691, V.694, V.696, V.697, V.709, V.729, V.730, V.731, V.738, V.739, V.740(x3!!!), V.741, V.745, V.776, V.798, V.809, V.852, V.858, V.859, V.865, V. 869 [66]
VI.10, VI.43, VI.117, VI.238, VI.253, VI.318, VI.320, VI.323, VI.357(PP), VI.375, VI.381, VI.389, VI.399, VI.406, VI.406, VI.415, VI.416, VI.419, VI.419, VI.459, VI.464, VI.471, VI.509, VI. 511 [24]

## Appendix 2. Text locations of pre-verbal (OV) vs. post-verbal (VO) detached prepositions (Text: Book I of Iliad)

Pre-verbal: $6,15,48,68,101,142,142,144,162,188 / 89,195,199,204,208,233,233$, 236, 251, 252, 258, 309, 309, 310, 311, 328, 346, 369, 417, 424, 436, 436, 437, 438, $439,442,460,462,465,475,480,481,482,486,493,572,578 / 79$ [46]
Post-verbal: 306/7, 338, 339, 611 [4]

## Appendix 3. Text locations of functionalsyntactic classes of detached prepositions (Text: Iliad, books I, II)

a. Coherent both semantically \& syntactically; IO overtly present as NP or PRO I. $162,188,251,258,307,309,328,338,339,346,417,436,437,438,439,460,481$, 482,542 ; II. 39/40, 45, 91, $93,154,156,208,310,389,423,465 / 6,524,534,545$, 556, 630, 637, 644, 710, 737, 747, 759, 857 [42]
b. Coherent both semantically \& syntactically; IO zeroed out, anaphoric or implicit I. $6,86,142,142,143,144,156 / 7,195,199,208,233,252,258,309,310,311,369$, $424,442,462,465,475,486,611$; II. 19, 43, $95,148,183,261,279,333,413,413$, 446/7, 477, 578, 588, 809 [39]
c. Semantically coherent, P absorbed into verb meaning; no overt IO
I. 15, 68, 101, 204, 233, 480, 493, 578/9; II. 76, 100, 256, 278, 281, 317, 326, 692, 845 [17]
d. Semantically and syntactically arbitrary
I. 48, 236; II. 379, 450 [4]

# The pre-verbal 'Augment' $e$ - in Homeric Greek as an earlier cycle of pre-verbal prepositions 

### 5.1 Introduction

In the preceding three chapters I suggested that the synchronic distribution of prepositional constructions in Homeric Greek suggests a diachronic pathway via which nominal-marking prepositions became, over time, prefixed to the verb. I also noted that the data of Homeric Greek conform rather well with what is known about verb-attached prepositions in other - typologically diverse and genetically unrelated - languages (Chapter 1). I also issued a promissory note that must now be redeemed, suggesting that the verb-prefixed vowel $e^{-}$, the so-called 'Augment' prefixed to many Homeric Greek verbs, represents an earlier cycle of prepositions becoming prefixed to the verb.

In his Grammar of the Homeric Dialect, Monro (1891) introduces the 'Augment' as follows:
> "...the Augment takes two forms, the Syllabic and the Temporal. The Syllabic Augment is the prefix $\varepsilon^{-}$, and it is used for stems beginning with a consonant. The Temporal Augment is a simple lengthening of the initial vowel of the stem...." (1891, p. 60)

On the following page, one finds another tantalizing reference to the presence of the 'Augment' in contexts preceding a missing ghost consonant, the notorious Digamma. ${ }^{1}$ By and large, the 'Augment' $e$ - is treated by Monro as, primarily, a historical phonological entity.

1. One of the reconstructed laryngeals that have plagued comparative IndoEuropean linguistics from its very inception, and about which I shall remain resolutely silent. Except to say that in its unconstrained proliferation of ghost consonants, the Laryngeal Theory resembles, eerily, Murray Gel-Mann's String Theory of complexity in physics, with its unconstrained proliferating dimensions. Whereby one may as well recall C.S. Peirce old observation that a theory that purports to explain everything most likely explains nothing.

While Prof. Monro does not assign the 'Augment' an explicit functional/ semantic value, in the Appendix (ibid., p. 402) he alludes to an article by $M r$. Arthur Plat where it is suggested that the augmented verb form is used more commonly in some semantic sub-context of the aorist tense but not in others.

In a more recent, comprehensive grammar of Classical Greek (van Emde Boas et al. 2019) one finds a fairly similar description in the section titled "Augments and Reduplication":
> "...Secondary indicatives (imperfect, aorist indicative, pluperfect) normally include an augment, which immediately precedes the stem. The form of the augment is determined by the initial sound of the stem.... If the stem begins with a consonant, the augment takes the form of the vowel $\varepsilon$-... In stems beginning with a vowel, the augment has the form of the lengthened initial vowel...." (ibid., pp. 121-122)

What one finds next, again, is a mixed bag of conditioning contexts for 'augmentation':

- It appears only in some tense-aspects but not others.
- It appears as $e$ - before consonants but never as any other vowel or consonant.
- It appears as lengthening of the first vowel in vowel-commencing stems

In what is, to my mind, the most admirable Classicist account of the Homeric verb, Willi (2018) - in a section titled "The augment in Homer" (pp. 358376 ) - enumerates first the factors that have been proposed over the years as conditioning contexts for the 'optional' appearance of the 'Augment' before verbs, casting them as "augmentation tendencies":

- Wackernagel's 'optionality', meter and poetic license: "...the Homeric augment is optional...not every aorist or imperfect indicative features the prefix...this optionality gave the epic singer a certain flexibility in adapting verbal forms to his meter... by using unaugmented past-tense forms the poet would simply have preserved a more archaeic stage of the language..." (ibid., p. 359)
- Wackernagel's Wortumfang: "...as a rule, preterits never appear unaugmented if, without the augment, a short vocalic monosyllable would arise..." (ibid. p. 359)
- Dottin's (1894) compound verb observation: "...verb forms with preverb [= preposition] are much more often augmented than forms without preverb..." (ibid., p. 361; bracketed material added)
- Blumenthal's mix of semantics (aorist-types) and comparative Indo-European: "...Blumenthal observed that the ratio of augmentation:non-augmentation is greater in the case of $s$-aorists ( $1: 1.6$ ) than strong aorists ( $1: 2.8$ ) $\ldots$ Blumenthal proposed to explain the divergence between stem types with the fact that "the sigmatic aorist, though widely diffused, is a relatively late I.E. formation" whose full development might have been "roughly contemporaneous with that of the early stages of attachment of the augment"..." (ibid., p. 363)
- The iterative (aspect) in ske/o-: "...The many Homeric past iteratives with the suffix ske-/o- are almost without exception unaugmented (leaving aside the special case of efaske to lexicalized faskw)..." (ibid. p. 365)
- Derwitt's rule: "...Finally, there is a fifth augmentation tendency that appears to be formally determined, although there are again deeper functional reasons behind it...the combination of an unaugmented form $+d e$ or other conjunctive particle (type noëse de 'and (s)he noticed') is much more common in epic than that of augmented form + de (type eklupse de 'and (s)he hid'): in the whole narrative of the Iliad there are only sixteen sure examples of de standing after the syllabically augmented aorist. After the unaugmented syllabic aorist, de is normal..." (ibid, p. 366)

In the next section, titled "Functional tendencies", Willi (2018) lists the following:

- Old epic poetry: "...It has already been mentioned (7.3) that the so-called 'gnomic aorist' shows a special behaviour with regard to augmentation. As Platt observed, "the general rule is that the gnomic aorist in old Epic poetry takes the augment". Importantly, this holds not only for the aorist in gnomes in the strict sense...but also for (timeless) aorists in similies..." (ibid., p. 368)
- The aorist as perfect: "...Another interesting feature was also noticed by Platt [1891], for whom the "perfect aorist" is "the aorist used where we in English use a perfect": "the rule upon the whole is that the perfect aorist takes the augment"..." (ibid, p. 369)
- The aorist in negative contexts: "...More recently Bakker has pointed out that "aorists in negative contexts tend to disfavor the augment..." (ibid., p. 370)
- Formulaic introduction of direct speech and meter: "...Bakker has also studied the practice of augmentation in the (largely formulaic) introductions of direct speech. Once again there is no absolute rule...However, it remains remarkable that $45.0 \%$ of verb forms in Iliadic speech introductions metrically require the augment, whereas only $16.7 \%$ rule it out..." (ibid., pp. 370-371).
- Narrative vs. direct-quoted speech: In an observation attributed to Koch (1868), Willi notes: "...narrative passages in epic and passages consisting of character speech substantially differ with regard to augmentation..." (ibid., p. 371)

Lastly, in a section titled "Theories on the origin of the augment", Willi (2018, p. 376) lists, mercifully, only three:

- A proximate deictic suffix, attributed to Bakker (2001): "...(the) verbal augment originally was a deictic suffix marking an event as 'near' with respect to the speaker's present and immediate situation..." (ibid, p. 376)
- A sentence connector, attributed to Watkins (1963): "...the augment is a sentence connective used with injunctive forms...in function of continuous narrative", i.e. more or less '(and) then'..." (ibid., p. 377).
- An emphatic particle, "...Another alternative...first mooted by Bréal [1900], has been to see in the augment an 'emphatic' particle and connected with the Greek $\eta$ 'indeed' and the Vedic $\bar{a}$ 'indeed, certainly', from PIE ${ }^{*}(h) \bar{e} . .$. ' (ibid., p. 378)

To the innocent ear of a general linguist, the lush array of interpretation, explanation and exception-prone conditioning factors surveyed above - phonological, semantic, syntactic, metric, stylistic and comparative/historical - spells a near-certain cognitive chaos to the language learner and a great theoretical bafflement to the linguist. This is especially jarring when interesting, obvious questions are hinted at but never quite placed on the table:

- Why Dottin's tantalizing correlation between the 'augment' and pre-verbal prepositions?
- Why the short vowel $e$ - rather than any other vowel or consonant?
- Where do short, unstressed, monosyllabic grammatical morphemes come from - except as inheritance from a related *proto language across vast temporal chasms?
- Above all - where, in all this grand multi-factored array, is a hypothesis about a step-by-step diachronic rise of grammatical forms from competing synchronic variants?

To a diachronically, functionally and typologically oriented grammarian, synchronic 'rules' that come with a long list of exceptions, and are governed by multiple kinds of conditioning context (phonological, semantic, syntactic, poetic, comparative), strongly hint at the absence of any rule. Such presumed
rules are, manifestly, eroded past regularities, the footprints of multiple successive changes during which a variety of factors have conspired to erode the grammar's older regularities. Children learning a natural - spoken - language would balk at such 'rules' and reject them as incoherent dead weight. Such 'rules' subvert the very notion of the regularity of form-function correlations in human language. ${ }^{2}$

The strategy I propose to pursue in this - admittedly revisionist - chapter is to show, with multiple text-derived examples, and with an assessment of their quantitative distribution in the Homeric text, that the pre-verbal 'Augment' $e$ - is indeed etymological in the most obvious sense of the word. Namely, that it reflects a rather mundane phonological reduction of three high frequency monosyllabic VC- Homeric Greek prepositions: en- 'in/at', ex/ek- 'out/from', and $e(i) s$ s- 'to'. In support of this phonologically-most-plausible conjecture I will show that the verbal-clausal contexts in which the 'Augment' $e$ - is found are highly predictable, with the vast majority involving clauses with verbs of location, motion or direction that, in most languages, take adposition-marked indirect objects. ${ }^{3}$ And further, that, those indirect objects, whether overtly-present or zeroed out in anaphoric or generic contexts, are of the type that take either the locative preposition 'in/at', the allative 'to', or the ablative 'out/from'.

The verbal-clausal contexts implicated here involve two well-known verb classes, already discussed in the preceding chapters:
2. This problem will rear its ugly head, with a vengeance, if the incredible irregularity of the old, eroded tense-aspect-modality system of Homeric Greek is ever confronted head on. It also brings us to a familiar territory, where the intellectual habits of the two approaches to language diachrony - the comparative method and internal reconstruction, part company. And while the difference between the two is often considered to be 'merely' methodological, it is in fact profoundly theoretical (Greenberg 2000, Givón 2000).
3. See extensive discussion in Chapter 1, above, of these characteristic contexts of case-marking adpositions. In the present context, I will take it for granted that the post-nominal case endings of Indo-European and other languages began their diachronic life as case-marking post-positions. In Indo-European, they represent a merger - condensation - with at least two other types of morphemes, noun classifiers ('gender') and number.
a. Intransitive location or motion verbs with locative, allative or ablative indirect objects, such as 'be in/at', 'go to/from/out of', 'come to/from/out/in'; or more abstract derivatives such as the dative/allative in 'look at', 'talk to', 'listen to' or the ablative in 'hear from'.
b. Bi-transitive transfer verbs with a similar range of locative, allative or ablative indirect objects, such as 'bring x to/from', 'take x to/from', 'put x at/ in/out', 'lead x to/from/in/out'; or their more abstract derivatives such as the dative/benefactive in 'give x to,' 'tell x to', the ablative in 'receive x from' or 'hear x from. ${ }^{4}$
c. A residue of plausible diachronic derivatives of verbs in categories (a) or (b) above.

What I propose to do, then, is match the phonological plausibility of the unstressed prepositions en-, ek-/ex- and $e(i) s$ - becoming reduced to the single vowel $e$ - with a parallel functional-syntactic plausibility.

Given the presence of a second, more recent, cycle of prepositions becoming verb prefixes in Homeric Greek (Chapters 2, 3, 4 above), two added facts militate for the 'augment' $e$ - being the product an earlier diachronic cycle of pre-verbal attachment of prepositions: ${ }^{5}$

- its much reduced phonological size to an unstressed single vowel;
- its position closer to the verb stem.

Similar functional-syntactic distributional facts, involving the instances where the 'augment' $e$ - is preceded by one or more prepositions, will be discussed in Chapter 6, below.

### 5.2 Clausal/verbal contexts for the use of the pre-verbal 'Augment'e-

I will begin by discussing the instances of the pre-verbal 'Augment' $e$ - that fit into the two major verbal/clausal contexts (a) and (b) above. A discussion of the residue (c) will follow. To this end, all instances of the 'Augment' $e$ - in Book
4. The four most common optional clause participants, instrumental, associative, benefactive and manner, are not restricted to any particular verb class; though they are obviously constrained by coherent clause-level semantic factors.
5. For a discussion of these two universal features of grammaticalization in the rise of bound morphology, see Givón (1971, 2000).

I of the Iliad were identified and categorized, with the suggested older value of $e$ - as either en-, ex/ek- or $e(i) s$ - provided in each case, as part of the hypothesis. In addition, I also note the instances where the phonologically-eroded $e$ - is being supplemented by an adposition somewhere in the same clause: either a pre-nominal preposition (PRE), a post-nominal post-position (POST), or a detached preposition (DET). At whatever syntactic locus, these added markers that co-exist with the 'Augment' $e$ - seem to serve two complementary functions:

- recapitulating the original sense of the old preposition, now eroded to the ambiguous $e$-;
- augmenting the old preposition with added semantic value.

Such augmentation is similar to what we see when more than one preposition appears before the verb.

### 5.2.1 Intransitive verbs with an indirect object

### 5.2.1.1 Overtly present indirect object

Consider first Example (1) below, where the suggested old value of $e$ - as 'to' is augmented by the pre-nominal preposition epi- 'on', yielding the more complex meaning 'onto':
(1) ho gar ë-lth-e thoas epi-nëas Akhaiwn

PRE (I.12)
3s for to-come-3s swift on-ships Achaeans
'for he had come onto the swift ships of the Achaeans'
In (2) below, next, the presumed old $e(i) s$ - 'to' is used to mark the semantic value of the dative in 'listen to':
(2) kai e-peithe-to muthw
and to-listen-NF word
'and (he) listened to (his) words'
And likewise in 'say to' (3) and 'listen to' (4):
(3) e-fa-tho ho geraios Apollwni anakti, to-say-nf 3s old.man Apollo/dat king/dat '(and) the old man said to king Apollo'
(4) tou d(e) e-klu-e Phoibus Apollwn

3s de to-hear-3s Phoebus Apollo
'and Phoebus Apollo heard/listened to him'

In (5) below, the assumption that $e$ - was originally $e x$ - 'out'/'from' is based on the semantics of 'sound out' or 'rattle out', with the pre-nominal epi- 'on' then augmenting the original sense 'out':
(5) e-klanx-an de ara oistoi ep(i)-wmwn

PRE (I.46) ex-rattle-3P DE ARA arrows on-shoulder 'and the arrows rattled out on (his) shoulder'

In (6) below, next, the interpretation of $e$ - as originally ex- 'away from' is supported by the recapitulation with apo- 'from' on the second verb, although $e$ - could have also been en- 'in'/'at'; in which case we have an augmentation rather than a recapitulation:
(6) e-ze-to epei-t(a) ap(o)-an(a)-euth-e newn ex-sit-NF then-3p from-up-far-3s boats 'then he sat far away from the ships' ${ }^{6}$

In (7) and (8), next, the transparent semantics of the motion verbs 'go' and 'come' presumably require no further recapitulation:
(7) ho moi geras e-rkhe-tai allë

3 s 1 s prize to-go-IRR other '(that) my prize is going to another'
(8) ë odon e-lthe-men-ai ë andrasin ifi makhes-thai? or journey to-come-be-IRR or men by fight-IRR 'either to come onto a journey or fight with warriors?'

In (9), next, the presumed old sense of the 'Augment' as 'to' could have just as easily been 'in'/'at'. The pre-nominal en- in 'in Phtia' thus either recapitulates or augments the eroded old $e$-:
(9) ou-de po-te en-Fthië eri-bwlaki bwti-aneirë kapron NEG-DE WH-TE in-Phthia deep-soil nurse-men grain e-dëlës-ant-o

PRE (I.155) to-lay.waste-be-nF
'nor have they in any way laid waste to the grain in deep-soiled men-nursing Phthia'
6. This example may be spurious. Cunliffe (1924/1963) lists an(a)-eu-the(n) as a locative adverb meaning 'away from', so that in this example apo- 'from' recapitulates the post-position -the(n) 'from'.

In (10), the pre-nominal epi- 'on' clearly augments the presumed old preverbal allative as $e(i) s$ - 'to':
(10) egw $d(e)$ oligon te filon te e-rkho-m(ai) ekh-on epi-nëas, 1s de little te dear te to-go-1s have-nf on-ship 'while I go onto my ship carrying little, yet dear to me' PRE (I.167)

What makes the next example interesting is the use of the allative post-position -de 'to' on the indirect object nominal to recapitulate the presumed 'to' sense of the old 'augment' $e$-:
(11) nun de e-i-mi Fthiën-de

POST (I.169)
now de to-go-1s Phthia-to
'now I will go back to Phthia'
No such recapitulation is seen in (12) below, where the directional sense of 'grab onto' is apparently sufficient:
(12) xanthës de komës e-l-e Pëleiwna,
blond de hair to-take-3s Peleus'.son
'and (she) grabbed onto the son of Peleus' blond hair'
In (13), next, the other locative post-position -then 'from' is used to recapitulate the presumed sense of the old $e$ - as ex- 'out/from':
(13) e-lth-on ego pausous-a teon menos, ai ke pithë-ai, ex-come-NF 1s stop-NF 2 s anger if KE listen-IRR
ourano-then,
POST (I.207)
heaven-from
'I have come from heaven to stop your anger, if you but listen'
The sense 'from' imparted by the post-position -then is not as clear in (14), next, where the interpretation of $e$ - as en- 'in' relies on the common meaning of en- as 'among' (see Chapter 2):
(14) Atreidë $d(e)$ heterw-then e-mën-ie

POST (I.247)
Atreides DE friends-from in-stay-3s
'and the son of Atreus remained among his friends'
The recapitulation of the eroded 'augment' $e$ - by pre-nominal prepositions in the next three examples is fairly transparent:
(15) ë-de e-gen-ont-o en-Pulw ëgatheë,

C-DE in-born-be-NF in-Pylos sacred
'having been born in sacred Pylos'
(16) kai men toisin ego meth(a)-omile-on ek-Pulos e-lth-wn, PRE (I.269) and men 3p 1 s with-meet-nf ex-Pylos ex-come-nf 'with those (men) I met together when I came from Pylos'
(17) Pëleidës men epi-klisias kai nëas eisas ë-i-e PRE (I. 306) Peleides men on-huts and ships equal(?)/pl to-go-3s 'and the son of Peleus went then to (his) hut and shapely(?) ships'
Likewise, the allative interpretation of $e$ - below as $e(i) s$ - 'to' is uncontroversial, given the verb 'go':
(18) e-rkhesth-on klisiën Pëlëiadew Akhilëos
to-go-NF hut Peleiades Achiles
'go to the hut of Peleiades Achiles'
In the next example, the detached preposition para 'by', 'next to' is used to augment the presumed sense of the eroded 'augment' $e$ - as en- 'in/at'. Thus: ${ }^{7}$
(19) ton de eur-on para te klisië kai nëi melainë ë-men-on 3s de find-nf by te hut and ship black in-stay-nf 'and finding him staying by/at his hut and black ship' DET (I.329)

Another example of a fairly transparent interpretation of the old $e$ - as $e(i) s$ 'to' may be seen in (20) below, with the dative sense fairly dictated by the verb 'listen':

> (20) tou de e-klu-e pontia mëtër
> 3s DE to-hear-3s queen mother
> 'and his queenly mother listened to him'

In the next two examples, the presumed sense of the old 'Augment' eis- recapitulated (21) or augmented (22) by the preposition:
(21) ë-men-e en-benthessin halos para-patri geronti

PRE (I.358)
in-stay-3s in-deep sea by-father old
'as she stayed in the deep sea by her old father'
(22) Khrusës de auth(o)... e-lth-e toas epi-neës

PRE (I.370)
Chryses de dem to-come-3s fast on-ships
'then Chryses himself... came onto the fast ships'

[^22]While in the next two, the old sense of $e$ - is augmented by a post-position:
(23) tën de neon klisië-then e-b-an kërukes ag-ont-es POST (I.391) 3sF DE new hut-from ex-go-3p heralds lead-be-nf/pl 'while the heralds have gone from (my) hut taking away the new one'
(24) e-lthous-(o) Oulumpon-de Dia lis-ai

POST (I.394)
to-come-IMP Olympus-to Zeus pray-IRR 'and come to Olympus and pray to Zeus'

In the next example, with a more abstract dative, the interpretation of the eroded old $e$ - as ex- 'out/from' is not altogether firm: ${ }^{8}$
(25) ina pantes e-paur-wnt-ai basilëos SUB all ex-???-be-IRR king 'so that they may all benefit from (their) king'

The general pattern of distribution of verbs 'augmented' by $e$ - into the two suggested verb classes remains fairly consistent, with augmentation by a preposition in (26), recapitulation in (27), and neither augmentation nor recapitulation in (28) and (29):
(26) ai-th(i) ofel-es para-nëusin a-dakrut-os kai a-pëm-wn
if-wH hope-2s by-ships NEG-tear-NF and NEG-grief-nF
ë-sth-ai
PRE (I.415)
in-stand-IRR
'if you had only stood tearless and grief-less by/at the boats'
(27) Zeus gar ex-Wkeanon met(a)-amumonas Aithiopëas khthizos Zeus for ex-Ocean with-blameless Ethiopians yesterday e-b-ë PRE (I.423) ex-go-3s
'for Zeus went yesterday from (the) Ocean with the blameless Ethiopians'
(28) Dii terpi-keraunw e-i-mi

Zeus/dat throw-bolts to-go-1s
'I will go to Zeus the bolt-thrower'
8. Cunliffe (1924/1963) lists neither paur- nor e-paur- as verbs, though pauros is listed as the quantifier 'few'. If one conjectures a negative sense of $e x$ - 'out of/ from' (viz. 'out of money' = 'have no money'), then $e x$ - with 'be few' may yield 'be many', then be perhaps extended to 'increase', 'profit' or 'benefit'; though this is admittedly rather speculative.
(29) kai to-te epeita toi e-i-mi Dios poti khalko-bates dw and 3 s -te then 3 s to-go- 1 s Zeus ?? bronze-threshold house 'and I will then go to Zeus' bronze-threshold house'

In the next two examples, the interpretation of $e$ - as ex- 'out/from' is supported plausibly by the semantics of 'hear from':
(30) ë-dë men po-te emeu paros e-klu-es eu-xa-men-oio

C-de men wh-te 1s early ex-hear-2s ver-pray-be-nf/gen 'even when you heard (from) me praying earlier on')
(31) tou de e-klu-e Foibos Apollwn

3s de ex-hear-3s Phoebus Apollo
'and Phoebus Apollo heard (from) him'
Next, the pre-nominal preposition kata- 'down' augments the suggested allative 'to' sense of the old $e$-:
(32) hë d(e) e-the-en kata-kuma

PRE (I.483)
3sF DE to-put/set-3s down-waves 'and she set (herself) down to the waves'

In (33), next, the interpretation of $e$ - as originally $e(i) s$ - 'to' is consonant with the allative sense of 'come to'. While its interpretation as ex- 'from' in (34) is consonant with the ablative sense of 'ask of/from'. And its interpretation as $e(i) s-$ 'to' in (35) is consonant with the dative sense of 'say to':
(33) hos wku.morwtatos allwn e-plet-o;

3 s quick.death.most others to-come.to.be-NF
'who is doomed to a death quickest than all others'
(34) kai e-ire-to deuteron autis
and ex-ask-nf second DEm/s
'and again (she) asked (from/of) him'
(35) ho te $m(e)$ ex-thodopës-ai e-fës-eis Hërë

3s te 1s ex-strive(?)-IRR to-say-2s Hera
'what you say to me (tell me), to contend with Hera'
Next, the interpretation of $e$ - as $e(i) s$ - 'to' is consonant with the allative sense of 'go', recapitulated in (36) by the post-position -de 'to' and in (37) by the preposition pros- 'to/toward':
(36) oi men ka-kkei-ont-es e-b-an oikon-de hekastos POST (I.606)

3P MEN CV-rest-be-nf/pl to-go-3p house-to each
'they each went to the house to rest'
(37) Zeus de pros-hon lekhos ë-(i)-i

PRE (I.609)
Zeus de to-3s couch to-go-NF
'and Zeus went to his couch'
What this sample of consecutively occurring instances of the pre-verbal 'augment' $e$ - in the Homeric text illustrates, I would like to suggest, is first the great predictability of the first verbal/clausal contexts where this verbal prefix appears - in intransitive clauses with verbs that, typically, take locative, allative, ablative or dative indirect objects. This conspicuous semantic-syntactic distribution of the 'Augment' $e$ - is further underscored by the fact that of the 37 instances of intransitive clauses surveyed thus far, $\mathbf{5}$ involved 'come' and $\mathbf{1 0}$ involve 'go'. That is, an astounding $40 \%$ of the sample is taken by just these two most-common motion verbs. ${ }^{9}$

Our survey also reveals another apparent regularity: Of the 37 intransitive clauses inspected thus far, the 10 that involve dative indirect objects show not a single case of either recapitulation or augmentation by an adposition, be it pre-nominal, post-nominal or detached. Which begs for two alternative - or perhaps complementary - interpretations:

- The semantics of the verbs that take dative indirect objects is transparent enough to signal the 'to' or 'from' interpretation of the old 'Augment' $e$ - in spite of its erosion and ambiguity.
- The dative case-ending on the indirect object, be it nominal or pronominal, is still reasonably transparent in Homeric Greek. ${ }^{10}$


### 5.2.1.2 Indirect object zeroed-out in anaphoric or generic contexts

The verbal/clausal context surveyed in this section involves the very same intransitive verbs that take, typically, locative, allative, ablative or dative indirect objects, as above. However, the nominal object here is left unexpressed, due to its anaphoric or generic predictability in context. The entire set of these instances, found consecutively in Book I of the Iliad, is listed in order below.
9. In addition, 1 example involved 'sit', 1 'stand' and 3 'stay'/'remain' (-men), all typical location verbs.
10. In his discussion of how prepositions 'govern' the case-ending of the indirect-object nominals, Monro (1891, p. 165) lists a whole range of variation that includes the accusative, locative, instrumental, dative and ablative-genitive. A similar list may be found in Zanchi (2019). This synchronically less-than-predictable variation must be memorized for specific verbs, and makes sense only in the context of the diachronic life-cycle of each preposition.
(38) hws e-fa-to, ed-deis(-e) d(e) ho geron
so to-say-NF in-fear-3s DE 3s old.man
'so he said to (him), and the old man became fearful'
(39) hws e-fa-to eu-kho-men-os
so to-say-NF VER-pray-be-NF
'so (he) said to (him), praying'
(40) ho d(e) ë-i-e nukti e-oik-ws

3s DE to-go-3s night to-resemble-NF
'he went to (there) resembling the night'
(41) ho-ti tosson e-khosa-to Foibos Apollwn

3s-wh 3s/much to-angry-nf Phoebus Apollo 'why Phoebus Apollo is so angry at (us)'
(42) ë toi ho ge hws eip-on, $\operatorname{kat}(a) \operatorname{ar}(a)$ e-ze-to

DET (I.68)
c 3 s 3 s em so speak-nf down ara in-sit-NF 'having thus spoken, he sat down at/in (there)'
(43) $\operatorname{kat}(a) \operatorname{ar}(a)$ e-ze-to

DET (I.101)
down ara in-sit-nF
'(he) sat down at/in (there)'
(44) ou gar egw Trowwn enek(a) ë-luth-on aikhmëtawn
neg for 1s Trojans sake to-come-nf spear.men 'for I have not come to (here) because of the Trojan spear-men'
(45) e-lth-e d(e) Athenë
to-come-3s DE Athene
'(and) Athene came down to (there)'
(46) thambëth-en $\mathrm{d}(\mathrm{e})$ Akhileus, meta de e-trape-to

DET (I.199)
wonder-3s DE Achilles, about DE ex-turn-NF
'and Achilles wondered, and turned away from/about (him)'
(47) ti-p(o)-te aut(o), aigio-khoio Dios tekos, ei-le-louth-as? (I.202) ${ }^{11}$ wh-wh-TE DEM/s aegis-bearing Zeus child to-CV-come-NF 'why, child of aegis-bearing Zeus, do you yourself come again to (here)?'
(48) hos ke theois epi-peithë-tai, mala te e-klu-on autou

3s KE gods on-obey-IRR more te to-hear-NF DEM/P(?)
'whoever obeys the gods, to (him) they listen more'

[^23](49) e-aze-to $t(e)$ autos
in-sit-NF TE DEM/s
'(then) he himself sat down in/at (there)'
(50) aipsa toi haima kelainon e-hrwes-ei
fast 2 s blood dark ex-flow-3s/IRR
'your dark blood will flow quickly out of (the wound)'
DET (I.310)
(51) ana de Khrusëida kalli.parëon e-is-en ag-wn
up DE Chryseida fair.cheek to-go-3s lead-NF
'leading the fair-cheeked daughter of Chryses to go up to (there)'
(52) en de arkhos e-b-ë polu-mëtis Odusseus

DET (I.311)
en de leader to-go-3s many-plans Odysseus
'and in/to (there) went as leader many-wiled Odysseus'
(53) egw de ken autos e-lw-mai

1s DE KEN DEM/s to-go-1s/fut
'I myself will go to (there)'
(54) autar Akhilleus dakrus-as hetarwn afar e-ze-to
but Achilles tears-NF companions away(?) in-sit-NF
'but Achilles, tearful, sat in/at (there) apart from his comrades'
(55) alla su ton ge e-lthous-a, thea
but 2 s 3 s em to-come-nf goddess
'but you coming over to (here), goddess'
(56) ws e-fa-to eu-kho-men-os
so to-say-NF VER-pray-be-NF
'so he said (to him), praying'
(57) autar epei kata-mër(o?) e-ka-ë

PRE (I.464)
but when down-thigh ex-burn-3p
'but after the thigh pieces had burned down/out (to the bottom)'
(58) kai epi knepas ë-lth-e,

DET (I.475)
and on dark to-come-3p
'and darkness came onto (the earth)'
(59) eur-en de euru-opa Kronidën pater ë-men-on
find-3s de wide-voice Cronides father in-stay-nf others
'and there he found the wide-voiced father, son-of-Cronos,
staying in/at (there)'
(60) alla a-këon dën ë-st-o
but NEG-sound $3 s(?)$ in-stand-NF
'but (he) stood silent in/at (there)'
(61) all(a) antioi e-st-an apantes
but face/PL in-stand-3p all
'but they all stood in/at (there) facing (him)'
(62) poion ton muthon e-eip-es!
wh/acc 3 s word to-say-2s
'what words do you say to (me)!'
(63) hos e-fa-to

3s to-say-NF
'he spoke to (her)'
(64) hos $\operatorname{ar}(a)$ e-f-ë

3 s ARA to-speak-3s
'he spoke to (them)'
The occurrence of the 'Augment' $e$ - in all the examples above involves the same, rather typical intransitive verbs that take a locative, allative, ablative or dative indirect object, with the zeroed-out object being contextually predictable on anaphoric or generic grounds. Of the total of 27 consecutive instances in our text, 4 involved the verb 'come', 4 'go', 3 'sit', 2 'stand' and 1 'stay'/'remain' (-men). That is, $14 / 27$ or $51 \%$ of the sample involves the most common intransitive verbs of location or motion. And again, none of the more abstract dative indirect objects required any recapitulation or augmentation by prepositions. The semantics of the verb, or the still-vigorous dative case-marking on the nominal object, seems to be enough.

### 5.2.2 Bi-transitive transfer verbs

The samples, comprising of all the clauses with bi-transitive verbs 'augmented' by $e$-found in Book I of the Iliad, will be again divided into two sub-groups: those with overtly present indirect object, be it nominal or pronominal, and those with the object zeroed-out in anaphoric or generic contexts. These bi-transitive clauses involve, first, typical concrete verbs of transfer, where the direct object is moved to or from the indirect object; and second, bi-transitive verbs with more abstract dative or benefactive indirect objects, and where the direct object may also be more abstract - speech, information or attitude. Since the examples are sufficiently transparent, they will be listed consecutively without comment, unless something about them is particularly striking or unpredictable.

### 5.2.2.1 Overtly expressed indirect object

(65) ë muri Akhaiois alge e-thëk-e

3SF thousands Achaeans/DAT woes to-bring-3s 'that brought countless woes upon/to the Achaeans'
(66) ei po-te toi khari-ent-o epi-neon e-reps-a PRE (I.39)
if wh-Te 2 s please-be-nf on-shrine to-cover(?)-NF 'if I ever, pleasing you, put a roof over/onto a shrine'
(67) toi kata-piona mëri(a) e-kë-a taurwn ë-d(e) aigwn
$2 s$ down-fat pieces to-burn-Nf bulls/GEN C-DE goats
'I burned for you fat pieces of bulls or goats'
(68) autar emoi geras autikh(a) e-toimasa-t(e)
but 1 s prize immed. to-prepare- $2 \mathrm{P} / \mathrm{IMP}$
'but you prepare a prize for me forthwith'
(69) nëa melainan e-russo-men-en eis-hala dian

PRE (I.141)
ship black in-launch-1p/IRR-?? to-sea bright
'let us launch the black ship into the bright sea'
(70) theos pou soi to ge e-dok-en;
god wh 2s/Dat 3s em to-give-3s
'some god has (surely) given it to you'
(71) ë ho ge fasganon oxu e-russa-men-os para-merou PRE (I. 190) if 1s em sword sharp ex-draw-be-nf by-thigh 'whether to be drawing his sharp sword from his thigh'
(72) e-lke-to d(e) ek-koleoio mega xifos

PRE (I.194) ex-pull-NF DE ex-sheath/Gen big sword '(and) drawing his big sword out of its sheath'

In the next example, the detached preposition $e k$ 'out/'from', while preceding a dative pronoun, does not pertain to it semantically. Rather, it augments the eroded 'augment' $e$-, interpret here as $e(i) s$ - 'to', presumably intended to mark the dative indirect object of 'tell to'. The detached $e k$, on the other hand, more likely pertains to the anaphoric direct object ('from/about it'). Thus:
(73) alla ek toi e-re-w

DET (I. 204)
but ex $2 \mathrm{~s} / \mathrm{dat}$ to-tell-1s
'but I will tell (to) you from/about (it)'

The next batch of examples are again fairly transparent, the first involving REL-clause anaphora:
(74) skëptoukhos basileus, hw te Zeus kudos e-dwk-en
sceptered king 3 s те Zeus glory to-give-3s
'a sceptered king, to whom Zeus has granted glory'
(75) allo de toi e-re-w
other DE 2s to-tell-1s/FUT
'and another thing I will tell (to) you'
(76) ë-k-e d(e) ep(i)-Argeioisi kako belos
to-send-3s DE on-Argives bad shaft
'so he sent an evil shaft upon the Argives'
(77) tous de kata-prumnas te kai amf(i)-hala e-ls-ai Akhaious

3P DE down-sterns TE and about-sea in-pen-IRR Achaeans
'but the Achaeans may he pen them down in the sterns (of their boats) about the sea'

PRE (I.409)
(78) nun de ama $t(e)$ wku-moros kai oizuros peri-panton
now de with TE fast-death and sorrow on-all
e-ple-o
DET (I.417)
to-consigned-2s/IRR
'but now you may be doomed to/with quick death and sorrow above all'
(79) touto de toi e-reous-a epos

3P de 2s/DAt to-tell-NF word
'to tell (to) you these words'
(80) hos nun Argeirosi polustona këde(a) e-fëk-en

3s now Argives many.so woes to-bring-3s
'who has now brought so many woes upon/to the Argives'
(81) toi de wka thew hierën hekatombën hexeiës e-stës-an

3P DE fast gods holy hecatombs in.order to-stand-3p
eu-dmëton peri-bwmon PRE (I.448)
ver-built about-altar
'and they then quickly set the gods' holy hecatombs in order to/about the well-built altar'
(82) nëa men oi ge melainan ep(i)-ëpeiroio e-russ-an PRE (I.485)
ship MEN 3P EM black on-shore to-pull-3p
'they pulled the black ship onto the shore'
(83) dexiterë d(e) ar(a) hup(o)-antherewnos e-lous-a
right DE ARA under-chin to-grab-NF
'while with her right grabbing him under/to the chin'
(84) ho-te ken toi a-aptous kheiras e-fei-w

3 s -TE KEN 2 s NEG-resist hands to-put-1s
'when I put (my) irresistible hands upon/to you'
(85) en de theoisi kolown e-launet-on

DET (I.575)
in DE gods/DAT strife to-set(?)-NF
'setting strife among/to the gods'
(86) paidos e-dexa-to kheiri kupellon
son ex-receive-nf hand cup
'she took the cup in her hand from her son'
(87) ti-(e)na mantin e-reio-men ë hierëa
wh-one seer/ACC ex-ask-1p/irr or priest
'let us ask (this question) from/of some seer or priest'
Of the 23 examples listed above, one is hard-pressed to point out to a single case where the interpretation of the 'augment' $e$ - as either en- 'in/at', ex- 'out/ from', or $e(i) s$ - 'to' is in any way controversial - given the semantics of the relevant verbs. And as in the case of the intransitive verbs discussed above, not a single instance of the more abstract dative or benefactive objects involves either recapitulation or augmentation of the eroded $e$ - by an adposition, be it pre-nominal, post-nominal or detached.

### 5.2.2.2 Zeroed-out indirect object

The zeroed out indirect objects seen below are all predictable from their context, be it anaphoric or generic. The same familiar group of bi-transitive verbs, or their more abstract dative/benefactive equivalents, are involved here, and the interpretation of the old 'Augment' $e$ - as either $e(i) s$ - 'to', ex/ek- 'out/ from' or en- 'in/at' is fairly transparent from the meaning of the verb. In order:
(88) meta de ion e-ëk-e, DET (I.48)
with DE arrow ex-shoot-3s
'(and) he shot an arrow out/from (there)'
tounek(a) ar(a) alge e-dok-en heka.bolos
reason ARA woe to-give-3s far.striking 'for this reason he who strikes afar had given woes to (them)'
(90) ego de ken auto e-lw-mai

1s DE KEN DEM/s ex-take-1s/fut
'I myself will take it from (them)'
(91) ax-w e-l-wn
grab-1s ex-take-NF
'I (will) grab and take it from (them)'
(92) pro de m(e) ë-k-e thea leukw-pis Hërë

DET (I.208)
to DE 1 s to-send-3s goddess white-arm Hera
'the white-armed goddess Hera sent me to (here)'
(93) më-de xifos e-lke-w kheiri
neg-de sword ex-draw-IMP hand
'(and) let not your hand draw the sword out of (the scabbard)'
(94) ou-de ana-thëlës-ei, peri gar $\operatorname{hr}(\mathrm{a})$ he khalkos e-leps-e NEG-DE up-grow-3s/IRR about FOR HRA 3s bronze ex-strip-3s 'nor shall it grow (leaf), for the bronze had stripped it off (the tree)'

DET (I.236)
(95) kata-moiran e-eip-es
down-duly to-speak-2s
'you have duly spoken the truth to (us)'
(96) kheiros e-l-ont-o age-men Brisëida kalli.parëon;
hands to-take-be-nf lead-2s/IMP Briseida fair.cheek
'and taking fair-cheeked Briseida to (here), lead her by the hand'
Of the two instances of the dative in (97) below, the first 'Augment' $e$ - could be easily interpreted as eis- 'to', recapitulated by the detached preposition pro 'to/for'; while the second is just as easily interpreted as ex- 'out/from', given the semantics of 'ask':
(97) ou-de ti min prose-fwne-on, ou-de e-re-ont-o DET (I.332) NEG-DE WH MIN to to-speak-NF NEG-DE ex-ask-be-NF
'and he himself neither spoke any (words) to (them), nor asked (questions) from (them)'

And further:
(98) e-l-wn gar ekh-ei geras
ex-take-NF FOR have-3s prize
'for he has taken from (me) and kept (my) prize'
(99) epos te e-fa-to
words TE to-say-NF
'and (she) said words to (him)'
(100) Khrusës de auth(o) hiereus hekatë-bolou Apollwnos e-lth-e (I.370)

Chryses de dem priest far-striking Apollo to-come-3s
'then Chryses, the priest of far-striking Apollo, came to (there)'
ou-de t(e) e-dës-an
neg-de te to-bind-3p
'and they did not bind (him) to (there)'
(102) ek de eunas e-bal-on, kata de prumnësi e-dës-an ex DE anchor.stones ex-throw-NF down DE stern.cables to-tie-3p 'then casting out the anchor stones out of (the boat), they tied down the stern cables to (their proper place)'

DET (x2) (I.436)
(103) au-e-rus-an men prota.... kai e-deir-an
?-ex-draw-3P MEN first and ex-cut.troat-3p
'first they drew back (the victims' heads) of/from (their body)... and then cut (their throats) off/from (their body)'

The verb -kalups- in (104) below is most commonly translated as 'cover (with)'. But the augmentation with the detached preposition kata 'down' may suggest a fairly common semantic alternative, 'pull down/over'. Thus:
(104) kata te knisë e-kalups-an diptukha

DET (I.460)
down te fat(?) to-cover-3p double
'and they covered down (on them) with a double (layer) of fat'
And lastly:
(105) e-lw-(o)n gar ekh-ei geras, autos apouras
ex-take-nf FOR hold-3s prize DEm/s arrogant
'for he has taken from (me) and kept (my) prize, in his arrogance'
Before going on to inspect the residue of instances in which the identity of the phonologically-eroded 'Augment' $e$ - is less transparent, or is in some way problematic, it would be useful to tabulate the quantitative distribution of the relatively transparent example discussed above - as against the less obvious residue inspected further below. The figures are given in Table (106) below.
(106) Quantitative distribution of the verbal/clausal contexts
where the pre-verbal 'Augment' $e$ - is found (Iliad, book I)

| Category |  | N |  | \% |
| :--- | :--- | :--- | :--- | :--- |
| intransitive, overt IO: |  | 37 |  |  |
| intransitive, zeroed-out IO: |  | 30 |  |  |
| subtotal: |  |  |  |  |
| bi-transitive, overt IO: |  | 23 |  |  |
| bi-transitive, zeroed-out IO: |  | 21 |  |  |
| subtotal |  | 44 |  |  |
|  | 111 |  | $71.6 \%$ |  |
| residue: | 44 |  | $28.4 \%$ |  |
| total: | 155 | 100.0 |  |  |

The text distribution tabulated in (106) is indeed striking: 71.6\% of the instances of the pre-verbal 'Augment' $e$ - in the Homeric text inspected here appear to be entirely predicted from their verbal-clausal context. That context involves the two familiar - indeed ubiquitous - groups of verbs that, universally, take adpositionally-marked indirect objects (see Chapter 1). The $\mathbf{2 8 . 4 \%}$ residue still needs to be analyzed, and explained in a principled way. But a hypothesis - in the domain of diachrony of grammar - that is supported at the level of ca. 70\% of text frequency is, in my experience, rather striking; especially when one considered the proposed alternatives.

### 5.2.3 The residue

The status of counter-examples in science, and how damaging - or fatal they may be to the validity of a hypothesis, has an ancient provenance. ${ }^{12}$ In pre-biological sciences such as chemistry or physics, where populations - atoms, molecules - commonly display extreme uniformity, a single counter-example is often all that is needed to falsify a hypothesis. In the study of biologically-based phenomena, on the other hand, where gradual change in phylogeny, ontogeny, maturation, growth or learning is the very essence of the phenomenon,

[^24]intra-population and intra-individual behavioral variation is an integral part of the mechanism of change. In such developmental domains, the methodological status of a recalcitrant minority of variants is rather different, and this is especially true in the study of language change.

In proposing to interpret counter-examples - apparent exceptions - as but more complex multi-factored instances that 'prove the rule', I am all too mindful of the eternal pitfall of blurring the difference between explaining and explaining away. The difference is, unfortunately, not absolute, but rather is subject to considerable gradation. All one can really do then is cite support from what is known about syntactic, functional and diachronic universals, and then rank the would-be counter-examples according some criteria of likelihood. To this end, I will divide the 44 instances I consider to be our less transparent residue into a number of sub-categories, discussing first the larger groups of instances where compatibility with our central hypothesis appears more likely.

## a. Verbal complements of the modal-aspectual verb 'want'

The use of directional allative adpositions to mark the non-finite verbal complements of modal-aspectual verbs is widely attested in many unrelated languages, as in:

(107) a. English (Germanic):<br>I want to eat<br>b. Bemba (Bantu):<br>n-dee-fwaaya uku-lia<br>1s-PROG-want to-eat<br>'I want to eat'<br>c. Hebrew (Semitic):<br>ani rots-e le-'ekhol<br>1s want-sm to-eat<br>'I want to eat'

A well-known typological alternative involves marking the complement verb with an irrealis marker, with the verb being either finite or non-finite. Thus compare: ${ }^{13}$

[^25](108) a. Ute (Uto-Aztecan, non-finite):
tuka-vaa-chi-n 'ásti-'i
eat-IRR-NOM-1s want-IMM
'I want to to eat'
b. Palestinian Arabic (Semitic, finite):
'ana bidd-i 'ieshrib
1s want-1s 1s/IRR-drink
'I want to drink'
Within the context of our hypothesis about the prepositional origin of the pre-verbal 'Augment' $e$-, it is useful to point out that both patterns of complementation are found in Homeric Greek. Thus, in the very same verbal clause in the Iliad, one may find the more current use of a Ute-like non-finite irrealis suffix -ai/-tai-/-thai marking the complement verb, coexisting with the 'Augment' $e$ - prefixed to the main verb 'want'. The latter, I suggest, may be interpreted as an eroded $e(i) s-$ 'to', as in Examples (109)-(114) below:
(109) ounek(a) egw kourës Khrusëidos agla apoina ouk e-thel-on because 1s girl Cryses/Gen good ransom neg to-want-NF dexas-thai accept-IRR
'because I would not want to accept glorious ransom for Cryses' girl'
(110) alla kai hws e-thel-w do-men-ai palin
but and so to-want-1s give-be-IRR all(?)
'but even so I would rather want to give her (back)'
(111) më-te su, Pëleidë, e-thel-(w) e-rize-men-ai basilëi antibën neg-te 2 s Peleides to-want-Imp to-fight-be-Irr king oppose 'and don't you, son of Peleus, want to contend against the king'
(112) alla ho-de anër e-thel-ei peri-pantwn em-men-ai allwn
but 3s-de man to-want-3s over-all in-be-IRR others
'but this man wants to be above all others'
(113) ai ken pws e-thelë-sin epi-Trwesin arëx-ai
if Ken wh to-want-nf/pl on-Trojans help-irr
'and (you-all) wish that he may somehow help the Trojans'

[^26](114) ou-de tis e-tl-ë mein-ai ep(i)-e-rkho-men-on

NEG-DE WH to-dare(?)-3s stay-IRR on-to-come-be-nF
'non of them dared to wait for his arrival'
Only in one instance in our sample do we find a different pattern, with the complement verb marked with the infinitive suffix, a fairly common alternation with the irrealis -ai/-tai/-thai in the Iliad. That is:

> (115) panton men krate-ein e-thel-ei
> all MEN rule-INF to-want-3s
> 'he wants to rule all'
b. Verbal complements of manipulation verbs

The use of allative adpositions to mark complements of verbs of causation and manipulation is just as wide-spread cross-linguistically as its use with complements of modal-aspectual verbs. Indeed, the same languages that use the allative 'to' to mark the complements of modal-aspectual verbs tend to use it to also mark the complements of - at least some - manipulation verbs, often alternating with irrealis marking. Thus compare: ${ }^{15}$
(116) a. English (non-finite 'to'): I told him to leave
b. English (finite, irrealis): I told him that he should leave
c. Bemba (non finite 'to') n-aa-mu-konkomeshya uku-ya 1 s -PA-3s-force to-go 'I forced him to leave'
d. Bemba (finite, subjunctive): n -aa-mu-ebele $\mathrm{a}-\mathrm{y}$-e 1s-PA-3s-tell 3s-go-subj 'I told him that he should leave'
e. Hebrew (non-finite, 'to'):
'ani hikhrah-ti 'ot-o la-'azov 1s tell/PA-1s ACC-3sm to-leave 'I forced him to leave'

[^27]f. Hebrew (finite, irrealis):
'ani 'amar-ti l-o she-ya-'azov
1s tell/pa-1sm to-1s sub-3sm/IRr-leave
'I told him that he should leave'
It is thus not all that surprising to see verbs of causation and manipulation in Homeric Greek display the 'Augment' $e$-, interpreted here as 'to', as in:
(117) krateron de epi-muthon e-tell-e
strong DE on-words to-order-3s
'(and) commanded him (to do it) with stern words'
(118) Dios d(e) e-teleie-to boul-ë

Zeus/GEn de to-cause-nf/PASS plan-NF
'bringing Zeus' plan to come about'
(119) ethslon de ou-te ti po eip-as epos, ou-t(e)
good DE NEG-TE WH WH speak-NF word NEG-TE
e-teless-as
to-bring.about-2s
'you have never spoken a good word, nor brought (any) to pass'
(120) ei de min aikhmëtën e-thes-an theoi aien e-ont-es
if DE MIN spear.man to-make-3p gods ever in-be-NF/PL
'if the Gods who are forever made him (to be) a warrior'
(121) megan de e-le-liz-en Olumpon
much/Acc de to-Cv-shake-3s Olympus/ACC
'and he caused great Olympus to shake'
Other causative-like clauses that display the pre-verbal 'Augment' $e$ - do not use a causative verb but still express a causative meaning, as in:
(122) më m(e) e-rethiz-e

NEG 1 s to-anger-IMP
'do not anger me' (= cause me to be angry)
(123) ho te ariston Akhaiwn ou-de-n e-tis-as

3 s te best/ACC Achaeans/GEN NEG-De-? to-honor-NF
'for having dishonored the best of the Achaeans'
(= caused them to not be honored)
(124) nun de ou-de me tutthon e-tis-en,
now de neg-de 1 s a.little to-honor-3s
'but now he doesn't honor me even a little' (= cause to be honored)
(125) ho $t(-e)$ ariston Akhaiwn ou-de-n e-tis-en

3s Te best/ACC Achaeans neg-de-? to-honor-3p
'that he did not honor the best of the Achaeans' (= cause to be honored)
(126) tën $s(u)$ oi-w kata-neus-ai e-të-tum-on hos Akhileë

3sf 2 s think-1s down-bow-IRR to-cv-honor-nf 3sm Achilles
timës-ës
honor-2s
'to her, I think, you bowed your head (promising) to honor Achilles' (= cause to be honored)
Lastly, negative causative verbs often take the ablative 'from'/'out' to mark their verbal complement ('prevent from', 'talk out of'); so that the pre-verbal $e$ - in (127) below may perhaps be interpreted as an eroded ex- 'out'/from':
(127)
ëe kholon paus-eien e-rëtus-eie te thumon
or wrath stop-INF ex-curb-3s/IRR TE spirit
'or to stop his wrath and curb out his spirit'

## c. The verbs 'know' or 'see'

The verbs 'know' and 'see' take direct objects in most nominative/accusative languages. But their object is not an affected patient, and may be interpreted semantically as having a directional allative sense. It is thus of some interest that quite a few instances of the pre-verbal 'Augment' $e$ - in our sample involve either the verb -gn-' 'know' or -id- 'know'/'see', as in:
(128) autar ho e-gn-w ës-in eni-fresi fwnës-en te
but 3 s to-know-Nf be-Nf in-heart speak-3s TE
'but knowing in his heart, he spoke'
(129) autika d(e) e-gn-w Pallad(a) Atheniën
immed. de to-know-nf Pallas Athene
'and immediately (he) recognized Pallas Athene'
(130) ofr(a) eu-e-id-ës hosson feretros ei-mi thesen
sub ver-to-know-2s 3s/much better be-1s 2 s
'so that you may know how much better I am than you'
(131) to de toi kër e-ide-tai ein-ai

3s de $2 \mathrm{~s} / \mathrm{dat}$ death to-seem-IRr be-IRR
'which may seem to you to be like death(?)'
(132) tw de ë-(i)d-ë duo men geneai meropwn anthrwpwn 3s de to-see-3s two MEN generations mortal men e-fthiath-e
ex-die-nf
'he who had seen two generations of mortal men die out'
(133) ina e-ido-men amphw
sub to-see/know-1p/irr both
'so that we may both see/know'
(134) ammi mantis eu-e-id-ws agoreu-e

1P/DAT seer VER-to-see-NF declare-3s
'and the far-seeing seer announced to us'
(135) ou-te theos proteros ton ge e-ise-tai, ou-de anthrwpwn

NEG-TE god before 2 s EM to-know-IRR NEG-DE man
'neither God will know before you, nor man'

## d. The verb 'be in/at'

Like many other languages, Homeric Greek has a large set of 'be' verbs, some old, phonologically eroded and semantically bleached, others younger, others younger yet and in the process of grammaticalizing as aspectual suffixes on the verb. One of the latter, -ont- (var.-ent-l-ant-) is of some interest here. When it appears as a main verb, almost invariably in a non-finite form, it almost always displays the pre-verbal 'Augment' $e$-. What is more, in such a context it also serves as a glaring counter-example to the 'Augment' rule - that $e$ - appears only before verbs beginning with a consonant. In the first example below (136), the main verb is actually another 'be' verb, -gen- 'become', 'emerge', 'be born', semantically more bleached here:
oi $d(e)$ epei oun ëgerth-en hom-ëgere-es
3P DE then OUN assemble-3p together-gather- $\mathrm{NF} / \mathrm{PL}$
e-gen-ont-o
in-be-be-nf
'then when they assembled and were gathered (in there) together'
The reason why the presence of $e$ - before 'be' verbs may be natural here, even with 'be' verbs that are semantically bleached to the point where they cannot carry any locative sense (viz. the Spanish ser), is because semantically bleached 'be' verbs tend to come diachronically from locational 'be' verbs, such as 'stand', 'sit', 'lie' or 'stay' (Heine et al. 1991; Hopper and Traugott 1993; Heine and Kuteva 2007). My interpretation of the persistent appearance of the 'Augment' $e$ - before -ont- 'be' thus depends on the universal-prompted supposition that
the now-bleached -ont- must have been earlier a locational 'be', much like the Spanish estar. And that the pre-verbal 'Augment' $e$ - must have been originally en- 'in'/'at'. ${ }^{16}$ Thus consider:
(137) hos ë-dë ta te e-ont-a ta te esso-men-a pro te e-ont-a, 3s C-de 3p te to-be-nf 3p Te be-be-nf before te to-be-nf 'of what is (there) and what will be (there) and what has been (there) before'
(138) ei de min aikhmëten e-thes-an theoi aien e-ont-es
if DE MIN spear.man to-make-3p gods ever in-be-nf/PL
'if the Gods that are (here/there) forever made him a warrior'
(139) kai to-te dë pros-Olumpun iss-an theoi aien e-ont-es
and $3 s$-TE de to-Olympus go-3p gods ever in-be-nf/pl 'the Gods who are (here/there) forever went to Olympus'
(140) mëter, epei $m(e)$ e-tek-es ge minunthaidion per e-ont-a mother then 1 s ex-bear-2s em little.time(?) тно in-be-nf 'Mother, since you bore me, if it be for but a short time'
(141) aiei toi filon est-in emeu apo-nosfin e-ont-a
ever 2s pleasure be-nf 1s from-ref in-be-NF 'it has always been your pleasure to be aloof from me'

The next - and last - example involves another semantically (and phonologically) bleached 'be' verb, where the same argument can be made that the prefix $e$ - is a trace of the verb's earlier locative meaning, interpreted here as originally en- 'in'/'at':
(142) më nu(n) toiou khraismw-sin hosoi theoi e-is-(ai) NEG now 2s favor-NF/pl 3p gods in-be-IRR 'lest the gods may not be favorable to you now'

## e. Final recalcitrant residue

The last batch of instances in our sample represent a grab-bag to which a more systematic explanation should not be attempted, although individual diachronic hypotheses may suggest themselves in almost each case.
16. The semantically less specific spatial preposition 'at' is often derived from the more specific 'to' or 'in', a fairly mundane instance of semantic bleaching. Thus the Hebrew locative preposition $b$ - can mean either 'in' or 'at'; much like the French allative a 'to' can also mean 'at'. Likewise, the Ute bleached general locative - pa 'at' was probably the allative $-v a$, originally the verb 'go'.
(143) ho d(e) ë-i-e nukti e-oik-ws

3s DE to-go-3s night to-resemble-NF
'he came (there) resembling (to) the night'
(144) tw de ë-(i)d-ë duo men geneai meropwn anthrwpwn

3s DE to-see-3s two MEN generations mortal men
e-fthiath-e
ex-die-NF
'he who had seen two generations of mortal men die out'
(145) kratistoi men es-an kai kratistois e-makh-ont-o
mightiest MEN be-3p and mightiest in-fight-be-NF 'they were the mightiest and fought among the mightiest'
(146) më-te su, Pëleidë, e-thel-(w) e-rize-men-ai basilëi antibën NEG-TE 2s Peleides to-want-IMP in-fight-be-IRR king oppose 'and don't you, son of Peleus, propose to contend with/among the king'
(147) teknon emin, ti nu(n) se e-tref-on
child 1s WH now 2 s to-rear-NF
'my child, why now did I rear you (to older age)?'
(148) mëter, epei $m(e)$ e-tek-es ge minunthaidion per $e$-ont-a mother then 1s ex-bear-2s EM little.time(?) THO in-be-NF 'Mother, since you bore me, if to be (in/at here) for but a short time'
(149) ë-dë men po-te emeu paros e-klu-es eu-xa-men-oio (I.453) C-DE MEN WH-TE 1s before ex-hear-2s VER-pray-be-NF 'even when you heard (from) me praying earlier on'
(150) ou-de ti thumos e-deue-to daitos eisës

NEG-DE WH heart ex-lack-NF feast equal 'and their hearts didn't lack/miss any (of/from) the equal feast'
(151) ou-de ti thumos e-deue-to daitos eisës

NEG-DE WH heart ex-lack-NF feast equal
'and their hearts didn't lack/miss any (of/from) the equal feast'

### 5.3 Discussion

The diachrony of grammar, be it of syntactic constructions or of their attendant morphology, follows a well-known life-cycle of regularity or predictability. At the early stages of its grammaticalization, a novel construction competes for usage space with the main well-established construction that already occupies
the intended functional niche, as well as with other potential contenders vying for the same niche. What is more, the novel construction still functions, ambiguously, in both its old and new niche. This engenders a considerable amount of usage variation, thus great unpredictability in the use of the emerging construction.

During the mid-life of its diachronic cycle, the new construction has taken over its intended slot in terms of usage frequency. This is when it is, both functionally and phonologically, most coherent, when it displays its maximal regularity or predictability, and the least amount of variation.

Lastly, when a construction is nearing the tail end of its diachronic life cycle, it is phonologically eroded and functionally less and less predictable. This is when its usage frequency gets gradually reduced, since it is on its way to being replaced by new contenders that are, both phonologically and functionally, more coherent, regular and predictable.

The pre-verbal 'Augment' $e$ - of Homeric Greek exhibits all the signs of being at the tail end of its diachronic life cycle. It is phonologically eroded to a single unstressed vowel. Its pre-verbal occurrence or lack thereof is less than fully predictable. Its semantic contribution to the verbal word is not always transparent. And to top it all off, it faces growing competition from a new generation of prepositions that are crowding in to recapitulate, augment or replace it. Speakers would be sorely tempted to consider this unstressed pre-verbal vowel as just part of the verb stem. But by calling it 'Augment' and assigning it multiple and oft-conflicting conditioning contexts one accomplishes relatively little. What is more, one then ignores some of the most relevant facts:

- Syntactic/semantic distribution: The 'Augment' appears in coherent and well known verbal/clausal contexts in $71 \%$ of its occurrences in the Homeric text. Of the residue of 44 instances in our sample, only 9 are hard to explain systematically. If one accepts that as a reasonable interpretation, then $146 / 155$, or $\mathbf{9 4 . 1 \%}$ of all occurrences of the 'Augment' in our sampled Homeric text conform to our hypothesis.
- Semantic interaction of the 'Augment' with full-fledged prepositions, be they pre-nominals, detached ('severed') or pre-verbal. Such interaction seems, rather consistently, to either recapitulate or enrich and augment (no pun intended) the old semantic sense of the eroded $e$-.
- Dottin's (1894) old intuition concerning the correlation or interaction of the 'Augment' with the pre-verbal prepositions ('preverbs') that directly precede it.

Last but not least, the hypothesis presented here, brash and unprecedented as it may seem, suggests a natural explanatory context within which the elusive 'Augment' $e$ - may be interpreted - in a down-to-earth diachronic perspective. What is more, the hypothesis gives a coherent semantic/syntactic account of $71 \%$ - or $94 \%$, take your pick - of the instances of the 'Augment' in the Homeric text. Such a distribution does not seem accidental, random, or incoherent. And all other things being equal, it is much preferable to the plethora of traditional accounts summarized by Willi (2018).

Even if our hypothesis turns out to be ultimately wrong, something one can never rule out, the explanatory imperative of the investigation remains. Or, to quote Karl Popper:
"...The game of science is, in principle, without end. He who decides one day that scientific statements do not call for any further tests, and that they can be regarded as finally verified, retires from the game..." (The Logic of Scientific Discovery, 1934/1959)

But the game goes on.

## Abbreviations of grammatical terms

| ACC | accusative | IRR | irrealis |
| :--- | :--- | :--- | :--- |
| ALL | allative | LOC | locative |
| ASSOC | associative | MANN | manner |
| ASP | aspect | NEG | negative |
| C | conjunction | NF | non-finite |
| CAUS | causative | NOM | nominative |
| CV | reduplicate first syllable | O | object |
| DAT | dative | P | preposition |
| DEM | demonstrative | PA | past |
| DO | direct object | PL | plural |
| EM | emphasis | PP | prepositional/postpositional |
| FOR | because |  | (phrase) |
| FUT | future | PROG | progressive |
| GEN | genitive | REF | referring/reflexive |
| HAB | habitual | S | subject |
| IMM | immediate | SUBJ | subjunctive |
| IMP | imperative | SUB | subordinator |
| INF | infinitive | THO | though |


| V | verb | 3SF | third person singular |
| :--- | :--- | :--- | :--- |
| vC | reduplicate first syllable |  | masculine |
| VER | intensifier | 3SM | third person singular <br> WH |
| WH-question |  | feminine |  |
| 1S | first person singular | S | singular |
| 1P | first person plural | SF | singular feminine |
| 2S | second person singular | SM | singular masculine |
| 2P | second person plural | P | plural |
| 3S | thirst person singular |  |  |

## Appendix 1. Text loci of verbs prefixed by the 'Augment' e(Books I,II,III,IV,V,IV of Iliad)

I.2, I.5, I.12, I.25, I.32, I.33, I.33, I.35, I.39, I.40, I.43, I.43, I.46, I.47. I.47, I.48, I.48, I.57, I.62, I.64, I.68, I.70, I.70, I.96, I.101, I.108, I.111, I.116, I.118, I.120, I.133, I.137, I.138, I.141, I.151, I.152, I.155, I.167, I.169, I.178, I.185, I.190, I.192, I.194, I.194, I.195, I.197, I.199, I.200, I.202, I.204, I.207, I.208, I.210, I.218, I.228, I.236, I.244, I.246, I.247, I.250, I.250, I.251, I.267, I.269, I.277, I.277, I.279, I.286, I.287, I.288, I.290, I.297, I.303, I.306, I.310, I.311, I.322, I.323, I.324, I.329, I.332, I.133, I.349, I.352, I.352, I.354, I.356, I.357, I.358, I.361, I.363, I.370, I.382, I.385, I.391, I.394, I.401, I.406, I.408, I.409, I.410, I.412, I.414, I.415, I.417, I.419, I.419, I.423, I.426, I.436, I.436, I.445, I.448, I.453, I.457, I.457, I.459, I.460, I.464, I.468, I.475, I.483, I.485, I.494, I.498, I.501, I.505, I.507, I.512, I.513, I.518, I.530, I.534, I.535, I.541, I.548, I.552, I.558, I.562, I.566, I.567, I.568, I.575, I.584, I.596, I.602, I.606, I. 609
II.10, II.12, II.19, II.20, II.22, II.27, II.29, II.35, II.36, II.39, II.41, II.42, II.44, II.47, II.49, II.52, II.56, II.58, II.59, II.64, II.66, II.97, II.99, II.99, II.100, II.106, II.112, II.119, II.123, II.125, II.127, II.132, II.152, II.155, II.156, II.164, II.165, II.166, II.169, II.179, II.180, II.185, II.187, II.189, II.194, II.199, II.211, II.211, II.212, II.214, II.216, II.228, II.237, II.240, II.247, II.247, II.249, II.265, II.268, II.272, II.274, II.275, II.280, II.284, II.294, II.302, II.305, II.308, II.309, II.314, II.316, II.317, II.318, II.319, II.320, II.320, II.324, II.326, II.332, II.333, II.343, II.351, II.357, II.373, II.375, II.381, II.381, II.386, II.387, II.391, II.394, II.395, II.399, II.400, II.408, II.419, II.422, II.422, II.428, II.429, II.429, II.431. II.440, II.441, II.444, II.457, II.567, II.470, II.480, II.484, II.492, II.504, II.516, II.522, II.530, II.531, II.534, II.538, II.555, II.571, II.578, II.583, II.584, II.593, II.602, II.611, II.615, II.617, II.633, II.635, II.637, II.639, II.643, II.652, II.667, II.673, II.681, II.682, II.686, II.692, II.694, II.700, II.701, II.709, II.711, II.716, II.719, II.723, II.724, II.728, II.733, II.738, II.743, II.750, II.751, II.764, II.776, II.786, II.794/5, II.800, II.800, II.807, II.809, II.823, II.824, II.827, II.831, II.832, II.845, II.859, II.860, II.874, II. 875
III.16, III.21, III.23, III.27, III.30, III.32, III.35, III.39, III.40, III.42, III.44, III.48, II.55, III.57, III.66, III.67, III.72, III.76, III.78, III.80, III.84, III.84, III.84, III.85, III.95, III.95, III.111, III.111, III.113, III.113, III.116, III.121, III.122, III.124, III.128, III.151, III.154, III.158, III.161, III.161, III.162, III.170, III.176, III.180, III.187, III.188, III.189, III.202, III.204, III.205, III.208, III.225, III.209, III.211, III.218, III.219, III.222, III.223, III.224, III.230, III.239, III.241, III.259, III.260, III.266, III.271, III.286, III.289, III.294, III302, III.303, III.311, III.316, III.321, III.322, III.324, III.328, III.330, III.332, III.333, III.336, III.337, III.341, III.351, III.353, III.357, III.358, III.360, III.361, III.366, III.368, III.368, III.370, III.373, III.381, III.382, III.383, III.385, III.387, III.389, III.393, III.393, III.396, III.404, III.414, III.418, III.424, III.427, III.428, III.439, III.443, III.445, III.449, III.461,
IV.2, IV.5, IV.20, IV.21, IV.24, III.25, III.26, IV.37, IV.39, IV.41, IV.42, IV.43, IV.48, IV.63, IV.64, IV.68, IV.70, IV.75, IV.78, IV.89, IV.105, IV.110, IV.124, IV.130, IV.131, IV.134, IV.135, IV.136, IV.137, IV.143, II.145, IV.149, IV.151, IV.155, IV.157, IV.160, IV.167, IV.176, IV.179, IV.180, IV.182, IV.186, IV.196, IV.196, IV.198, IV.200, IV.200, IV.206, IV.213, IV.218, IV.221, IV.222, IV.224, IV.226, IV.239, IV.243, IV.244, IV.245, IV.246, IV.247, IV.248, IV.251, IV.262, IV.269, IV.272, IV.273, IV.275, IV.277, IV.279, IV.290, IV.293, IV.299, IV.300, IV.310, IV.314, IV.318, IV.326, IV.328, IV.330, IV.334, IV.341, IV.341, IV.346, IV.353, IV.367, IV.378, IV.380, IV.381, IV.382, IV.389, IV.396, IV.402, IV.406, IV.416, VI.420, IV.421, IV.430, IV.431, IV.432, IV.433, IV.438, IV.443, IV.447, IV.448, IV.455, IV.457, IV.459, IV.463, IV.464, IV.467, IV.470, IV.473, IV.478, IV.481, IV.483, IV.492, IV.493, IV.493, IV.498, IV.500, IV.505, IV.509, IV.516, IV.524, IV.529, IV.529, IV.530, IV.534, IV. 541
V.11, V.16, V.17, V.19, V.21, V.23, V.30, V.32, V.37, V.37, V.41, V.47, V.48, V.50, V.54, V.55, V.57, V.58, V.61, V.64, V.67, V.68, V.70, V.72, V.75, V.75, V.77, V.79, V.80, V.81, V.82, V.87, V.89, V.90, V.95, V.97, V.99, V.106, V.107, V.110, V.111, V.114, V.118, V.118, V.119, V.121, V.121, V.122, V.125, V.127, V.131, V.136, V.144, V.147, V.148, V.150, V.157, V.159, V.164, V.164, V.172, V.174, V.175, V.176, V.186, V.186, V.187, V.188, V.190, V.191, V.195, V.196, V.197, V.199, V.205, V.206, V.207, V.208, V.210, V.212, V.220, V.234, V.236, V.237, V.245, V.255, V.264, V.268, V.270, V.275, V.275, V.285, V.287, V.294, V.298, V.300, V.301, V.308, V.309, V.309, V.310, V.314, V.317, V.319, V.321, V.327, V.328, V.334, V.344, V.346, V.347, V.352, V.353, V.355, V.356, V.357, V.358, V.364, V.364, V.365, V.366, V.368, V.371, V.372, V.373, V.374, V.391, V.397, V.400, V.401, V.404, V.409, V.413, V.419, V.437, V.440, V.442, V.446, V.456, V.462, V.465, V.467, V.480, V.481, V.485, V.496, V.497, V.497, V.498, V.505, V.507, V.508, V.508, V.510, V.512, V.514, V.515, V.517, V.522, V.523, V.528, V.529, V.536, V.538, V.538, V.539, V.541, V.543, V.547, V.549, V.550, V.551, V.554, V.560, V.561, V.573, V.576, V.579, V.584, V.587, V.594, V.598, V.599, V.600,V.604, V.605, V.607, V.607, V.608, V.609, V.610, V.618, V.620, V.625, V.632, V.634, V.640, V.644, V.651, V.656, V.658, V.659, V.659, V.664, V.665, V.673, V.683, V.684, V.686, V.691, V.692, V.711, V.717, V.719, V.730, V.731, V.739, V.753, V.759, V.766, V.767, V.770, V.770, V.775, V.776, V.780, V.781, V.782, V.785, V.787, V.790, V.796, V.800, V.802, V.803, V.807, V.816, V.820, V.823, V.836, V.837, V.838, V.844, V.847, V.852, V.856, V.858, V.859, V.862, V.863, V.864, V.880, V. 901
VI.6, VI.9, VI.13, VI.16, VI.18, VI.19, VI.28, VI.37, VI.40, V. 43 VI.45, VI.51, VI.52, VI.61, VI.66, VI. 80, VI.94, VI.102, VI.105, VI.106, VI.106, VI.109, VI.110, VI.126, VI.128(ei-!!), VI.131, VI.139, VI.139, VI.141, VI.145, VI.150, VI.153, VI.156, VI.158, VI.159, VI.165, VI.165, VI.170, VI.175, VI.176, VI.179, VI.188, VI.196, VI.199, VI.205, VI.206, VI.210, VI.217, VI.223, VI.229, VI.239, VI.251, VI.252, VI.253, VI.256, VI.269, VI.275, VI.279, VI.282, VI.286, VI.290, VI.295, VI.295, VI.300, VI.302, VI.304, VI.309/310, VI.311, VI.314, VI.316, VI.333, VI.334, VI.336, VI.354, VI.362, VI.364, VI.365, VI.377, VI.381, VI.386, VI.393, VI.393, VI.394, VI.396, VI.403, VI.407, VI.410, VI.416, VI.426, VI.431, VI.434, VI.435, VI.438, VI.438(?), VI.465, VI.468, VI.471, VI.472, VI.482, VI.484, VI.485, VI.501, VI.513, VI.515, VI.515, VI.519, VI.519, VI.523, VI. 528

## The pre-verbal 'Augment' $e$ - in Homeric Greek when preceded by prepositions

### 6.1 Introduction

In the preceding chapter I suggested that the pre-verbal 'Augment' $e$ - in Homeric Greek represents an earlier cycle of cliticization of prepositions in front of the verb, noting that this hypothesis is supported by the rather coherent distribution of 'augmented' verbs in the classes of verbal clauses that, universally, take adposition-marked indirect objects. This distribution predicted, at the level of at least $71 \%$ and possibly as high as $\mathbf{9 4 \%}$, the occurrence of 'augmented' verbs in the Homeric text. I also suggested that the plethora of multi-factored accounts of the 'augment' offered in the traditional Classicist literature, admirably recounted by Willi (2018), in no way came close to offering a coherent alternative explanation, be it synchronic or diachronic.

In this chapter I will further test the hypothesis by investigating an additional data set, that of verbs where the 'Augment' vowel $e$ - is preceded by one or more prepositions. The position of the 'Augment' closer to the verb stem, its reduced phonological size and the growing arbitrariness of its meaning all suggest earlier grammaticalization. ${ }^{1}$

The phonological collapse of the three prepositions in the early cliticization cycle into the single vowel $e$ - resulted in a three-way ambiguity of en- 'in/at', ex/ $e k$ - 'out/from' and eis- 'to'. The second cycle, with prepositions cliticizing in front of already-'augmented' verbs, may have been prompted by the need to either recapitulate or augment the semantic value of the three collapsed prepositions.

### 6.2 Functional-syntactic context

When verbs with the 'Augment' $e$ - are preceded by one or more prepositions, they are typically found in the very same verbal-clausal contexts as verbs 'augmented' by $e$ - alone (Chapter 5):

[^28]- intransitive verbs that take locative, allative, ablative or more abstract indirect objects
- bi-transitive verbs that take locative, allative, ablative or more abstract indirect objects
- clauses with optional locative, instrumental, associative or benefactive indirect objects regardless of verb type
- a relatively small residue due to further diachronic change.

In the following sections, we will survey in order all the instances of such constructions found in Books I, II and III of the Iliad.

### 6.2.1 Intransitive verbal clause with indirect objects

### 6.2.1.1 Concrete location or motion verbs

Consider first clauses with the verb 'stand' (-st-), where the presumed original value of $e$ - as en- 'in/at ${ }^{2}$ is augmented by ana- 'up' or efi- 'on':
(1) toisi $\mathrm{d}(\mathrm{e})$ an(a)-e-st-e Kalkhas Thestoridës

3P DE up-in-stand-3s Calchas Thestor's.son 'and among them stood up Calchas son of Thestor'
(2) toisi de an(a)-e-st-ë euru kreiwn Agamemnwn akhnu-men-os 3p de up-in-stand-3s wide ruler Agamemnon angry-be-NF 'then among them stood up angry wide-ruling Agamemnon' (I.102)
(3) ho-t(i) ef(i)-ë-sth-a kelain.efei Krwniwni oië en-athanatoisin 3s-wh on-in-standnf dark.clouds Kronos.son alone in-immortals 'that you alone among the immortals stood up (there)'
(4) theon de ama-pantes an(a)-e-st-an gods DE with-all up-to-stand-3p
'and the Gods all stood up together'
位
2. The general locative 'at' often arises from the more specific allative 'to' or inclusive 'in'. One of the best illustrations for the extension of en- 'in' to the more neutral locative 'at' is the high-frequency in the Homeric text use of en-tha, lit. 'in-it', meaning 'there' and eventually 'then'; as in:

```
en-tha kath(a)-e-ud-e ana-b-as
in-3s down-in-sleep-3s up-go-NF
'going to sleep down (in/at) there'
```

On occasion, one finds the eroded $e$ - augmented by ana- 'up' together with another preposition, or even two, as in:
(5) oi $\mathrm{d}(\mathrm{e})$ ep(i)-an(a)-e-stës-an peith-ont-o poimeni lawn

3P DE on-up-in-stand-3p obey-be-NF shepherd host/GEN 'and they stood up, obeying the shepherd of the hosts'
(6) smwdix d(e) aimateossa meta-frenou ex-hup(o)-an(a)-e-st-e weal DE bloody with-spirit(?) ex-under-up-in-stand-3s
skëptrou hupo-khruseou
(II.267)
scepter under-golden
'and a bloody weal stood out up from under the golden scepter'
Likewise, hupo- 'under', apo- 'away from', or para- 'by' can augment the eroded eall by themselves, as in in (7), (8) and (9) below, in mundane standing situations:
(7) hën per hup(o)-e-st-an

3sf тнO under-in-stand-3s 'though they stood under (there)'
(8) hws d(e) ho-te tis drakonta id-wn palinorsos ap(o)-e-st-ë (III.33) as de 3 s -TE wh snake see-nf glades from-ex-stand-3s 'and he stood back away from (it) like one seeing a glades snake'
(9) touneka dë nun deuro dolo-froneous-a par(a)-e-st-ës
(III.405)

CAUS DE now there guile-carry-NF by-in-stand-nF 'because of this you are now standing by there so guileful'

Consider next the verb 'sit', where the eroded 'Augment' $e$ - presumably stood for en- 'in/at', and is often augmented by kata- 'down', as in:
(10) kai hra paroi-th(e) autoio kath(a)-e-ze-to
and hra front-from dem/s down-in-sit-nF 'and (she) sat down before him'
(11) hos hra para-Krwniwni kath(a)-e-ze-to

3 s hra by-Cronos'son down-in-sit-nf '(for) he sat down by the son of Cronos'
(12) kai hra paroi-the autoio kath(a)-e-ze-to and hra before-loc dem/s down-in-sit-nf 'so she sat down before him'
(13) hos ho men en-tha kath(a)-e-ze-to epi-thronou so 3 s men in-3s down-in-sit-NF on-throne/GEN 'thus he sat down there on his throne'

The augmenting preposition can also be para- 'by', 'next to' or epi- on', as in:
(14) ëerië gar soi ge par(a)-e-ze-to kai lab-e gounwn dawn For 2s em by-in-sit-nf and hold-3s knees 'for in the (early) dawn she sat by you and held you knees'
(15) twn nun min mnësas-a par(a)-e-ze-o lab-e gounwn (I.407) 3s now min remember-nf by-in-sit-IMP hold-Imp knees 'you now remind him this, sit by him and hold (his) knees'
(16) tettigesin e-oikot-es, oi te kath(a)-hulën dendrew ef(i)-e-zo-men-oi cicadas to-like-pl 3P TE down-forest tree on-in-sit-be-nF/PL 'like cicadas, who sit down on a forest tree' (III.151)

In one exceptional case, the 'Augment' $e$ - appears to be sandwiched between two full-fledged prepositions, further highlighting the claim that it is a bleached older preposition:

$$
\begin{array}{ll}
\text { (17) } \begin{array}{l}
\text { ourous } \quad \mathrm{t}(\mathrm{e}) \\
\text { lex-e-kath(a)-air-on } \\
\text { launch.ways TE ex-ex-down-sit(?)-NF } \\
\text { 'and sitting down away from the launc-ways' }
\end{array} \tag{II.153}
\end{array}
$$

Next, consider the motion verb(s) 'go'. It is frequently used with the 'Augment' $e$-, which presumably stands for either the allative e $(i) s$ s- 'to' or the ablative $e x$ - 'from', and may be recapitulated or augmented by various prepositions, as in:
(18) hws ara fones-as ap(o)-e-bese-to
so ARA speak-NF from-ex-go-NF
'so speaking, she went away from (there)'
(19) ëerië $d(e)$ an(a)-e-b-ë megan ouranon Oulumpon te
morning DE up-to-go-3s big mount/sky Olympus TE 'and in early morning went up to high-sky Olympus'
(20) hws ara fwnes-as ap(o)-e-bese-to
so ARA speak-NF from-ex-go-nf
'having thus spoken, he (Dream) went away (from there)'
(21) ëos men hra thea pros-e-bëse-to makron Olumpon,

Dawn men hra goddess to-to-go-nf great Olympus 'now the goddess Dawn went up to high Olympus'
(22) hos $\mathrm{t}(\mathrm{e})$ oiwn mega pwu di(a)-e-rkhe-tai argennawn 3s TE alone great flock(?) through-in-walk-IRR white (sheep) 'that is pacing alone among a great flock of white sheep'

Likewise with the verb(s) 'come', where the eroded 'Augment' $e$ - must have been originally either the allative e(i)s- 'to' or the ablative ex- 'from', recapitulated or augmented by various prepositions, as in:
(23) hws oun deina pelwpa theon eis-e-lth(-e) hekatombas
as oun dread portent gods to-to-come hecatombs
'so has the dread portent come (crashing) onto the hecatombs of the gods'
(24) ë-de kai Frygiën eis-ë-luth-on ampel-oessan

C-de and Phrygian/gen to-to-come-nf much-wine 'and having come to the wine-blessed Phrygia'
(25) thewn $\mathrm{d}(\mathrm{e})$ apo-e-ik-e keleuthou
gods DE from-ex-come-IMP calls
'but stay away from the gods' command'
(26) karpalimws de an(a)-e-d-u poliës halos ëu-te omikhle
immediate de up-ex-rise-nf gray sea ver-Te mist
'and she immediately came up/out of the gray sea like the very mist'
(27) autar epei kat(a)-e-d-u lampon faos ëelioio
but then down-ex-come-nf light bright sun/GEN
'but then when the bright light of the sun had come down'
The same general pattern of fairly transparent recapitulation or augmentation of the old sense of the 'Augment' $e$ - is evident with the many other, less-frequent, location or motion verbs, all fitting snugly into the same general intransitive syntactic frame, as in:
(28) oi men epei-t(a) ana-bant-es ep(i)-e-pleit-on hugra keleutha (I.312)

3P MEN then-3s up-go-NF/pl on-to-sail-NF water path
'then they went up sailing over the watery path'
(29) toi d(e) al-alë-tw nëas ep(i)-e-sseu-ont-o

3sp DE vC-shout-NF ships on-to-rush-be-nF
'and shouting, they rushed over onto the ships'
(30) oi d(e) agorën-de autis ep(i)-e-ssou-ont-o

3P DE agora-to DEM/pl on-to-hurry-be-NF 'and they themselves hurried noisily onto the agora'
(31) alla su men nun nëusi par(a)-ë-men-os wku-poroisi
but 2s MEN now ships by-in-stay-NF fast-moving/pl
'but you do stay on by the fast-moving ships'
(32) all(a) hë ge an(a)-e-dusse-to kuma thalassës
but 3sf em up-ex-rise-nf waves sea/GEN
'but she rose up out of the waves of the sea'
(33) tw $\mathrm{g}(\mathrm{e})$ hws boules-ant-e, di(a)-e-tmag-en

3d em so consult-be-nf through-ex-cut-3p
'thus the two of them, having consulted, parted company from (each other)'
(34) Trwessi de këde ef(i)-e-pt-ai

Trojans de woes on-to-hang-IRR
'and woes may hang onto the Trojans'
(35) Trwessi de këde ef(i)-ë-pt-ai ek-Dios

Trojans de woe on-to-hang-Irr ex-Zeus
'and woes may hang onto the Trojans by (the will of) Zeus'
(36) Trwessi de këde ef(i)-ë-pt-ai ek-Dios

Trojans de woes on-to-hang-IRr/pl ex-Zeus
'and woes may hang onto the Trojans by (the will of) Zeus'
(37) en-tha kath(a)-e-ud-e ana-b-as
in-3s down-in-sleep-3s up-go-NF
'going up to sleep down there'
(38) thein de $\min \operatorname{amf}(\mathbf{i})$-e-khu-t(o) omfë
godly DE MIN about-in-ring-NF ears
'with a divine (voice) ringing about in his ears'
(42) ë-de oi Samon $\operatorname{amf}(\mathbf{i})$-e-nem-ont-o,

C-de 3p Samos about-in-dwell-be-nF
'and those who lived about/in Samos'
(43) alloi th(e) oi Krëtën hekatom-polin amf(i)-e-nem-ont-o
others TE 3p Cretans hundred-cities about-in-dwell-be-NF 'and all the others dwelled about/in Crete of the hundred cities'
(44) oi Hrodon amf(i)-e-nem-ont-o dia-trikha kosmes-ent-es 3p Rhodians about-in-live-be-NF through-three marshal-be-NF/PL 'now those who dwelled about/in Rhodes divided into three' (II.655)
(45) oi d(e) ara Perkwtën kai Praktion $\operatorname{amf}(\mathbf{i})$-e-nem-ont-o

3s de ara Percote and Practius around-in-live-be-nf 'and those who lived about/in Percote and Practius'
(46) oi hra Kutwron ekh-on kai Sësamon $\operatorname{amf}(\mathbf{i})$-e-nem-ont-o 3p hra Cytorus have-nf and Sesamon about-in-dwell-be-nf 'they hold Cytorus and live about/in Sesamon'

Many other examples of verbs with assorted locative or directional indirect objects may be seen below, with the presumed old senses of the 'Augment' eaugmented by various prepositions:
(47) hippoi de para-armasin oisin hekastos lwton horses de by-chariots alone/pl each lotus ep(i)-e-pto-men-oi on-to-chew-be-BF/pl
'and the horses, each standing by its own car, were chewing on/to lotus'
(48) gaia d(e) hup(o)-e-stenakhiz-e
earth DE under-to-groan-3s
'and the earth groaned under (their feet)'
(49) mala d(e) wka di(a)-e-prës-on pedioi
much DE fast through-to-hurry-NF plain '(as they were) hurrying (to their eestination) through the plain'
(50) ë men dë mala polla makhas eis-ë-loth-on andrwn (II.798) C MEN DE more many battles to-in-enter(?)-NF men/GEN 'many times (before) have I intervened into such battles of men'
(51) en-tha to-te $\operatorname{Trwes}(\mathrm{i})$ te $\operatorname{di}(\mathbf{a})$-e-krith-en ë-d(e) epikouroi in-3s 3 s -te Trojans te through-ex-split-3p C-de allies 'right there the Trojans and the allies separated from (each other)'
(52) mala d(e) wka di(a)-e-pres-on pedioio
more DE fast through-to-hurry-NF plain/GEN
'and they pressed onward quickly through/across the plain'
(53) kat(a)-ë-fei-ën de soi auto
down-to-downcast-3p de 2s/dat dem/s
'and you yourself (your spirits) cast down in shame'
(54) aps(o) d(e) an(a)-e-khores-en
back DE up-ex-go-3s
'and he pulls back up from (there)'
(55) tw d(e) ep(i)-e-toxaz-ont-o karë komo-wnt-es Akaioi

3s DE on-to-aim.bow-be-nf long hair-be-NF Achaeans
'but the long-haired Achaeans kept aiming (their bows) on/at him'
(56) ois $\mathrm{d}(\mathrm{e})$ ho geron $\operatorname{met}(\mathbf{a})$-e-ës-in
(III.109)

3s DE 3s old with-in-be-NF
'but whatever an old man partakes with/in'
(57) ois $\mathrm{d}(\mathrm{e})$ ho geron $\operatorname{met}(\mathrm{a})$-e-ës-in,

3s DE 3s old with-in-be-NF
'but whatever the old man took part in/with'
(58) khwron men prwton di(a)-e-metre-on
ground MEN first through-to-measure-NF
'first measuring through the ground'
(59) an(a)-e-gnamfth-ë de hoi aikhmë
up-ex-bounce-3s DE 3s point
'but his (bronze) point bounced up off (the shield)
(60) keinë de trufaleia $\mathrm{am}(\mathrm{a})$-e-spe-to kheiri pakheië
(III.376)

REF DE helmet with-ex-come.out-NF hands strong 'and the helmet came off (the head) in his strong hands'
(61) ou gar pw po-te $\mathrm{m}(\mathrm{e}) \mathrm{hw}$-de $\mathrm{g}(\mathrm{e})$ erws frenas

NEG FOR WH wh-te 1s 3s-de em desire heart
$\operatorname{amf}(\mathrm{i})$-e-kalups-en
about-to-cover-3s
'for never has any such desire come over my heart'

### 6.2.1.2 Intransitive verbs with more abstract indirect objects

The 'Augment' $e$-, recapitulated or augmented by prepositions, is found just as frequently in clauses with abstract indirect objects. Consider first the near formulaic use of the verbs 'speak to' or 'say to' when augmented by meta- 'with':
(62) toisi de an(a)-ista-men-os met(a)-e-f-ë podas wkus Akhilleus 3p/DAT DE up-stand-be-nF with-to-speak-3s feet swift Achilles 'then, rising, swift-footed Achilles spoke with/to them'
(63) ho sfin eu-frone-wn agoresë-to met(a)-e-eip-en

3S REF VER-intend-NF address-NF with-to-speak-3s
'then he addressed their gathering with good intent and spoke with/to (them)'
(64) ho sfin eu-froneron agorësa-to kai met(a)-e-eip-en

3 S REF VER-intent address-NF and with-to-say-3s
'he addressed (their gathering) with good intent and spoke with/to (them)'
(65) ho sfin eu-frone-wn agorësa-to kai met(a)-e-eip-en

3s REF VER-intend-NF address-NF and with-to-say-3s 'and with good intent he addressed them) and said with/to (them)'
(66) ho sfin eu-fronewn agorësa-to kai met(a)-e-eip-e

3s ReF VER-intent speak-NF and with-to-say-3s
'and he addressed them with good intent and spoke with/to (them)'
(67) toisi de kai met(a)-e-eip-e Gerënios hippota Nestwr

3P DE and with-to-speak-3s Gerenian horseman Nestor 'then Nestor the Gerenian Horseman spoke with/to them'
(68) toisin d(e) eu-kho-men-os met(a)-e-f-e kreiwn Agamemnwn

3P DE VER-pray-be-NF with-to-say-3s king Agamemnon 'and king Agamemnon, praying, spoke with/to them'
(69) toisi de kai met(a)-e-eip-e boën agathos Menelaos

3P DE and with-to-speak-3s war.cry good Menelaus 'then good-at-the-war-cry Menelaus spoke with/to them'
(70) toisi de kai met(a)-e-eip-en anax andrwn Agamemnwn (III.455)

3P DE and with-to-say-3P king men?GEN Agamemnon
'then king-of-men Agamemnon spoke with/to them'
Consider next the equally formulaic use of the preposition pro(s)- 'to', 'toward' to recapitulate the presumed sense 'to' of $e$ - in verbs of speaking or saying:
(71) ton de ap(o)-am(a)-ei-bo-men-os pros-e-f-ë podas
him de from-with-to-answer-be-NF to-to-say-3s feet
wkus Akhilleus:
fast Achilles
'(then) responding to him, swift-footed Achilles said to (him)'
(72) ton de ap(o)-am(a)-ei-bo-men-os pros-e-f-ë kreiwn

3s DE from-with-to-answe-be-NF for-to-say-3s lord Agamemnwn
Agamemnon
'Then answering him, Lord Agamemnon said to (him)'
(73) Kalkhanta protista $\operatorname{kak}(o)$ osso-men-os pros-e-eip-e

Calchas foremost bad look-be-NF to-to-speak-3s 'and looking most evil, he spoke first to Calchas'
(74) to de ara hup(o)-oda id-wn pros-e-f-ë podas wkus Akhilleus 3s de ara under-brow see-nf to-to-speak-3s swift feet Achilles 'then, looking from under his brows, swift-footed Achilles spoke to (him)'
(75) ton de aute pros-e-eip-e thea leukw-lenos Athënë

3s DE DEM/SF to-to-say-3s goddess white-eye Athena '(and) the white-eyed goddess Athena, said to (him)'
(76) Peleidës de ex-autis atraptepois epeessin Atreidën Peleus.son DE ex-DEM/s violent words Atreus'son pros-e-eip-e,
to-to-say-3s
'then the son of Peleus himself said violent words to the son of Atreus'
(77) ton $\mathrm{d}(\mathrm{e}) \mathrm{ap}(\mathrm{o})$-am(a)-ei-bo-men-os pros-e-f-e kreiwn

3s DE from-with-to-reply-be-nF to-to-say-3s lord Agamemnwn:
Agamemnon
'then answering him, lord Agamemnon said to (him)'
(78) alla ho ge Talthubion te kai Eurybatën pros-e-eip-e
but 3s em Talthybius Te and Eurybatus to-to-speak-3s
'but he spoke to Talthybius and Eurybates'
(79) tën de baru stenakhwn pros-e-f-ë podas wkus Akhilleus

3sF DE deep heart to-to-speak-3s feet fast Achilles 'then from deep in his hear fast-footed Achilles spoke to her'
(80) patri filw en-khersi tis-ei kai min pros-e-eip-en
father/all dear in-hand put-3s and min to-to-say-3s
'and he put her in her dear father's arms and said to (him)'
(81) lisso-men-ë pros-e-eip-e Dia Kroniwna anakta'
pray-be-a/NF to-to-speak-3s Zeus Cronos/gen king 'and praying, he spoke to king Zeus son of Cronos'
(82) tën de ou ti pros-e-f-ë nefelë-gereta Zeus

3sF DE NEG wh to-to-say-3s cloud.gatherer Zeus
'but cloud-gathering Zeus said nothing to her'
(83) tën de mega okhthes-as pros-e-f-ë nefelë-gereta Zeus

3sF DE much troubled-nF to-to-speak-3s cloud-shaker Zeus 'then, much troubled, cloud-shaker Zeus spoke to her'
(84) depas amphi-kupellon mëtri filë en-kheiri tith-ei kai min cup with-double/Acc mother dear in-hand put-3s and min pros-e-eip-e
to-to-say-3s
'he put the double cup in his dear mother's hand and spoke to (her)'
(85) ankhou d(e) ista-men-ë pros-e-f-ë glauk.wpis Athënë:
near DE stand-be-nF to-to-say-3s bright-eyed Athena 'then standing near (him), bright-eyed Athena said to (him)'
(86) tw min e-eisa-men-os pros-e-fone-e theios Oneiros

3s min to-equal-be-nf to-to-speak-3s god Dream 'and likening himself to him, the god of Dream spoke to (them)'
(87) ton $\mathrm{d}(\mathrm{e}) \mathrm{ap}(\mathrm{o})$-am(a)-ei-bo-men-os pros-e-f-ë kreiwn

3 s DE from-with-to-reply-be-nF to-to-say-3s ruler Agamemnwn
Agamemnon
'(then) king Agememnon, replying to him, spoke to (him)'
(88) ou-de ti min pros-e-fwne-on

NEG-DE WH MIN to-to-speak-NF
'and he himself didn't speak at all to (them)'
(89) tën de ap(o)-am(a)-ei-bo-men-os pros-e-f-ë podas wkus

3sF DE from-with-to-answer-be-nF to-to-say-3s feet swift
Akhilleus
Achilles
'responding, swift-footed Achilles then said to (her)'
(90) ankhou d(e) ista-men-ë pros-e-f-ë podas wkeas Iris
(II.790)
near DE stand-be-nF to-to-speak-3s feet fast Iris
'and standing near (him), swift-footed Iris spokes to (them)'
(91) tw min e-eirë-men-ë pros-e-f-ë podas wkea Iris

3s min to-liken-be-nf to-to-speak-3s feet fast Iris 'then likening herself to him, swift-footed Iris spoke to (him)'
(92) ankhou d(e) ista-men-ë pros-e-f-ë podas wkas Iris
near DE stand-be-nF to-speak-3s feet fast Iris 'then standing near (her), swift-footed Iris spoke to (her)'
(93) grëi de min eikuia palai-genei pros-e-eip-en
old.woman DE mIN likeness(?) old-born to-to-speak-3s 'and she spoke to her in the likeness of an ancient lady'
(94) të min e-eisa-men-ë pros-e-fwne-e di(a) Afroditë:
(III.389)

3sf min in/to-like-be-NF to-to-speak-3s godly Aphrodita 'and in her likeness godly Aphrodita spoke to (her)'
(95) tën de kholwsa-men-ë pros-e-fwne-e di(a) Afroditë:
(III.413)

3SF DE angry-be-nF to-to-speak-3s godly Aphrodite 'then godly Aphrodite spoke to her angrily'
(96) tën de Paris muthoisin am(a)-ei-bo-men-os pros-e-eip-e: (III.437) 2sf de Paris words with-to-answer-nf to-to-say-3s 'then Paris, answering her with words, said to (her)'
For contrast, consider the augmentation of $e$-, presumably 'to' again, with ex- 'out':
hw-de gar ex-e-re-w, to de kai teles-men-on est-ai as-de FOR ex-to-speak-1s 3 s DE and make.pass-be-nf be-IRR 'for just as I shall speak out, it shall come to pass'

Consider next the formulaic augmentation of the presumed 'to' sense of $e$ by ama- 'with' in the verb 'answer/reply'. What is striking in the three examples below is how the more common ei- 'to', as in (87), (89) above, is fully reduced here to $e$-, again underscoring our hypothesis: ${ }^{3}$
(98) ton de am(a)-e-bei-to pod-arkes dios Akhilleus:'

3s De with-to-answer-nF foot-swift godly Achilles
'then swift-footed godly Achilles replied to him'
(99) ton de ëm(a)-e-bei-to epei-ta Thetis

3s de with-to-reply-nf then-3s Thetis
'then Thetis replied to him'

[^29](100) ton de ëm(a)-e-bei-to epeita bo-wpis potnia Hërë

3s de with-to-reply-nf then oxeyed queen Hera 'then ox-eyed queen Hera replied to him'

Consider, lastly, the augmentations by various prepositions of the presumed 'to', 'from' or 'in' senses of $e$-, used with other more abstract verbs, with the contribution of the preposition becoming, on occasion, semantically opaque: ${ }^{4}$
(101) ei dë soi pan ergon hup(o)-e-izo-mai
if DE 2 s all work under-to-yield-1s/FUT
'if I were to yield to you in all matters'
(102) Patroklos de filw ep(i)-e-peith-e hetairw Patroclus DE dear on-to-listen-3s comrade 'and Patroclus listened to his dear comrade'
(103) ton kai hup(o)-e-d(e)-deis-an makares theoi 3s and under-ex-cv-fear-3p blessed gods 'and the blessed gods were afraid of/from him'
(104) pasin de met(a)-e-prep-en hërwessin,
all DE with-in-surpass(?)-3s warriors
'he was pre-eminent among/in all the warriors'
(105) hës ep(i)-e-pith(o)-men

3pf on-in-believe-1p
'the one on/in which we trust'

### 6.2.2 Bi-transitive verbs

The clausal context surveyed in this section pertains, as in Chapter 5 above, to bi-transitive verbs of transfer that involve, at their concrete prototype, a subject/agent causing an direct object/patient to change to, from, into or out of some location - the indirect object. The examples are sufficiently transparent and will be listed in order, with the preposition either augmenting or recapitulating the presumed old sense of the 'Augment' $e$-. The semantic contribution of the added preposition is sometime more transparent and sometime less so.
4. Cunliffe's (1924/1963) Lexicon often does not give the sense of verbal roots, or even 'augmented' stems, but rather of the whole verbal word, 'Augment' and preposition included.
(106) tis $t(e)$ ara sfwe thewn eridi xun-e-ëk-e makhes-thai WH TE ARA REF gods/GEN quarrel with-to-bring-3s fight-IRR 'who of the contesting(?) gods then brought them (there) together to fight?'
(107) tox(a) wmoisin ekh-wn $\operatorname{amf}(\mathbf{i})$-e-refe-a te faretren
bow shoulders hold-NF about-to-cover-NF TE quiver 'carrying the bow on his shoulders and the quiver covered-over'
(108) alla ta men poliwn ex-e-prazo-men
but 3p men cities-aCC ex-ex-take-1p
'but that which we took from the cities'
(109) alla ta men poliwn ex-e-patho-men
but 3p men cities/ACC ex-ex-sack-1p
'but that which we took from the cities'
(110) twn ouk an ti fero-is an(a)-e-l-on

3s NEG AN wh carry-2s up-ex-take-nF
'you may not carry and take up/away any of it'
(111) Atreidës de ara nea thoën hala-de pro-e-russ-en

Atreides DE ARA ship fast/acc sea-loc to-in-launch(?)-3s
'while the son of Atreus launched a swift ship into the sea'
(112) ou-d(e) Agamemnwn lëg(-e) eridos të prwton ep(i)-ë-peilës-(e)
neg-de Agamemnon leave-3s strife 3 s before on-to-threaten-3s
Akhilëi
Achilles/dat
'and Agamenon did not let go of the strife with which he had earlier threatened Achiles'
(113) hup(o)-e-lusa-o desmwn
under-ex-loose-IMP bond/ACC
'and release him from his bonds'
(114) tën de eis-hormon pro-e-res-an eretmois

3SF DE to-anchorage to-to-row-3P oars
'then they rowed her with oars to the anchorage place'
(115) kouroi krëtëras ep(i)-e-steps-ant-o potoio
youths bowls on-in-pour-be-NF drink/GEN
'the youth poured (fresh) drinks into their bowls'
(116) Zeus me megas Kronidës atë en-e-dës-e bareië skhetlios

Zeus 1s great Chronos'-son bad in-in-trap-3s deep obstinate
'Zeus the great son of Chronos trapped me in deep obstinacy' (II.111)
(117) kai sfin thespesion plouton kat(a)-e-kheu-e Kroniwn' and ref godly wealth down-to-pour-3s Cronos/GEN 'and the son of Cronos poured stupendous wealth down upon them'
(118) Brisëidos ëu-komoio, tën ek-Lurnëssou ex-e-ile-to (II.690)

Briseis ver-haired 3sf ex-Lyrnessus ex-ex-take-nf 'the fair-haired Briseis' (daughter), whom he had taken away from Lyrnessus'
(119) nëpios, ou-de ti oi to $g(e)$ ep(i)-ë-pkes-e lugron olethron, fool NEG-DE WH 3s 3s em on-ex-push-3s woeful death 'fool, it did not ward off woeful death from him'
(120) Trwwn an(a)-e-erg-e falangas

Trojans up-ex-work-3s battalions
'he separated(?) the Trojan battalions from (the Achaean)'
(121) teukhea $t(e)$ ex-e-du-ont-o
arms TE ex-ex-take(?)-be-NF
'taking their arms off (their shoulders)'
(122) ta men $\operatorname{kat}(a)$-e-th-ent-o epi-gaië

3P MEN down-to-put-be-NF on-ground
'(and) putting them down on the ground'
(123) di-plaka porfureën, poleas $d(e)$ en-e-pass-en aethlous'
two-fold purple many de in-in-???-3s contests
'two-fold purple, into which she embroidered (the) many battles'
(124) kai tous men kat(a)-e-thëk-en epi-khthonos
(III.293)
and 3p MEN down-to-put-3s on-ground
'then he put them down on the ground'
(125) pros-then af(o)-e-i-e khalkeon enkhos
first-loc from-ex-go-3s bronze spear
' (a bronze helmet, which) he would first leave away from his bronze spear'
(126) theoisi de kheiras an(a)-e-skh-on
(III.318)
gods De hands up-to-raise-NF
'raising their hand up to the gods'
(127) ton d(e) ex-ë-rpaz(-e) Afroditë hreia

3s DE ex-ex-snatch-3s Aphrodite flowing
'but Aphrodite pulled him off/out of (there) easily'
(128) ou-de ap(o)-e-lus-e thugatra kai

NEG-DE from-ex-free-3s daughter
'neither did he free (his) daughter from (jail)'
(129) kai ouk ap(o)-e-dexa-t(o) apoina
and NEG from-ex-accept-NF ransom
'nor (did he) accept a ransom from (the jailer)'
(130) w Khrusë, pro-me ep(i)-e-mps-en anax andrwn Agamemnwn oh Chryses to-1s on-to-send-3s king men/gen Agamemnon 'oh Chryses, Agamemnon king of men has sent me onto (here)'(I.442)
(131) epeita kai oulokhutas an(a)-e-l-ont-o
then and barley up-ex-take-be-nf
'then (they) took the barley grain up from (there)'
(132) mërous $t(e)$ ex-e-tam-on
thighs TE ex-ex-cut-nf
'then cutting the thighs off from (the body)'
(133) kai oulokhutas an(a)-e-l-ont-o
and barley-grain up-ex-take-be-nF
' and (they) picked the barley grain up from (there)'
(134) thea $\operatorname{kat}(a)$-e-thek-e ferous-a
goddess down-in-put-3s carry-NF
'and carrying it, the goddess put it down (there)'
(135) eme de glukus hupnos an(a)-ë-k-en

1s DE sweet sleep up-ex-let.go-3s
'and sweet sleep then let go of/from me'
(136) en-tha ho tous e-leein-a kat(a)-e-sth-ie
then 3s 3p to-pity-nf down-in-swallow-3s
'then he pitiably swallowed them down (his throat)'
(137) mërous $t(e)$ ex-e-tam-on
thigh TE ex-ex-cut-nF
'(then) cut out the thighs off (the body)
(138) kai ta men ar(a) skhizësin a-fuloisin kat(a)-e-kai-on
and 3p men ara branches(?) neg-leaves down-to-burn-NF
'and they burned them down to (the bark) with de-foliated branches'
(139) hws tous hëgemones di(a)-e-kosme-on en-tha kai en-tha (II.476) so 3 s leaders through-in-marshall in-3s and in-3s
'so did the leaders marshal them through (the field) this and that way'
(140) eu- $t(e)$ oreos koroufësi Notos $\operatorname{kat}(a)$-e-kheu-en omikhlën VER-TE mountain peaks So.wind down-to-shed-3s mists/ACC '(and) much as the South Wind sheds mists down the mountain peaks'

Relatively few - 8 - of the bi-transitive clauses in our counted sample involve more abstract senses, beginning with two datives:
(141) ou-d(e) ara pw hoi ep(i)-e-kraain-e Kroniwn
neg-de ara wh 3/dat on-to-grant(?)-3s Cronos'son
'but the son of Cronos did not grant to him any of (his wishes)'
(142) ou-de sfin ep(i)-e-krain-e Kroniwn
(III.302)
neg-de ref on-to-grant-3s Cronos'son
'but the son of Cronos did not grant to them (their wish)'
$\qquad$
(149) epei ou par(a)-e-leuse-ai ou-de me peis-eis
then neg by-ex-bypass-IRR NEG-de 1s convince-2s
'since you will not by-pass me nor convince me'
(150) autar ego ge lisso-m(ai) Akhillëi meth(a)-e-men kholon
but 1 s Em beg-1s Achilles/dat with-ex-be/IRR anger
'but I beg you to let go of you anger against Achilles'
(151) kheiri te min $\operatorname{kat}(a)-e-r e x-e n$
hands TE min down-to-stroke-3s
'and she stroked him down with her hands'
(152) tën de di(a)-e-pratho-men

3s DE through-ex-sack-1p
'and we sacked it out completely'
(153) ou-de tis e-tl-ë mein-ai ep(i)-e-rkho-men-on

NEG-DE WH to-want(?)-3s stay-IRR on-to-come-be-NF
'non of them dared to await upon/for his arrival'
(154) më-de ea nëas ala-d(e) e-lke-men amfi-e-liss-as

NEG-DE 3SF ship sea-from ex-take-IRR with-to-ask-NF
'and ask (him) not to pull his ship out of the sea'
(155) novon $\mathrm{d}(\mathrm{e})$ am(a)-e-gart-on ofell-en
toil DE with-e-wretched-nf cause-3s
'(then he) made their toil miserable'
(156) Hërë më de pantas emous ep(i)-e-lpe-o muthous e-idës-ein Hera neg de all 1s/gen on-to-think-ImP words to-know-Inf 'Hera, don't think that you know all my words'
(157) ho de xun-e-ëk-e thea opa fwnësas-ës

3s DE with-to-hear-3s goddess voice speak-NF
'and he heard the voice of the goddess speaking'
(158) alla hon men ke epi-e-(o)ik-es akouse-men
but 3sm Men Ke on-to-proper-2s hear-be/IRR
'but what is proper for you to hear'
(159) ë de loigia erga ta-d(e) esset-ai ou-de et(i) an(a)-e-kt-a
$3 \mathrm{~s}($ ?) de bad work $3 \mathrm{P}-\mathrm{de}$ be-IRr neg-de sub up-to-do/PASS-nf 'this will be a bad affair that had better not to be done'
(160) hos dë pollawn poliwn kat(a)-e-lus-e karëna

3s de many cities down-to-loosen-3s hearts
'(he) who has laid low the hearts of many cities'
(161) Thersitës de eti mounos am(a)-e-troep-ës e-kalow-a

Thersites DE sub alone with-ex-chatter-nf ex-call-nf 'though Theresites alone, chattering, kept calling out'
(162) autika patros heoio filon mëtrw kat(a)-e-kt-a immed. father 3s/gen dear mat.uncle down-ex-kill-NF 'right away he slew his own father's dear uncle'
(163) mala gar te kat(a)-e-sfi-ei
more FOR TE down-in-devour-3s/HAB
'for he further devours (it) down/in'
(164) kat(a)-e-pleg-e filon ëtor
down-to-struck-3s dear heart
'his dear heart was struck down with dismay
(165) tws de $s(e)$ ë ap(o)-e-khthër-w

3s de 2s C from-ex/to(?)-hate-1s
'and (lest) I may hate you'
(166) ison gar sfin pasin ap(o)-ë-khthe-to këri melainë
(III.454)
equal for Ref all from-ex-hate-nf fate black
'for they all hated him equally (like the) black fate'

### 6.3 Quantitative text distribution

The quantitative text distribution of verbs with the 'Augment' $e$ - preceded by one or more prepositions is given in Table (167) below. In Chapter 5 above, where we investigated the functional-syntactic distribution of verbs prefixed by the 'Augment' $e$ - alone, ca. $\mathbf{7 1 \%}$ - or $94 \%$ - of all the examples in the counted text (Book I of the Iliad) occupied the predicted functional-syntactic contexts. In the sample inspected here (Books I,II,III of the Iliad), this predictable distribution reached the level of ca. $90 \%$.
(167) Quantitative distribution of augmented verbs preceded by prepositions

| Clausal context |  | N |  | $\%$ |
| :--- | :--- | :--- | :--- | :--- |
| intransitive with concrete/locative IOs |  | 61 |  |  |
| intransitive with abstract/dative IOs |  | 44 |  |  |
| bi-transitive with various IOs |  | 43 |  |  |
| sub-total |  | 148 |  | 89.2 |
| residue |  | 18 |  | 10.8 |
| total: | 166 | 100.0 |  |  |

### 6.4 Discussion

The fact that the quantitative text distribution of the pre-verbal 'Augment' $e$ - in Homeric Greek, whether appearing by itself or preceded by prepositions, fits - overwhelmingly, with relatively small residues - into the two universal functional-syntactic clausal contexts where case-marking adpositions tend to mark indirect objects does not, by itself, constitute a proof of our hypothesis. One can still argue that this highly suggestive quantitative distribution is merely compatible with our hypothesis. In terms of the methodology of science, such a suggestive distribution constitutes a mere failure to falsify (Popper 1934/1959; Hanson 1958), whereby a hypothesis may stand till further notice. Still, the hypothesis presented here should be contrasted with the plethora of alternative accounts of the 'Augment' $e$-offered in the traditional literature (Chapter 5), which falls somewhat short of either substantive coherence or predictable text distribution.

One may also wish to argue that the reason why ca. $90 \%$ of the 'Augment' $e$ - in our Homeric text sample fit in the two predictable syntactic-semantic contexts is due to the prepositions that precede the 'augmented' verbs in our current sample. But this does not explain the similar text distribution of 'augmented' verbs without added prepositions, as surveyed in Chapter 5 above. ${ }^{5}$

Another quantified distribution may perhaps be also relevant here, this one involving the distribution of detached prepositions in clauses containing 'augmented' verbs. Out of the 156 clauses with verbs 'augmented' with $e$ - alone studied in Chapter 5 above, only 15 - or $9.6 \%$ - contained detached prepositions. In the sample inspected in this chapter, with verbs 'augmented' by $e$ - and then preceded by a preposition, not a single occurrence of a detached preposition was observed. This may of course be a meaningless fluke. Still, one way of interpreting this fluke coherently is as follows:

- As proposed earlier above (Chapters 2, 3, 4), detached ('severed') prepositions are an intermediate stage in the diachronic life-cycle of prepositions, between their older function as nominal case-markers and their later cliticization to verbs.
- Due to zeroing-out of their nominal object, detached prepositions found in clauses with verbs preceded only by the 'Augment' $e$ - (Chapter 5) represent an early stage of the second cycle of attaching prepositions to verbs.

[^30]- The reason why we don't seem to find stranded prepositions in clauses with the completed second cycle is thus fairly transparent - the erstwhile detached prepositions have now become prefixed to the verb in front of the 'Augment' $e$-.

The process by which prepositions became prefixed to the verb in Homeric Greek is neither unique nor mysterious. Calling the intermediate stage of this process, detached prepositions, by the traditional name Tmesis, lit. 'cutting off' or 'severance', does little to either describe the phenomenon or explain it as a natural diachronic change. Indeed, as Monro (1891) suggested, Tmesis is an upside-down description of what must have happened in actual diachrony.

In the same vein, giving the traditional name 'Augment' to the pre-verbal vowel $e$ - does not explain why it is $/ e /$ rather than any other vowel (or consonant). Indeed, the phonological reduction of unstressed VC- prefixes before consonant-commencing stems, turning them into mere unstressed vowels, is a well-attested, natural diachronic process in the phonology of grammaticalization. What we deal with here is not any VC- prefix being reduced to V-, but one for which we have just the right three candidates for plausible etymology - the still-extant prepositions en- 'in/at', ex-/ek- 'out/from' and e(i)s- 'to'.

Lastly, if the mysterious 'Augment' $e$ - is not the product of an earlier diachronic cycle of prefixing prepositions to verbs, then its striking text distribution in functional-syntactic clausal contexts where adpositions tend to appear cross-linguistically, and where they tend to mark common types of indirect objects, remains a mere coincidence, an unexplained puzzle. In science, such puzzles are the common impetus for seeking explanations, and for constructing testable hypotheses.

## Abbreviations of grammatical terms

| ACC | accusative | FOR | because |
| :--- | :--- | :--- | :--- |
| ALL | allative | FUT | future |
| ASSOC | associative | GEN | genitive |
| ASP | aspect | HAB | habitual |
| C | conjunction | IMM | immediate |
| CAUS | causative | IMP | imperative |
| CV | reduplicate first syllable | INF | infinitive |
| DAT | dative | IRR | irrealis |
| DEM | demonstrative | LOC | locative |
| DO | direct object | MANN | manner |
| EM | emphasis | NEG | negative |


| NF | non-finite | VC | reduplicate first syllable |
| :--- | :--- | :--- | :--- |
| NOM | nominative | VER | intensifier |
| O | object | WH | WH-question |
| P | preposition | 1 s | first person singular |
| PA | past | 1 P | first person plural |
| PL | plural | 2 s | second person singular |
| PP | prepositional/postpositional | 2 P | second person plural |
|  | (phrase) | 3 s | thirst person singular |
| PROG | progressive | 3 sF | third person singular masculine |
| REF | referring/reflexive | 3 SM | third person singular feminine |
| S | subject | S | singular |
| SUBJ | subjunctive | SF | singular feminine |
| SUB | subordinator | SM | singular masculine |
| THO | though | P | plural |

## Appendix 1. Text loci of verbs prefixes by preposition(s) plus e(Books I,II,III,IV,V,VI of Iliad)

I.8, I.45, I.58, I.69, I.73, I.84, I.95, I.95, I.102, I.105, I.121, I.125, I.127, I.130, I.132, I.148, I.206, I.212, I.215, I.223, I.253, I.283, I.285, I.294, I.301, I.308, I.312, I.319, I.320, I.332, I.345, I.359, I.360, I.361, I.364, I.367, I.397, I.401, I.405, I.406, I.407, I.413, I.421, I.428, I.435, I.441, I.442, I.449, I.460, I.470, I.496, I.497, I.500, I.502, I.511, I.517, I.531, I.533, I.534, I.536, I.545, I.547, I. 551 (!), I.557, I.573, I.585, I.605, I.611 [68]
II.14, II.15, II.22, II.31, II.32, II.35, II.41, II.48, II.68, II.69, II.71, II.77, II.78, II. 85 (x2), II.111, II.117, II.149, II.150, II. 153 (ex-e-kata-), II.165, II.172, II.182, II.208, II.212, II. 219 (x2), II.267(x3), II.283, II.286, II.314, II;321, II.336, II.341, II.369, II.410, II.411, II.419, II.420, II.423, II.425, II.476, II.579, II.585, II.629, II.634, II.649, II.655, II.662, II.664, II.665, II.670, II.690, II.775, II.781, II.785, II.790, II.794/5, II.798, II.815, II.835, II.853, II. 873 [61]
III.10, III.14, III.25, III.31, III.33, III.35, III.51, III.77, III.79, III.96, III.109, III.114, III.114, III.126, III.129, III.151, III.177, III.184, III.198, III.293, III.302, III.315, III.317, III.318, III.348, III.376, III.380, III.386, III.389, III.405, III.406, III.413, III.415, III.425, III.437, III.442, III.454. III. 455 [38]
IV.1, IV.5, IV.9, IV.12, IV.20, IV.30, IV.33/4, IV.53, IV.62, IV.86, IV.111, IV.112, IV.118, IV.129, IV.139, IV.153, IV.154, IV.159, IV.161, IV.176, IV.183, IV.214, IV.220, IV.227(x2), IV.231, IV.250, IV.267, IV.267, IV.301, IV.319, IV.335, IV.340, IV.341, IV.349, IV.356, IV.376, IV.380, IV.390, IV.392, IV.394, IV.397, IV.398, IV.401, IV.403, IV.411, IV.415, IV.434, IV.468, IV.476, IV.477, IV.485, IV.517, IV.521, IV.524, IV.531, IV.532, IV.539, IV. 542

[^31]
## Mirror image: <br> How English prepositions became post-verbal clitics

### 7.1 Introduction

There are two reasons why an investigation of the rise of prepositions as post-verbal clitics - so-called 'verb particles' - in English might serve to further illuminate the rise of Homeric Greek pre-verbal prepositions ('preverbs').

- Methodologically: While the Homeric text displays a wealth of synchronic variants from whose complex distribution the diachrony can be inferred via Internal Reconstruction, English affords us a view of substantially the same variants as they emerge in diachronic order.
- Typologically: English, with its VO order, is a syntactic mirror image of the OV-ordered pre-Homeric dialect from which Homeric Greek must have emerged (Lehmann 1969, 1974). That OV order predicts that when pre-verbal prepositional phrases lose their nominal object, the leftover detached prepositions should find themselves preceding the verb, and thus become pre-verbal clitics. The validity of such a prediction is thus enhanced by noting that detached prepositions in the VO-ordered English wound up following the verb, and thus became post-verbal clitics. In this chapter we will track this diachronic development through English texts from Chaucer (14th Century), Mallory (15th Century), Shakespeare (16th Century) and beyond.


### 7.2 Chaucer (1340-1400)

In The Canterbuy Tales, prepositions are found in three main syntactic contexts:
a. pre-nominally in prepositional phrases, where they mark the case-roles of indirect objects
b. in REL-clause subordinators, marking the case-role of the zeroed-out indirect object
c. as the preposition 'to' or 'for-to' marking some non-finite verbs, mostly in equi-subject verb complements.

Of these three contexts, (c) is a limited case: First because it pertains to only a single preposition ('to' or 'for to'); second because the preposition winds up before the verb; and third because the diachronic mechanism involved has nothing to do with how prepositions become either pre-verbal affixes in Homeric Greek, Latin and Germanic or post-verbal clitics in English. Examples of these three syntactic contexts in the Chaucerian text are given in (1), (2) and (3) below, all taken from The Parson's Tale (Chaucer, pp. 189-192).
(1) Pre-nominal preposition
a. unnethe ariseth he out of synne 'once he arises out of sin'
b. the weyes espirituels that leden folk to our Lord Jehsu Crist 'the spiritual ways that lead people to our Lord Jesus Christ'
c. and walketh in that way 'and walks in that way'
d. that thurgh synne has mysgoon fro the righte wey 'that through sin has mis-gone from the right way'
e. of which man sholde gladly herken \& enquere with all his herte 'of which a man should listen and inquire with all his heart'
f. a man that halt hymself in sorwe \& oother peyne for his giltes 'a man who mires himself in sorrow and other pains for his sins'
g. that men fallen in venial synnes after hir baptesme 'that men fall into venal sins after their baptism'
h. if he be baptized withouten penitence 'if he is baptized without penitence'
i. for biforn that tyme that ye synned 'for before the time when you sinned'
j. his synne shal nat turne hym into delit 'his sin will not turn itself into delight'
(2) Prepositions incorporated into a REL-clause subordinator
a. and never to doon thyng for whiche hym oughte moore to biwayle 'and to have never done anything for which he ought to regret more'
b. thre thynges in whiche we wratthe oure Lord Jhesu Crist 'three things in which we anger our Lord Jesus Christ'
c. Rememberth yow fro whennes that ye been falle 'remember from where you have fallen'
d. to the lond of mysese and of darknesse, whereas is the shadowe of deeth
'to the land of misery and darkness, wherein is the shadow of death'
(3) The pre-verbal infinitive 'to' or 'for to':
a. and axeth of olde pather, that is to sayn 'and asks about old paths, that is to say'
b. and stidefastly purposen in his herte to have shrift of mouth 'and (he) intends in his heart to be careful with his mouth'
c. destreyneth hym for to do open penanunce '(it) constrains him to do open penance'
d. as dooth the hound that retourneth to eten his spewyng 'as does the hound that returns to eat his barf'
e. swiche manere of thoughtes maken a man to have shame of his synne
'such a way of thought makes a man have shame of his sins'
f. and shul desiren to dye 'and (they) shall desire to die'
g. mo develes than herte may bithynke for to harye and drawe the synful soules
'more devils than heart may plan to hurry and draw the sinful souls
h. yet wolde I have desdayne for to do synne 'yet would I have disdain for sinning'

Not a single case of post-verbal detached preposition was found in the Chaucerian text inspected, suggesting that the migration of prepositions to a post-verbal position in English must have started sometime after Chaucer. ${ }^{1}$

The quantitative distribution of the three main prepositional constructions in the Parson's Tale text (Chaucer, pp. 189-192) is given in Table (4) below.

1. Since written language is more conservative, and often reflects the way the language was spoken many years - or centuries - prior, and since one century after Chaucer, in Mallory, we find a few early examples of post-verbal detached prepositions, one could safely assume that the Middle English spoken during Chaucer's time already had some post-verbal detached prepositions.
(4) Quantitative distribution of three loci of prepositions in Chaucer's Parson's Tale

| Category | N | \% |
| :---: | :---: | :---: |
| pre-nominal | 202 | 77.7 |
| REL subordinator | 15 | 5.7 |
| Infinitive 'to' | 43 | 16.6 |
| detached post-verbal | / | / |
| total: | 260 | 100.0 |

Since the use of the infinitive-marking 'to' or 'for to' has nothing to do with marking the case-role of nominal indirect object, the 43 instances of that category may be subtracted from the total. And one may then say that at the Chaucerian base-line, where no detached post-verbal prepositions are yet found, the diachronicsource construction, prepositions marking the case-roles of nominal indirect objects, constitute 202/217, or $93 \%$, of prepositional sample of text, with the remaining $7 \%$ (15/217) found in REL-clause subordinators.

### 7.3 Mallory (1410-1471)

In Mallory's Le Morte d'Arthur, written about 100 years after Chaucer's Canterbury Tales, one finds the same three prepositional constructions as in Chaucer, with a nascent - minuscule - portion of post-verbal detached prepositions, our diachronic target construction. The examples cited below are taken from the beginning of The Noble Tale of Sir Launcelot du Lake (pp. 180-190).

As can be expected, the sample is still dominated numerically by pre-nominal prepositions, our presumed source construction. Representative examples of this construction in the Mallory text are:
(5) Pre-nominal prepositions
a. Sone aftir that kynge Arthurwe com from Rome into Ingelonde
b. But in especiall hit was prevyd on sir Launcelot du Lake
c. and at no tyme was he over-com but if hit by treson ${ }^{2}$
2. The few examples of pre-verbal prepositions in the text are, presumably, frozen carry-overs from the earlier Germanic or Romance vocabulary of Middle English, and thus do not reflect on the on-going diachronic process studied here.
d. quene Gwenyvere had him in grete favoure aboven all other knyghtis
e. and for hir he dud many dedys of armys and saved her from the fyre
f. so they mounted on their horses, armed at all ryghtes, and rode into a depe foreste
g. And come unto this tre and sawe many fyre shyldys, and amonge them all
h. so he mounted uppon his horse and overtok the strong knyght ${ }^{2}$
i. and threw him over-thwarte his owne hors

Next, we find examples of prepositions incorporated into REL-clause subordinators, with the first element being the anaphorically-pointing locatives 'where', 'here' or 'there', a pattern of indirect-object REL-clause subordinators that remains dominant in the written language well into the 18th and 19th Centuries. Representative examples of this category in our Mallory text may be seen in:
(6) REL-clause subordinators
a. Wherefore quene Gwenyvere had him in grete favoure
b. and thereon hongyth many fayre shyldys
c. and therewith he russhed his horse on sir Ector
d. and herebye within this ten myle
e. and layed hym therein, and felle on slepe sadly

Next, we find the use of 'to' or 'for to' to mark infinitives, most commonly again in verbal complements. Representative examples are:
(7) Infinitive verbs marked by 'to' or 'for to'
a. and than he thought hymself to preve in straunge adventures
b. and bade his nevew, sir Lyonell, for to make hym redy
c. and sir Launcelot had grete luste to slepe
d. there is a fayre fourde for horses to drynke off
e. I promyse you, by the leve of God, for to recowe that knyght

Lastly, post-verbally detached prepositions now make their first appearance, with the small sample, eleven in our entire counted text, given below in full, with the zeroed-out but still implicit nominal object given in parentheses:
(8) Stranded post-verbal prepositions
a. there is a fayre fourde for horse to drynke off (= off the ford)
b. and he threste in with his spere in the thyckyst of the press (= into his opponents)
c. wyth that com in sir Launcelot (= into the scene)
d. and there he smote downe with one spere five knytes (= down to the ground)
e. and in that thrange he smote down the kynge of north Galys (= down to the ground)
f. there com in sir Gahalantyne (= into the scene)
g. and than they flange oute with her sweres (= outward towards the opponent)
h. that his nose, erys and mowthe braste oute on bloode (=outside his body)
i. and sytthen he bette on the basyn with the butte of his spere tylle the bottum felle oute (= out of the basin)
j. as ever as they com nere and nere (= near each other)
k. and toke their shyldys before them and drew oute their swerdys (= out of the scabbards)

What is striking in (8) above is that in each of the 11 examples, the zeroed-out object is readily accessible from the clause's immediate anaphoric context. This is, as one may recall, a prominent feature of pre-verbal prepositions in the Homeric text (Chapters 3, 4). In one case (8a), this anaphoric accessibility involves a REL-clause, where the zeroed-out object is accessible from the adjacent head noun. The early appearance of post-verbal detached prepositions in the Mallory text thus satisfies the very same contextual condition we identified for both detached and pre-verbal prepositions in Homeric Greek (Chapter 3, $4)$ - that the zeroed-out nominal object must be accessible in context on either anaphoric or generically grounds. ${ }^{3}$

The quantitative distribution of the four prepositional constructions in our Mallory text is given in Table (9), below.

[^32](9) Quantitative text distribution of the four prepositional constructions in Mallory's Sir Launcelot du Lake (pp. 180-190)

| Construction | N | \% |
| :---: | :---: | :---: |
| pre-nominal | 252 | 84.3 |
| REL subordinator | 9 | 3.0 |
| Infinitive 'to' | 27 | 9.0 |
| detached post-verbal | 11 | 3.7 |
| total: | 299 | 100.0 |

Since the position where a grammatical morpheme cliticizes depends, ultimately, on the syntactic position of its lexical diachronic precursor, ${ }^{4}$ it is of some interest to see the extent to which prepositional phrases occupied either a pre-verbal or post-verbal position in the late-Middle English clause during the early period when detached prepositions began to appear post-verbally.

To this end, the same 11 pp. of Mallory's The Noble Tale of Sir Launcelot du Lake (pp. 180-190) were searched and quantified, with all prepositional phrases divided into those that appeared before the verb (OV) vs. those that appeared after the verb (VO). The results are given in Table (10) below, with representative examples directly following in (11) and (12).
(10) Pre-verbal (OV) vs. post-verbal (VO) prepositional phrases in the Mallory text (pp. 180-190)

| Clausal order | N | \% |
| :---: | :---: | :---: |
| pre-verbal (OV) | 35 | 14.8 |
| post-verbal (VO) | 201 | 85.2 |
| total: | 236 | 100.0 |

The V-O order of indirect objects indeed predominates in our text, at the level of ca. $85 \%$.

Representative examples of the post-verbal (VO) order of prepositional phrases are given in (11) below:

[^33](11) Post-verbal (VO) prepositional phrases in the Mallory text
a. Sone aftir that kynge Arthure was com from Rome into Ingelonde
b. so he loved the quene agayne above all other ladyes
c. So this sir Launcelot encresed marvaylously in worship and honoure
d. Wherefore quene Gwenyvere had him in grete favoure above all other knyghtis
e. I wote not how I com into this castell but hit beby inchautemente
f. and there come a knyghte behynde hym and bade hym com oute of the water

It is also of some interest to see in what discourse contexts one still finds the minority OV- ordered prepositional phrases in Mallory's text. In earlier studies, the discourse contexts where the fronting of constituents tended to occur were identified as:5

- referential novelty or discontinuity
- referential contrast, emphasis or unpredictability
- referential importance

Pre-verbal (OV) prepositional phrases thus occupy a rather familiar communicative niche of discontinuity or contrast, and may be divided for this purpose into the following syntactic sub-categories:
a. paragraph initial (thematic or referential novelty)
b. chain initial (directly following a period; thematic or referential novelty)
c. clause initial (directly following a comma)
d. existential 'there' constructions (indefinite/novel subject)
e. others (uncategorized)

Representative examples of OV-ordered prepositional phrases, illustrating the first three communicative contexts in our Mallory text, are given in (12) below.
(12) Pre-verbal (OV) prepositional phrases in the Mallory text

## i. Paragraph initial:

a. But in especiall hit was prevyd on sir Launcelot du Lake,
b. And in the meanewhile com there three knyghtes
c. So aftir noone com the damsel unto hym
d. Than within an owre there com that knyght

[^34]ii. Chain initial (following period):
e. So within a while this stronge knyght had overtakyn one of the three knyghtes
f. And thereby within this myle is a stronge maner
g. Aboute the none so there com by him four queenys
h. And on the morne erly com thes four quenys
iii. Clause initial (following comma)
i. for in all turnementes...he passed all other knytes
j. at no time was he ovircom but yf hit was by treson
k. and for her he dud many dedys

1. and by that maner on a lyffte honde there is a fayre fourde

The quantitative distribution of the various discourse-contexts of pre-verbal (OV) prepositional phrases in the Mallory text in given in Table (13) below.
(13) Distribution of functional-syntactic sub-categories of pre-verbal (OV) prepositional phrases in the Mallory text (pp. 180-190)

| Category | N | \% |
| :---: | :---: | :---: |
| Paragraph-initial | 5 |  |
| Chain-initial | 13 |  |
| Clause-initial | 12 |  |
| existential 'there' | 4 |  |
| sub-total | 34 | 94.4 |
| others | 2 | 5.5 |
| total: | 36 | 100.0 |

As can be seen, only a minuscule $5 \%$ of the pre-verbal (OV-ordered) prepositional phrases in our Mallory sample text don't fit into the well-known uses of pre-posing - of nouns, noun phrases or prepositional phrases - in front of the verb. These communicative uses of the pre-posed (OV) order in the otherwise predominantly-VO English are well known in all languages, VO or OV word-order notwithstanding. Their presence in our Mallory text, ca. 15\% (see Table (10) above), does not impinge on the predominance of the VO word-order in Mallory's Middle English. And it is this predominant VO order, placing prepositional phrases primarily after the verb, that makes prepositions available to post-verbal cliticization - once their nominal object is zeroed out in the relevant communicative context.

### 7.4 Shakespeare (1564-1616)

In Shakespeare's language, considered Early Modern English, many grammatical trends that peaked later on find their early consolidation. For the purpose of this study, I chose the text of The Tragedy of Coriolanus (part I, scenes $1,2,3,4$, pp. 1-27), and investigated the appearance of prepositions in the three familiar syntactic contexts:
a. pre-verbal prepositional phrases (OV)
b. post-verbal prepositional phrases (VO)
c. post-verbally stranded prepositions (V-P)

A number of prepositional phrases in our text appear in clauses without a verb, a stylistic device in Shakespeare's imagined spoken language. They were not counted here, although they most commonly appear in anaphoric contexts where the zeroed-out verb can be easily inferred. Some representative examples of such verbless clauses with prepositional phrases are:
(14) Verbless prepositional phrases in the Coriolanus text
a. Would you proceed especially against Caius Marcius? Against him!
b. Which he is, even to the altitude of his virtue.
c. Why stay we prating here? To the Capitol!
d. What work 's, my countrymen, in hand?
e. Your company to the Capitol;
f. Hence to your homes; be gone!

Representative examples of the bulk of our prepositional sample, in postverbal (VO) prepositional phrases, may be seen in:
(15) Post-verbal prepositional phrases in the Coriolanus text:
a. you know Caius Marcius is chief enemy to the people
b. Let us revenge this with our pikes
c. for the gods know I speak this in hunger for bread
d. I say unto you
e. Our business is not unknown to the senate
f. They ne'er cared for us yet
g. when all the body's members rebelled against the belly
h. But it proceeds or comes from them to you

The use of pre-verbal (OV) prepositional phrases in our Shakespeare text, as in the Mallory text, is often associated with referential or thematic discontinuity or contrast. Typical examples from the Coriolanus text may be seen in:
(16) Pre-verbal prepositional phrases in the Coriolanus text
a. You must in no way say he is covetous
(chain-initial manner-adverb)
b. against the Roman state whose course will on the way it takes (REL-clause)
c. What then:'Fore me, this fellow speaks! (contrast)
d. that all from me receive the flour of all (emphasis)
e. With every minute do you change a mind (chain-initial time-adverb)
f. What matter it, that in these several places of the city you cry against the noble senate
(thematic discontinuity)
Lastly, the Coriolanus text furnishes a decent sample of post-verbal detached prepositions, our diachronic target construction. Most of those come directly after the verb, though some allow a direct-object anaphoric pronoun, a negative marker, or in two striking cases even an object or subject noun, to intervene after the verb. ${ }^{6}$

It is of some interest to note that while in the Mallory text all zeroed-out indirect objects were still contextually predictable on either anaphoric or generic grounds, many detached post-verbal prepositions in the Coriolanus text are alreadysemantically incorporated into the verb or semantically arbitrary, so that their zeroed-out nominal object is not contextually predictable any more. This does not mean that one cannot trace the diachronic route by which arbitrary-looking post-verbal prepositions began their life as bona fide nominal case-role markers. As noted in our study of Homeric Greek, such detached prepositions become first semantically merged with the verb and then increasingly arbitrary. This diachronic semantic progression may be illustrated by the following constructed examples from modern English:
(17) a. Anaphorically predictable - main clause:
the water was freezing, but she jumped in anyway
b. Anaphorically predictable - REL-clause:
the river she jumped into was near frozen
6. As we shall see further below, this pattern persists into 20th Century English.
c. Generically predictable:
she was stuck in the middle of the slope, couldn't go up, couldn't go down
d. Semantically incorporated: come over, sit down, don't get up till they tell you
e. Semantically arbitrary: never give up, now just shut up, calm down, don't freak out

Some typical examples of post-verbal detached prepositions from our Coriolanus text may be seen in:
(18) Post-verbal 'stranded' prepositions:
a. to chain up and restrain the poor (semantically incorporated)
b. if wars eat us not up, they will
(semantically incorporated; DO pronoun intervenes)
c. I receive the general food first, which you live upon
(REL-clause anaphora)
d. though all at once cannot see what I do deliver out
(semantically incorporated)
e. I can make my audit up
(semantically incorporated; object noun intervening)
f. and give out conjectural marriages (semantically incorporated)
g. Would the nobility lay aside their ruth (generically implicit)
h. Lead you on
(semantically incorporated; subject noun intervening)
i. the shadow which he treads on at noon
(REL-clause anaphoric object)
j. a giddy censure will then cry out of Marcius
(semantically incorporated)
k. what ever have been thought on in this case
(REL-clause anaphora)

1. these three lead on this preparation (semantically incorporate)
m . for the remove bring up your army
(semantically arbitrary)
The quantitative text distribution of the three main prepositional constructions in our Coriolanus text (Act I, scenes 1,2,3,4, pp. 1-27) is given in Table (19) below.
(19) Quantitative distribution of prepositional constructions in the Coriolanus text

| Category |  | N |  | $\%$ |
| :--- | ---: | ---: | ---: | ---: |
|  | post-verbal prep. phrase (VO) |  | 148 |  |
| pre-verbal prep. phrase (OV) |  | 14 |  | 7.3 |
| post-verbal stranded preposition |  | 33 |  | $\mathbf{1 6 . 9}$ |
| total: | 195 |  | 100.0 |  |

The first thing to note in this distribution is the predominance of VO syntax in Shakespeare's English. The ca. 75\% figure is somewhat misleading, since in terms of word-order, the detached post-verbal prepositions, being grammatical morphemes, should not be counted here, but only the prepositional phrases, VO vs. OV. When the total count is thus adjusted to 162 , the percent of VO order is 148/162 or $97.3 \%$. By comparison, the percent of prepositional phrases in the VO order in our Mallory text was $\mathbf{8 5 . 2 \%}$. The post-verbal position of detached preposition, whose nominal object was zeroes out due to anaphoric or generic predictability, is thus well motivated by the predominant VO syntax of Middle-to-Modern English.

The second thing to note is the percent of detached post-verbal prepositions, our diachronic target construction, in the Coriolanus text - $16.9 \%$. In our Mallory text (Table (9) above), if the pre-verbal infinitival 'to' and the REL-subordinator are removed for a more fair comparison, the comparable percentage was $11 / 263$ or $4.2 \%$. While in the Chaucer text we found no trace of post-verbal prepositions.

It is also of interest to find out the quantitative distribution of the various semantic types of post-verbal prepositions in our Coriolanus text (see (18) above). To this end, the total sample of post-verbal prepositions in Act I of Coriolanus (scenes 1-10, pp. 1-41) was inspected, and divided into the three main semantic categories:
a. anaphorically or generically predictable (incl. REL-clauses)
b. semantically incorporated into the verb
c. semantically arbitrary

The quantitative distribution of these three semantic categories in our Coriolanus text is given in Table (20) below.
(20) Distribution of the semantic categories of detached post-verbal prepositions in the Coriolanus text

| Category |  | N |  | $\%$ |
| :--- | ---: | ---: | ---: | ---: |
| anaphorically or generically predictable |  | 8 | 17.8 |  |
| semantically incorporated |  | 22 |  | 48.9 |
| semantically arbitrary |  | 15 |  | 33.3 |
| total: | 45 | 100.0 |  |  |

Our hypothesis has been that post-verbal detached prepositions in English, much like their mirror-image Homeric Greek 'preverbs', began their diachronic life as pre-nominal case-role markers, and then, gradually:
a. lost their nominal object in contexts of anaphoric or generic predictability;
b. became semantically associated with the verb;
c. gradually became arbitrary components of the verbal word.

From this perspective, the distribution of the various semantic types of detached post-verbal prepositions in our Shakespeare text, summarized in Table (20) above, makes perfect sense. This is especially true when one recalls that in the few cases of detached post-verbal prepositions in the Mallory text, all the zeroedout nominal objects that were contextually predictable on either anaphoric or generic grounds.

Roughly 100 years after Mallory, in Shakespeare's Coriolanus (written ca. 1610), the diachronic process had advanced considerably, and in the predicted direction. Only ca. 18\% of the post-verbal detached prepositions are still at the early stage - where the zeroed-out object is contextually predictable. The bulk of the sample, ca. $48 \%$, are in the middle stage where the anaphoric predictability of the zeroed-out nominal object has turned into a more subtle semantic association with the verb. And ca. $33 \%$ of the sample of post-verbal preposition in our Coriolanus text had arrived at the terminal stage, where the semantics of the preposition is largely arbitrary, and does not reflects its original meaning as a nominal case-role marker.

When a comparable semantic assessment was applied to pre-verbal prepositions in the Homeric text, the language appears to have been caught at a much earlier stage of the diachronic continuum as compared to Shakespeare's English. One might have to, no doubt, look at Classical Greek to catch the language at a stage of the diachronic process comparable to Shakespeare's English.

### 7.5 Twentieth Century English

While the process of placing detached prepositions post-verbally in English seems to be fairly near to completion by Shakespeare's time (early 1600s), it is still of interest to see how it fares in more recent Modern English. To this end, I have selected two texts, the first from a novel by Elmore Leonard (1989), the second an oral narrative.

### 7.5.1 Mid-Twentieth-Century fiction: Elmore Leonard

What makes Leonard's prose attractive, in addition to being superbly well written, is that he tends to favor the less-educated working-class or Redneck language with heaps of quoted dialogue, for which he has a matchless ear. Clauses with prepositions in our Leonard text were divided into the familiar syntactic categories:
a. post-verbal (VO) prepositional phrases
b. pre-verbal (OV) prepositional phrases
c. detached post-verbal prepositions with zeroed-out nominal object (V-P)
d. detached post-verbal preposition followed by a prepositional phrase (V-P-P-N)

The significance of the last category, found neither in the Mallory nor Shakespeare texts, may emerge in our discussion further below, since it suggests another similarity - albeit again in mirror image - with the process surveyed earlier in Homeric Greek.

Representative examples of the four categories, taken from the first chapter of Leonard (1989, pp. 7-19), are given in (21), (22), (23) and (24) below, respectively.

## (21) Post-verbal (VO) prepositional phrases

a. Try to walk out the door past it
b. because he lived in this hotel
c. He didn't give a shit about the Blue Jays
d. he wouldn't drink so much an be sick in the morning
e. He listened to several rings
f. see himself and his brothers with her
g. It's arranged for her to let you in
h. It was the same vivid color as his grandmother's cottage
i. where the Detroit River turned into Lake St. Clair
j. This time he came from Algonac

The sole example of pre-verbal (OV) prepositional phrase in the 12 pages of our counted text, a paragraph-initial time-ADV, is not quite representative, since it includes a long REL-clause:
(22) pre-verbal prepositional phrases (OV)

In the moment the voice on the phone said "Detroi-it"
the Blackbird thought of his grandmother
This paucity of clause-initial - thus also chain-initial and paragraph-initial connective phrases has much to do with Leonard's no-frill prose style.

Representative examples of post-verbal detached prepositions with zeroed-out nominal object may be seen in (23) below. As before, cases where the zeroed-out object is contextually predictable, on either anaphoric or generic grounds (including three instances of REL-clause anaphora), are clearly discernable. In many other instances, the preposition is semantically merged with the verb, a category that shades gradually into semantic arbitrariness. Consider:
(23) Detached post-verbal prepositions
a. because he lived in this hotel and the Silver Dollar was close by (main-clause anaphora)
b. He listened to several rings before picking up the receiver
(semantic merger)
c. What difference is where he is from? (REL-clause anaphora)
d. tough guy, one come from Montreal, maybe a little crazy, they gave the jobto (REL-clause anaphora)
e. I wonder it's the old guy you lined up to kiss her hand (REL-clause anaphora)
f. He was in town for the ball game... Walk in. Walk out.
(main-clause anaphora)
g. She looked him over
h. The blackbird hung up the phone
(semantic merger)
(semantic merger)
i. There was a bunch of Ojibway that hung up there
(semantic merger)
j. But look how frail he was, dried up
(semantic merger)
k . The shower was turned on
(semantic merger)
In several instances, as in $(23 \mathrm{~d}, \mathrm{~g})$, the direct-object pronoun or noun is tucked in between the verb and the preposition, an enduring feature of this construction in Modern English.

Lastly, we can also find in the Leonard text examples of another prepositional construction, one that seems to have emerged more recently in Modern English and was not attested in our Shakespeare text: post-verbal detached prepositions followed by a prepositional phrase; that is, a verb followed by two prepositions and a nominal (V-P-P-N). Representative examples of this seemingly novel construction from our Leonard (1989) text may be seen in:
(24) Detached post-verbal preposition followed a prepositional phrase (V-P-P-N)
a. having a few drinks before coming up to this room
b. He believed it was time to get away from here
c. He looked down at the room-service table
d. you take the ferry over from Algonac
e. and a wind comes in under the door
f. He turned and looked up with his tired eyes
g. and drove down through Wallaceburg
h. Coming away from the cooler
i. he bought aalt lick to put out in the woods
j. drove off toward the ferry dock
k. saw himself drive up to the blue cottage

In all the examples in (24) above, the preposition closer to the verb is semantically more merged to the verb, or even semantically arbitrary, while the second one, preceding an indirect-object nominal, is more likely to still mark its case-role. This consistent pattern has some bearing, I will suggest, on the contrast in Homeric Greek between the old 'Augment' $e$ - and the new generation of pre-verbal prepositions that joined it later (Chapter 6).

The quantitative distribution of the four prepositional constructions in our E. Leonard text (1989, pp. 7-19) is given in Table (25) below.

## (25) Quantitative distribution of prepositional constructions in the E. Leonard text

| Category | N | \% |
| :---: | :---: | :---: |
| post-verbal prepositional phrase (VO) | 256 | 78.3 |
| pre-verbal prepositional phrase (OV | 1 | 0.3 |
| post-verbal preposition alone (V-P) | 49 | 15.0 |
| post verbal preposition plus prep.-phrase (V-P-P-N) | 21 | 6.4 |
| total: | 327 | 100.0 |

When one compares the distribution in the Leonard text (Table (25)) with that in Shakespeare (Table (19)), it appears that while post-verbal detached prepositions (V-P) constituted $16.9 \%$ of the prepositional sample in our Shakespeare text, with no example of the V-P-P-N construction, our Leonard text had $\mathbf{1 5 . 0 \%}$ of the V-P construction and an added $6.4 \%$ of the new V-P-P-N construction.

In Table (20) earlier above, we attempted to quantify the distribution of the various semantic categories of post-verbal detached prepositions (V-P) in Shakespeare's Coriolanus text, noting that ca. $\mathbf{3 3 \%}$ of them already appeared to besemantically arbitrary, a determination that is not always easy to make. The comparable figure in our Leonard text is 17/49 or 34.6\%, not a substantial difference. It would thus be of some interest to try and make a similar determination about the use of the new V-P-P-N construction in Modern English; that is, recall, where a detached post-verbal preposition (V-P) is followed directly by a prepositional phrase (P-N). All 21 instances of this apparently novel construction found in our E. Leonard text are listed in (26) below:
(26) The V-P-P-N construction in the E. Leonard text
a. coming up to his room
b. get away from here
c. drive up to the blue cottage
('up' arbitrary)
d. look down at the room-service table
e. reaching out beyond the city
f. look up at him
g. a wind comes in under the door
h. take the ferry over from Algonac ('over' arbitrary)
i. looked up with his tired eyes
j. brought the sheet up over the old man's body
k. drove down through Wallaceburg ('down' arbitrary)
l. and pulled up in the Cadillac ('up' arbitrary)
m . coming away from the cooler
n. bought a salt-lick to put out in the woods
o. her tail standing up in the air
p. drove off toward the ferry dock
q. come back into the store
r. his gaze moved back to the trees,
s. then [moved] over to the tip of Russell Island ('over' arbitrary')
t. stared back at him
u. walked over to his pickup

In only 6 out of the 21 cases - $\mathbf{2 8 . 5 \%}$ - does the detached post-verbal preposition appear to be semantically arbitrary, though dispensing with it would still make a subtle semantic difference.

If one compares the quantitative distribution of the three main prepositional constructions in our Shakespeare text (Table (20) above) with the mid-Twenties-Century literary fiction of E. Leonard (Table (25) above), the differences do not appear to be all that dramatic.
(27) Quantitative distribution of prepositional constructions in the Shakespeare and Leonard texts

| Category | Shakespeare |  | E. Leonard |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% |
| post-verbal prepositional phrase (VO) | 148 | 75.8 | 256 | 78.3 |
| pre-verbal prepositional phrase (OV) | 14 | 7.3 | 1 | 0.3 |
| post-verbal preposition alone (V-P) | 33 | 16.9 | 49 | 15.0 |
| post verbal preposition plus prep.-phrase (V-P-P-N) | / | / | 21 | 6.4 |
| total: | 195 | 100.0 | 327 | 100.0 |

A new construction seems to be emerging, combining the already-emerged verb-plus-preposition (V-P) with a prepositional phrase (P-N), thus V-P-P-N. But its percentage in the text is relatively low (6.4\%). There is also a perhaps-expected reduction in the percent of pre-verbal (OV) prepositional phrases. Though as noted above, those are frequently paragraph-initial or chain-initial adverbial connectives that have little to do with the OV-VO word-order contrast.

It appears that the diachronic rise of post-verbal detached preposition ('verb particles') may have reached its maturity in mid-20th Century English. It is thus of some interest to assess the quantitative and qualitative distribution of prepositional constructions in spoken face-to-face 20th-Century English. When this is done, the situation turns out to be much more complex and dynamic, suggesting that the diachronic process by which prepositions in English migrate from their original pre-nominal slot to their more recent post-verbal position is far from over.

### 7.5.2 Oral narrative

The spoken English text I chose to investigate here is a personal oral narrative, recorded ca. 1978 in Bloomfield, New Mexico. The speaker was a retired rancher, trapper and oil-field roustabout ca. 55 years old, who was born in Texas, grew up in Southern New Mexico, and had a spotty high school education in rural schools. The reason why I chose a rural, less-educated variety of spoken English - in addition to an admitted personal preference - is easy to discern: Diachronic change occurs primarily in the spoken language. If there is either a clear tail end to the diachronic process studied here, or a significant further elaboration, it would be more likely to be found in the spoken language.

Even when investigating the presumed source construction of post-verbal detached prepositions in English, one finds a rather fluid situation in our spoken English text, with one, two or even three prepositions preceding a single indirect-object nominal. One may consider such multiplicity as, perhaps, a possible diachronic precursor to post-verbal prepositions in English. ${ }^{7}$ Typical examples of post-verbal (OV) prepositional phrases may be seen in (28) below.
(28) Post-verbal (VO) simple prepositional phrases
a. Well my dad's people came to Texas from Illinois
b. He was born in Sherman
c. the turkey would come into that river
d. there's a flat between the mesquit and the river
e. and the ol' big trees were on the river
f. so they naturally lived off the big ranchers' beef
g. five-year-old steer that they haven't even seenbefore then
h. he moved into Cattle County at Paduka
i. they were around there for a good while
j. it's a whole lot like your ranch up there, Tom

Examples with two prepositions, or in one case even three, may be seen in:
(29) Post-verbal (VO) prepositional phrases with double prepositions
a. there were quite a few springs over the country, back in the rough hills
b. there's no water up at Magdalena
c. it was a truck back in those days

[^35]d. It was high up there
e. but that evening they were way up in the corner
f. it was twisted a way over to one side
g. he put me in a body cast... plum down on this leg down to the knee
h. my little brother and I were down in this arroyo
i. they put a forty-pound weight off over the end of the bed
j. two and a half miles back over to the pine timber

It is of corse not always easy to tell the difference between a verb followed by a doubled preposition marking the indirect-object nominal and a verb-preposition combination followed by a simple prepositional phrase.

The next category found frequently in our oral text is our diachronic target construction of post-verbal detached prepositions (V-P). Such prepositions may appear alone, with no prepositional phrase to follow. And as is already seen in earlier Modern English, an anaphoric pronoun or object noun is often sandwiched between the verb and the preposition. Likewise, a REL-clause construction may also be implicated. Thus consider:
(30) Simple verb-preposition combinations
a. so he brought it over and gave it to me
b. I don't know what he went through (REL-clause)
c. and I figured some out myself
d. I got out when I was fourteen
e. he went ahead and fixed me up
f. and it wound up being about four and six-quarter inch shorter
g. He and her got along fine
h. they cut out about half of those teams
i. they couldn't get gas to run the busses with (REL-clause)
j. because they went on back

An even more common construction is the innovative one, where the verbpreposition combination (V-P) is followed by a prepositional phrase, thus V-P-P-N. A considerable variety of doubling the preposition is found here too, at either end; as well as the already-noted difficulty in determining where the preposition belongs - detached post-verbal vs. pre-nominal. Thus consider:
(31) Post-verbal preposition(s) followed by a prepositional phrase
a. when he was about a year old they moved-down to Hanson
b. when the came-down from Sherman
c. they would come-in and roost-in on the river
d. my dad was raised-up through that kind of thing
e. him and I came-through in an old truck
f. two of the older brothers went-out with my dad
g. my dad wound-up with three sections there
h. she took-off out through the trees
i. (he was) a-ridin' that ol' mare in up from there
j. that ol' heel slipped-out from under me
k. He had a terrible time getting-along with women

While semantic intuition is notoriously fickle and hard to quantify, all the examples in (31) above impart a strong sense that the first preposition, following the verb, is semantically more closely associated with the verb, creating a merged lexical item, or at least one on its way. This contrasts with the following - pre-nominal - prepositions, which seem to be more closely associated with the nominal indirect object. This does not necessarily detract from one's ability, as a linguist but perhaps also as a speaker, to discern the semantic value that the extra preposition adds to the V-P combination. And this, of course, contrasts sharply with the synchronically-arbitrary old pre-verbal prepositions that English inherited from its Germanic and Romance ancestors.

Table (32) below presents a comparison of the quantitative distribution of prepositional constructions in our two varieties of 20th Century English, the oral narrative described in this section and E. Leonard's (1989) written prose.
(32) Quantitative distribution of prepositional constructions ${ }^{8}$ in oral vs. literary narrative in 20th Century English

| Category | Oral narrative (N. M. rancher) |  | Written fiction (E. Leonard) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% |
| post-verbal prepositional phrase (VO) | 324 | 62.3 | 256 | 78.3 |
| post-verbal preposition alone (V-P) | 137 | 26.3 | 49 | 15.0 |
| post verbal preposition plus prep.-phrase (V-P-P-N) | 59 | 11.4 | 21 | 6.4 |
| total: | 520 | 100.0 | 327 | 100.0 |

[^36]The comparison in (32), however rough and tentative, reveals something striking: The text frequency of both categories of post-verbal prepositions, whether with one preposition alone or followed by a prepositional phrase, are almost double in the oral narrative text, as compared with E. Leonard's written prose. Taken together, they comprise ca. $38 \%$ of the sample of prepositional constructions in the oral text, as compared to only ca. $21 \%$ in the written text. One way of interpreting this comparison is that the creative elaboration of the post-verbal prepositional construction in modern English, our proposed analog to the Homeric pre-verbal prepositions, is still going on in the spoken language.

### 7.5.3 Functional categories of post-verbal prepositions in spoken English

The use of the verb-preposition construction in spoken English, whether alone (V-P) or followed by an added prepositional phrase (V-P-P-N), can be divided into the by-now-familiar three functional categories, which - as in Homeric Greek - may be considered a diachronic continuum:
a. zeroed-out nominal object: The zeroed-out object is accessible from either the anaphoric or generic context, in the main clause or REL-clause.
b. semantically coherent preposition: The semantic relation of the preposition to the verb is still fairly transparent, and still resembles the use of the preposition as indirect object case-role marker.
c. semantically arbitrary: The semantic contribution of the preposition has become obscure, to the point where it may be considered arbitrary.

The assignment of text examples to these categories is not always easy, since they fall on a graded continuum; so that in 6 instances I assigned an item to two categories. In the main, the first category (a) is the most obvious, provided one is sufficiently attuned to the discourse context. The second (b) is less obvious, sometimes overlapping with the first. The third (c) is in some cases obvious but in others frustrating, since it often overlaps with the second (b) - semantic change being gradual. In (33), (34) and (35) below, both the classification and the difficulties it raises are illustrated with a number of representative examples.
(33) Anaphorically or generically predictable zeroed-out indirect object

## Example

a. then you get back about half a mile
b. and the turkeys would come in and roost in
c. They shedded them in between, so they have a runway between the two house
d. I don't know what county that is in
e. and those ol' cowboys would ride in on horseback
f. 'cause they had to graze 'em along (along the plain)
g. they grabbed some sagebrush... and (out of the ground) pulled 'em out
h. And so they came back
i. he kept four or five there that he had feed for

## Context notes

(back from the river)
(in the thick mesquite brush)
(in between the two houses) (reinforced cataphorically)
(REL-clause anaphora)
(into Pie-Town)
(back to the ranch)
(Rel-clause anaphora)

Consider next our category (b), where the indirect object is not contextually accessible any more but the preposition is still semantically associated with the verb, and its original meaning as indirect-object case-marker is fairly transparent. Most of the examples in (34) below still shade, somehow, into either anaphoric or generic contextual predictability:
(34) Semantically coherent preposition
a. there were quite a few springs around over the country (around that place?)
b. and some neighbors that moved out there too (out of their old place?)
c. but my dad said he got up one morning
(up from bed?)
d. and he looked down there
(down from where he stood?)
e. he was gonna batch, y'know, camp out (outdoors?)
f. and he set my dad down in a rockin' chair (downward from standing)
g. she took off out through the trees (off from where she stood)
h. hetraded it off
(traded it away)
i. then go on west twenty five miles to Quemado (go further onward)

The post-verbal detached preposition in (35) below, next, seems more or less arbitrary, thus our category (c):
(35) More arbitrary verb-preposition pairings:
a. turn you over to them doctors up there
b. they'd come up with a little different deal then
c. that fouled me up again
d. let it kinda heal up
e. the government began to put out some money
f. it wound up just like that
g. but he found out that he could take me down
h. you know how you go over to Williamsburg
i. he came up to this hospital
j. so they brought it over and gave it to me
k. and I figured some out myself
l. every day when he come around to see me
m . and I fooled around and got so I could
n. and he went ahead and fixed me up

Lastly, a few cases seem to be hybrids, with overlapping semantics that seems hard to pin down. Thus consider:
(36) Seeming hybrids
a. I guess they didn't like it there
'cause they went on back (anaph.: back to their old place) (sem.: went further on)
b. oh yeah, ol' John came over (anaph: to the house) (arbit: use of 'over')
(sem: over the terrain?)
c. they took me in to ol' Doc

Hannid,
in Albuquerque to the (sem.: into Albuquerque)
Presbiterian hospital
The quantitative distribution of the three semantic categories of use of detached post-verbal prepositions in our oral English text is given in Table (37) below.
(37) Quantitative distribution of semantic categories of detached post-verbal prepositions in the spoken English text

| Category |  | N |  | \% |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| zeroed out in context |  |  | 35.6 |  |
| semantically coherent |  | 48 |  | 25.6 |
| semantically arbitrary |  | 71 |  | 38.8 |
| total: | 185 |  | 100.0 |  |

### 7.6 Discussion

Our survey of the historical data from English suggests that the syntactic contexts where prepositions are found form a fairly transparent diachronic continuum, corresponding rather well to the continuum found in Homeric Greek:
a. pre-nominal preposition marking the case-role of indirect objects (P-N)
b. post-verbal detached prepositions (V-P)
c. post-verbal prepositions followed by a prepositional phrase (V-P-P-N)

As in Homeric Greek though in a syntactic mirror image, one may assume that post-verbal detached prepositions in English arrived at their syntactic position due to the combination of two factors:

- the post-verbal (VO) position of nominal indirect objects
- subsequent zeroing out of the nominal object in contexts of anaphoric or generic predictability.

It remains an open question whether post-verbal detached prepositions in English are in the process of being cliticized to the verb the way Homeric Greek prepositions did pre-verbally. The placement of unstressed anaphoric object pronouns between the verb and the preposition ('cut it out!') is not an issue here, since those anaphoric pronouns are themselves post-verbal clitics. The intervention of stressed object nouns ('cut this nonsense out!') is a problem, however. As is the fact that post-verbal detached prepositions in English - unlike their pre-nominal counterparts - carry a strong lexical stress. This leaves their status as potential clitics unresolved. ${ }^{9}$

[^37]
### 7.7 Closure

Our survey of the history of post-verbal prepositions in English appears to recapitulate the three-stage diachronic semantic continuum noted in the study of pre-verbal prepositions ('preverbs') in Homeric Greek:
a. the zeroed-out object is still accessible from the anaphoric or generic context
b. the detached preposition becomes semantically merged with the verb
c. the detached preposition becomes semantically arbitrary.

The fact that English with its VO syntax and post-verbal detached prepositions is the syntactic mirror-image of the pre-Homeric OV dialect during which detached prepositions became pre-verbal clitics further reinforces the suggestion that the two diachronic developments are broadly similar - and typologically coherent.

In the same vein, the more recent - and still evolving - prepositional construction in modern English, adding a new prepositional phrase behind the post-verbal detached preposition, is another striking parallel to the diachrony of Homeric Greek pre-verbal prepositions, where two distinct cycles of the same diachronic process can be identified, with similar syntactic and semantic conditioning factors. What is more, the occasional doubling or even tripling of pre-verbal prepositions in Homeric Greek suggests that the process was still ongoing during Homeric times, the way it appears to be still ongoing in modern English.

The comparison of pre-verbal prepositions in Homeric Greek with post-verbal prepositions in modern English, lastly, is bound to reinforce one's suspicion that however unique Homer's language may have appeared to its speakers, or to well-focused linguists, it is still a natural human language, and as such abides by a host of well-documented universals. The study of these universals, and of their interaction with cross-language typological diversity, makes it reasonably clear that they are cognitively, semantically and communicatively motivated. It also suggests that, once again, language universals reveal themselves most conspicuously in diachrony.

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| :--- | :---: | :---: |
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Adpositions are used, universally, to mark the roles of nominal participants in the verbal clause, most commonly indirect object roles. Practically all languages seem to have such markers, which begin their diachronic life as lexical words -- in this case either serial verbs or positional nouns. In many languages, however, adpositions also seem to have extended their diachronic life one step further, becoming verbal affixes. The main focus of this book is the tail-end of the diachronic life cycle of adpositions. That is, the process by which, having arisen first as nominal-attached prepositions or post-positions, they wind up attaching themselves to verbs. Our core puzzle is thus fairly transparent: How and why should morphemes that pertain functionally to nominals, and begin their diachronic life-cycle as nominal grammatical operators, wind up as verbal morphology? While the core five chapters of this book focus on the rise of verb-attached prepositions in Homeric Greek, its theoretical perspective is broader, perched at the intersection of three closely intertwined core components of the study of human language: (a) the communicative function of grammar; (b) the balance between universality and cross-language diversity of grammars; and (c) the diachrony of grammatical constructions, how they mutate over time. While paying well-deserved homage to the traditional Classical scholarship, this study is firmly wedded to the assumption, indeed presupposition, that Homeric Greek is just another natural language, spoken before written, designed as an instrument of communication, and subject to the same universal constraints as all human languages. And further, that those constraints - so-called language universals express themselves most conspicuously in diachronic change. Lastly, in analyzing the synchronic variation and text distribution of prepositional constructions in Homeric Greek, this study relies primarily on the theoryladen method of Internal Reconstruction.



[^0]:    1. For a more extensive discussion of these verb types and their association with semantic and pragmatic case-roles, see Givón (2001, Chapter 3).
[^1]:    7. Givón (2011, Chapter 4). The accusative and genitive case suffixes have collapsed together in Ute (ibid., Chapter 5). For the reconstruction of monosyllabic post-position as erstwhile verbs, see again ibid., Chapter 5.
[^2]:    8. With the orthography and morphological glosses somewhat simplified.
[^3]:    9. See Givón (1984). A similar situation is seen in KinyaRwanda, further below.
    10. With the morphological glosses somewhat simplified.
[^4]:    13. The allative preposition $k u$ - in KinyaRwanda undergoes lenition to -hu when suffixed to the verb, and the old Bantu relative suffix $-o$ is then added, yielding the verb suffix -ho.
    14. The locative preposition $m u$-, when suffixed to the verb, is followed by the old Bantu relative suffix -o, becoming -mo.
[^5]:    15. Most Bantu verb suffixes ('verb extensions') are historically derived from verbs (Givón 2015, Chapter 6). The reciprocal -na may or may not be an exception, being related to the preposition na- 'with', 'and'. Comparative Niger-Congo evidence nonetheless suggests that the preposition/conjunction na- 'with', 'and' was ultimately also verb-derived (Givón 2015, Chapter 6). The 'neutral' verb-final vowel $-a$ is removed when the verb is 'extended' by various suffixes that do not themselves end with the vowel $-a$.
    16. Direct objects, be they patients or 'promoted' non-patients, are often pronominalized or zeroed out in real communication, given their higher anaphoric topicality. Thus, 'she gave him the book' is much more common in English text than either 'she gave the man the book' or 'she gave the book to him'. For an discussion see Givón (1984).
[^6]:    17. For a discussion of the diachronic typology of word-order in the Chibchan and Misumalpan languages of Meso-America, see Givón (2015, Chapter 24).
    18. See Givón (1984).
[^7]:    22. See again Givón (ed. 1983; 2018).
[^8]:    1. Two modern works, Luraghi (2003) and Zanchi (2019), contain an extensive discussion of the semantics of Homeric Greek prepositions and how they interact with the old suffixal nominal-case system.
[^9]:    3. For an extensive discussion, see Givón (2000).
[^10]:    4. See e.g. Luraghi (2003, pp. 328-33). In general, written language lags far behind the contemporary spoken usage, commonly rendering grammaticalized clitics, prefixes and suffixes as independent words, as well as preserving decayed, old systems that are on the way to de-grammaticalization and extinction in the spoken language. For discussion of these and other issues in grammaticalization, de-grammaticalization and re-grammaticalization, see Givón (1971, 1975, 2000), inter alia.
[^11]:    8. In this case, the verb $e$-ruso- 'launch into', with the 'augment' $e$ - interpreted as originally en- 'in', further contributes to the sense of eis- as 'into'.
[^12]:    (31) Pëleidës men epi-klisias kai nëas eisas ë-i-e

    Peleides MEN on-huts and ships equal(?) to-go-3s
    'then the son of Peleus went to (his) hut and shapely ships'

[^13]:    9. I have interpreted the 'Augment' $e$ - here as originally eis-/es-/ei- 'to'; see discussion in Chapter 5, below.
[^14]:    1. The verb stem for 'sit' exhibits considerable variation between -az-, -ez-, -es- or -(h)ed-.
[^15]:    2. A verbal root -ariz- is not listed in Cunliffe's (1924) lexicon, perhaps an indication that it never appeared without the preposition en-, which is synchronically rather arbitrary.
[^16]:    1. While Monro and other Classical grammarians strive valiantly to extract maximal regularity in the use of the 'particles', their use of the 'particles' in the Homeric text is subject to a great amount of variation and unpredictability.
    2. All other things being equal, affixes closer to the lexical word-stem are assumed to have cliticized earlier (Givón 1971, 2000). The semantic arbitrariness of ana- also suggest older diachronic age.
[^17]:    3. Except perhaps in an 'instrumental' sense, more commonly associated with sun 'with'.
[^18]:    4. See Givón (1984).
[^19]:    5. Given the great variability of the Homeric writing system, this example could very well be one of a pre-verbal preposition. At the very least, this pattern must be the direct diachronic precursor of cliticization of prepositions to the verb.
[^20]:    7. In the logic or methodology of science, one never proves a hypothesis. At best, one fails to falsify it (Popper 1934/1959).
    8. Whether a relatively low text frequency of intermediate construction is a general feature of multi-stage grammaticalization is yet to me determined.
[^21]:    11. For the general theoretical perspective underlying this approach, see again Givón (1971, 1979/2019, 2000).
[^22]:    7. This interpretation of en- as either 'in' or 'at' will be discussed in more detail later on, in relation to the verbal form $e$-ont-a 'being'.
[^23]:    11. The striking thing about this example is that the 'Augment' $e$ - appears here as ei-, a common phonological reduction of eis-, precisely in a context - 'come to', where $e$ - can only be plausible interpreted be as eis- 'to'.
[^24]:    12. For a review of these issues in the philosophy of science, especially of the central role of falsificatory counter-examples in the growth and mutation of scientific hypotheses, see Givón (2020, Chapter 8).
[^25]:    13. For a cross-linguistic discussion of verbal complement patterns and their diachrony see Givón (2001, Chapter 12), Heine and Kuteva (2007), Givón (2009, Chapter 4).
[^26]:    14. The 'Augment' $e$ - is found here not only on the main verb 'want', but also on the complement verb 'fight', which is also marked with the irrealis suffix -ai.
[^27]:    15. The alternation between finite and non-finite $V$-complement forms falls within the more complex scale of complementation (Givón 2001, Chapter 12).
[^28]:    1. See Givón 1971, 2000 .
[^29]:    3. The more common augmentation of 'to' ei-/e- in 'answer', with both apo'from' and ama- 'with', still needs to be explained in terms of the semantic history of this rather frequent verb in the Homeric text.
[^30]:    5. As noted in Chapter 5, above, plausible diachronic accounts of many instances in the less-clear residue may yet reduce it to 10 out of 156 , or $6.4 \%$.
[^31]:    V.25, V.36, V.65, V.68, V.69, V.92, V.100, V.108, V.112, V.113, V.116, V.133, V.179, V.198, V.229, V.245, V.251, V.276, V.286, V.290, V.291, V.293, V.295, V.318(x2), V.320, V.324, V.329, V.349, V.352, V.372, V.375, V.377(x2), V.381, V.390, V.394, V.405, V.417, V.427, V.435, V.439, V.442, V.456, V.459, V.460, V.461, V.498, V.501, V.504, V.521, V.527, V.558, V.581, V.584, V.600, V.608, V.619, V.621, V.624, V.636, V.655, V.661, V.663, V.665, V.666, V.667, V.689, V.690, V.701, V.715, V.734, V.748, V.756, V.756, V.777, V.814, V.818, V.818, V.842,V.844, V.869, V.882, V.885, V.888, V.889, V.895, V.900, V. 906
    VI.12, VI.17, VI.27, VI.29, VI.29, VI.32, VI.42, VI.62, VI.64, VI.65, VI.74(x2), VI.86, VI.107, VI.109, VI.116, VI.122, VI.134, VI.140, VI.160, VI.178, VI.183, VI.186, VI.187, VI. 190 (x2), VI.192, VI.198, VI.200, VI.204, VI207, VI.213, VI.221, VI.234, VI.241, VI.256, VI.258, VI.263, VI.280, VI.284, VI.288, VI.292(x2), VI.295, VI.301, VI.311, VI.318, VI.341, VI.342, VI.348, VI.362, VI.369, VI.371, VI.390, VI.414, VI.417, VI.418, VI.423, VI.427, VI.427, VI.440, VI.461, VI.473, VI.485, VI.504, VI.517, VI.518, VI. 520

[^32]:    3. Contextual accessibility on generic grounds often involves an antipassive construction, where typically the missing object is non-referring, generic or habitual, thus accessible to speakers who know the culture and lexicon (see Chapter 1).
[^33]:    4. See Givón (1971).
[^34]:    5. See discussion in Givón (ed. 1983, 1988)
[^35]:    7. The number of pre-verbal (OV) prepositional phrases in the text was minuscule, and will be disregarded here.
[^36]:    8. The rather minuscule number of pre-verbal (OV) prepositional phrases in the two texts was again disregarded.
[^37]:    9. In Homeric Greek, bi-syllabic pre-verbal prepositions are written with a lexical stress; but as noted by Zanchi (2019) this may not reflect the situation in the spoken Homeric language.
