Paradigmatic Possibilities as Perspective for Absolute Constructions

Exploring Linguistic Differences and Similarities of the Greek Genitive and Latin Ablative Absolute

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Abstract

Compared to Greek genitive absolutes, Latin ablative absolutes are of two types. The first have agents that are non-coreferential with the subject of the main clause. The second have agents that are coreferential with the subject of the main clause. The first type strongly resemble Greek genitive absolutes because of their high frequency of animate subject complements and the similar way in which they articulate referential coherence. The second type, which always contains a perfect passive participle, from a comparative perspective can be seen as a paradigmatic filler, which is a Latin alternative to an anterior active participle. Their subject complements are less frequently animate and in the word order (iconically) placed close to the subject of the main clause that is also the agent of the ablative absolute. However, paradigmatic differences have only minor consequences for the preferred sentence position of the absolute constructions and their internal complexity.

Keywords
Greek and Latin linguistics – discourse pragmatics – referential coherence – iconicity –
genitive absolute – ablative absolute

1 Introduction

The Greek genitive absolute and the Latin ablative absolute feature frequently in linguistic
studies from varying methodological angles.¹ They have been studied from a historical
perspective, either to establish their origin or their diachronic evolution, and from a stylistic
angle. Moreover, they feature occasionally in typological literature.² Our paper follows
another, less explored line of research, inspired by a number of recent functional and
discourse analytic approaches to Latin and Greek. Recent grammars of Greek and Latin are
often functional.³ Furthermore, Buijs’s extensive study of the discourse functions of various
types of preposed clauses is an important starting point for discourse analytic approaches of
Greek and Latin.⁴ Beginning with these methodologies, the aim is to highlight a number of
discourse pragmatic aspects that are characteristic of the function of both the genitive and the
ablative absolute. Usually, Greek and Latin are analysed separately, but we aim to show that a

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some valuable comments and Martina Diehl for improving our English. For providing draft versions of their
syntax and grammar, we thank Harm Pinkster, Mathieu de Bakker and Evert van Emde Boas.
² Kühner-Gerth 1904, 77-110, Kühner-Stegmann 1912, 774-792. Historical approaches are Thesleff 1958,
³ Very recent examples are Pinkster 2015, forthc. and van Emde Boas et al. forthc.
⁴ Buijs 2005.
comparison can provide a fruitful basis for understanding more thoroughly the pragmatic functions of both Latin ablative and Greek genitive absolute. Furthermore, we will examine to what extent differences between the Greek and Latin participial paradigm are relevant. The following definition of an absolute construction will be used: a non-finite adverbial satellite clause consisting of at least a participial predicate, which provides circumstantial information relevant to the state of affairs of its matrix clause. Its (sometimes implied) subject complement is in its case not determined by a constituent of its matrix clause.\(^5\)

Our analysis is based on 100 instances of both the genitive and the ablative absolute, all used in main clauses.\(^6\) Our Greek corpus consists of Thucydides 4.1-4.38 and Polybius 3.105-3.118; Sallust \textit{Iugurtha} 1-58.4 and Livy 22.34-57.1 is our Latin corpus. On the one hand, we choose two stylistically quite divergent authors for each language in order to limit the risk of stylistic influences. On the other hand, Sallust is often considered to be stylistically similar to Thucydides, whereas Livy is more similar to Polybius, which enhances the comparability. All authors belong to the same genre of historiographical prose. By analysing a \textit{narrative} text type, this paper connects to other discourse pragmatic research that has been conducted on Greek and Latin prose texts. To find the absolute constructions, we have made use of \textit{Perseus under PhiloLogic} and \textit{LASLA}.\(^7\)

\(^5\) Our definition is inspired by Coleman 1989, 354, König-van der Auwera 1990 and Buijs 2014. A matrix clause is a clause on which other clauses are dependent: Buijs 2005, 2. In our case, this is the main clause (or subordinate clause) that contains an absolute construction. Cases such as \textit{Numa rege}, without predicate, are not taken into account, whereas instances where the subject complement is not expressed but easily retrievable from the previous context are.

\(^6\) Absolute constructions inside a subordinate clause are left out of consideration, because we expect them to function differently. Further research would be required to analyse how these instances function, and what the differences are with absolute constructions at the level of the main clause.

\(^7\) Perseus under PhiloLogic 2016 and LASLA 2016.
In the next section, we will explore the paradigmatic differences that are relevant for the genitive and ablative absolutes (section 2). The following three sections deal with various consequences of the paradigmatic differences for the way the absolute constructions function in texts (section 3: animacy, section 4: referential coherence and section 5: complexity vs. sentence position). Lastly, we will summarize our conclusions and indicate possibilities for further research (section 6).

2 Paradigmatic possibilities

The Greek and Latin verbal paradigm are both able to express relative temporal relationships by means of participial clauses. However, this is only one usage type of the participle. Pinkster distinguishes several usage types, of which secondary predicate and ablative absolute express circumstantial information to their matrix clause, as in the following examples (taken from Pinkster).³

(1) (secondary predicate) Omnino est amans sui virtus. (Cic. Amic. 98)

Virtue loves herself completely.

(2) (ablative absolute) Sed mirus invaserat furor … ut pugnare cuperent me clamante nihil esse bello civili miserius. (Cic. Fam. 16.12.2)

But a strange madness had come up … so that they were possessed with the lust of battle, while I cried aloud that nothing is worse than civil war.

In these uses of participial clauses, Greek and Latin are highly similar, but two important caveats should be made when comparing the two absolute constructions.

First of all, Greek and Latin have considerably different temporal, aspectual and diathetic systems. Greek has both an aspectual and a tense system, whereas the Latin tense system is nowadays often explained in temporal terms only, being “based essentially on the combination of relative position (anteriority, simultaneity, and posteriority) and reference point (time of speaking, past, and future)”.\(^9\) Greek has an active-middle-passive opposition whereas Latin has an active-passive one.\(^10\) A second caveat is that, even though Greek and Latin share the grammatical possibility of using an absolute construction, this does not imply that these constructions also share the same information-structural function.

In narrative texts, the Latin perfect participle and Greek aorist participle usually both express anteriority. Greek can express relative anteriority to the state of affairs of the main verb by using an active aorist conjunct participle, whereas Latin does not have an active participle expressing anteriority, and must resort to the use of finite subordinate clauses or absolute participial clauses to express anterior state of affairs.\(^11\) Often, Latin uses the anterior (perfect) ablative absolute construction where one would, in Greek, expect an anterior (aorist) active conjunct participle.\(^12\) From a comparative perspective, therefore, the ablative absolute could be understood as filling in a ‘paradigmatic gap’ in the Latin verbal paradigm.

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\(^9\) Pinkster 2015, 383. See *ibid.*, 379-386 for a discussion and relevant bibliographical references on the problems concerning tense analysis in Latin.


\(^11\) Latin can use a perfect participle of a deponent verb when available to express active anterior state of affairs as well: Pinkster 2015, 60.

\(^12\) Kühner-Stegmann 1912, 774-792, Coleman 1989, 364, Pinkster 2015, 541-549 and *forthc*, §1.1.2.2.1.2. 16.90, Haug 2012, 289-294.
These paradigmatic filler ablative absolutes typically have an agent that is coreferential with the subject of the main clause. In Greek, the aorist participle can be used in this constellation to express anterior active state of affairs. Compare example (3) with (4):

(3) At Iugurtha contra spem nuntio accepto, quippe cui Romae omnia venire in animo haeserat, filium et cum eo duos familiaris ad senatum legatos mittit iisque uti illis, quos Hiempsale interfecto miserat, praecipit, omnis mortalis pecunia aggrediantur.
(Sal. Jug. 28.1)

Jugurtha, however, when the unexpected news was received, for he had a firm conviction that at Rome anything could be bought, sent his son, and with him two friends, as envoys to the senate, giving them the same directions that he had given those whom he sent after murdering Hiempsal, namely, to try the power of money on everybody.

(4) Ἀννίβας δὲ χρόνον ἱκανὸν μείνας, οὐδενὸς ἀντεξίόντος, τὴν μὲν λοιπὴν δύναμιν αὖθις εἰς χάρακα κατέστησεν, τοὺς δὲ Νομάδας ἐπαφῆκε τοῖς ὑδρευομένοις ἀπὸ τῆς ἐλάττονος παρεμβολῆς. (Plb. 3.112.3)

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13 In these instances it can be expected that the agent of the ablative absolute could refer to constituents in different syntactic roles (e.g. object), but our results do not show this.

14 The text of Sallust is taken from Rolfe 1955. The translations of these passages are based on Rolfe 1955.
Hannibal, after waiting for some time, without anyone coming out to meet him, withdrew again the rest of his army into their entrenchments, but sent out the Numidians to intercept the water bearers from the lesser Roman camp.\textsuperscript{15}

The difference here between the Latin participial construction and the Greek participial construction is that the Greek participle is syntactically connected to a constituent of the main clause (conjunct) whereas the Latin participle is not (absolute). In our Latin corpus, 45 instances match the definition of a paradigmatic filler. The other 55 instances are not paradigmatic filler cases.\textsuperscript{16} This raises the expectation that the paradigmatic filler cases (PFCs) behave differently from the Greek genitive absolutes, while the non-paradigmatic filler cases (NPFCs) behave in a similar way to the Greek genitive absolutes.\textsuperscript{17}

3 Animacy

To understand the difference between PFCs and NPFCs, we first examine the animacy of the subject complement of the absolute constructions. We use a broad definition of animacy by which groups of people are animate, but body parts and dead people are inanimate.\textsuperscript{18}

\textsuperscript{15} The text of Polybius is taken from Büttner-Wobst 1905. The translations of all passages are based on Paton, Walbanks and Habicht 2010.

\textsuperscript{16} NPFCs consist of 34 perfect passive participles and 21 active participles. PFCs are all perfect passive participles. It should be noted that when it is impossible to reconstruct an agent because of the Aktionsart of the verb (e.g. State), these instances are also classified as NPFCs. We emphasize that they can only be classified as non-paradigmatic or paradigmatic filler cases from a comparative perspective.

\textsuperscript{17} In our corpus no genitive absolutes were found that are comparable to PFCs. Nonetheless, we refer to Buijs’s section on genitive absolutes in Xenophon that are used when, grammatically speaking, a conjunct participle would have been expected. See Buijs 2005, 226-253.

\textsuperscript{18} Kittilä et al. 2011, 5, For the discussion on animacy, see ibid., 5-6.
Table 1: Animacy of subject complement

<table>
<thead>
<tr>
<th></th>
<th>PFC</th>
<th>NPFC</th>
<th>Latin full corpus</th>
<th>Greek full corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animate</td>
<td>16 (35.56%)</td>
<td>32 (58.18%)</td>
<td>48 (%)</td>
<td>62 (%)</td>
</tr>
<tr>
<td>Inanimate</td>
<td>29 (64.44%)</td>
<td>23 (41.82%)</td>
<td>52 (%)</td>
<td>38 (%)</td>
</tr>
<tr>
<td>Total</td>
<td>45 (100%)</td>
<td>55 (100%)</td>
<td>100 (%)</td>
<td>100 (%)</td>
</tr>
</tbody>
</table>

The data regarding animacy, as shown in table 1, indicate that for the whole corpus of Latin, the subject complement of the absolute construction is inanimate in 52% of the instances. This is significantly higher than for Greek, where 38% of the subject complements is inanimate. When we divide the Latin corpus into NPFCs and PFCs, the initial difference with Greek can be understood, because the NPFCs (which we expect to behave in the same way as the Greek cases) are inanimate in 41.82% of the instances, which is very close to the 38% for Greek. On the other hand, no less than 64.44% of the subject complements from the PFCs are inanimate. This differs significantly from Greek.

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19 In table 1 (and 5), the percentages and absolute numbers of the categories ‘Latin full corpus’ and ‘Greek full corpus’ coincide, so there only a % symbol is added.  
20 The Fisher Exact Test (48,52,62,38) gives $p=0.049$. $P=0.05$ is statistically significant.  
21 The Fisher Exact Test cannot be used to verify the 0-hypothesis that two populations actually belong to the same group. Nevertheless, from the percentages can be observed that NPFC and Greek have a very similar distribution of animacy of the subject complement (41.82%-58.18% NPFC vs 38%-62% Greek).  
22 The Fisher Exact Test (16,29,62,38) gives $p=0.004$. This is a significant result.
number of inanimate subject complements can be explained by looking at how the PFCs, which are all passive anterior participles, tend to have a subject complement with a patient role, which is more likely to be inanimate (as nuntio is in example (3) in contrast with the implicit agent Iugurtha).23

4 The articulation of referential coherence

A second difference between NPFCs and PFCs concerns the articulation of referential coherence. Narrative texts display coherence in several respects, as consecutive events are ‘linked’ via their continuity of time, persons, place etc. This coherence binds the narrative, as can be seen in example (5). In this example, Leukios, who is the subject of the first sentence in the example, occurs again as a relevant participant in the genitive absolute highlighted in bold. Thus, this first part displays continuity with reference to the person involved (Leukios). This sequence of references to Leukios constitutes a part of the referential coherence strand, because Leukios is one of the participants involved in the events. In the last sentence of the example, however, he is absent, and thus the chain of referential coherence is broken, that is, the referential coherence strand displays discontinuity.24

23 Kittilä et al. 2011, 11. Exceptions are cases like: Varro, ... nihil consulto collega, signum proposuit (Liv. 45.5) or instructions to the army. Pinkster 2015, 26: “agent for entities wilfully instigating an SoA … Agents are especially human beings or entities equated with them, such as animals and sometimes forces of nature. Satellites may also function as agent …, but this is very infrequent.”

24 Buijs 2005, 138 and Givón 2001, II, 349. Buijs examines the discontinuity of the temporal, locational and action-event coherence strands (articulated by means of participial and subordinate clauses) as a reliable way to measure breaks in discourse structure. We restrict ourselves to how the genitive and ablative absolute articulate the referential coherence strand, because referents are more often linguistically expressed than time and place. For a formal account of the temporal coherence strand and ancient Greek participles, see Bary & Haug 2011.
We measure the articulation of the referential coherence strand by counting the occurrence of the agent of the absolute constructions in the surrounding sentences. The occurrence of the agent in the preceding two sentences constitutes its *accessibility*, whereas the occurrence of the agent in the subsequent two sentences constitutes its *persistence*. The reference to Leukios in the genitive absolute of example (5) is accessible because it was subject of the sentence two main clauses earlier.

(5) ὁ μὲν οὖν Λεύκιος … ἐφη … τοῦ δὲ Γαίου διὰ τὴν ἀπειρίαν ὑπὲρ τῆς ἐναντίας ὑπάρχοντος γνώμης, ἢν ἁμφισβήτησις καὶ δυσχρηστία περὶ τούς ἡγεμόνας, ὁ πάντων ἐστὶ σφαλερώτατον. τῆς δ’ ἡγεμονίας τῷ Γαίῳ καθηκούσης εἰς τὴν ἐπιοῦσαν ἡμέραν …, ἀναστρατοπεδεύσας προῆγε, βουλόμενος ἐγγίσαι τοῖς πολεμίοις, πολλὰ διαμαρτυρομένου καὶ κωλόντος τοῦ Λευκίου. ὁ δ’ Ἀννίβας … παραδόξως συνεπλέκετο καὶ πολὺν ἐν αὐτοῖς ἐποιεῖτο θόρυβον. (Plb. 3.110.2-5)

Leukios [Aemilius] … said … . As Gaios [Terentius], owing to his inexperience, was of the contrary opinion, difficulties and dispute arose between the generals, one of the most pernicious things possible. When the command was given to Gaios for the next day, … he advanced, wishing to approach the enemy, although Leukios strongly protested and tried to prevent him. Hannibal … met them with surprise and disordered the Romans (them) much.

By measuring referential coherence we aim to find out what the characteristic information-structural function of the absolute constructions is and whether this function differs between Greek, PFCs and NPFCs.
To grasp this type of articulation of referential coherence for Latin as well, the notion of the paradigmatic fill is revealing, because it helps to understand why the Latin corpus as a whole displays dissimilar behaviour compared to the Greek corpus, whereas the NPFCs, taken apart, display much more similar behaviour. We examine how the *agent* of the absolute construction is referred to for the purpose of an equal comparison, because diathetic differences between Latin and Greek entail that looking merely at the subject complement of the absolute constructions would lead to an uneven comparison. For example, the genitive absolute can have referents that are agents as subject complement with both the middle and active voice, whereas an ablative absolute, with its passive nature, has a patient as subject complement more often. Moreover, since referents that are agents are expected to play a more central role, and hence are coded more strongly in the storyline, we choose to focus on those.\(^{25}\)

Referent accessibility and persistence are difficult to measure. However, Accessibility Theory as defined by Ariel is an attractive theoretical approach; it defines the factors that play a role in determining matters of accessibility and, to some extent, persistence.\(^{26}\) Its basic assumption is that “referring expressions instruct the addressee to retrieve a certain piece of given information from his memory by indicating to him how accessible this piece of information is to him at the current stage of the discourse”.\(^{27}\) In other words, the form of referring expressions correlates with the level of accessibility of the referents that listeners/readers are meant to retrieve by them. When referents continue to be referred to, that is, when persistence is displayed, referents show a similar form-function correlation, because


\(^{26}\) Ariel 2001. She builds on the seminal work of Givón 1983 on topic continuity in discourse. Bolkestein and van der Grift 1994 have applied Givón’s findings to Latin. Allan 2014 has applied them to Greek.

\(^{27}\) Ariel 2001, 29.
their form of reference (e.g. personal pronoun or zero anaphora) reflects how highly accessible they are.\textsuperscript{28}

4.1 Corpus evidence

We measure accessibility by counting whether the referent expressed as agent of the absolute construction is referred to in the preceding two main clauses or their subordinate clauses. Persistence is measured by counting references in the subsequent two main clauses or their subordinate clauses. Agents that are implicit are also taken into account, something that occurs primarily with passive ablative absolutes.\textsuperscript{29} For instance, in example (5) Leukios in the genitive absolute does display accessibility with regard to his mention two clauses earlier, whereas he does not display persistence because he is absent in the subsequent two main clauses.

Table 2 contrasts the different groups of instances in terms of their agent articulation.\textsuperscript{30} High accessibility or persistence includes the instances that are referred to in the preceding

\textsuperscript{28} Ariel 2001, 31. Note that accessibility and persistence are not fully observable in the so-called ‘linear distance’ between the referring expressions and previous or later reference, but other factors play a role as well. For general factors, see Ariel 2001, 33-38 and for factors observed in Greek narrative Allan 2014, 188.

\textsuperscript{29} Implicit subjects are also taken into account, since Latin and Greek do not require that the subject should be expressed. The choice for taking two surrounding clauses instead of one clause into account is made, because often one small main clause is found in between the absolute construction and the reference to its agent. We assume that one main clause in between will not affect the activation status of the agent referent substantially, but two main clauses will.

\textsuperscript{30} The sum of the agent articulation evidence does not comprise the full corpora, since there are instances where the \textit{Aktionsart} of the verb (e.g. when the plague was in Athens) or the context does not allow for pointing out an agent. This occurred 29 times in the Greek corpus, and 25 times in the Latin corpus. Cf. Pinkster 2015, 22 and 59-61.
Low accessibility or persistence are the instances that do not have a reference in these clauses. Example (6) demonstrates an instance of low accessibility as well since Hannibal’s troops have not been referred to in the two main clauses and their subordinate clauses preceding the ablative absolute.

(6) Hannibal id damnun haud aegerrime pati; quin potius gaudere velut inescatam temeritatem ferocioris consulis ac novorum maxime militum esse. et omnia ei hostium haud secus quam sua nota erant: dissimiles discordesque imperitare, duas prope partes tironum militum in exercitu esse. itaque locum et tempus insidiis aptum se habere ratus nocte proxima nihil praeter arma *ferente* secum *milite* castra plena omnis fortunae publicae privataeque relinquit … (Liv. 22.41.4-7)

Hannibal was not greatly disconcerted by this reverse; indeed he rejoiced that the hook should have been baited, as it were, for the rashness of the more impetuous consul, and especially for that of the new [Roman] soldiers. All the circumstances of his enemies were as familiar to him as his own: that their generals were unlike each other and were at loggerheads, and that nearly two-thirds of their army consisted of recruits. Believing, therefore, that place and time were favourable for a ruse, he left his camp full of every sort of public and of private riches, and putting himself at the head of his *troops, who carried* nothing but their weapons …

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31 Here and elsewhere, texts and translations of Livy are taken from Foster 1929.
Table 2: Agent articulation

<table>
<thead>
<tr>
<th></th>
<th>Accessibility</th>
<th>Persistence</th>
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<tbody>
<tr>
<td></td>
<td>Greek NPFCs</td>
<td>Latin PFCs</td>
</tr>
<tr>
<td>High</td>
<td>23 (32,39%)</td>
<td>11 (31,43%)</td>
</tr>
<tr>
<td></td>
<td>21 (52,50%)</td>
<td>15 (21,13%)</td>
</tr>
<tr>
<td></td>
<td>7 (20,00%)</td>
<td>27 (67,50%)</td>
</tr>
<tr>
<td>Low</td>
<td>48 (67,61%)</td>
<td>24 (68,57%)</td>
</tr>
<tr>
<td></td>
<td>19 (47,50%)</td>
<td>56 (78,87%)</td>
</tr>
<tr>
<td></td>
<td>28 (80,00%)</td>
<td>13 (32,50%)</td>
</tr>
<tr>
<td>Total</td>
<td>71 (100%)</td>
<td>35 (100%)</td>
</tr>
<tr>
<td></td>
<td>40 (100%)</td>
<td>35 (100%)</td>
</tr>
<tr>
<td></td>
<td>40 (100%)</td>
<td>40 (100%)</td>
</tr>
</tbody>
</table>

Opposing the accessibility of the various corpora with the Fisher Exact Test, it turns out that Greek (32,39% high and 67,61% low) and the PFCs (52,50% high and 47,50% low) differ significantly.32 It cannot be proven that the Latin groups (PFCs and NPFCs) differ significantly from each other, but the percentages do point out a tendency. The reason for this could be due to the limited number of instances that have been analysed. Greek (32,39% high and 67,61% low) and NPFCs (31,43% high and 68,57% low) cannot be compared via the Fisher Exact Test, as this statistic test is only able to falsify the assumption of two groups belonging to the same category and cannot verify that assumption. Still, from the percentages

32 The results of the Fisher Exact Test regarding the accessibility of the agent are as follows (p=0,05 to be statistically significant):

Greek-PFCs (23, 48, 21, 19): p=0,045
PFC-NPFCs (21, 19, 11, 24): P=0,101
it can be observed that the populations may very well belong to the same group as they have a highly similar distribution. For a prototypical example of the low accessibility of the NPFCs, see example (6) and for a non-prototypical example see example (5). Comparing the persistence of the agent, the results are even clearer. The PFCs (67.50% high and 32.50% low) are significantly different from both the Greek corpus (21.13% high and 78.87% low) and the NPFCs (20.00% high and 80.00% low). This demonstrates that PFCs are a separate group. The NPFCs (20.00% high and 80.00% low) and the Greek (21.13% high and 78.87% low) display very similar behaviour as with the behaviour of these groups regarding the accessibility of the agent, which increases the probability that they actually belong to a similar group.

To sum up, the proportions of the accessibility and persistence of the agent give us strong evidence that the PFCs should be treated as a separate group. Moreover, it indicates that the Greek corpus and NPFCs seem to behave in a similar way with regard to how they articulate the referential coherence strand.

When a broader definition of reference is used, in this case part-whole, whole-part and resumptive references, Greek has much higher accessibility than Latin (NPFCs). For this phenomenon, see example (7):

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33 The results of the Fisher Exact Test regarding the persistence of the agent are as follows:

Greek-PFCs (15, 56, 27, 13): p=0.000002
PFC-NPFCs (27, 13, 7, 28): p=0.000058

34 We consider an instance as a part-whole reference when a part of a referential group is referred to in the genitive absolute, whereas the group to which it belongs is referred to somewhere in the previous two clauses (or their subordinate clause). For a whole-part reference the reverse applies. A resumptive reference summarizes previously mentioned state of affairs.
Of all the events of this war this came as the greatest surprise to the Greeks; for they could not conceive that the Lacedaemonians would ever be induced by hunger or any other compulsion to give up their arms, but thought that they would keep them till they died, fighting as long as they were able; and they could not believe that those who had surrendered were as brave as those who had fallen. And when one of the Athenian allies … asked … whether …, the answer was, …

This genitive absolute has a referent that is not uncommon for Greek genitive absolutes. It contains an agent (τινος) that refers to a part of the whole that has already been mentioned (τοῖς Ἕλλησιν). In our example, the one person asking a question belongs to the group of Greeks that has already been referred to in the clause heading the example (and also implicitly as subject of the second main clause).

If these types of references are also taken into account, a considerably different picture emerges.

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35 The text of Thucydides is taken from Jones and Powell 1942. The translation here and elsewhere is adapted from Forster Smith 1920.
Table 3: Broader agent accessibility

<table>
<thead>
<tr>
<th></th>
<th>Greek (full corpus) adapted</th>
<th>Greek (full corpus) unadapted</th>
<th>Latin (NPFCs) adapted</th>
<th>Latin (NPFCs) unadapted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessibility</td>
<td>50,7%</td>
<td>32,39%</td>
<td>31,43%</td>
<td>31,43%</td>
</tr>
</tbody>
</table>

The considerable change of the Greek data (32,39% to 50,7%) illustrates how this phenomenon is typically Greek. Whereas Greek accessibility increases with about 60% in the adapted corpus, the Latin accessibility remains the same.

4.2 **Iconic word order**

Besides the accessibility and persistence of agents of absolute constructions in surrounding clauses, it is relevant to determine to what extent the agents of the PFCs are accessible through the word order of the main clause they belong to. In other words, does the paradigmatic fill have consequences for the word order of the main clause? In practice this concerns the question: how close is the reference to the agent that is implicit in the ablative absolute construction to that ablative absolute? As table 4 will illustrate, it happens very frequently that the agent, implicit in the ablative absolute in the PFCs, is highly accessible through the word order of the sentence.

Consider example (8):

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NPFCs are left out of consideration, because there are only two instances where the agent was mentioned somewhere in the main clause.
Meanwhile, Albinus, now that the war had been renewed, hastened to transport to Africa provisions, salary and other material, which would be of service to his soldiers …

In this example, Albinus, who is the agent of the ablative absolute (renovato bello), immediately precedes the ablative absolute. Thus, the placement in the word order is iconic: its adjacent position reflects its semantic connection with the ablative absolute, for iconicity “identifies the extent to which a relationship between semantic notions is directly represented in a language’s formal expression”.37

Taking together all the PFCs, their agent accessibility turns out to be iconically organized in the word order, because the agent expression is at most one word away from the ablative absolute in 77.78% of the cases.38

As can be seen in table 4, the perceived agent stands before (B) the ablative absolute without any words in between in eleven instances and right after (A) the ablative absolute in eight instances. There are eighteen cases of the PFCs where the agent is not expressed explicitly but where the agent is only present in the verb.

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38 Calculation: 21/27.
Table 4: Number of words between ablative absolute and agent expression

<table>
<thead>
<tr>
<th></th>
<th>8B</th>
<th>6B</th>
<th>4B</th>
<th>2B</th>
<th>1B</th>
<th>0B</th>
<th>0A</th>
<th>8A</th>
<th>11A</th>
<th>Agent not expressed as subject</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PFCs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>18</td>
<td></td>
<td>45</td>
</tr>
</tbody>
</table>

We suggest that the iconic position of the agent for PFCs is based on the “spacing rule of proximity and relevance”\(^{39}\). This iconic principle holds that “information chunks that belong together conceptually are kept in close spatio-temporal proximity”.\(^{40}\) This principle is applicable to the word order of the PFCs, because the subjects, which are as agents conceptually connected to the ablative absolute, are very close in terms of word order.

5 Internal complexity and position in the sentence

Word order is also relevant for absolute constructions on a different level, as absolute constructions can be placed in various places in the sentence and have different degrees of internal complexity. It is worth considering whether absolute constructions in certain sentence positions display differences in degree of complexity and, if so, whether this can be related to differences between PFCs and NPFCs, or whether differences in complexity relate to word order differences between Greek and Latin (PFCs and NPFCs together). It may be expected that passive absolute constructions (PFCs) are less complex compared to active ones (NPFCs are a mix of passive and active ones) due to the fact that passive state of affairs usually lack an agent expression and thus have less constituents.\(^{41}\) In other words, is the distinction

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\(^{39}\) Givón 2001, I, 35.

\(^{40}\) Ibid.

\(^{41}\) For factors responsible for expressing an agent, see for example Pinkster 1992.
between PFC and NPFC also relevant when examining complexity of the absolute constructions according to sentence position, or are they similar to each other in these respects?

5.1 Position in the sentence

In recent years, much progress has been made in the study of word order, both for Greek and Latin. This progress is mainly achieved on the basis of a functional-pragmatic approach. We take a similar approach and draw from the recent work of Dik, Matić, Spevak, Allan and Pinkster.\textsuperscript{42}

We distinguish three major positions that the absolute construction can occupy with respect to the main clause.\textsuperscript{43} This is a syntactic distinction, because the slot that an absolute construction occupies depends on the place and number of constituents that precede or follow it. The slots are:

1A) Left periphery A: the absolute construction precedes all constituents of the main clause.

1B) Left periphery B: the absolute construction follows after one constituent of the main clause, either an argument or a satellite.

2) Intra-clausal: the absolute construction follows after more than one constituent of the main clause, but appears before the last constituent of the main clause.

3) Right periphery: the absolute construction follows all constituents of the main clause.

\textsuperscript{42} Dik 1995; Matić 2003; Spevak 2010; Pinkster 2015 and forthc.; Allan 2012 and 2014.

\textsuperscript{43} This division is inspired by the functional differences observed between preposed and postposed subordinate clauses. Fox 1983, Givón 2001, II, 342-348; Buijs 2005.
Category 1A as well as category 1B are considered to be part of the left periphery domain for the following reason. In the left periphery, mainly topics and settings are found, which provide a frame of reference for the state of affairs of the main clause. Topics and settings can be in competition with each other, which results in a variety of possible word orders. When a topic gets priority over a setting to occupy the first position as in example (9), the subsequent participle clause still functions as a setting and should therefore be included in the left periphery instead of the intra-clausal category.

(9) At Iugurtha, *cognita vanitate atque imperitia legati*, subdole eius augere amentiam, missitare supplicantis legatos, ipse quasi vitabundus per saltuosa loca et tramites exercitum ductare. (Sal. Jug. 38.1)

Jugurtha, however, **well aware of the presumption and incapacity of the acting commander**, craftily added to his infatuation, and constantly sent him suppliant envoys, while he himself, as if trying to avoid an encounter, led his army through woody places and by-paths.

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44 De Jong 1989; Spevak 2010, 28-29, 68-72; Dik 2007, 37-39; Allan 2014, 184; van Emde Boas et al. *forthc.*, 593-599. We subscribe to Allan’s definition of a setting: “Settings are pre-posed adverbial clauses. They have a grounding function with respect to the subsequent main clause in that they specify time, location and/or other circumstantial states of affairs. Apart from their link to the subsequent discourse, they typically also show signs of a pragmatic connection with the preceding discourse. Thus they constitute a coherence bridge between the preceding and the following discourse unit.” Sometimes elements with a comparable function are labelled ‘point of departure’, e.g. Dooley and Levinsohn 2001, 69.

45 Something different happens in the intra-clausal position. We go into this in section 5.2.
The distribution of the absolute constructions, as shown in table 5, indicates that both Greek and Latin absolute constructions prefer to occur in the left periphery (67% for Greek and 70% for Latin). This preference in distribution is in line with the prototypical information-structural function of the absolute constructions as they are most often employed as a setting.

Table 5: Distribution across the sentence

<table>
<thead>
<tr>
<th></th>
<th>Latin PFC</th>
<th>Latin NPFC</th>
<th>Latin full corpus</th>
<th>Greek full corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Left periphery (A&amp;B)</td>
<td>34 (75.56%)</td>
<td>36 (65.45%)</td>
<td>70 (%)</td>
<td>67 (%)</td>
</tr>
<tr>
<td>Intra-clausal</td>
<td>8 (17.78%)</td>
<td>9 (16.36%)</td>
<td>17 (%)</td>
<td>3 (%)</td>
</tr>
<tr>
<td>Right periphery</td>
<td>3 (6.67%)</td>
<td>10 (18.18%)</td>
<td>13 (%)</td>
<td>30 (%)</td>
</tr>
<tr>
<td>Total</td>
<td>45 (100%)</td>
<td>55 (100%)</td>
<td>100 (%)</td>
<td>100 (100%)</td>
</tr>
</tbody>
</table>

There does not seem to be a large difference between PFCs and NPFCs regarding their position in the left periphery or in intra-clausal position. However, the right periphery is remarkably different. PFCs (6.67%) occur less often in the right periphery than NPFCs (18.18%). A probable explanation is that PFCs occupy an (iconic) adjacent position to the subject that is unlikely to occur close to the right periphery.46

5.2 Correlation between complexity and position in the sentence

46 For the relevance of iconicity for PFCs, see section 4.2.
Absolute constructions may differ in terms of their complexity, that is, the number of words of the absolute construction. It is worthwhile examining whether the difference between NPFC and PFC is also reflected in their complexity. We will start to examine these differences independently from sentence position. After that, we add the dimension of sentence position.

We assess the complexity of the absolute constructions by counting the number of words they contain. Connectors operating on the main clause or inter-clausal level (such as *at*, *igitur*, *et*, *ac*, *μέν*, *καί*, *οὖν*, *δὲ*) and satellites functioning on the main clause level (such as *deinde* or *μετὰ δὲ τὰ στάσιμα*) are excluded. It is sometimes difficult to determine whether these satellites should be counted within the ablative or genitive absolute clause because they can function on the level of the main clause as well as the absolute clause. In these cases, the satellite is in principle taken with the main clause whenever that is possible. A similar principle applies when subordinate clauses are found interrupting an absolute construction. We only include these subordinate clauses into the absolute construction if they cannot be taken with the main clause.

<table>
<thead>
<tr>
<th>Table 6: Average word count according to sentence slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin PFCs</td>
</tr>
</tbody>
</table>

47 E.g. Sal. Jug. 57.3: *Deinde signo dato undique simul clamor ingens oritur* … (‘Then, upon a given signal, a mighty shout arose from all sides at once …’). In this case, *deinde* should be taken with the main clause. Therefore, *signo dato* belongs to the category of Left periphery B.

48 In the next example, the satellite should be taken with the ablative absolute instead of the main clause, contrary to the example in the previous footnote: Liv. 22.44.1: *consules satis exploratis itineribus ... bina castra communiunt* … (‘The consuls, after making a sufficient reconnaissance of the roads, … fortified two camps …’).
In table 6 the complexity of the various groups is displayed.\textsuperscript{49} Their overall complexity is presented in the bottom row, which shows that PFCs and NPFCs are actually quite similar to each other (4.20 vs 4.85), whereas genitive absolutes are more complex (6.09). Even when the Greek full corpus, PFCs and NPFCs are compared per sentence position, the overall picture remains that the complexity of PFCs and NPFCs is not that different, although there is a variance between PFCs and NPFCs in the right periphery. Greek stands out compared to the Latin groups, except for the intra-clausal position. In the remainder of this section, we therefore aim to account for the differences between Greek and Latin as a whole. Besides this, the similarity between Greek and Latin regarding the intra-clausal position will be discussed in more detail.

With regard to the complexity of right versus left periphery, it is striking that the complexity of the right periphery is higher in Latin than in Greek. Genitive absolutes have an average length of 5.73 words in the right periphery and 6.37 words in the left periphery. Ablative absolutes, on the other hand, measure an average length of 8.15 words in the right periphery and 4.27 words in the left periphery. In other words, Latin has the preference to

\begin{table}
\centering
\begin{tabular}{|l|c|c|c|c|}
\hline
& & & & \\
Left periphery & 4.21 & 4.33 & 4.27 & 6.37 \\
Intra-clausal & 3.25 & 2.78 & 3.00 & 3.33 \\
Right periphery & 6.67 & 8.60 & 8.15 & 5.73 \\
Whole group & 4.20 & 4.85 & 4.56 & 6.09 \\
\hline
\end{tabular}
\end{table}

\textsuperscript{49} Pinkster, forthc., 1.1.2.2.1.3 16.91, discusses complexity from a stylistic and diachronic perspective and Coleman 1989 looks at it from a diachronic one.
place the more complex constituents in the right periphery, as in example (10), where the ablative absolute consists of 7 words (excluding the subordinate clause).  

(10) Non solum … nihil … superabat, sed ne unde raperet quidem quicquam reliqui erat omni undique frumento, postquam ager parum tutus erat, in urbes munitas convecto, ... (Liv. 22.40.7-8)

For not only … was nothing … left, but there was not even any district left for them to spoil; for the corn had - when it appeared that the farms were no longer safe - everywhere been carried into the walled towns …

One possible factor involved in making the Latin right periphery ‘heavier’ in number of words could be that Latin complies to the “principle of increasing complexity”. This principle describes how certain languages show a “preference for ordering constituents in an order of increasing complexity”. It seems that Greek, having less complex absolute clauses in the right periphery does not seem to adhere to this principle. Maybe the right periphery adheres to different pragmatic principles in Greek compared to Latin, but further research with a larger corpus is needed, which falls outside the scope of this article.

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50 One could argue that the subordinate clause in example (10) logically belongs to the ablative absolute as the corn had been carried away when it was safe, but since it cannot be fully proven that it does not in any way belong to the main clause, we leave this type of subordinate clause out of account in our measure of internal complexity to prevent blurring of our numbers.

51 Dik 1997, 404 and Spevak 2010, 8 who builds on Behagel’s laws.

52 Ibid.
Finally, the clearest similarity (pointed out above) observable across all groups is that the intra-clausal absolute constructions are the least complex ones as compared to the ones in the other sentence slots. A simple explanation is that speakers want to keep their sentence processible without making them too complex. In technical terms, they will tend to obey the principle of *domain integrity*. Examples of domains are infinitive or participial clauses or a noun phrase. The general ordering principle holds that “constituents prefer to remain within their proper domain; domains prefer not to be interrupted by constituents from other domains”. The insertion of an absolute clause after two or more constituents of the main clause violates this principle, because the absolute construction, being a separate clause, belongs to a different domain. Precisely because this principle is violated, the intra-clausal absolute clauses tend to be less complex than absolute clauses in other positions. Therefore, the fact that those instances are less complex is a compromise to the fact that the principle of domain integrity is violated. Compare example (11) where *extenuate suorum acie* is inserted intra-clausally:

(11) *igitur in eo colle, quem transverso itinere porrectum docuimus, Iugurtha extenuata suorum acie* consedit … (Sal. Jug. 49.1)

On this hill then, which, as I have said, flanked the Romans’ line of march, Iugurtha took his position after he had extended his line …

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53 Dik 1997, 402. For applications to Latin and Greek, see Spevak 2010, 8-9 and Allan 2012, 6.

54 Spevak 2010, 8.

55 Dik 1997, 402.
In our Greek corpus, it is surprising that we find only 3 intra-clausal instances, compared to the 17 in Latin. Example (12) works in a similar way as the Latin ones, but not exactly the same.\(^{56}\)

\[(12) \text{καὶ μετὰ τοῦτο τῶν Συρακοσίων ἐσβάντων ἐς τάς ναῦς καὶ παραπλεόντων ἀπὸ κάλω ἐς τὴν Μεσσήνην, αὖθις προσβαλόντες οἱ Ἀθηναῖοι, ἀποσιμωσάντων ἐκείνων καὶ προεμβαλόντων, ἑτέραν ναῦν ἀπολλύουσιν. (Th. 4.25.5)}^{57}\]

After this the Syracusans got on board their ships, and while they were being towed along shore to Messina, the Athenians attacked them again and, because [the Syracusans] suddenly got out to sea and became the assailants, they lost another vessel.

From a pragmatic point of view it could be argued that οἱ Ἀθηναῖοι is part of a setting and therefore this genitive absolute is a left-periphery instance. However, according to our syntactically determined analysis, the genitive absolute follows after a satellite (μετὰ τοῦτο) and the subject (οἱ Ἀθηναῖοι) of the main clause, that is, two constituents. This could make it an intra-clausal instance, although these approaches do not rule each other out. As with the Latin example, the intra-clausal genitive absolute clause thus violates the domain integrity of the main clause by interrupting the order of the main clause.

6 Conclusions

\(^{56}\) It would be fascinating to compare intra-clausal absolute clauses in Latin with Greek in more depth. However, a larger corpus is needed for that purpose.

\(^{57}\) Here we focus on the first intra-clausal genitive absolute. The third intra-clausal example is Plb. 3.113.1.
For a fruitful comparison between Greek and Latin absolute constructions, it is important to make a distinction in Latin between ablative absolutes that are used as substitute for a lacking anterior active conjunct participle (PFCs) and ablative absolutes that have an agent non-coreferential with the subject of the main clause (NPFCs). The non-paradigmatic filler cases (NPFCs) are very similar to the Greek cases, whereas the paradigmatic filler cases (PFCs) are different in two respects.

First of all, the animacy of the subject complements of the absolute constructions and the management of their agent differs for each group. On the one hand, PFCs differ from the rest, because they have more inanimate subject complements than the NPFCs and Greek cases. On the other hand, NPFCs and Greek are remarkably similar in this respect. Second, NPFCs and Greek display similar behavioural patterns concerning referential coherence, whereas PFCs act significantly different regarding agent accessibility and persistence. Nevertheless, the Greek cases display a higher tendency for a specific type of reference than for Latin, that is, the part-whole, whole-part and resumptive reference. We have shown how principles of iconic placement, rather than syntactic relation, make the PFCs more easily understandable.

Generally speaking, the difference between PFCs and NPFCs is not reflected in the distribution across the positions that the absolute constructions occupy. There are differences in complexity, but they are more dependent on differences between Greek and Latin. Absolute constructions prefer a place in the left periphery of the sentence, which corresponds with their frequent function as setting. When they do occur in intra-clausal position, they tend to be shorter than in other positions. We suggest that these are shorter, because intra-clausal absolute constructions violate the principle of domain integrity. When they occur in the right periphery, ablative absolutes are somewhat longer than in other positions. That might be due to the principle of increasing complexity for Latin, but further research is required.
Our results show that a comparison of Greek and Latin linguistic phenomena has an additional heuristic value. For example, assuming a paradigmatic fill for Latin not only explains why the PFC’s are different from the other groups but also which linguistic characteristics they therefore either share or do not have in common with the NPFC’s and genitive absolutes. The analysis of two superficially similar constructions forces one to think about the factors responsible for these differences, be it paradigmatic, discourse pragmatic or both. However, it is remarkable that paradigmatic and discourse pragmatic principles seem to cooperate in order to express the same thing linguistically both in Latin and in Greek, although the linguistic structure they produce varies. Methodologically, it is thus rewarding to start by determining the relevance of paradigmatic differences before trying to find discourse pragmatic explanations, because, as we have shown with the absolute constructions, this leads to a better understanding of the examined phenomena in both languages.

There are still a number of aspects of these absolute constructions that deserve more attention. For example, we focus on how both constructions articulate the referential coherence strand, but more could be said about temporal, locational and action-event coherence strands. In addition to this, a comparison of absolute clause types with finite subordinate clauses could yield information about which clause types are preferred for managing topical versus non-topical referents. Moreover, it would be interesting to further examine how absolute constructions function inside subordinate clauses. In conclusion, it would be insightful to use the distinction between PFCs and NPFCs for the analysis of the different functions according to sentence position and to combine our discourse pragmatic approach to the correlation of complexity and sentence position with Pinkster’s diachronic analysis of the ablative absolute. With regard to further discussion it would be thought

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Pinkster, *forthc.* 1.1.2.1.3. 16.91.
provoking to explore whether Pinkster’s observation of increasing diachronic complexity of the ablative absolute correlates with particular sentence positions.

**Bibliography**


