

## A unified account of Ancient Greek participles: Spelling out (the) Asp (analysis)

**Background** Ancient Greek (AG) participles are used in a variety of different contexts, but a unified formal treatment of these is as of yet lacking. This paper argues that participial morphology spells out Asp(ect) whenever the verbal stem cannot combine with (finite) T, building on Embick’s (2000) and Bjorkman’s (2011) analyses of Latin periphrastic perfect constructions (PPCs). AG participles are thus always “the same size”, but occur in different types of nonfinite environments in which  $\phi$ -agreement is unavailable for different reasons.

**Data** AG participles express  $v$ /Asp and Voice morphology and agree with a head noun for case, number, and gender. Table 1 summarizes the (masc.) present, aorist, and perfect participial forms (the passive aorist & future forms are not illustrated here).

Table 1: AG participles of *lou̓-ō* ‘wash’; RED = reduplication

|          | Active  | Nonactive/“middle”   |
|----------|---|--|
| a. Prs.  | <i>lou̓-ōn</i> m. (stem <i>-o-nt-</i> )<br>wash-PRS.PTCP.ACT.NOM.SG.M                     | <i>lou-ō-men-os</i> m.<br>wash-PRS-PTCP.MID-NOM.SG.M                 |
| b. Aor.  | <i>lou̓-sās</i> m. (stem <i>-a-nt-</i> )<br>wash-AOR.PTCP.ACT.NOM.SG.M                    | <i>lou-sá-men-os</i> m.<br>wash-AOR-PTCP.MID-NOM.SG.M                |
| c. Perf. | <i>le-lou-k-ōs</i> m. (stem <i>-ōt-</i> )<br>PF <sub>RED</sub> -wash-PF-PTCP.ACT.NOM.SG.M | <i>le-lou-mén-os</i> m.<br>PF <sub>RED</sub> -wash-PTCP.MID-NOM.SG.M |

All participles can be used attributively, as clausal adjuncts (circumstantial participles; including in absolute constructions, e.g., the genitive absolute), and as complements to verbs of perception and knowledge. Perfect participles are moreover used in a PPC in which Asp and Voice are expressed on the participle, while tense and agreement are expressed on a BE-auxiliary with default active endings:

|             | Ptcp.act.m.sg.     | Ptcp.mid.m.sg.       | Aux.act. BE | Meaning              |
|-------------|--------------------|----------------------|-------------|----------------------|
| a. Pf.act.  | <i>le-lou-k-ōs</i> |                      | <i>eimí</i> | ‘I have washed’      |
| b. Pf.pass. |                    | <i>le-lou-mén-os</i> | <i>eimí</i> | ‘I have been washed’ |

For circumstantial participles, Goldstein (2016) distinguishes between participial clauses and participial VPs (and chained participles, not discussed here). Participial clauses modify a proposition and act as islands for clitic climbing, modal scope and scope of negation. Participial VPs, on the other hand, allow clitic climbing into the matrix clause, (1).

- (1) *Oudeís me<sub>i</sub> apodeíksei [ t<sub>i</sub> bouleú-sa-nt-a ]* (Lys. 25.14.4)  
Nobody.NOM me.ACC show.FUT.3SG council.sit-AOR-PTCP.ACT-ACC.SG  
“Nobody will prove that I sat on the council” (lit. “will prove **me to have sat ...**”)

Both participial VPs and participial clauses (including genitive absolutes) are underspecified for tense (they receive temporal interpretation only relative to the matrix clause) and can be transitive, (2), and passive, suggesting that they minimally contain VoiceP.

- (2) ... *hoi d’ ekhárēsan (...)* *Akhaioi [ mēnin*  
the.NOM.PL PTCL rejoice.AOR.3PL Achaeans.NOM wrath.ACC  
*apeipóntos megathúμου Pēleíōnos ]* (Il. 19.74–75)  
renounce.AOR.PTCP.GEN.SG magnanimous.GEN Peleus.son.GEN  
“and the Achaeans rejoiced **because the son of Peleus had renounced his wrath.**”

**Proposal** I propose that the participial suffixes spell out Asp when head movement of Asp to T is impossible, either because it is blocked by a marked feature [RES] on Asp or because T is  $\phi$ -deficient or absent altogether (Embick 2000, Bjorkman 2011, Grestenberger 2022). I moreover adopt Upwards Agree (e.g., Bjorkman & Zeijlstra 2019). In PPCs, Agree and head movement take place up to Asp, but further movement is blocked by [RES], and Asp is therefore spelled out as active/nonact. participle depending on the features of the adjacent Voice head by the Spell Out rules in (3). Periphrasis thus arises in “finite contexts” when marked features block movement; auxiliaries like BE then pick up “stranded” features (Bjorkman 2011), Fig. 1.

(3) a. is the VI for the perf. act. participle, c. for the middle participle, and d. for the active-as-Elsewhere participle; Asp is spelled out as  $\emptyset$  when it moves to and concatenates with T, (3b). Attributive and circumstantial participles, on the other hand, either contain only Asp ( $\approx$  Goldstein’s participial VPs), or Asp +  $\phi$ -defective T [ ]. In the latter case, agreement and head movement proceed up to Asp as in the PPCs, but because there are no  $\phi$ -features on T the verbal complex is again spelled out as a participle.

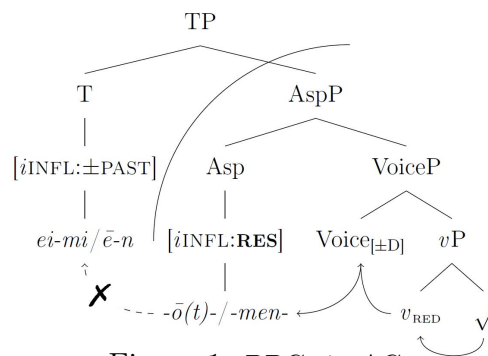


Figure 1: PPCs in AG

(3) Vocabulary Items (VIs) for AG Asp

- a. Asp[RES]  $\leftrightarrow$  *-ot-/-os- /v/Voice[+ext.arg.]*  $\curvearrowright$   $\_$       b. Asp  $\leftrightarrow$   $\emptyset$  /  $\_$   $\curvearrowright$  T  
c. Asp  $\leftrightarrow$  *-men- /Voice[-ext.arg.]*  $\curvearrowright$   $\_$       d. Asp  $\leftrightarrow$  *-nt-*

Evidence that TP is present, but defective in these types of reduced clauses (cf. Pires 2006) comes from attributive participles that can be modified by temporal adverbs, as in (4).

- (4) *en tēi nūn Helládi kaleo-mén-ēi khórēi*  
in the.DAT now Hellas.DAT call.PRS-PTCP.MID-DAT.SG.F land.DAT.SG.F  
‘‘In the land **now called Hellas**’’ (Hdt. 1.1.8)

Moreover, appositive circumstantial participles functionally compete with finite (non-restrictive) relative clauses and allow topicalization to a left-peripheral position and wh-movement, (5).

- (5) [ *tí d’ àn epidizēmenos* ] *poiōimi taūta*  
what.ACC.N PTCL MOD seek.PRS.PTCP.NOM.SG do.PRS.OPT.1SG this.ACC.PL  
‘‘[In search of what] would I do these things?’’ (Hdt. 5.106.3; Goldstein 2016: 235)

I propose that such structures contain a defective CP whose head cannot license  $\phi$ -features on T. Assuming that there is a selectional relationship between C and T (Chomsky 2001),  $\phi$ -complete C can only select  $\phi$ -complete T, in which case T becomes the goal for agreement with the  $[u\phi]$  feature on the verbal complex which is then spelled out as a synthetic finite verb. However,  $\phi$ -defective C can select either  $\phi$ -complete T or  $\phi$ -defective T. Neither is able to act as a goal for agreement with the  $[u\phi]$  feature on the verbal complex (the former because it is not licensed by C, the latter because it does not contain the relevant features), so the verb is spelled out with infinitival morphology in the former and with participial morphology in the latter context, as summarized in (6).

(6) AG clause types

|              | CP[ $\phi$ ] | CP[ ]       |
|--------------|--------------|-------------|
| TP[ $\phi$ ] | finite verb  | inf         |
| TP[ ]        | n/a          | <b>ptcp</b> |

Finally, complements of perception and knowledge verbs can be either participles or infinitives, depending on whether the complement refers to something that is known to be true/actually occurring (participles) or not (infinitive). Building on Wurmbrand & Lohninger (2020), I interpret this as evidence that these verbs select complements of different ‘‘sizes’’ depending on whether they are (semantically) propositions (CP), situations (TP) or events (*vP/VoiceP*). The latter contain Asp in AG and are spelled out as participles (Faure 2017), whereas situations are spelled out as infinitives and propositions as finite clauses with a complementizer.

**Implications** This paper proposes a uniform analysis of AG participles across syntactic contexts in interaction with different clause types, providing further evidence that finiteness is gradient. Genitive absolute constructions as in (3) moreover speak against exfoliation accounts (Pesetsky 2021) because there is no subject extraction out of the nonfinite clause.

**Selected Refs.:** Bjorkman, B. 2011. BE-ing default: The morphosyntax of auxiliaries. MIT Phd thesis. Embick, D. 2000. Features, syntax, and categories in the Latin perfect. *LI* 31/2:185–230. Faure, R. 2017. Argument participial clauses viewed as abstract objects in Classical Greek. *Ancient Greek Linguistics* 551–64, de Gruyter. Goldstein, D. 2016. *Classical Greek syntax: Wackernagel’s Law in Herodotus*, Brill. Wurmbrand, S. & M. Lohninger. 2020. An implicational universal in complementation: Theoretical insights and empirical progress. <https://ling.auf.net/lingbuzz/004550>