

*A gradient for periphrastic constructions  
with εἶναι in post-Hellenistic Greek:  
Between degree of verbiness and event type\*\*\**

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This paper addresses the long-debated question of the periphrastic constructions ‘εἶναι + participle’ in post-Hellenistic Greek in a gradient perspective, and proposes a model in which copula desemanticization interacts with the complex system of mapping relationships between formal and functional features of predicate, including voice and actionality distinctions. The analyzed corpus consists of the New Testament and non-canonical Judæo-Christian texts, dating from the II cent. B.C.E. to ca. the VI C.E., in addition to Flavius Josephus’ *Antiquitates* and *Bellum*, and a selection of non-literary papyri.

*Keywords:* copularity continuum, periphrasticity continuum, ancient Greek participle, verbal/adjectival periphrases.

*1. Greek εἶναι-periphrasis:  
state-of-the-art and research questions*

The question of ancient Greek periphrases has long captured the interest of scholars and is still at the center of the linguistic debate (cf. Regard 1919; Björck 1940; Rosén 1957; Gonda 1959; Aerts 1965; Dietrich 1973; Coseriu 1975; Porter 1989: 441ff.; Ceglia 1998;

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Amenta 2003; Kahn 2003: 126ff.; Campbell 2008: 32-37; Bentein 2010; 2011; 2016, among others). However, general agreement on crucial aspects involving the definition of periphrasis and the function and distribution of periphrastic constructions is still lacking. One of the most debated periphrases in ancient Greek corresponds to the construction type εἶναι + participle: in the present paper, we focus on this type of construction. Specifically, we address three main issues that remain unsettled: 1. the prototypicality and multifactorial nature of the category encoded into this construction; 2. the parameters that govern the interface between morphosyntax and semantics in this construction (on which cf. Bentein 2012: 31ff.; 2016: 62ff.); 3. the distinction between verbal and adjectival function of this construction.

Traditional studies on the εἶναι-periphrasis center around the distinction between the verbal type and the adjectival type (see Björck 1940, to mention only one of the most influential works in this field): the verbal type would typically encode events and behave as a verb, whereas the adjectival type would typically encode states/qualities/conditions and behave as an adjective (cf. Bentein 2016: 59ff.).

However, the alternation between the verbal and the adjectival εἶναι-periphrasis relies on a complex mapping relationship between functional and formal dimensions, and a clear-cut distinction between the two types is far from being unproblematic. There are several cases, in which the participle by itself could be classified as belonging to the verbal type, whereas the meaning of the construction corresponds to a state or condition of the first or sole argument of the predicate and, therefore, parallels the prototypical adjectival type (see example (1)):

- (1) Ἦ**Ε**στι γὰρ ἀληθὴς καὶ μακρόθυμος, πρᾶος καὶ ταπεινός, καὶ ἐκδιδάσκων διὰ τῶν ἔργων νόμον Θεοῦ.  
 ‘For he **is** true and long-suffering, meek and lowly, and **teaches** by his works the law of God.’ (*Testamentum Dan* 6:9; trans. Sinker)

The participle ἐκδιδάσκων belongs to an activity verb, but the construction refers to a condition of the subject and not to an action performed by the subject: ἐστὶ ἐκδιδάσκων means “he is a teacher” and not “he is teaching”. Moreover, the participle of the εἶναι-periphrasis in (1) coordinates with a sequence of adjectives. Syntactic coordination has been reckoned as a parameter of the verbal vs. adjectival classification of periphrases (cf. Amenta 2003: 31-32; Bentein 2016: 86-87): if the participle is in coordination with an adjective or an adjectivized participle, it will be classified as adjectival. However, this

formal criterion by itself does not provide a decisive answer to the question of the distinction between verbal and adjectival periphrases. There are several cases, in fact, in which a clearly verbal participle coordinates with either an adjective or a clearly adjectival participle or both (see (2) and (3)):

- (2) Καὶ μὴ δυνάμενος ἐκφᾶναι τινὶ τὴν ἐπιθυμίαν αὐτοῦ διὰ τὸ εἶναι τὸν κύριον αὐτοῦ εἰδωλόλατριν, ἦν κατώδυνος ἀεὶ τῇ ψυχῇ καὶ **στενάζων** πάνυ.  
 ‘And being unable to show his desire to anyone, because his master was an idolater, he **was** always pained at heart and **sighing** greatly.’  
 (*Acta Xanthippae et Polyxenae* 1; trans. Craigie)
- (3) Καὶ ἦν **ὀργιζόμενος** σφόδρα καὶ **λέγων** πρὸς τοὺς ἱερεῖς: [...] ‘And he **was** very **angry** and **said** to the priests: [...]’ (*Acta Philippi* 124; trans. Bentein 2016: 87)

The εἶναι-periphrases ἦν στενάζων (στενάζω ‘to sigh’) and (ἦν) λέγων (λέγω ‘to say’) in (2) and (3), respectively, clearly refer to an actual event, although the participle στενάζων in (2) is in coordination with the adjective κατώδυνος, and the participle λέγων in (3) is in coordination with the adjectival participle ὀργιζόμενος (ὀργίζω ‘to be angry’, in fact, corresponds to a state verb).

In summary, a rigid dichotomy between verbal and adjectival participle cannot be reckoned as the main criterion for classifying the εἶναι-periphrases and, consequently, clarifying the principle underlying their function and distribution. We believe that a more productive way to address this type, as well as other types of periphrasis is to adopt a different perspective, that is to consider them as gradient categories, in which it is possible to identify a prototype, corresponding to the most central members, and various peripheral members, linked to the prototype via a similarity relationship (cf. Rosch 1973; 1978; Taylor 1995; 1998). This perspective allows us to account for the (apparent) inconsistency in the data and to explain the different manifestations of the εἶναι + participle constructions in a unitary model.

Previous studies, and especially Amenta (2003) and Bentein (2010; 2011; 2016) provided significant contributions to the definition of ancient Greek periphrases as graded, prototypically organized categories. However, the parameters characterizing the prototypes remain to be fully clarified.

Amenta (2003: 20-26) relates the degree of periphrasticity of the construction to the degree of grammaticalization of the auxiliary (also called auxiliarization), as established on the basis of Heine's parameters of decategorialization and desemanticization (see Heine 1993). The term decategorialization was coined by Hopper and Thompson (1984) to refer to the following phenomenon: «forms undergoing grammaticization tend to lose or neutralize the morphological markers and syntactic privileges characteristic of the full categories Noun and Verb, and to assume attributes characteristic of secondary categories such as Adjective, Participle, Preposition, etc.» (Hopper 1991: 22). Decategorialization, then, does not apply to the εἶναι-periphrases addressed here, that – as we will show in detail below – appear to be only slightly grammaticalized on this score (cf. Haspelmath 2000; see § 4): decategorialization, in fact, «is indicative of a later stage of grammaticalization» (Bentein 2016: 72). Moreover, as is well known, a clear-cut distinction between auxiliary and copula cannot be established, as they happen to be contiguous steps of the same process (cf. Meillet 1912; Amenta 2003: 22-23; Lehmann 2015: 35ff.). However, our data suggest that a more fruitful approach to the εἶναι-periphrases is considering εἶναι as playing the role of copula, rather than the role of auxiliary (cf. Heine 1993: 22ff.). To be more precise:

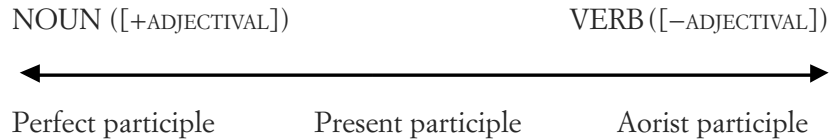
1. εἶναι is hardly captured by Heine's schema of the development of auxiliaries from verb lexemes: in fact, it does not lose its verbal properties (Heine 1993: 55ff.: see, in particular, points I to III; cf. Bentein 2016).
2. εἶναι can stay in a syntactic relationship with both a verbal and an adjectival participle, or with a more or less adjectival participle and an adjective in the same sentence (see (2) and (3)). The possibility of having syntactic coordination between adjectives and participles with different values governed by the same εἶναι form reveals the asymmetry between a supposed auxiliary εἶναι and its function in governing either a verbal or a nominal/adjectival element (cf. Dik 1968; Lang 1984). In Italian sentences, for instance, such as (a) *Maria è stanca* 'Mary is tired', (b) *Maria è assonnata* 'Mary is sleepy', è ("to be" present indicative, 3rd singular) is the copula, whereas in cases like (c) *Maria è andata a dormire* 'Mary has gone to sleep', è is the auxiliary: syntactic coordination between (a) and (b) is perfectly acceptable (*Maria è stanca e assonnata* 'Mary is tired and sleepy'), whereas syntactic coordination between (a) and (c) is not (\**Maria è stanca e andata a letto* 'Mary is tired and [has] gone to bed'). Assigning

an auxiliary status to εἶναι would hardly account for its licensing this type of phenomenon<sup>1</sup>.

Bentein's proposal of the continuum of ancient Greek periphrases represents a breakthrough in this field (cf. Bentein 2010; 2011; 2016). He rejected the traditional dichotomy between the verbal and the adjectival type and interpreted them within the representation of a graded category centered around two opposite poles (Figure 1: see, in particular, Bentein 2010: 27; 2016: 88ff.):

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Figure 1. [±ADJECTIVAL] periphrasis continuum by Bentein (2016: 98)




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In Bentein's proposal, the prototypical members of the periphrasis category can be defined on the basis of either morpho-semantic or morpho-syntactic criteria (Bentein 2011; 2016: 70ff., 92ff.). Specifically: 1. if a construction selects a perfect participle, it is more likely to be adjectival, whereas if a construction selects an aorist participle it is more likely to be verbal; 2. both paradigmatic and syntagmatic processes determine the degree of periphrasticity of a given construction. To express this more precisely:

paradigmaticization, which describes the process of a construction becoming integrated into the conjugational paradigm, obligatorification, which assesses whether there are other constructions available for the same function, and rigidification, which determines the degree of syntagmatic variability of the component parts of the construction (Bentein 2016: 72).

<sup>1</sup> Notably, our corpus shows several occurrences of so-called nominal clauses, in which the participle functions as the main predicate and no finite form of εἶναι is expressed (see § 2). As is well known, the ∅-copula phenomenon is cross-linguistically consistent and robustly represented in a large variety of languages (including ancient Greek, Latin, Sanskrit, Hebrew, Aramaic, Russian, etc.; cf. Dik 1987; Hengeveld 1992; Kahn 2003; Pustet 2003, among others).

Although Bentein's criteria apply to a large number of cases, they do not appear to account for the issues involved in the εἶναι-periphrases, to the same extent. The morpho-semantic criterion in 1. is not able to capture distinctions that are particularly relevant to the understanding of εἶναι-periphrases, such as voice or actionality distinctions: as we will show below (see § 4), these distinctions are crucial to the interpretation of participles, and especially perfect participles. The morpho-syntactic criteria in 2., specifically developed to assess the degree of periphrasticity of the ἔχω 'I have', the ἔρχομαι 'I go', and the διαγίγνομαι 'I continue' constructions, appear not to be equally relevant to classifying the εἶναι-periphrases. Specifically:

- Paradigmaticization: from a synchronic perspective, none of the periphrastic types addressed here are integrated into the verbal paradigm (with the exception of the 3rd plural of the medio-passive perfect indicative and pluperfect of verbs whose stem ends with a stop, and the medio-passive optative and subjunctive, later extended to other persons, moods and stems: cf. Bentein 2016: 116-117); from a diachronic perspective, within the various manifestations of the εἶναι-periphrasis, only the type εἶναι + passive perfect participle underwent paradigmaticization and survived in modern Greek as a passive periphrasis (cf. Drinka 2003; Holton *et al.* 2012: 308-309).
- Obligatorification: our data show that the grammatical meanings encoded into the εἶναι-periphrases can also be expressed by corresponding synthetic forms, with a few exceptions (mostly – but not exclusively – limited to modal uses).
- Rigidification: the component parts of the εἶναι-periphrases exhibit syntagmatic variability, and not a rigid word order (cf. Lehmann 2015: 167ff.); therefore, it is difficult to establish whether a given sequence of constituents has to be attributed to the degree of periphrasticity of the construction or, rather, to different functional (including pragmatic) factors (cf. Bentein 2011: 14). Moreover, it cannot be ruled out that this variability is related to the degree of word order freedom displayed by ancient Greek.

Syntagmatic variability is generally acknowledged as a pivotal parameter for the classification of periphrases (cf. what Bertinetto refers to as «*organicità sintattica*» 'syntactic organicity': Bertinetto 1990). According to this criterion, the members of a periphrastic construction should be syntactically contiguous, and separable only by a limited number of linguistic items (mostly, adverbs). Porter (1989: 453) considers syntactic adjacency between the auxiliary and the participle as a distinctive feature of Greek periphrases (against this idea, see Evans

2001: 232). As we will show below (see § 4) the data included in our corpus indicate that in the analysis of εἶναι-periphrases, the prominence of the parameter of syntagmatic variability needs to be reconsidered.

In this study, we adopt a prototypical approach to the εἶναι-periphrases, with the aim of solving certain crucial distinctive issues of this type of ancient Greek periphrases, that – as discussed above – remain unsettled. It is worth remarking, even at this point, that gradient categories not only are centered around prototypical members but also have fuzzy boundaries. This question did not receive enough attention in previous studies on Greek periphrases, and especially εἶναι-periphrases, although it appears to be a key question in the understanding of these periphrases in ancient Greek. In the following sections, we will show that:

1. in order to account for the various manifestations of the εἶναι-periphrasis, it is fundamental to first understand their function in relation to the superordinate category of εἶναι + participle construction. This category comprises three sub-categories: not all of them can be reckoned as real periphrases (see § 2). These sub-categories, in their turn, have fuzzy boundaries and, therefore, the classification of a given construction may not correspond to a clear-cut distinction. We will present the idea of the “copularity continuum”, that can account for the complex interplay between the various levels of categorization involved in the phenomenon under investigation (see § 3).
2. The constructions identified as “truly” periphrastic correspond *per se* to a gradient, in which certain members are more periphrastic than others. Within the various parameters that have been previously used to analyze periphrastic constructions, we consider copula desemanticization (on which see Bertinetto 1990: 333; Heine 1993: 54; Lehmann 2015: 136) as crucial to the assessment of the degree of periphrasticity of the εἶναι-constructions. The parameter of copula desemanticization can be defined on morphological, semantic and morpho-semantic grounds, which, taken together, only partially correspond to Bentein’s criteria (cf. Bentein 2016). We will, therefore, propose a new periphrasticity hierarchy for the εἶναι-periphrases (see §§ 4 and 5).

Our data come from the analysis of a large corpus belonging to so-called “post-Hellenistic Greek”. We use this expression to refer to the historical phases of the ancient Greek language that broadly date from the II century B.C.E. to the VI century C.E. (including a number of occurrences dating to the first decade of the VIII century C.E.). This

corpus comprises the whole New Testament<sup>2</sup>, several of the Septuagint books<sup>3</sup>, a fairly large number (ca. 75) of non-canonical Judaeo-Christian texts<sup>4</sup>, the historiographical works by Titus Flavius Josephus (*Bellum Iudaicum* and *Antiquitates Iudaicae*) and various non-literary papyri (including private letters, bank and trade receipts, legislative decrees, etc.). The selection of the corpus matches our objective to account for the variability of the εἶναι-constructions, as these texts provide striking evidence of this variability, on both morpho-syntactic and semantic grounds.

## 2. A superordinate category of “εἶναι + participle”

The category consisting of constructions including the verb εἶναι plus a participle (1293 total occurrences in our corpus) can be divided into three sub-categories, namely ① existential constructions, ② predicative participle constructions (or participial clauses)<sup>5</sup>, and ③ “true” periphrases.

Category ① (existential) includes the constructions in which εἶναι has an existential meaning (cf. Kahn 2003: 164-167; 228ff.) and, therefore, can be translated with either ‘to exist’ or ‘there is / there are’; for example:

<sup>2</sup> The New Testament texts are translated according to the English Standard Version (ESV).

<sup>3</sup> Namely: 1 Esdras, 3-4 Machabaeorum and Psalmi Salomonis.

<sup>4</sup> Namely (in alphabetical order): *Acta Andreae* – *Acta Andreae et Matthiae* – *Acta Barnabae* – *Acta Iohannis* – *Acta Matthaei* – *Acta Pauli et Theclae* – *Acta Petri* – *Acta Petri et Andreae* – *Acta Petri et Pauli* – *Acta Philippi* (and *Hypomnemata Philippi*) – *Acta Pilati A & B* – *Acta Thaddaei* – *Acta Thomae* – *Acta Xanthippae et Polyxenae* – *Anaphora Pilati A & B* (and *Paradosis Pilati*) – *Apocalypsis Baruch* – *Apocalypsis Esdrae* – *Apocalypsis Henoch* – *Apocalypsis pseudo-Iohannis* – *Apocalypsis Mosis* – *Apocalypsis Pauli* – *Apocalypsis Petri* – *Apocalypsis Sedrach* – *Ascensio Isaiae* – *Epistulae Abgari et Iesu Christi* – *Epistula Barnabae* – *Epistula Polycarpi ad Philippenses* – *Epistulae Ignatii* – *Evangelium Nicodemi* – *Evangelium Petri* – *Evangelium Thomae A & B* – *Iohannis Liber de Dormitione Mariae* – *Iosephus et Aseneth* – *Martyrium Andreae A & B* – *Narratio Iosephi* – *Oracula Sibyllina* – *Passio Bartholomaei* – *Passio Petri et Pauli* – *Passio Pauli* – *Protevangelium Iacobi* – *Quaestiones Bartholomaei* – *Testamentum Abrami A & B* – *Testamenta Duodecim Patriarcharum* – *Testamentum Iob* – *Testamentum Salomonis* – *Vitae Prophetarum*. When not specified, the English translation is provided by the Authors.

<sup>5</sup> It is worth specifying that participial clauses do not exhibit any expressed form of the verb εἶναι. However, as is well-known, the absence vs. presence of the copula does not correspond to a clear-cut distinction: therefore, participial clauses may be included in the superordinate category of “εἶναι + participle” (cf. § 3).



- (4) Ἦσαν δὲ καὶ γυναῖκες ἀπὸ μακρόθεν **θεωροῦσαι**, ἐν αἷς καὶ Μαρία ἡ Μαγδαληνὴ καὶ Μαρία ἡ Ἰακώβου τοῦ μικροῦ καὶ Ἰωσήτος μήτηρ καὶ Σαλώμη.  
 ‘**There were** also women **looking on** from a distance, among whom were Mary Magdalene, and Mary the mother of James the younger and of Josès, and Salome.’ (*Mk.* 15:40)

According to Aerts (1965: 11-12), these constructions cannot be regarded as truly periphrastic (cf. § 4, below). Existential constructions typically occur in descriptive contexts or in contexts in which either a new element is introduced or a state-of-affair that is functional to the narrative situation is presented. This type of construction includes Logozzo and Tronci’s presentative type («*constructions présentatives*»: Logozzo and Tronci 2020: 209ff.).

Category ② (predicative participles) consists of participial clauses, that is nominal clauses in which the participle has the function of predicate; for example:

- (5) Καὶ ἔστησαν ἐν τῷ τόπῳ τοῦ σπηλαίου, καὶ ἰδοὺ νεφέλη φωτεινὴ **ἐπισκιάζουσα** τὸ σπήλαιον.  
 ‘And they stood in the place of the cave: and behold a bright cloud **overshadowing** the cave.’ (*Protevangelium Iacobi* 19:2; trans. James)

These participles represent the predicative core of the sentence and function as finite verb forms; as such, they can occur in both main (or coordinate) and subordinate clauses, and do not inherently encode subordination, differently from the normal behavior of participles in ancient Greek. Predicative participles do not correspond to a periphrasis, as defined by a combination of two (or more) elements. However, the lack of the copula by itself is not sufficient to establish a clear-cut distinction between predicative participles and periphrastic constructions: this distinction – as we will show below (see § 3) – can be better represented as a gradient.

Category ③, which is significantly more frequent than the other two categories in our corpus (as it includes more than 1000 occurrences), consists of constructions that can be considered as “truly” periphrastic; for example:

- (6) Οὕτως καὶ ὑμεῖς διὰ τῆς γλώσσης ἐὰν μὴ εὖσημον λόγον δῶτε, πῶς γνωσθήσεται τὸ λαλούμενον; **ἔσεσθε** γὰρ εἰς ἄερα **λαλοῦντες**.

‘So with yourselves, if with your tongue you utter speech that is not intelligible, how will anyone know what is said? For you **will be speaking** into the air.’ (1 Cor. 14:9)

- (7) Ἐχάρησαν δὲ οἱ Ἰουδαῖοι καὶ δεδώκασι τῷ Ἰωσήφ τὸ σῶμα αὐτοῦ ἵνα αὐτὸ θάψῃ, ἐπειδὴ **θεασάμενος ἦν** ὅσα ἀγαθὰ ἐποίησεν.  
 ‘And the Jews rejoiced, and gave his body unto Joseph to bury it, because he **had beheld** all the good things which he did.’  
 (*Evangelium Petri* 23; trans. James)

We will show in § 4 how truly periphrastic constructions may exhibit different degrees of periphrasticity.

Our corpus provides evidence of the threefold classification presented above. However, what we want to remark, even at this point, is that in the interpretation of single constructions, it is necessary to consider the so-called “fuzziness” of these sub-categories, that is their characteristic of having fuzzy boundaries. This perspective allows us to explain the various manifestations of the sub-categories in a unitary model, a distribution that can also account for the (apparent) inconsistency in the data.

In this and the following sections, we will discuss the three main types of data for which the perspective of the “fuzzy categories” (Rosch 1973; 1978) appears to be especially fruitful.

There are constructions that can be interpreted as belonging to either category ① or category ③, that is as either existential or periphrastic, depending on the selected parameter; for instance:

- (8) Ἦσαν δὲ καὶ ἄλλα παιδιά πολλὰ **παίζοντα** σὺν αὐτῷ. (*Evangelium Thomae* A 2:2)  
 a. ‘And **there were** also many other little children **playing** with him.’ (trans. James)  
 b. ‘And also many other little children **were playing** with him.’

An existential meaning can be (and has been traditionally) assigned to the εἶναι + participle construction type in (8). However, this construction neither occurs in a presentative context nor introduces a new element or state-of-affairs that is functional to the narrative schema: rather, it provides an additional detail of the background, which is overall irrelevant to narration (as it is clearly shown by the context)<sup>6</sup>.

<sup>6</sup> Τοῦτο τὸ παιδίον Ἰησοῦς πενταέτης γενόμενος παίζων ἦν ἐν διαβάσει ῥυακος, καὶ τὰ ῥέοντα ὕδατα συνήγαγεν εἰς λάκκους, καὶ ἐποίει αὐτὰ εὐθέως καθαρὰ, καὶ

Furthermore, the syntactic schema in (8), that is C(opula) – S(ubject) – P(articiple), might indicate a special emphasis on the copula and, therefore, imply an existential meaning (cf. Aerts 1965: 11-12): the C – S – P schema, in fact, characterizes more than a half (52.3%) of the existential constructions in our corpus. However, the same syntactic schema is also found in a certain number (16.2%)<sup>7</sup> of periphrases from category ③. Therefore, the word order *per se* cannot be used as a parameter to assign a given construction to the existential category.

Another type of data attested in our corpus can refer to both category ① and category ②. These correspond to predicative participles (category ②) with an existential value (category ①): see (9)), that are more frequently (but not exclusively) attested in the *Apocalypsis Petri* (a few cases are also found in *Revelations*):

- (9) Καὶ καταντικρὺ τούτων ἄλλοι πάλιν ἄνδρες καὶ γυναῖκες τὰς γλώσσας αὐτῶν **μασώμενοι** καὶ πῦρ φλεγόμενον **ἔχοντες** ἐν τῷ στόματι. Οὗτοι δὲ ἦσαν οἱ ψευδομάρτυρες.  
 ‘And over against these **were** yet others, men and women, **gnawing** their tongues and **having** flaming fire in their mouths. And these were the false witnesses.’ (*Apocalypsis Petri* 29; trans. James)

The essentially descriptive character of the *Apocalypsis Petri* provides an ideal environment for existential constructions to occur. In some cases, this function is not encoded by εἶναι-patterns, but, rather, by predicative participles: these participles, therefore, place themselves in two different categories, relative to the classification presented above. This overlap can be explained by the observation that the formal distinction between

λόγῳ μόνῳ ἐπέταξεν αὐτά. Καὶ ποιήσας πηλὸν τρυφερὸν ἔπλασεν ἐξ αὐτοῦ στρουθία ιβ. Καὶ ἦν σάββατον ὅτε ταῦτα ἐποίησεν. **Ἦσαν δὲ καὶ ἄλλα παιδιά πολλὰ παίζοντα σὺν αὐτῷ.** Ἰδὼν δὲ τις Ἰουδαῖος ἃ ἐποίει ὁ Ἰησοῦς ἐν σαββάτῳ παίζων, ἀπῆλθε παραχρῆμα καὶ ἀνήγγειλε τῷ πατρὶ αὐτοῦ Ἰωσήφ. [...] ‘This little child Jesus when he was five years old was playing at the ford of a brook: and he gathered together the waters that flowed there into pools, and made them straightway clean, and commanded them by his word alone. And having made soft clay, he fashioned thereof twelve sparrows. And it was the Sabbath when he did these things. **And there were also many other little children playing with him.** And a certain Jew when he saw what Jesus did, playing upon the Sabbath day, departed straightway and told his father Joseph: [...]’ (*Evangelium Thomae* A 2:1-3; trans. James).

<sup>7</sup> Category ③ shows various word order schemas: the C – S – P schema is the third most represented. The first two are: C – P, with unexpressed S (36%), and S – C – P (25%).

the two categories does not reflect a functional distinction: although existential constructions and predicative participles are formally different, both may have a predicative function<sup>8</sup>. This type of data reveals how a clear-cut distinction between the three sub-categories presented above is far from being unproblematic, and further supports the idea of adopting the perspective of a “fuzzy” boundary between them.

The third type of data involves categories ② and ③: as it requires a more detailed discussion, it will be separately addressed in section 3.

### 3. *The copularity continuum*

Aristotle observes that any finite verb is functionally equivalent to a participle plus a copula, that is to an εἶναι-periphrasis: e.g., διδάσκει = διδάσκων ἐστί ‘he teaches’ (*Metaph.* 1017a28; *Anal. Pr.* 51b12). Since the participle is a nominal form, and nominal clauses are perfectly acceptable in Greek, a participle by itself can function as a full predicate (e.g., διδάσκει = διδάσκων ‘he teaches’; cf. also Aristotle *Poet.* 1457a27; Schwyzer 1950: 407-408): sub-category ② manifests this phenomenon. The predicative participle (e.g., διδάσκων), then, and its copular counterpart (i.e., εἶναι-periphrasis: e.g., διδάσκων ἐστί) are two formally-different ways to express predication.

In many cases, a single form of εἶναι governs more than one (copular) clause: in these cases, the copula is expressed in one clause but is implicitly represented in the other(s) (cf. (10) vs. (11)):

- (10) Διότι δὲ πολιτικὸν ὁ ἄνθρωπος ζῷον πάσης μελίττης καὶ παντὸς ἀγελαίου ζῴου μᾶλλον, δῆλον.  
 ‘And why man [**is**] a political animal in a greater measure than any bee or any gregarious animal is clear.’ (Aristotle, *Pol.* I,1253a; trans. Rackham)
- (11) Ἐκ τούτων οὖν φανερόν ὅτι τῶν φύσει ἡ πόλις ἐστί, καὶ ὅτι ὁ ἄνθρωπος φύσει πολιτικὸν ζῷον.  
 ‘From these things therefore it is clear that the city-state **is** a natural growth, and that man (**is**) by nature a political animal.’ (Aristotle, *Pol.* I,1253a; trans. Rackham)

<sup>8</sup> Evidence on this score is provided by a synoptic passage: while an existential construction occurs in *Lk.* 17:35 (ἔσονται δύο ἀλήθουσai ἐπὶ τὸ αὐτό ‘**there will be** two women **grinding** together’), a participial clause is found in *Mt.* 24:41 (δύο ἀλήθουσai ἐν τῷ μύλῳ ‘two women **will be grinding** at the mill’). This type of evidence indicates that the two patterns may be interchangeable.

While (10) includes a nominal clause, with no copula, (11) shows how the copula may be expressed in the first clause (ὅτι τῶν φύσει ἡ πόλις ἐστὶ) and implicitly represented in the following(s) (ὅτι ὁ ἄνθρωπος πολιτικὸν ζῷον).

However, the presence vs. absence of the copula corresponds to a more complex architecture, that can be represented as a continuum of copularity. This continuum is defined by the feature [ $\pm$ COPULA] and extends across the boundaries between sub-categories ② and ③: true periphrases place themselves at the [+COPULA] pole (expressed copula), whereas predicative participles place themselves at the opposite pole [-COPULA] (no copula). In the space between the two poles, we can identify (at least) three points, corresponding to constructions with different degrees of copularity, all attested in our corpus, as shown by the following examples (see (12) to (16)):

- (12) Ὁ δὲ Κορνήλιος **ἦν προσδοκῶν** αὐτοὺς, συγκαλεσάμενος τοὺς συγγενεῖς αὐτοῦ καὶ τοὺς ἀναγκαίους φίλους.  
‘Cornelius **was expecting** them and had called together his relatives and close friends.’ (*Acts* 10:24)
- (13) Καὶ **ἦν** Ἰωάννης **οἰκοδομῶν** ναοὺς καὶ **καταρτίζων** ἱερεῖς καὶ ἐπισκόπους καὶ πρεσβυτέρους καὶ **θεραπεύων** πᾶσαν νόσον καὶ πᾶσαν μαλακίαν ἐν τῷ λαῷ.  
‘And John **built** temples and **trained** priests and bishops and presbyters and **cured** all sicknesses and infirmities among the people.’ (*Acta Iohannis* 44)<sup>9</sup>
- (14) Καὶ ἄμπελος **ἔσται περιπελεγμένη** αὐτῷ πλήρης βοτρυῶν, καὶ ἀπὸ ἄκρου αὐτοῦ μέλι **καταβαῖνον**.  
‘And a vine **shall be twined** round it, full of clusters, and from the top of it honey **coming down**.’ (*Acta Matthaei* 6)<sup>10</sup>
- (15) Ἐπέταξα οὖν ἐπισκέψασθαι, καὶ εὗρέθη ὅτι **ἐστὶν** ἡ πόλις ἐκείνη ἐξ αἰῶνος βασιλεῦσιν **ἀντιπαρατάσσουσα** καὶ οἱ ἄνθρωποι ἀποστάσεις καὶ πολέμους ἐν αὐτῇ **συντελοῦντες**.

<sup>9</sup> The translation paralleling the Greek structure of the original would include progressive periphrases; however, the imperfective aspect of the constructions in this passage cannot clearly be interpreted as progressive. Therefore, in our translation, we used the less marked form of the past tense.

<sup>10</sup> Walker’s translation (see Roberts and Donaldson 1903) implies an existential meaning, although the context suggests a different interpretation.

‘I therefore ordered that a search be made, and it was found that that city from of old **has been opposing** kings and that the people in it **perpetrate**<sup>11</sup> rebellions and wars.’ (1 *Esdras* 2:21; trans. NETS)

- (16) Καὶ Δαρεῖος συναπέστειλεν μετ’ αὐτῶν ἱππεῖς χιλίους ἕως τοῦ ἀποκαταστήσαι αὐτοὺς εἰς Ἱερουσαλήμ μετ’ εἰρήνης καὶ μετὰ μουσικῶν, τυμπάνων καὶ αὐλῶν· καὶ πάντες οἱ ἀδελφοὶ αὐτῶν **παίζοντες**, καὶ ἐποίησεν αὐτοὺς συναναβῆναι μετ’ ἐκείνων.  
 ‘And Darius sent along with them a thousand cavalry until they would restore them to Jerusalem in peace, with the music of drums and flutes. And all their kindred **were making merry**, and he made them go up along with them.’ (1 *Esdras* 5:2-3; trans. NETS)

Example (12) represents the prototypical copular construction, that is a periphrasis in which the copula is expressed. Example (13) includes three participles that share both the copula (ἦν) and the subject (Ἰωάννης): the copula is expressed in the first clause (ἦν Ἰωάννης οἰκοδομῶν) but implied in the cases of the participles καταρτίζων and θεραπεύων. Example (14) shows two participles in relation to the same copula: the verb form ἔσται is expressed when combined with περιπεπλεγμένη, but implied in the case of καταβαῖνον. Notably, though, the two participles refer to different subjects (ἄμπελος corresponds to περιπεπλεγμένη, whereas μέλι corresponds to καταβαῖνον), as also shown by the gender variation marked on them. However, the construction in (14) does include the feature [+COPULA]. In example (15), the first clause contains a prototypical copular predication (ἐστὶν ἡ πόλις ἀντιπαρατάσσουσα), whereas the coordinate clause οἱ ἄνθρωποι συντελοῦντες could be interpreted as either a predicative participle construction or a periphrastic construction parallel to that in the main clause. However, the latter interpretation appears to be quite problematic: besides the fact that the same copula refers to two different subjects (analogously to example (14)), in this example, the sole verb form of εἶναι (i.e., ἐστὶν) has singular number in relation to the subject of the first clause, whereas the coordinate clause shows a plural subject (οἱ ἄνθρωποι). The discrepancy in the subject number may constitute a further difficulty in the interpretation of the

<sup>11</sup> A better translation of this construction, maintaining the aspectual connotation of the participle, may be ‘have been perpetrating’: we are thankful to an anonymous reviewer for this remark.

coordinate clause as a truly periphrastic construction in which the copula is implied<sup>12</sup>. Finally, example (16) represents a clear instance of participial clauses.

In summary, examples (12) to (16) show how different types of εἶναι constructions can be differently associated with either the predicative participle or the “true” periphrasis sub-category, depending on their position along what we have referred to as copularity continuum, oriented around the two poles of presence vs. absence of a clearly expressed copula.

#### 4. The periphrasticity continuum

Whereas the copularity continuum has inter-categorical character, as it extends across different sub-categories, the periphrasticity continuum has intra-categorical character, as it specifically applies to the constructions in sub-category ③, i.e., the “truly” periphrastic constructions. The periphrasticity continuum proposed here, which extends from the [+PERIPHRAISIS] (highest periphrasticity / prototypical periphrasis) to the [−PERIPHRAISIS] (lowest periphrasticity / least prototypical periphrasis) pole, is established on the basis of the main parameter of copula desemanticization (cf. § 1, above), by which «a lexical item is emptied of its lexical semantics and acquires a grammatical function» (Heine 1993: 54): the degree of periphrasticity of a given construction is measured in relation to the degree of loss of lexical meaning of the copula. It is worth specifying that copula desemanticization does not apply to the constructions in category ②, as the predicative participles have no copula, and to the existential constructions in category ①, in which εἶναι has the lexical meaning of existing and, therefore, cannot be regarded as a copula *tout-court* (cf. the copula desemanticization scale in Amenta 2003: 23).

Copula desemanticization is primarily determined on morphological and semantic grounds. An additional potentially relevant criterion is the modal-aspectual relevance<sup>13</sup>. According to this criterion, con-

<sup>12</sup> A corresponding English example can be provided, such as *John is eating sandwiches and his friends \*drinking beers*. A similar type of discrepancy is found in cases of adjectival predication, such as: καὶ οὐχ οὕτως οἱ περὶ Δανιήλ λέοντες ἦσαν ἄγριοι οὐδὲ ἡ Μισαήλ ἐκφλεγόμενη κάμινος λαβροτάτῳ πυρί, ὥς [...] ‘the lions surrounding Daniel **were** not so **savage**, nor [**was**] the furnace of Misael so **ablaze** with fiercest fire as [...]’ (4 *Machabaeorum* 16:3; trans. NETS).

<sup>13</sup> For a parallel in the domain of tense and aspect, see Bertinetto (1990) on the temporal-aspectual relevance («*rilevanza tempo-aspettuale*»).

structions that encode specific modal (e.g., conativity) or aspectual (e.g., habituality or ingressivity) meanings exhibit a higher degree of periphrasticity, in relation to a higher degree of copula desemanticization. However, as for the εἶναι-periphrases in our corpus, the criterion of modal-aspectual relevance depends on the context in which the periphrasis occurs and, therefore, cannot be viewed as a distinctive feature of a given type of constructions. For instance, in the following examples, (17)-(19), the same construction type, εἶναι + present participle, is used to encode three different meanings<sup>14</sup>: progressive (in (17)), continuative (in (18)), and intentional (in (19))<sup>15</sup>:

- (17) Ἐφάνη ὁ κύριος ἐν τῇ χώρᾳ ἣ **ἦν διδάσκων** ὁ Ἀνδρέας.  
 ‘The Lord appeared in the country where Andrew **was teaching**.’  
 (*Acta Andreae et Matthiae* 4; trans. Walker)
- (18) Ὡς δὲ ἐγένετο ὁρμὴ τῶν ἐθνῶν τε καὶ Ἰουδαίων σὺν τοῖς ἄρχουσιν αὐτῶν ὑβρίσαι καὶ λιθοβολῆσαι αὐτούς, συνιδόντες κατέφυγον εἰς τὰς πόλεις τῆς Λυκαονίας Λύστραν καὶ Δέρβην καὶ τὴν περίχωρον, κακεῖ **εὐαγγελιζόμενοι ἦσαν**.  
 ‘When an attempt was made by both Gentiles and Jews, with their rulers, to mistreat them and to stone them, they learned of it and fled to Lystra and Derbe, cities of Lycaonia, and to the surrounding country, and there they **continued to preach the gospel**.’ (*Acts* 14:5-7)
- (19) Ἀναφάναντες δὲ τὴν Κύπρον καὶ καταλιπόντες αὐτὴν εὐώνυμον ἐπλέομεν εἰς Συρίαν, καὶ κατήλθομεν εἰς Τύρον· ἐκεῖσε γὰρ τὸ πλοῖον **ἦν ἀποφορτιζόμενον** τὸν γόμον.  
 ‘When we had come in sight of Cyprus, leaving it on the left we sailed to Syria and landed at Tyre, for there the ship **was to unload** its cargo.’ (*Acts* 21:3)

<sup>14</sup> As already remarked by Amenta (2003), Christian writers extended the use of periphrastic BE + participle (and especially present participle) beyond the level used by non-Christian Greek writers. The frequent use of this type of periphrases became «a linguistic emblem of membership in the Christian community» (Drinka 2011: 41).

<sup>15</sup> The intentional nuance expressed by ἦν ἀποφορτιζόμενον in (19) is made clearer in the Vulgate, in which ἀποφορτιζόμενον is rendered into the future participle *expositura* (*ibi enim navis expositura erat onus*).



Apart from the modal-aspectual relevance, we propose that the degree of desemanticization of the copula and, consequently, of the periphrasticity of the construction has to be considered in relation to a combination of morphological, semantic and morpho-semantic features taken by the participle and involving the categories of tense, voice, transitivity, actionality (specifically, telicity and stativity), and – to a lesser extent – lexical meaning. These features, that appear to be context-independent (with the partial exception of the type (D) below, which will be explained in § 5), allow us to consistently account for different types of constructions in a unitary model based on the notion of periphrasticity continuum, in which differences in the degree of verbiness and event type distinctions (on which see Vendler 1967; Dowty 1979; Hopper and Thompson 1980; 1984; Levin 1993; Tenny 1994; Van Valin and LaPolla 1997; Vogel and Comrie 2000; Beavers and Koontz-Garboden 2020, among many others) play a crucial role. Types (A)-(D) below, which show the lowest degree of copula desemanticization, represent the prototypical members of the less periphrastic εἶναι -constructions found in our corpus; on the contrary, types (E)-(F), which show the highest degree of copula desemanticization, represent the most prototypical periphrases in our corpus (see Figure 2):

- (A) εἶναι + passive participle (mainly perfect or aorist), typically (but not exclusively) from telic predicates: e.g., ἐστὶ λελυμένος ‘he is loosened’;
- (B) εἶναι + “Homeric” active perfect participle<sup>16</sup>: e.g., ἦν κεκμηκυῖα ‘she was weary’ (cf. Romagno 2005: 70);
- (C) εἶναι + active present participle of verbs denoting psychological or physical conditions: e.g., ἦν ζῶν ‘he was alive’;
- (D) εἶναι + perfect participle of unaccusative verbs, to which the eventive interpretation does not apply; rather, the construction expresses a state of the subject: e.g., ἦν τεθνεῶσα ‘she was dead’ (for further details on this type, see § 5);
- (E) εἶναι + perfect / aorist participle; formally, the participle may be either active or middle, but functionally it is consistently active (typically, it is from transitive and/or highly telic predicates): e.g., ἦν θεασάμενος ‘he had seen’ or ἦσαν διατεταχότες ‘they had ordered’;

<sup>16</sup> By “Homeric” perfect participles we mean those cases in which the participle shows the original value of the old perfect, as manifested in Homeric Greek (cf. Romagno 2005).

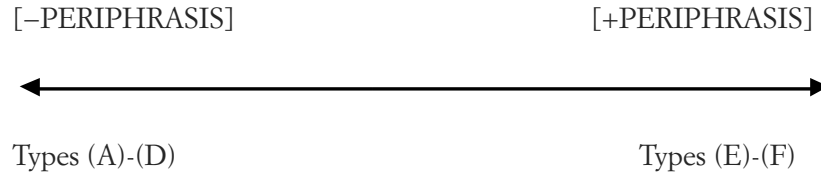
(F) constructions encoding specific modal-aspectual meanings (including progressive, continuous<sup>17</sup>, habitual, ingressive, continuative, conative, intentional, etc.): e.g., ἦν λέγων ‘I was saying’ or ἦν ἀποφορτιζόμενον ‘it was to unload’.

Examples (20) to (25) illustrate the six construction types discussed above.

- (20) Type (A): Ὑμῶν δὲ καὶ αἱ τρίχες τῆς κεφαλῆς πᾶσαι **ἡριθμημέναι εἰσίν**.  
‘But even the hairs of your head **are** all **numbered**.’ (*Mt.* 10:30)
- (21) Type (B): Ὁ μὲν γὰρ μέσος **ἦν** κίων ἐκ τῆς βάσεως **πεπηγώς**, [...] ‘For its middle shaft **was fixed** upon a basis, [...]’ (*Bel. Iud.* VII:149; trans. Whiston)
- (22) Type (C): **Ὑγιαίνων ἦν** ὅτε ἐκάλεσεν αὐτοὺς πρὸς ἑαυτόν.  
‘**He was sound in health** when he called them to him.’ (*Testamentum Levi* 1:2; trans. Charles)
- (23) Type (D): Καὶ ἀπὸ τῆς πομπῆς πάλιν λαμβάνει αὐτὴν ἡ Τρύφαινα· ἡ γὰρ θυγάτηρ αὐτῆς Φαλκονίλλα **ἦν τεθνεῶσα**, καὶ κατ’ ὄναρ εἶπεν αὐτῇ· [...] ‘And after the procession Tryphaena took her again. For her daughter Falconilla, which **was dead**, had said to her in a dream: [...]’ (*Acta Pauli et Theclae* 28; trans. James)
- (24) Type (E): Τότε ἐγγίσας ὁ χιλιάρχος ἐπελάβετο αὐτοῦ καὶ ἐκέλευσε δεθῆναι ἀλύσει δις, καὶ ἐπυνθάνετο τίς εἴη καὶ τί **ἔστιν πεποιηκώς**.  
‘Then the tribune came up and arrested him and ordered him to be bound with two chains. He inquired who he was and what he **had done**.’ (*Acts* 21:33)
- (25) Type (F): Ὡς δὲ ταῦτα **ἦν λέγων** ὁ Φίλιππος, καὶ ἰδοὺ ὁ Ἰωάννης εἰσῆλθεν εἰς τὴν πόλιν αὐτῶν.  
‘And as Philip **was thus speaking**, behold, John came into the city.’ (*Acta Philippi* 128; trans. Walker)

<sup>17</sup> “Continuous” is used here in the sense of Bertinetto (1986: 162ff.: «*continuo*»).

Figure 2. the periphrasticity continuum



The periphrasticity continuum proposed here captures the transitivity/intransitivity hierarchy (on which see Hopper and Thompson 1980; Sorace 2000, among others) and is governed by different parameters that operate at the interface between semantics and morphosyntax. The selection of tense (perfect vs. aorist vs. present) interacts with voice distinction, as established on both formal (active vs. middle endings) and functional (active vs. passive meaning) grounds, as well as with actional features such as telicity and stativity. The degree of periphrasticity of the construction may vary on the basis of the degree of telicity of the predicate and of transitivity of the clause. Moreover, within the intransitivity domain, the unaccusative/unergative distinction plays a role, in so far as the function of the participle and, consequently, the degree of periphrasticity of the construction is related to the properties governing split intransitivity.

Construction types that differ in one or more (either formal or functional) features from types (A) to (F) can be accounted for in the graded space between the two poles of the continuum. The large majority of the less prototypical cases correspond to εἶναι + present participle constructions, with either active or middle markers, but active meaning (see (26) and (27)):

- (26) Ὁ δὲ Σίμων καὶ αὐτὸς ἐπίστευσεν, καὶ βαπτισθεὶς ἦν **προσκαρτερῶν** τῷ Φιλίππῳ, θεωρῶν τε σημεῖα καὶ δυνάμεις μεγάλας γινομένης ἐξίστατο.  
 ‘Even Simon himself believed, and after being baptized he **continued** with Philip. And seeing signs and great miracles performed, he was amazed.’ (*Acts* 8:13)
- (27) Αὕτη γὰρ ἐπίλεκτός **ἐστιν** παρὰ τῷ θεῷ καὶ **εἰσάγουσα** εἰς τὴν αἰώνιον ζωὴν.  
 ‘For this [sc. holiness] **is** chosen before God and **leadeth** unto eternal life.’ (*Acta Thomae* 85; trans. James)

The degree of desemanticization of the copula appears to be higher in (26) than (27); the combination of εἶναι with both the adjective ἐπίλεκτός and the participle εισάγουσα, in (27), formally indicates its role of copula<sup>18</sup>.

A particularly interesting type of construction that is located between the two poles of the periphrasticity continuum is represented by εἶναι + active present participle periphrases such as the one in (28):

- (28) Ἦν δὲ τὰς ἡμέρας ἐν τῷ ἱερῷ διδάσκων, τὰς δὲ νύκτας ἐξερχόμενος ὑπλίζετο εἰς τὸ ὄρος τὸ καλούμενον Ἑλαιῶν.  
 ‘And every day he **was teaching** in the temple, but at night he went out and lodged on the mount called Olivet.’ (*Lk.* 21:37)

Aerts (1965: 9) argues that the presence of spatial or temporal specifications such as ἐν τῷ ἱερῷ and τὰς ἡμέρας indicates that «it is mainly a question of an independently used εἶναι with a participle coniunctum»: that is, the construction cannot be considered periphrastic (see also Logozzo and Tronci 2020: 207). However, a dichotomous interpretation of cases like those exemplified in (28) is far from being unproblematic. The εἶναι-διδάσκων construction in (28), in fact, might be interpreted as either ‘and every day he **was** in the temple **teaching**’ or ‘and every day he **used to teach** in the temple’. The former corresponds to a less periphrastic representation, with (non-prototypical)<sup>19</sup> existential meaning, and refers to the syntactic structure [ἦν ἐν τῷ ἱερῷ] + [διδάσκων], in which the copula directly combines with the spatial expression and διδάσκων functions as a circumstantial participle, which is a modifier (in line with Aerts’ proposal: Aerts 1965). The latter corresponds, rather, to a more prototypical periphrastic representation and refers to the syntactic structure [ἦν διδάσκων] + [ἐν τῷ ἱερῷ], in which the copula directly combines with the participle and the place adjunct functions as a modifier: τὰς ἡμέρας ‘every day’ provides habitual meaning to the construction and, therefore, increases

<sup>18</sup> The participles in this type of constructions more frequently encode imperfective aspect, with no further specifications of aspectual (or modal) meanings.

<sup>19</sup> Εἶναι, in fact, does not encode a prototypical existential predicate, nor does the construction introduce new elements that are functional to the narrative context. According to the copula desemanticization scale proposed by Amenta (2003: 23), the pattern ἦν ἐν τῷ ἱερῷ corresponds to the type exemplified by *je suis chez moi / sono a casa* ‘I am home’ (cf. Amenta 2003: 23), in which the *be*-form retains some of its lexical meaning and, therefore, cannot be considered as a copula *tout-court*.

its degree of periphrasticity (see the discussion on the modal-aspectual relevance above).

The kinds of discrepancies and ambiguities revealed by the construction type exemplified in (28) can be solved by adopting a prototypical approach to the εἶναι-periphrases, that accounts for the complex interplay between formal and functional verbal categories:

a characteristic of prototype categories [...] concerns the fuzziness of their boundaries. A consequence of this is that one category can merge at its edges with a neighboring category. [...] If syntactic constructions are prototype categories, we should expect to encounter the same phenomenon in the syntactic domain. If we focus only on the prototypical center of a construction, it will usually be possible to easily distinguish the construction from its neighbors. Marginal instances of a construction may, however, exhibit properties of another construction. These expressions could have ambiguous status vis-à-vis the two constructions (Taylor 1998: 196).

To conclude this section, we go back to the question of the syntagmatic variability discussed in § 1. As shown by the examples presented so far, the constituents of the εἶναι-periphrases exhibit a high freedom in the syntactic order: in fact, the copula can either precede or follow the participle and – most importantly – the two elements can be separated by a more or less conspicuous amount of linguistic material. Moreover, the copula-participle contiguity and the copula-participle non-contiguity do not show significant differences in the frequency of occurrences in our corpus: the percentages of occurrences relative to the total number of the εἶναι-periphrases analyzed here are 54.9% and 45.1%, respectively<sup>20</sup>. Notably, the distribution of contiguous vs. non-contiguous patterns in our corpus does not interact with the degree of periphrasticity of the constructions: highly periphrastic constructions,

<sup>20</sup> Notably, these percentages correspond to Logozzo and Tronci's percentages (2020: 207), measured in a smaller and more homogeneous corpus relative to the corpus analyzed here. Logozzo and Tronci (2020), in fact, analyze only the type "εἶναι + present participle" in the New Testament (124 total occurrences, out of which 60 have been found to be contiguous and 64 have been found to be non-contiguous: 48.4% vs. 51.6%), whereas our corpus includes a significantly larger data set and a wider variety of both texts and construction types, thus indicating that the hypothesis proposed in the present paper does not simply rely on the distinction between canonical and non-canonical texts and is not limited to the "εἶναι + present participle" construction. It is worth specifying that our contiguity category also includes cases in which the constituents are separated by either semantically or phonetically "weak" items, such as particles (μὲν, δέ, γάρ, etc.) and unstressed pronouns (μοι, σοι, etc.).

in fact, do not necessarily show copula-participle contiguity (see (29) vs. (30)).

- (29) Ἦν δὲ ὁ Βαρνάβας μαθήματα παρὰ Ματθαίου εἰληφὼς βίβλον τῆς τοῦ θεοῦ φωνῆς καὶ θαυμάτων καὶ διδαγμάτων σύγγραμμα.  
 ‘And Barnabas **had received** documents from Matthew, a book of the voice of God, and a narrative of miracles and doctrines.’  
 (*Acta Barnabae* 15; trans. Walker)
- (30) Καὶ ἐπέβλεψα, καὶ ἶδον μέσον τῆς πόλεως θυσιαστήριον μέγα καὶ ὑψηλὸν σφόδρα· καὶ ἦν τις ἐστὼς πλησίον τοῦ θυσιαστηρίου, οὗ τὸ πρόσωπον ἔλαμπεν ὡς ὁ ἥλιος, [...]  
 ‘And I saw in the midst of the city an altar exceeding high. And **there was** one **standing** by the altar whose visage shone like the sun, [...]

The construction in (29) is a prototypical periphrasis (type (E)), in which the copula and the participle are not contiguous, whereas (30) includes an existential and, therefore, less periphrastic construction, in which the copula and the participle are adjacent (or, more precisely, separated by an unstressed pronoun). A higher degree of periphrasticity can combine with no copula-participle contiguity without functional changes in the construction (cf. Bybee 1985; Bybee *et al.* 1994).

In conclusion, our data show that syntagmatic variability is not pertinent to the classification of ancient Greek εἶναι-periphrases, as it hardly applies to their grammaticalization patterns, as discussed in § 1 (cf. Lehmann 2015: 167).

### 5. Periphrasticity and the verbal/adjectival dichotomy

The periphrasticity continuum presented in § 4 captures the distinction between verbal and adjectival periphrases discussed in § 1: higher periphrastic constructions typically denote events, whereas lower periphrastic constructions typically denote states/qualities/conditions. Therefore, the periphrases traditionally classified as verbal ([+VERBAL]) correspond to more prototypical periphrases ([+PERIPHRASTIC]), whereas the periphrases traditionally classified as adjectival ([−VERBAL]) correspond to less prototypical periphrases ([−PERIPHRASTIC]). The data in our corpus clearly support this hypothesis, which is also confirmed by different kinds of evidence paralleling the results of our analysis. We can start by observing the functional similarity between the con-

struction type (A), that includes a perfect participle with passive meaning (see (20)) and the so-called “adjectival” periphrases:

*la réanalyse des parfaits analytiques comme constructions copulatives formées par une copule et une prédication adjectivale-participiale a été possible grâce à la proximité sémantique des participes parfaits (surtout médio-passifs) et des adjectifs, qui partagent une valeur sémantique (résultative-)stative et la fonction de décrire des propriétés plus ou moins stables du référent* (Logozzo and Tronci 2020: 232).

In some cases, the adjectival meaning of the passive perfect participle is also confirmed by philological evidence provided by the comparison between two different versions of the same text (see (31) and (32)):

- (31) Εἰ γὰρ φόβος ἐκφοβεῖ, ἐκεῖνός ἐστιν ἐπτοημένος ὁ τέλος μὴ ἔχων· [...]. Καὶ ἐὰν εἰσιν πόννοι ἐπτοημένοι, ἐκεῖνοί εἰσιν οἱ οὕτως ἀρχόμενοι ὥστε μηδέποτε τέλος ἔχειν.  
‘For if fear is scary, that which has no end **is dreadful**; [...]. And if any pain **is dreadful**, such is the one that begins and has no end.’ (*Acta Andreae* 7 – version A)<sup>21</sup>

- (32) Εἰ γὰρ πτόησις φοβητέα ἐστίν, ἐκείνη γοῦν φοβητέος ἢ τέλος μὴ ἔχουσα. [...] Καὶ εἰ αἱ ὀδύναι φοβητέαι εἰσίν, ἐκείνας χρὴ φοβηθῆναι αἱ οὕτως ὑπάρχοντι αἵτινες οὐδέποτε περατοῦνται.  
‘For if dread is to be feared, that which has no end is indeed **to be feared**. [...] And if torments **are to be feared**, we must fear those that begin and never end.’ (*Acta Andreae* 7 – version B)

The participles ἐπτοημένος and ἐπτοημένοι (from the telic verb πτοέω ‘to scare’) in (31) correspond to the verbal adjectives φοβητέος and φοβητέαι in (32).

The relationship between the verbal/adjectival dichotomy and the periphrasticity continuum proposed here is also revealed by the contrastive analysis between the Greek version of the New Testament and the Latin translation of the Vulgate. There are several cases in which Greek’s more prototypical periphrases are rendered into Latin synthetic verbal forms (see (33)), whereas Greek’s less prototypical periphrases are rendered into Latin “*esse* + adjective” constructions (see (34)):

<sup>21</sup> Cf. the trans. by Walker in Roberts and Donaldson (1903).

- (33) Ἦσαν γὰρ **προεωρακότες** Τρόφιμον τὸν Ἐφέσιον ἐν τῇ πόλει σὺν αὐτῷ, ὃν ἐνόμιζον ὅτι εἰς τὸ ἱερὸν εἰσήγαγεν ὁ Παῦλος. (*Acts* 21:29)  
*Viderant enim Trophimum Ephesium in civitate cum ipso, quem aestimaverunt quoniam in templum introduxisset Paulus.* (Vulgate)  
 ‘For they **had previously seen** Trophimus the Ephesian with him in the city, and they supposed that Paul had brought him into the temple.’
- (34) Αἰτεῖτε καὶ λήμψεσθε, ἵνα ἡ χαρὰ ὑμῶν **ᾗ πεπληρωμένη**. (*Jn.* 16:24)  
*Petite et accipietis, ut gaudium vestrum sit plenum.* (Vulgate)  
 ‘Ask, and you will receive, that your joy **may be full**.’

To only mention a few other examples of these types, the same correspondence as in (33) is found in *Acts* 20:13 (διατεταγμένος ἦν = *disposuerat*) and *Acts* 22:29 (ἦν δεδεκώς = *alligasset*), whereas the same correspondence as in (34) is found in *Gal.* 2:11 (κατεγνωσμένος ἦν = *reprehensibilis erat*) and *Lk.* 5:18 (ἦν παραλελυμένος = *erat paralyticus*; cf. also *Acts* 9:33).

Notably, Greek constructions that place themselves on different (non-prototypical) points of the periphrasticity continuum and, therefore, do not correspond to either the lowly periphrastic prototypes (types (A) to (D)) or the highly periphrastic prototypes (types (E) and (F)) are generally translated with formally equivalent constructions in Latin, that is *esse*-periphrases:

- (35) Ἦσαν δὲ **προσκαρτεροῦντες** τῇ διδαχῇ τῶν ἀποστόλων καὶ τῇ κοινωνίᾳ, τῇ κλάσει τοῦ ἄρτου καὶ ταῖς προσευχαῖς. (*Acts* 2:42)  
*Erant autem perseverantes in doctrina Apostolorum et communicatione, fractionis panis et orationibus.* (Vulgate)  
 ‘And they **devoted themselves** to the apostles’ teaching and the fellowship, to the breaking of bread and the prayers.’
- (36) Ἀκούσας δὲ ὁ νεανίσκος τὸν λόγον ἀπῆλθεν λυπούμενος, **ᾗν** γὰρ ἔχων κτήματα πολλά. (*Mt.* 19:22; cf. also *Mk.* 10:22)  
*Cum audisset autem adolescens verbum, abiit tristis: erat enim habens multas possessiones.* (Vulgate)  
 ‘When the young man heard this he went away sorrowful, for he **had** great possessions [lit. was having many possessions].’





- (38) Καὶ ἐπελάβετό μου τῆς χειρός τις καὶ ἐξέβαλέν με ἀπὸ τοῦ τόπου ὅπου ἤμην πεπτωκός.  
 ‘And one took me by the hand and removed me from the place whereon I **had fallen**.’ (*Acta Pilati A* 15:6; trans. James)

The construction in (37) has an aorist participle and encodes relative past, in a modality-marked context: ἤμην ἀποθανών represents a prototypical type (E) periphrasis, as opposed to the construction in (38), which has a perfect participle and might be classified as more or less periphrastic on the basis of its more or less eventive meaning<sup>23</sup>.

## 6. Conclusion

In this study, we have used the perspective of prototypical categorization, by which it is possible to consistently account for both the central and the peripheral members of a given category, and have shown how this perspective allows us to clarify certain crucial issues of the εἶναι + participle constructions in ancient Greek, and specifically post-Hellenistic Greek, and to solve the (apparently) irreducible aporia involving different types of εἶναι-periphrasis. We have proposed both a copularity continuum and a periphrasticity continuum, referring to various types and sub-types of constructions: the interplay between these two continua provides an explanation for the different manifestations of the εἶναι + participle category. In these continua, formal features, such as the presence vs. absence of the copula, interact with the functional features manifested in tense, voice, actionality and transitivity distinctions: the degree of periphrasticity of a given construction is ultimately related to both its degree of verbiness and the type of event that is encoded into the predicate.

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<sup>23</sup> It is worth noting that, in a few cases, an eventive interpretation is suggested by the translation in the Vulgate: e.g., ἦν ἐπιπετωκός ‘it had fallen’ (*Acts* 8:16) is rendered into the synthetic verbal form *venerat*.

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