



On vowel prosthesis before *sC* in Substandard Latin and Koine Greek: a synoptic review

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ABSTRACT

This paper aims at proposing a synoptic account of vowel prosthesis in word-initial *sC* in Substandard Latin and Koine Greek. A new *recensio* of the attestations in documentary texts suggests that the phenomenon was spread all around the Roman Empire, both in Substandard Latin and Koine Greek. Different syntopic analysis have been subsequently provided in order to investigate both external and internal factors, namely to which level of variation this phenomenon is to be attributed in a diasystematic perspective and the phonotactic and prosodic contexts in which vowel prosthesis emerges. Finally, the diachronic path is taken into account focusing on the following topics: i. the relation between polygenesis and monogenesis, continuity and discontinuity; ii. Greek/Latin interference, in the attempt to establish which language is responsible for triggering; iii. phonological drifts in Substandard Latin which determined the creation of a word-initial pattern (viz. the deletion of initial *ex-*, the simplification of *#in₊sC* into *#isC* and the aphaeresis of *#VsC* into *#sC*).

KEYWORDS: prosthetic vowel, Substandard Latin, Koine Greek.

1. *Introduction*

The insertion of an epenthetic vowel before word-initial *sC* currently characterizes Ibero-Romance and Gallo-Romance languages, Logudorese Sardinian and some Tuscan subvarieties¹. This phenomenon is documented

¹ The rule of insertion is systematic and productive in Castilian, Catalan and Portuguese. In these languages prosthetic vowel is present not only in Latin inherited lexicon (e.g. Lat. *status*, Sp. *estado* vs. It. *stato*), but also in newly introduced words (e.g. Sp. *estrés* “stress”). On the contrary, in French the phenomenon concerns only Latin inherited lexicon (e.g. Lat. *stella*, Fr. *étoile*), and it is not productive with recent borrowings (e.g. Fr. *stress*, *scrabble*). For a general overview, see SAMPSON (2010: 12 ff.) and references therein. In Logudorese Sardinian the process is productive, unlike Campidanese variety (BLASCO FERRER, 1984: 210). In the Italian literary tradition vowel prosthesis was recommended in post-consonantal position (e.g. *in istrada*). Nowadays, the phenomenon is restricted to the crystallized form *per iscritto* (SABATINI, 1985: 157). Nevertheless, it survives in some Tuscan subvarieties (ROHLFS, 1966: § 187).

also in Substandard Latin (= SL) and its first attestation generally dates back to the 1st c. AD². A thorough examination of this topic has been provided, albeit with different documentary and interpretative frameworks, especially by Schuchardt (1866-1868, II: 337-365), Prinz (1938), and, more recently, Sampson (2010: 53-73).

The description and the explanation of this phenomenon in SL have been carried out emphasizing both external and internal factors. From a geolinguistic perspective, it has been noticed, through inscriptional evidence, that vowel prosthesis was particularly widespread in North Africa³ and Christian Rome Latin and in Asia Minor Koine Greek. Therefore, it has been assumed that vowel prosthesis developed in SL either as a result of the influence of African *einheimische Dialekte* (Schuchardt, 1866-1868, II: 348) or as a consequence of the migration of the first Christian communities from Asia Minor to Rome and North Africa (Schuchardt, 1866-1868, II: 348; Prinz, 1938; Pisani, 1940: 177), which would have spoken a variety of Koine Greek (= KG) characterized by the presence of vowel prosthesis (see § 3.3). From an internal and structural perspective, on the other hand, it is widely assumed that the heterosyllabicity of /s/ in sC clusters – along with its segmental properties – favors the development of an epenthetic element as syllabic nucleus. This happens in particular if a word beginning with sC is in a postconsonantal phonotactic context (cf. Sampson, 2010: 67-73; for a further analysis, see § 5.1).

Nevertheless, a complete examination of non-literary Latin and Greek texts is still needed. Through an updated collection of documentary materials (inscriptions, papyri and ostraca), this paper aims at proposing a wider reconsideration of the phenomenon, in the attempt to dive into its diasystematic depth and to highlight the interpenetration of internal and external elements in phonological change. Furthermore, the combined study of SL and KG forms with prosthetic vowel enlarges the horizon of analysis to Latin-Greek diasystem during the imperial period, in the line of the perspective suggested by Dressler (1965) and Consani (1999).

² See *Ismurna* in *CIL* IV 7221 for the personal name *Smyrna* (cf. VÄÄNÄNEN, 2006 [1963]: 47).

³ In this respect, see also ACQUATI (1971). DURANTE (1981: 36-38) claims that North Africa is the only starting point of vowel prosthesis in SL. According to a well-established doctrine, vowel prosthesis represents an isogloss linking North-African and Sardinian areas (cf. FANCIULLO, 1992; LUPINU, 2000; 2003; LORENZETTI and SCHIRRU, 2010).

2. Data collection and general overview

Data collection has been carried out through the current databases which gather epigraphic and papyraceous documents, namely the *Epigraphische Datenbank Clauss-Slaby (EDCS)*⁴, *papyri.info*⁵, *PHI Greek Inscriptions*⁶ and *CLaSSES*⁷. Additionally, further direct documents which have not been yet recorded on these databases have been taken into account, namely the Latin-Greek glossaries edited in Kramer (1983) and the Latin and Greek inscriptions from Didyme (Cuvigny, 2012, *éd.*). The photographic reproduction of the recorded texts and the apographs of the inscriptions, if available, have been subsequently examined. The collected data have been cross-checked with other data collections of this phenomenon⁸; ultimately, they have been classified according to a series of elements which take into account both linguistic and extra-linguistic aspects:

Linguistic aspects

- (A) *Lexeme*: vowel prothesis is particularly frequent in specific lexemes which are quite widespread both in Latin and Greek (e.g. *σπεφάν-, σπράτ-, spirit-, stipend-*).
- (B) *Part of speech*: the most represented categories are nouns (252 forms) and personal names (269 forms).
- (C) *Graphicization*: viz. the graphemic representation of vowel prothesis.
- (D) *Phonological context*: viz. the phonotactic context and the segmental and suprasegmental properties of the elements around the fricative /s/.
- (E) *Language of the text*: the examined texts are written in Latin, Greek or are bilingual Latin/Greek texts with different degrees of interference (see Adams, 2003: 30-84).

⁴ Cf. <http://manfredclaus.de/it/index.html>.

⁵ Cf. <http://papyri.info>.

⁶ Cf. <https://inscriptions.packhum.org>.

⁷ Cf. <http://classes-latinlinguistics.fileli.unipi.it>.

⁸ Viz. SCHUCHARDT (1866-1868, II: 337-365), PRINZ (1938), GAENG (1968: 263-266), ACQUATI (1971: 182-183), OMELTCHENKO (1977: 418-427), SAMPSON (2010: 54-60), and, as regards Greek forms, DRESSLER (1965) and CONSANI (1999). The collected data have been further cross-checked with the forms with vowel prothesis collected in the LLDB (<http://lldb.elte.hu/en/database/>).

- (F) *Script*: the examined texts are written both in Latin and Greek script. In some cases, Latin texts are written in Greek script⁹ and, more rarely, Greek texts are written in Latin script¹⁰. Some bilingual texts are written in both Latin and Greek script¹¹.

Extra-linguistic aspects

- (A) *Textual typology*: the main textual typologies are funeral inscriptions and private letters.
- (B) *Writing support-material*: viz. stone, tablets, ostraka, papyri.
- (C) *Periodization*: the collected forms date back to 1st c. BC-8th c. AD. A single attestation (*IG XIV, 645*) dates back to the 4th c. BC.
- (D) *Origin*: thanks to the information provided by TM Places¹², this record has allowed a geolinguistic overview (see Figure 2).

From a quantitative point of view, 647 forms with prosthetic vowel have been recorded¹³. In comparison with the count of Prinz (1938: 106) and the data discussed by other scholars, the documentary framework can be updated as follows in Table 1¹⁴.

⁹ See e.g. <Ισ-πηραντια βενεμερεντι · φηκειτ> (*IG XIV, 2016*), from Rome. Some of the Ravenna Papyri (TJÄDER, 1955-1982, ed.) are written in *hellenika grammata*: see e.g. <ειστρωμεντις> ~ <histromentis> in *P. Ital. 2.35* (539 AD). For the discussion of such reanalyzed forms, see § 5.1.

¹⁰ See e.g. <DEDALI ISPES TUA PIE · ZESES>, from Rome (*CIL XV, 7025*).

¹¹ See e.g. the *Folium Parisinum* (KRAMER, 1983, I, 14), a Latin-Greek glossary dating back to the 7th c. AD (according to Kramer). In this document Latin script is peculiarly used for Greek words as well. Probably this constitutes a clue of the fact that the recipient of the list – maybe of western origin – did not know neither the Greek language nor the Greek script. The majority of the glosses concerns elementary lexicon and vowel prosthesis is attested in both Latin and Greek forms: *iscaria* (from a reanalyzed Lat. (*e*)*scaria*), *istoma* (Gk. στόμα), *iscorda* (Gk. σκόρ(ο)δον), *isticarin* (Gk. στιχάρι(ο)ν), *iscio* (Lat. *scio*, see below fn. 21).

¹² Cf. <https://www.trismegistos.org/geo/>.

¹³ Some ambiguous forms have been discarded, e.g. records such as *i(n)scripsit*, *i(n)sculpsit* etc. In these cases, a simplification of *#i_nsC* into *#isC* is more likely than a reanalysis with subsequent insertion (*i#sC* > *#sC* > *#VsC*), which is otherwise evident in Albertini tablets and Ravenna Papyri (see below § 5.1). As regards Greek inscriptions, forms such as *ἐστήλη* / *ιστήλη* / *ειστήλη* are to be examined with caution. As a matter of fact, the initial vowel could be attributed not only to vowel prosthesis, but also to the fusion of the preposition *εἰς*. See formulas such as *ἀναγράψαι εἰστήλην λιθίνην* (= *εἰς* *στήλην*, see e.g. *IG II² 1011*).

¹⁴ Table 1 data are displayed according to the synoptic data set out in SAMPSON (2010: 60). The item ALII concerns specific data collections, namely ACQUATI (1971) for North Africa inscriptions, DRESSLER (1965), GIGNAC (1976) and CONSANI (1999) for Greek forms, LUPINU (2000) for Sardinian inscriptions and GAENG (1968) and OMELTCHENKO (1977) for Christian inscriptions. For practical purposes, the macro-areal subdivision refers to the Sampson's one, with some modifications (note that the *prouvinciae* SYRIA and SARDINIA and the *regiones*

| REGION | PRINZ | <i>ALII</i> | NEW DATA | |
|------------------------------------|-------|----------------------------------|----------|-----|
| | | | LAT. | GK. |
| LATIUM AND CAMPANIA | 107 | 37 (GAENG) | 213 | - |
| NORTHWEST AFRICA | 52 | 17 (OMELTCHENKO) 33 (ACQUATI) | 200 | - |
| ASIA MINOR | 22 | 95 (DRESSLER) | 2 | 114 |
| IBERIAN PENINSULA | 7 | 5 (GAENG) | 24 | 1 |
| NORTHERN ITALY AND GALLIA CIS. | 7 | - | 24 | - |
| EGYPT | 1 | 3 (GIGNAC) 4 (CONSANI) | 9 | 14 |
| GALLIA TRANS. AND GERMAN PROVINCES | 5 | 1 (GAENG) | 11 | - |
| SYRIA | - | 3 (BUBENIK, CONSANI) | 3 | 6 |
| ETRURIA, UMBRIA, PICENUM | - | - | 8 | 1 |
| EASTERN EUROPE | 2 | 2 (OMELTCHENKO) | 6 | - |
| SOUTHERN ITALY AND SICILY | 11 | - | 3 | 2 |
| SARDINIA | - | 4 (LUPINU) | 4 | - |
| UNCERTAIN | - | - | 2 | - |
| BRITAIN | - | - | | - |
| TOTAL | 214 | 120 | 509 | 138 |

Table 1. *Quantitative data about forms with vowel prosthesis (1st c. BC-8th c. AD).*

A preliminary examination seems to show a situation which is quite different to the Romance outcomes. As a matter of fact, the phenomenon is little attested in Iberian Peninsula and Gallia Transalpina, as Herman (1990: 159) and Adams (2007: 672-673), among others, highlighted.

Nevertheless, it is well known that it is methodologically and theoretically inappropriate, albeit tempting, to adopt a retrospective view of the Romance configuration on Latin documentation. Furthermore, these absolute data could be misleading, since the attestations of vowel prosthesis

ETRURIA, UMBRIA, PICENUM have been added; SOUTHERN ITALY refers to the *regiones* SAMNIUM, APULIA ET CALABRIA, LUCANIA ET BRUTII, whereas Sampson's table includes Campania as well). The last column concerns the number of attestations respectively in Latin (= LAT.) and Greek (= GK.) texts.

should be statistically evaluated in relation with the frequency of word-initial *sC* in each area, as Figure 1 intends to show¹⁵.

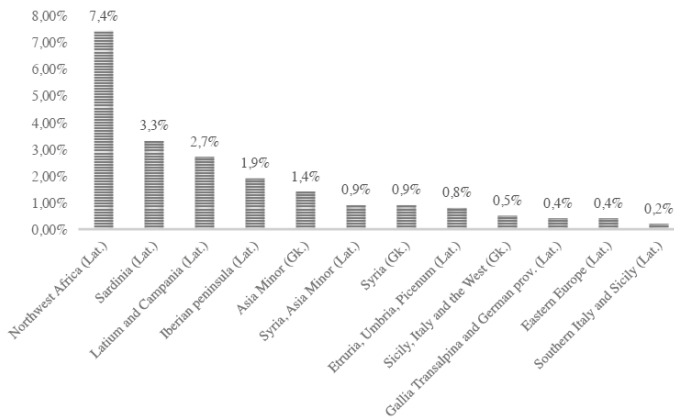


Figure 1. *Relative frequency of the forms with vowel prosthesis (1st c. BC-8th c. AD).*

Even if the value of such statistics could not be completely heuristic, since they level the diasystem in which these historical documents are involved, they provide a more balanced overview of the phenomenon, suggesting the reconsideration of the data shown in Table 1. Northwest Africa appears to be a center in which the phenomenon was much more widespread than Latium and Campania, whereas Sardinia – though attesting only 4 forms with vowel prosthesis – turns out to be the second center of major spread. In spite of the considerable

¹⁵ These data have been collected in different ways. As far as Greek inscriptions are concerned, the *PHI Greek inscriptions* database has been queried for *sC* clusters, using the diacritic # in order to filter word-initial occurrences. The results have been subsequently hand-counted, excluding not-relevant records. As far as Latin inscriptions are concerned, the huge amount of data and the impossibility to filter the results via the word-initial filter # have required a specific strategy. The *EDCH* database has been queried for *sC* clusters, filtered according to various regions and provinces. The results have been subsequently undergone to a program which has allowed the grep of initial *sC*. Then, an accurate manual check of the results has been carried out. In the event that the same texts were published in different databases, these duplications have been carefully avoided. In fact, the data which are displayed in Figure 1 do not constitute a complete projection of those shown in Table 1, and further researches are needed in order to provide a more consistent data set. First, Latin and Greek texts have been counted separately, because the geographical criteria adopted by the different databases were not fully corresponding. Secondly, it was not possible for now to provide relative frequencies for Egypt as well as Northern Italy and Gallia Cisalpina, because many attestations of vowel prosthesis in these areas come from papyraceous documentation (Egyptian papyri and ostraca and Ravenna Papyri): in case of Egypt, a quantitative analysis with relative frequencies of word-initial *sC* – especially as far as Greek papyri and ostraca are concerned – would have been too dispersive (moreover, the *papyri.info* database is not easily searchable with this specific purpose); in case of Northern Italy, since the major part of the attestations is documented in the Ravenna papyri, a relative frequency would have been inconclusive.

number of attestations, Asia Minor shows otherwise a lower frequency than Iberian Peninsula. Moreover, an overall distribution in SL and KG may suggest, at a preliminary geolinguistic analysis, the presence of an areal phenomenon which was common to both languages (see the split map in Figure 2).

Given this general account, a further fine-grained and qualitative investigation is needed in order to probe the historical dimension of the documents which attest vowel prothesis and which language is responsible for triggering. Such an attempt could be pursued in particular by focusing on the circulation of some words – especially anthroponyms – since the phenomenon is structurally limited to a restricted group of lexemes. Therefore, the following sections will deal with the syntopic analysis of the Greek-speaking (§ 3) and Latin-speaking (§ 4) areas, with particular reference to some unnoticed details so far.

3. Greek-speaking provinces

3.1. Egypt

As known, Roman Egypt was a complex sociolinguistic area, in whose repertoire the varieties of Egyptian, Koine Greek and Latin coexisted with different degrees of use¹⁶. In this area 23 forms with prosthetic vowel are attested. In (1) some of these forms are shown according to chronological order¹⁷:

- (1) a. *is·cis* (= *scis*?; *CEL* 79, approximately 50 AD)
- b. *είστατήρων* (= *στατήρων*; *O. Did.* 373, 88-96 AD)
- c. *ίστατήρα* (= *στατήρα*; *O. Did.* 425, 125-140 AD)
- d. *ίσστρατιώτης* (= *στρατιώτης*; *I. Did.* 7, 177-192 AD)
- e. *Ἰσμαράγδω* / *Ἰσμαράγδου* (= *Σμάραγδ-*; *P. Med.* 46; 3rd c. AD)
- f. *ἔσπέρματα* (x 2) (= *σπέρματα*; *P. Sakaon* 70; 338 AD)
- g. *ἔσχονίου* (= *σχονίου*; *P. Sakaon* 70; 338 AD)
- h. *ίστοργῆς* (= *στοργῆς*; *Milne Cairo Mus.* 77.9282; 4th c. AD)
- i. *ίσκ[ρ]ίβαις* (= *σκρίβας*; *Stud. Pal.* 1.3.; 455 AD)
- l. *είσταδιάρχη* (= *σταδιάρχη*; *SEG* XXXII, 1588; 6th-7th c. AD)

¹⁶ On this subject, see mainly ADAMS (2003: 527-641) and SCHIRRU (2013) and references therein. On the characteristics of Egyptian Koine Greek, see BUBENIK (1989: 214-227) and HORROCKS (2010: 111 ff.).

¹⁷ In this section the 5 forms attested in the *Folium Parisinum* are not taken into account, since they require a distinct detailed study. In these glosses Greek forms with vowel prothesis probably depend on the pronunciation of Greek words by a Latin-speaker and Latin-writer (see fn. 11).

The forms (1a)-(1d) are attested in very interesting documentary niches, which provide useful information about the circulation of Latin in Egypt, namely the well-known ostraca of Wâdi Fawâkhir (*CEL* 72-80)¹⁸, and the ostraca and inscriptions from the town of Didyme in the Eastern desert, where a Roman *praesidium* was settled (Cuvigny, 2012, *éd.*)¹⁹.

In the *verso* of the quite fragmentary ostrakon published in *CEL* 79, the form <is-cis> (l. 5) can be read. Cugusi (1992-2002, II: 73) interprets it as <[concup]/is-cis>, with an erroneous wordcut. Nonetheless, it could not be ruled out the reading of the form <is-cis> as the 2nd sg. ps. indicative present of the verb *scio*. The syllabic punctuation – well documented in this fragment and indicative of a low alphabetization level (Guéraud, 1942: 161) – could show a heterosyllabic treatment of sC cluster²⁰. The plausibility of this reading could be corroborated by further considerations. Firstly, the prosthesis in the verb *scio* is well documented, see for example the forms <iscias> and <iscire> in the Bu Njem ostraca (*O. Bu Njem* 83 and 104)²¹. Furthermore, the verb *scio* in the 2nd sg. ps. is quite frequent in letters and brief messages due to obvious pragmatic and communicative reasons²². The <me> which follows <is-cis> could be interpreted as the subject of an infinitive structure (by integrating <f[...]> with <f[acere]>)²³. The sense might therefore be “you know I do willingly”.

In both (1b) and (1c) vowel prosthesis is attested in the lexeme *στατήρ*-, with different graphycizations due obviously to itacism²⁴. The word *στατήρ*, -ῆρος, ὁ (“a weight, standard coin”; *LSJ s.u.*) is well documented in Greek papyri. This word is documented in Latin since the end of the Republican age (Cic. *de orat.* 2.159 and *CIL* IX 1656) and it was mainly adapted in -a class (*statera*, -ae, f. “a kind of balance”; *OLD s.u.*)²⁵ from the accusative *στατήρα*. In the Latin word *statera*, which is continued in many Italian di-

¹⁸ See CUGUSI (1981), ADAMS (2013: *passim*; 2016: 307-316).

¹⁹ The *corpus* consists of both Greek and Latin texts, dating back to 76/77-250 AD (CUVIGNY, 2012: 2). Latin letters are very interesting from a linguistic point of view, since they contain a concentration of aberrant spelling comparable only with the private letters of the Bu Njem ostraca (24%).

²⁰ A comparable syllabic punctuation would not be isolated. See e.g. <IS · PE · RA · BI > in *CIL* X 8189.

²¹ The vowel prosthesis in the verb *scio* is overall attested 9 times (see Logud. *iskire*).

²² Cf. e.g. *CEL* 141 (*optime scis*), *CEL* 147 (*optime scis*), *O. Did.* 429 (*et tu scis*), *T. Vindol.* 255 (*scis certe*).

²³ For a comparable structure, see *CEL* 141: *scias me pater accepis[se]*.

²⁴ Since the Roman period the interchange among <η>, <ι>, <ει> and, more rarely, <ε> to indicate /i/ is very frequent in Greek papyri (cf. GIGNAC, 1976: 235).

²⁵ On the other hand, see *stater*, *eris*, m. in *Cod. Theod.* 12.7.1 and *Vulg. Matth.* 17.27; and *stateri* (nom. pl.) in *CPL* 208-209, l. 10 (150-199 AD).

alects (*REW* § 8233), vowel prosthesis is attested too (<istatera>, *CIL* VIII 22914, from Hadrumentum).

The form which appears in (1d), with geminated graphicization of the fricative /s/²⁶, is attested in the lexeme στρατ²⁷. It is remarkable that the inscribed brick *I. Did.* 7 contains the form <ΛΥΣΙΤΑ/ΝΩΝΡΟΜ>, which is a hybrid Greek/Latin genitive plural; moreover, the use of <Υ> instead of <ΟΥ> is probably due to graphemic interference with Latin (Cuvigny, 2001: 156).

The forms (1e)-(1l) are discussed in Gignac (1976: 312) and Consani (1999: 86). Note that *P. Sakaon* 70 from Theadelphia is written by Aurelius Aiel. He was Sakaon's son, one of the most notable and rich people of the village, performing various liturgies (cf. Bagnall, 1982).

In (1i) the form with prosthetic vowel is a Latinism which is quite attested in Greek papyri (cf. Daris, 1991: 283-284)²⁸.

3.2. Syria

In the Roman province of Syria 9 forms with prosthetic vowel are attested. Three of them are attested in Latin inscriptions, namely <istupendi-
orum> (*AE* 1939, 221) and <istra> (for *strata*, in *AE* 1931, 86 and *AE* 1931, 104, two *miliaria* along the *strata Diocletiana*). In (2) some Greek forms can be noticed. They are mainly attested in inscriptions from the city of Dura Europos, a crossroad characterized by an intense linguistic variety (cf. Taylor, 2002).

- (2) a. ισταρτηγα (= στρατηγός; *SEG* XV.850, 168 AD; Dura Europos)
 b. εισκότλα (cf. lat. *scutella*; *SEG* VII 371, 2nd c. AD; Dura Europos)
 c. εισπύλλ[α (cf. lat. *spinula*; *SEG* VII 371, 2nd c. AD; Dura Europos)
 d. ιστήλην (= στήλην; *IGLSyr* V, 2396; 196 AD; Emesa)
 e. ιστα(ρτηγα) (= στρατηγός; *MUSJ* 36.1.1959; 250-256 AD; Dura Europos)
 f. ισφήνη (= σφήνη?; *SEG* VII, 431; Dura Europos)

²⁶ The gemination of /s/ before consonant is quite attested in both Latin and Greek. See e.g. <isspirito> (*ICUR* VI, 17165), <Abasscantus> (*CIL* X, 588), <ἀγορασσθη> (*O. Did.* 425). See also (1e), in which the forms Ἰσμαράγδω / Ἰσμαράγδου are due to different hands.

²⁷ The form ι(σ)στρατιωτ- is quite widespread in Koine Greek of Eastern provinces (see §§ 3.2, 3.3).

²⁸ The form ισκριβας is to be interpreted as a nom. sg. (= σκριβας); see [σκρι]βας in l. 14. Note that this loanword is adapted into Greek morphology in the class of male nouns in -ας, whereas the non-adapted form σκριβια is generally more attested in Greek papyri and it is indeclinable (see τὸν σκριβια in *P. Lips.* 1 40).

Some of these forms have not been noticed so far. The form (2d) finds many parallels in Asia Minor inscriptions (see § 3.3); (2e), whose reading is actually doubtful, could be compared with (2a), with prosthesis and metathesis in the lexeme *στρατ*²⁹.

On the other hand, the forms (2a)-(2c) are well-known. This notwithstanding, an issue needs further analysis. Scholars generally maintain that a typical characteristic of Syro-Palestinian KG is the presence of vowel prosthesis before *sC* due to Aramaic substrate and such examples are generally reported³⁰. Actually, Semitic languages generally avoid word-initial *sC* and they normally prefer CV syllables (cf. Lipiński, 1997, §§ 9.14, 9.15, 10.2). In addition to this, in Palmyrene inscriptions Latin and Greek personal names beginning with *sC* are written with initial <ṣ> /ʔ/ (e.g. ʔSPYDN for Σπεδιανός, cf. Stark, 1971: 136), as well as many Latin and Greek borrowings in biblical Aramaic (e.g. ʔSPLNT for σπληνίον, ʔSṬRTYS for στρατιώτης, ʔSṬLʔ for στολή, ʔSQRTWR for *scriptor*, ʔSQWTL for σκουτέλλιον/σκούτλια)³¹. Nonetheless, such spellings are not systematic³² and it is even possible that these graphemic oscillations depend on the source language, as Consani (1999: 85) claimed.

Therefore, the influence of Aramaic substrate in Latin/Greek forms in (2) could be not fully explanatory. On the one hand, vowel prosthesis is well attested in the Greek lexeme *στρατ*- in Egyptian and Asia Minor KG as well (see §§ 3.1 and 3.3). On the other hand, (2b) and (2c) are rather to be interpreted as Latinisms which reflect SL, as it can be assumed by an overall examination of the graffito. Inscribed in the southern wall of the temple of Palmyrene Gods in Dura Europos (*SEG* VII, 371), this document records a list of objects. Therein, the four items (i)-(iv) are Latin loanwords which clearly show substandard (and even pre-Romance) characteristics:

²⁹ Cf. also Ἐστάρτωνος from Asia Minor (*JHS* 19 (1899) 123, 132; see § 3.3).

³⁰ See BUBENIK (1989: 234-235), BANFI (1996: 20) and MANCINI (2008: 296).

³¹ See BUBENIK (1989: 235), BANFI (1996: 20) and MANCINI (2008: 296). In Biblical Aramaic, the prosthetic element represented by <ṣ> is documented in various initial consonant clusters (not only *sC*, but also πτ, ξ and *meta cum liquida* clusters) and simple consonant as well, see KRAUSS (1898, I: 136-140). A comparable use is documented in (Neo-)Punic inscriptions (see e.g. ʔʕʕṢN for Κλέων in *CISI*, 2, 143, the *trilinguis* from Pauli Gerrei).

³² On the other hand, the Latin name Statilius appears without the prosthetic vowel (SṬṬYLS), as well as some loans such as SPG (σπόγγος) and SṬRWMṬYN (στρώματα). See BUBENIK (1989: 235) and CONSANI (1999: 85).

- (i) The form εἰσκότλα (*col. I, l. 7*) is generally put in relation with Latin *scutella* “dish”³³. This match is probably to be reconsidered. The word *scutella* is obviously evident in the Greek form σκουτέλλιον, which circulates in Egyptian papyri (Daris, 1991: 283) and it is formed via the -ιον suffix, which was very productive in Egyptian Greek (Schirru, 2013: 317). Latin *scūtūla* “dish”³⁴, which is attested in documentary Latin as well (cf. *Vindol. Tab.* 194, 208, 590), is otherwise the basis of σκούτουλα (Daris, 1991: 283) and also σκούτλι(ο)ν (< *scut(ū)l*). The form εἰσκότλα is to be connected with *scūtūla* as well. Note that this form, dating back to the 2nd c. AD, shows different elements hinting a phonetic SL spelling: not only vowel prosthesis, but also the syncope of post-tonic vowel and the use of <ο> instead of <ου>, which is probably a clue of a proto-Romance merger between /ū/ and /ō/ in /o/ in tonic position³⁵. Additionally, it is worth mentioning that εἰσκότλα is in agreement with δύω. This fact suggests that εἰσκότλα is considered a neutral plural, with a metaplasm of gender and class of flexion which is common in Egyptian Greek (cf. Schirru, 2013: 317).
- (ii) The form εἰσπύλλ[α] (*col. I, l. 11*) implies a syncopated form from Lat. *spinūla* “backbone”, with a subsequent total assimilation (cf. It. *spilla* “pin”). This seems to be the only attestation of such a pre-Romance development for this word in ancient documentation.
- (iii) Similarly, the form φῖβλα (*col. II, l. 3*) results from the syncope of *fibūla* “buckle” (cf. It. *fibbia* “buckle”). For similar outcomes, see e.g. φῖβλατῶριν in Egyptian papyri (cf. Daris, 1991: 297; 3rd c. AD)³⁶ and *fiblis* in *CIL III 536* (3rd c. AD).
- (iv) The form τοράλλια is a *hapax* in Greek³⁷. It could be connected with Lat. *torale* “coverlet” (Cumont, 1926: 374). Note the gemination of /l/ before prevocalic <ι> (probably [j]). It cannot be excluded that it represents an early instance of palatalization (see Rovai, 2015: 176). No Romance successors of this word are found.

³³ See CUMONT (1926: 135), BUBENIK (1989: 235) and BANFI (1996: 20).

³⁴ The word *scūtella* derives from *scūtra* (**scutro-lā* > **scūtŕla* > *scūtella*). Hence, the back-formation *scūta* (with *ū* due to juxtaposition with *scūtum*) and subsequently *scūtūla* have been created (cf. *DELL* and *EDLIL*, s.v. *scūtra*). Such *¹scūtūla* “dish” is not to be confused with *²scūtūla* “wooden cylinder”, which is a borrowing from Greek σκυτάλη “staff, cudgel”.

³⁵ Rovai’s stance (ROVAI, 2015: 77) on the use of the Greek grapheme <ο> as a clue of an opener pronunciation of Latin /ū/ is here taken into account.

³⁶ On the other hand, see *fibula[torium]* in *AE 1953, 132*.

³⁷ Cf. perhaps the forms τολαρ(ια) (*SEG VII, 417*) and τυλαρ(ια) (*SEG VII, 431*, where the form 2f is attested), from Dura Europos as well.

3.3. *Asia Minor*

Greek inscriptions found in the Roman province of Asia and in the entire Anatolian area (cf. Figure 2) abundantly attest vowel prosthesis in word-initial *σC*. This observation led Thumb (1901) to hypothesize a dialectal characteristic of Asia Minor KG due to Phrygian substrate and some scholars maintain that prosthetic vowel was a feature of the Phrygian «accent» (Brixhe, 2002; 2010). Nevertheless, various factors suggest that the Phrygian element should be revised. Firstly, the phenomenon is attested in other KG varieties as well (§§ 3.1 and 3.2) and its first attestations in Asia Minor date back to Christian era. For this reason, a global explanation is preferable and more economic, in the line of Dressler (1965) and Consani's (1999) stance, maintaining that the phenomenon is to be studied internally on Greek and in its contact with Latin. Furthermore, Dressler (1965) revealed that there are no sufficient proofs that Phrygian – as well as Anatolian languages – did not admit word-initial *σC*. After all, Neo-Phrygian status itself is the subject of recent discussions and its vitality and circulation might have been overestimated (see Tzitzilis, 2014). Furthermore, the major number of attestations of vowel prosthesis in Phrygian KG is more probably due to a thicker epigraphic density in that region.

On the other hand, Latin influence is evident through an overall analysis of the documentation, focusing on chronology, lexemes and onomastics. The chronological evidence reveals that the first attestations, dating back to the 1st c. AD, concern military lexicon (3):

- (3) a. Λονγεῖνος [...] ἰστρατιώτης (= στρατιώτης; *IK Perge* 469, 56-64 AD, from Perge)
 b. ἰσ[το]πενδίων (= στοπενδίων; *Bosch, Quellen Ankara* 138, 114; 74-107 AD, from Ankyra)

As already seen, vowel prosthesis is attested in the lexeme *στρατ-* (3a) in Egyptian and Syro-Palestinian KG (see 1d, 2a, 2e) as well. It is worth noticing that the soldier name in (3a) is of Latin origin (Λονγεῖνος)³⁸. Besides, the form ἰσ[το]πενδίων (3b) is an evident Latinism³⁹ and the noun *stipendium* / *stupendium* is attested with vowel prosthesis in Latin inscriptions all around

³⁸ Cf. also Μάρκου ἰστρατιώτου (3rd c. AD) and Οὐλπ(ίου) Κλε[.] ἰστ[ρατ]ιώ[του] (2nd c. AD).

³⁹ See CONSANI (1999: 78-79) for the analysis of other Latinisms, such as ἰσκηναρίου (= *scri-narius*, *MAMA V*, 301; 5th-6th c. AD).

the Roman Empire⁴⁰. Therefore, it could be hypothesized that at first vowel prosthesis circulated in Asia Minor KG in military contexts interfering with Latin. This interference is evident in onomastics, in which vowel prosthesis is attested in anthroponyms with hybrid Latin/Greek formation (see Ἴσκοπελλιανῶ)⁴¹ and in personal names of Latin origin (see e.g. Ἰστεμένιος)⁴². Furthermore, onomastic data show that vowel prosthesis is attested in personal names – mainly relating to Christianity – which are widespread all over the Roman Empire⁴³, often preceded by the ‘default-nomina’ Αὐρήλιος and Φλαούιος⁴⁴.

Indeed, Asia Minor data are important not because they attest a dialectal feature of Asia Minor KG, but because a major number of documents allows the surfacing of a situation which Syrian and Egyptian documents more sporadically attest. As a matter of fact, a thicker demographic density implies a major number of funeral inscriptions (hence the 35 attestations of vowel prosthesis in the word στῆλη) and a richer onomastic repertoire. Therefore, it could be assumed that vowel prosthesis was a feature of the Greek-Roman Koine in Eastern provinces, as inferable by the presence of the phenomenon in Latin inscriptions as well (4):

- (4) a. *Forum istatuis veterum principum ornatum.* (CIL III 352; 331 AD)
 b. *Fl(avius) Buraido [prote]ctor escolae ped[itum].* (MAMA XI, 72; 390 AD)

⁴⁰ Cf. *ist[ipe]ndiis* (CIL VIII, 9838; from Mauretania Caesariensis); *istipen(diorum)* (CIL VI, 32694; 3rd c. AD, from Rome); *istipen(diorum)* (CIL VIII, 21568; 1st-3rd c. AD, from Aquae Sirenses); *istipendior[]* (CIL VI, 2789; 3rd c. AD, from Rome); *istup(endiorum)* (AE 1979,447; 2nd c. AD, from Spalatum); *istupendiorom* (AE 1939, 221; from Syria).

⁴¹ As CONSANI (1999: 78-79) shows, the name Ἴσκοπελλιανῶ (MAMA VI List 151; 2nd-3rd AD, from Kürd Uşak) has a Greek lexeme (σκοπελ-) and a Latin suffix (-ianus). Furthermore, note the gemination of /l/ before pre-vocalic <ι> (see ROVAI, 2015: 176).

⁴² The form Πόπλιος Ἰστεμένιος (MAMA IX 294; 133 AD, from Aizanoi) – perhaps corresponding to Publius Steminus – is attested in the city of Aezanoi, where many immigrants from Italy settled (see LEVICK *et al.*, 1988, ed., lx-lxii).

⁴³ The personal names deriving from the lexemes στρατ- and στεφαν- are the most attested ones. See e.g. Ἐστράτις (MAMA I 225) and Εἰστρατόνικος (MAMA X 278). Such names were similarly widespread in Christian Rome, see. e.g. *Istratonice* (CIL XIV, 629). Their circulation in Christian onomastics probably echoed the expression “soldier of Christ” (cf. 2 Tim 2.3). The name Ἰστέφανος (SEG XLI, 1217) is attested in Asia Minor inscriptions 7 times from the 3rd to the 6th c. AD (cf. § 4.1).

⁴⁴ See e.g. Αὐρ Ἰστέφανος (SEG XLI 1217) and Φλάβιος Εἰστρατόνικως (MAMA I 217). As known, the names Aurelius and Flavius – respectively from the 3rd and the 4th c. AD – became a sort of default-nomina to indicate Roman citizenship (see SALWAY, 1994).

The inscription (4a) comes from the town of Orcistus. This is a petition written by the citizens – *sectatores sanctissimae religionis* – to the Emperor Constantinus, in which they ask for the status of independent city. The inscription (4b) is an epitaph dedicated by Flavius Buriado to his wife. The lexeme *sc(h)ol-* of Greek origin is attested with prosthesis in other contemporary Latin inscriptions as well⁴⁵.

It is worth a final mention about a group of Christian *carmina sepulcralia* (*SEG VI*, 137-140; 300-350 AD) which shows an interesting use of vowel prosthesis in versification (5):

- (5) a. φένγος οὐκ ἰσορᾶτη, ἰσκοτόεσα δὲ νύξ (n. 147, v. 16)
 b. ἀλλ'ἐμῆς τοργῆς (n. 138, v. 5)
 c. τί σπεύδουσ' ἔθανες; (n. 140, v. 2)
 d. πρίν σε νυνφικὸν ἰστέφανον κοσμήσαμεν ἦν θαλάμοισιν (n. 140, v. 5)

In (5a) vowel prosthesis is used to increase the number of syllables in dactylic pentameter. The inserted element is in arsis in the second hemiepes. On the contrary, in (5b) the phrase ἐμῆς στοργῆς does not develop vowel prosthesis⁴⁶, since an additional syllable would have not fit in exameter (note the simplified spelling ἐμῆς στοργῆς > ἐμῆς τοργῆς). In (5c) the prosodic chain neutralizes the distinction between τι-σπευδ and τ-ισπευδ⁴⁷. Lastly, in (5d) vowel prosthesis is used to increase the number of syllables such as in (5a). The insertion is in arsis in the third foot of the exameter.

4. *Latin-speaking area*

4.1. *Rome, Latium and Campania*

In Latium and Campania 213 forms with vowel prosthesis are attested. Among these, 190 come from the city of Rome, which was a highly articulate center from a demographic and linguistic point of view, since many alloglot communities – mainly speaking varieties of Greek and Aramaic – lived therein (see Banfi, 1991). Therefore, the analysis of inscriptionsal data

⁴⁵ See e.g. *iscolasticus* (*CIL VI*, 32955; 403 AD, from Rome).

⁴⁶ On the other hand, there are 5 occurrences of the noun *στοργή* with vowel prosthesis in Asia Minor Greek inscriptions.

⁴⁷ See *συνισπουδάσαντες* (*MAMA IV* 85a), *ισπουδῆ* (*MAMA VII* 228).

from Rome requires the consideration of such a complex network, with a particular focus on chronology, onomastics and prosopography (Lorenzetti and Schirru, 2010: 305).

As a matter of fact, the first attestations of vowel prothesis concern servile names and refer to a milieu of linguistic interference which allows the surfacing of SL spellings. A special evidence is provided by the name *Smyrna*, clearly relating to the Asia Minor toponym *Σμύρνη*. A first macroscopic evidence that such an onomastic basis refers to a servile personal name in Latin inscriptions, and to the town in the Greek ones⁴⁸, suggests that slave forces from Asia Minor coasts were named through the purchase town toponym. It is likely that this immigrant influx dates back to Pompeius' Asiatic campaign (67-62 BC), as evidenced by the fact that the first attestations of the name *Smyrna* date from the half of the 1st c. BC. This name shows many graphemic variants: in this respect, it is worth noticing that the most aberrant spellings appear in peripheral areas, whereas the forms <Smyrna> and <Zmyrna>⁴⁹, which correspond to the Greek spelling, are attested especially in Rome. On the other hand, the anaptyctic spelling <Zmyrina> is mainly attested in Campania⁵⁰ and the forms with prosthetic vowel firstly appear in Campania as well⁵¹. Actually, the most ancient form – with the particular spelling <Iszmyrnae>⁵² – is attested in Volcei: this inscription (cf. Soldovieri, 2010) provides a sure backdating of the first attestation to 60-20 BC and joins to the form *Ismurna* from Pompei (*CIL* IV 7221) – generally considered as the most ancient – datable at latest 79 AD. Such a graphemic variability suggests different attempts to adapt a foreign name into the grapho-phonetic level, thus providing phonetic spellings: on the one hand the anaptyctic forms might suggest an Os-

⁴⁸ In Greek inscriptions this name is attested 111 times as a toponym, whereas 9 times as an anthroponym (often preceded by the form *Ἀσπὴρλίαια*, see e.g. *Panamara* 254 and *Ephesos* 22489).

⁴⁹ These forms are attested about 40 times between 30 BC and 200 AD, especially in Rome. These are transliterations of the Greek variants *Σμύρνη* / *Ζμύρνη* (since the Hellenistic period, <ζ> was used also to indicate [z] before voiced consonant, see LEJEUNE, 1972: § 107).

⁵⁰ Such anaptyctic forms are attested 5 times: once in Rome (*CIL* VI 23897), three times in Pompei (*AE* 1912 238, *CIL* IV 7863, *CIL* IV 7864) and once in Capua (*CIL* X 4049).

⁵¹ The forms with prosthetic vowel are 12. One of these is attested in Asia Minor Greek inscriptions (*MAMA* V R 20). The other ones are attested especially in Rome (7 examples), whereas the most ancient forms come from Campanian area.

⁵² Note that Greek <ζ> is transliterated via <sz>. In Greek papyri the use of <σζ> for <ζ> is documented as well (GIGNAC, 1976: 123-124). In Latin this use is limited to few foreign personal names (<Soszonti>, <Soszomene>, <Soszicus>, <Comaszonte>).

can adaptation⁵³, on the other hand the prosthetized ones are probably due to a Latin nativization (Sampson, 2010: 56), since /sm/ cluster did not fit in Latin phonological system and had disappeared in both initial and internal position in pre-documentary Latin (see Weiss, 2009: 167). The case of the name *Smaragdus* is similar. This name is attested in Latin inscriptions since the 1st c. AD, and the first attestations with vowel prosthesis date back to the 1st-2nd c. AD. It concerns servile names, often with Greek morphology (see *Ismaragdis* in *CIL* VI 37250)⁵⁴. Furthermore, the insertion of vowel prosthesis in such names created a phonological pattern which aligned with other Greek servile names beginning with *Is-* such as *Ismarus* and *Ismene* (see Prinz, 1938 and Sampson, 2010: 56).

A servile Latin/Greek interfering milieu could account for the first attestations of vowel prosthesis in the personal names *Stephanus* and *Spes* (and their derivatives). The name *Stephanus* (written both <Stephanus> and <Stefanus>) is attested in Latin inscriptions about 700 times from the 1st c. AD, and it became popular from the 3rd c. onward as a Christian name (Kajanto, 1963: 97). The first forms with prosthetic vowel are datable between the 1st and the 3rd c. AD: they come from Rome and relate to freedmen names (*CIL* VI 2693 and *CIL* VI 62551). Note that in *CIL* 62551 the sisters *Rubria Istefanis* and *Rubria Marciane* (nom. sg.) have both a *cognomen* with Greek morphology (as usual in freedmen's *cognomina*, see Adams, 2003: 473 ff.).

The name *Spes*, on the other hand, is the first Latin lexeme in which vowel prosthesis is attested. This personal name was very spread in the first imperial period, likewise its Greek equivalent *Helpis* / *Elpis* (Solin, 1996: 362), and refers initially to freedwomen as well. In some cases, it is not unlikely that the Latin form reflects a calque of the Greek name, according to a common practice. A Latin/Greek interference might be inferred in some forms with vowel prosthesis. Actually, among the various personal names which derives from the noun *spes* or the verb *sperare*⁵⁵, two in particular provide some trac-

⁵³ Nevertheless, anaptyxis is not recorded in Oscan in this kind of consonant cluster (see BUCK, 1904: § 80). More generally, one can assume that this epenthesis – peculiar at all – is otherwise interpretable as an idiolectal nativization of a Greek name by L₂ Latin speakers (maybe with Oscan L₁). See ADAMS (2003: 157) who provides a similar account for the anaptyctic forms in the Sulpicii archive.

⁵⁴ On the other hand, the variant with vowel prosthesis is attested in Greek in six inscriptions datable between the 2nd and the 3rd c. AD, from Asia Minor (moreover, note the two attestations in 1e, § 3.1).

⁵⁵ See e.g. *Speratus*, *Speratianus*, *Sperantia*, *Spesina*, *Spesilla* etc.

es of a *plebejische Deklination* (Schuchardt, 1866-1868, III: 34), namely the forms *Spenis* and *Spetis*. The first one is overall attested 37 times ($\Sigma\pi\eta\nu\iota\varsigma$ is attested also in Greek inscriptions, see e.g. *SEG* XLIII 461), whereas *Spetis* is attested 8 times. As a matter of fact, vowel prosthesis in the name *Spes* is attested earlier in these submerged formations, see <Ispeti> (*CIL* XIV 198, from Ostia Antica) and <Isp[e]nis> (*CIL* VI 26687, from Rome), both datable between the 1st and the 3rd c. AD. Actually, these coronal extensions develop from a nominative (*I*)*spes*⁵⁶, with a metaplasm from the defective fifth declension⁵⁷ to the third one (*Ispes*, *-tis*; *Ispes*, *-nis*). Such *-nis* and *-tis* genitive morphemes are induced by the genitive endings of other Greek personal names, such as *Zosimenis*, *Eronis*, *Zosimetis*, *Aphroditis* (see Bücheler, 1866: 35-36). However, textual evidence shows that both (*I*)*Spenis* and (*I*)*Spetis* are attested as nom. sg. as well (see e.g. *CIL* III 7331), probably due to analogy with *-is* ending Greek personal names (see *Elpis*, *Stephanis*, *Smaragdis* etc.).

The personal name *Sperantia*, showing a formation which is continued in Romance languages (cf. It. *speranza*, Fr. *espérance*, Sp. *esperanza*), unlike *spes*, is attested 8 times. The unique attestation of vowel prosthesis occurs in a Latin inscription written in Greek script, from Rome (*IG* XIV 2016, 290-325 AD).

As regards phonotactic aspect, although there are no cogent proofs from a quantitative point of view, some inscriptions provide clues that the rule of insertion might have been phonologically productive in post-consonantal contexts. In (7), a Latin inscription from Rome dating back to 403 AD (*CIL* VI 32955), the same lexeme *sc(h)ol-* shows either the presence or the absence of vowel prosthesis according to the phonotactic context:

- (7) *V(ivit) / [...]co Scolastico qui vixit / [...]III dep(ositus) IIII K(alendas) Feb(ruarias) in pace / [...]inus Iscolasticus sororis / [...] v(iris) c(larissimis) Teodosio et Rumorido cons.*

Actually, a general trend in the development of vowel prosthesis in specific phrases is inferable, see e.g. *in istatuam* (*CIL* XI 5966), and the

⁵⁶ See <Isspes> (*CIL* VI 7974, 1st-3rd c. AD, from Rome) and $\text{I}\sigma\pi\eta\varsigma$ (*IG* XIV 48, from Syracuse).

⁵⁷ On the declension of *spes*, see MEISER (1998: 147-149), WEISS (2009: 256).

formulas *vir ispectabilis*⁵⁸ and *mater iscelesta* (or *pater iscelestus*)⁵⁹. Similarly, anaptyctic forms in which a vowel is inserted between a prefix such as *in-* or *sub-* and a lexeme-initial *sC* suggest the productivity of the process in post-consonantal environments, see. e.g. *subiscalirem* (*CIL* VI 29791, from Rome, II-III c. AD), and *superistitem* (*ICUR* I 3194, from Rome, 380 AD)⁶⁰.

The dendrophori inscription from Ostia Antica⁶¹ (7) provides interesting elements for the analysis of the insertion in relation to phonosyntactic, phonostylistic and prosodic aspects. Cocilius Hermes, *patronus* of the *collegium* and also mentioned in other inscriptions (*CIL* XIV 326 and *AE* 1987, 199), is the author of this dedication (*AE* 1987, 198; 256 AD):

- (8) *C(aius) Iul(ius) C(ai) f(ilius) Cocil(ius) Hermes | patr(onus) et q(uin) quennalis p(er)p(etuus) col(legii) den(drophorum) Ost(iensium) | signum M(atris) M(agnae) ex argent(o) | p(ondo) III et Z et SS VI m(ilia) n(ummum) d(ono) d(edit) ut VI | Kal(endas) Iun(ias) die natalis sui de ((denariis)) CLXXX usuras eorum epu | lentur et discumbentes | sportulas partiantur | quot si obserbatum non | erit, tunc s(ummas) s(upra) s(criptas) honoratis | coll(egii) fabr(um) tig(nuariorum) Ost(iensium) dari | volo sub condicione s(upra) s(cripta), | stipulatus est Cocilius | Hermes ispepond(it) plebs | dedicat(um) Idib(us) Ianuari(i)s | Maximo et Glabrione | co(n)s(ulibus), ob cuius | d(edicationem) d(ecurionibus) dedit ispor(tulas) ((denarios)) II.*

This text contains four words with initial *sC*. Vowel prosthesis is attested twice (*ispepondit*, *isportulas*) in post-consonantal contexts. On the other hand, the occurrences without prosthetic vowel appear at the beginning of the line after a syntactic pause. It is worth noticing that the juxtaposition of

⁵⁸ See *vir ispectabilis* in *CIL* VI 31968 (Rome, 5th-6th c. AD) and *vir isp(ectabilis)*, which is attested three times in a papyrus recording a trial document (*ZEP* 170/2009, 465-480 AD).

⁵⁹ The form *iscelestus/iscelesta* is attested three times (*CIL* X 2801, from Puteoli and *CIL* VI 13535 and *AE* 1990, 101 from Rome). In the adjective *scelestus*, which is attested especially in Campanian inscriptions, the surfacing of vowel prosthesis might have been favored by collocation after *mater* and *pater* (out of 14 attestation of this adjective, in 8 cases it is associated with *mater* and *pater*).

⁶⁰ These forms can be interpreted either as formations from a subjunctive form with lexicalized i-prosthesis (in this sense PISANI, 1950: 119 interprets *subiscalirem*) or as a clue of the productivity of the insertion in internal sandhi, in morphemic boundaries transparency. For the analysis of such forms, see SAMPSON (2010: 55).

⁶¹ The dendrophori – in charge of selling wood and extinguishing fire – were connected with the cult of Magna Mater. As known, many Oriental cults from Asia Minor were spread in Ostia since the end of the Republican age (SQUARCIAPINO, 1962).

three fragmentary slabs (Pellegrino, 1987) might show a copy of this dedication. This copy contains some variants, namely <SUCCONDICIONE> (l. 1.7) instead of <SUBCONDICIONE> (l.11) and especially <HERMESSPEPOND[IT]> (l.1.5) instead of <HERMES·ISPEPOND(IT)> (l.13). It could be assumed that the first text shows a tendency towards the definition of morphemic and word boundaries (note the use of the *interpunctum*), on the contrary the second text exhibits simplification in internal and external sandhi (note the assimilation and the *scriptio continua*). Prosodic and syntactical considerations must be taken into account as well. The sequence *Hermes (i)spepondit* is not cohesive from a syntactical point of view, since the two words belong to different phrases. The use of the *interpunctum* and the insertion of the prosthetic vowel, with secondary accent, mark the phrase boundary⁶². Actually, the proximity of two identical /s/ segments and the iambic structure of the Greek name *Hermes* tended to form a phonological unit, as evidenced by the second variant. Since the ductus of the first stone is well-finished, one cannot rule out the hypothesis that it shows a higher phonostylistic variety.

4.2. Northwest Africa

The evidence of data (cf. § 2) shows that Northwest Africa is the center in which vowel prosthesis was particularly spread, in both absolute and relative terms. The analysis which have been provided from Schuchardt onwards are substantially confirmed. Nonetheless, some further considerations can be done.

First of all, it is quite evident that the major concentration of forms with prosthetic vowel appears in the peninsular area – including Numidia and Africa Proconsularis – in front of Sardinia and Sicily. Actually, this area was characterized by an intense vitality from both a commercial and a socio-cultural point of view. The first attestations – dating back to 50-150 AD – come from the town of Dougga. These inscriptions show the names *Clodia Ispes* (MAD 245) and *Haelvia Ispes* (MAD 485): this datum fits with those emerging from Latium and Campania (§ 4.1).

From a structural point of view, some (mostly prepositional) phrases suggest the surfacing of vowel prosthesis in post-consonantal environments,

⁶² For the use of the punctuation in documentary Latin, see mainly WINGO (1972) and SCHIRRU (2012).

as evidenced by Latium and Campania inscriptional data as well: see e.g. *per ispiritalles* (Aud. 253) and *in ispatium* (Aud. 254). The sequence *et ispiritus* is well attested, especially due to its collocation in the Trinitarian formula⁶³.

On the other hand, some later texts show that vowel prosthesis is extended to all *s*C-beginning lexemes. A clear example is provided by a long text from Ain Fournà, datable between the 5th and the 8th c. AD (see Audollent, 1951). This is a magical formula which is inscribed on a lead cross and it is characterized by the presence of many pentalphas. In this text the presence of vowel prosthesis is systematic in all word-initial *s*C, regardless of the phonotactic post-consonantal context (see e.g. *ibi ista, ubi istabat, filio ispirito, mici ispromisera*)⁶⁴.

Some coherent corpora – namely the Bu Njem ostraca and the Albertini tablets – deserve a specific attention. The Bu Njem ostraca are datable between 253 and 259 AD, and they provide precious clues of SL and imperfect learning phenomena⁶⁵. In these documents vowel prosthesis is attested twice in the verb *scio*, even though not systematically (9):

- (9) a. *iscias* (O. Bu Njem 83)
 b. *iscire debes* (O. Bu Njem 104)
 c. *salutem scias* (O. Bu Njem 89)
 d. *piciparis scias* (O. Bu Njem 101)

In (9a) and (9b), due to the conditions of the ostrakon, it is not possible to infer the context which precedes these forms. On the other hand, in (9c) and (9d) vowel prosthesis is not attested after consonant. Indeed, one should note that it is likely that in (9c) final *-m*/ was not pronounced (actually, final *-<m>* omission in Bu Njem Ostraca is overall attested; see Adams, 1994) and that in (9d) the contiguity of two identical */s/* segments with in fact the formation of a [is'kias] sequence might have prevented the realization of vowel prosthesis (note that the text is written in inked *scriptio continua*).

The forms with vowel prosthesis in Albertini tablets are quite known (see Väänänen, 1965). It is remarkable that in these texts the insertion is complementary to processes of reanalysis which affect words etymologi-

⁶³ See e.g. *D(is) Manibus s(acrum) [i]n nomine pat[ris] et fili et ispiritus [s]ancti amen Ha[b] etdeu* (IC Maktar 12, 39; Maktar, 2nd-3rd c. AD).

⁶⁴ Note the peculiar spelling <ispromisera>, which could be interpreted as a sort of analogy with the synonym *spondeo*, in which vowel prosthesis is well documented.

⁶⁵ For more details, see MARICHAL (1992, ed.) and ADAMS (1994: 87-112; 2007: 562-565).

cally beginning with *i(n)+sC* and *ex+C* (see below § 5). Note in particular the alternance between *strumentum* and *instrumentum*, *scribsi* and *iscribsi*. Vowel prosthesis in the verb *spondeo* is graphicized in different ways: besides <ispopondit>, the forms <espopondit> and <expopondit> are attested as well. The form <espopondit> coincides with those ones beginning with *ex-(s)C* and then simplified in *es-C* (e.g. *escussi* from *excussi*), and for this reason the hypercorrected spelling <expopondiderunt> is written as well. In this respect, a very interesting parallel is provided by the Ravenna Papyri. In *P. Ital.* 2.35 (539 AD) and *P. Ital.* 2.35 (572 AD), vowel prosthesis is attested before the reanalyzed form *strumentum*, and it is graphicized in different ways: <hinstromentis>, <hissitrumentis>, <histromentis>, <ειστρωμεντις>, <histromentis>, <estromentis> (see Cuzzolin and Sornicola, 2018: 308).

4.3. *Sardinia*

Sardinia shows only four cases of prosthetic vowel, in quite late inscriptions (5th-6th c. AD). This notwithstanding, in relative terms, the phenomenon is attested with a certain consistency (§ 2), since Sardinian inscriptions provide few attestations of word-initial *sC* (see Lupinu, 2000; 2003). Moreover, both the noun *spiritus* and the personal name *Spes* (ant its derivatives) are attested only five times. In (10) the collected forms from Sardinia are shown:

- (10) a. *ispirito* (*CIL* X, 7551; 5th c. AD, Pula)
 b. *Isporte[l]a* (*ILSard* 1, 368, 5th c. AD)
 c. *Istefanus* (*AE* 1971, 135, 6th c. AD, Cagliari)
 d. *Iscribonissa* (*I. Cornus* 72, 6th c. AD, Cornus)

Lupinu's detailed study shows that these testimonia relate to a Christian milieu, as evidenced by a prosopographic and archaeological inquiry. Thus, he hypothesizes that African bishops who had been deported in Sardinia in Vandalic era were responsible for spreading the process in Sardinia. Nevertheless, the scarcity of the documentation does not allow a sure assumption that the phenomenon – which was spread all around the Roman Empire since the 1st c. AD, and even in Greek-speaking area – penetrated Sardinian Latin only with the arrival of these Christian communities in the 5th c. More generally, the idea that vowel prosthesis was a sociophonetic mark of Christian Latin might have been overestimated (see § 5, fn. 68).

4.4. Iberian Peninsula

The new data call into account a different evaluation of the phenomenon in Iberian Peninsula. Actually, in relative terms vowel prosthesis is quite attested, since the first imperial period, such as in the major part of Roman Empire.

A preliminary analysis seems to show that vowel prosthesis is attested in both post-consonantal and post-vocalic environments. The first attestations are provided by a metrical epitaph from Valencia de don Juan (*IRP Leon* 243, 1st-3rd c. AD). This text is not well-finished, and it is characterized by many substandard forms (see e.g. *miserissimi* and *avevamus*), as well as writing mistakes. The insertion appears in the noun *spes* (*in te ispe*) and in the verb *abistulerunt* (see fn. 60). Other forms – mainly personal names – are attested in later inscriptions or of uncertain dating.

A prayer based on *Ps.* 15, in Visigothic cursive, is attested in one inscription from Armenteros (*PizV* 29), datable between the 5th and the 8th c. AD. Even in this text vowel prosthesis does not seem to depend on post-consonantal contexts (see *in te isperabi* and *in ispe*).

A Greek inscription from Myrtilis, dating back to the 6th c. AD, contains the form *ἔσταμινιάς*. As Consani (1999: 84) highlights, this develops from a Latin basis (*i*)*staminia* which has been integrated in Greek morphology (for a parallel example, see *εἰσταβλαρίς* < *σταβλάρι(ο)ς* < *stab(u)larius* from Pisaurum, *SEG* XL 849, 7th c. AD).

5. *Synopsis: theoretical, areal and (socio)-historical issues*

The data which have been analyzed require further considerations at two different levels: on the one hand, theoretical phonological frameworks account for the realization of an epenthetic vowel in *sC* beginning lexemes (§ 5.1); on the other hand, areal and historical observations are needed in order to investigate in diachrony the emersion of vowel prosthesis at the grapho-phonetic level, as evidenced by the collected material (§ 5.2).

5.1. *Theoretical and empirical aspects*

A thorough analysis of the theoretical aspects related with the realization of an epenthetic vowel before *sC* has been already provided by Sampson

(2010). Further considerations based on some writing uses in non-literary texts can be added. The realization of vowel prothesis deals with three main factors: i. syllable structure; ii. phonosyntax; iii. segmental nature of /s/. As known, from a nonlinear phonology perspective, syllable structure is hierarchically organized around a peak of sonority, represented by the Nucleus. Syllable margins may be represented by one or more segments which constitute respectively the Onset (on the left) and the Coda (on the right), with which the Nucleus branches forming the Rhyme (cf. Goldsmith, 1990: 109 ff.; Kenstowicz, 1994: 253 ff.). According to the functional model of Venneman (1988), the segments are disposed around the Nucleus in accordance with Preference Laws. As far as Onset is concerned, the more preferred one complies with the following laws: (a) the closer the number of segments is to one; (b) the greater is its Consonantal Strength value; (c) the more sharply the Consonantal Strength of its elements drops. Actually, typological and acquisitional data show that the prototypical and unmarked syllable has a CV structure (cf. Jakobson, 1962; Blevins, 1995, and, in the framework of Optimality Theory, Prince and Smolensky, 1993).

Some languages do admit deviations from this kind of syllable, and present more complex Onsets, such as C_1C_2 (mainly *muta cum liquida*) and $C_1C_2C_3$ (in the case of /s/ and *muta cum liquida* Onsets). Complex Onsets such as $C_1C_2eC_1C_2C_3$ with $C_1 = /s/$, especially if $C_2 = C_{[-cont]}$, do not comply with the Preference Laws. For this reason, in the theoretical framework of Government Phonology, such clusters are considered heterosyllabic, with /s/ in Coda of a subjacent syllable with an empty Nucleus (cf. Kaye, 1992; Marotta, 1999; Marotta, 2016), whereas in phonosyntax, if the previous syllable is an open one, /s/ is to be considered as the Coda of the preceding Nucleus.

Phonological processes may occur in order to simplify such complex clusters, namely deletion ($C_1C_2V \rightarrow C_1V / C_2V$) or vowel insertion ($C_1C_2V \rightarrow C_1VC_2V / VC_1C_2V$). Latin historical phonology shows a general drift towards the simplification of syllable margins (cf. Weiss, 2009: 158 ff.). In case of *sC* clusters, phonological processes occur especially when a *sC*-beginning lexeme is in a post-consonantal position, in both internal and external sandhi, because this distribution potentially leads to the creation of a $C_{1(\#,+)}C_2C_3(C_4)$ cluster. In this case, documentary data show either a C_1 deletion (see e.g. *constituo* > *costituo*, *inscribo* > *iscribo*) or the insertion between C_1 and C_2 of an epenthetic vowel which, before /s/, is coarticulatorily realized as [e, i, i] (see e.g. *instare* > *inistare*, *in statuam* > *in istatuam*). In case of more complex sequences such as $\#C_1C_2C_3V$ metathesis between C_3 and

V is attested as well: see e.g. ἰσταρτηγα (*SEG* XV 850), *ispeldido* (CIL VI 31850) and εστορμεντις (*P. Ital.* 2, 37).

The surfacing of vowel prosthesis is symmetrical and converging with the outcomes of word-initial in_+sC , $ex_+(s)C$ and V_3C (cf. Lausberg, 1971: § 356; Sampson, 2010: 57-58), thus creating a sC word-initial phonological pattern. In (11) some examples are shown:

- (11) a. $\#V_3C > \# \emptyset sC \sim \#[e, i, i]_sC$
Hispania ~ *in Spaniam* (*AE* 1947, 148); Lat. *escaria* ~ *iscaria* (*Folium Parisinum*) (<*scaria, cf. It. *scaròla*); *Asclepia* (CIL X 6054) ~ *Sclepia* (CIL VIII 3818) ~ Ἰσληπία (*SEG* VI 373)
- b. $\#in_+sC > \#isC > \# \emptyset sC \sim [e, i, i]_sC$
strumentum ~ *istrumentum*, *scribo* ~ *iscribo* (Albertini tablets, Ravenna Papyri, § 4.2)
- c. $\#ex_+(s)C > \#esC > \# \emptyset sC \sim [e, i, i]_sC$
exspectare ~ <*measpec[t]emus*> (*CEL* 146)

The case (11a) concerns aphaeresis of an etymological vowel before sC , with subsequent vowel insertion (see Lat. *historia*, It. *storia* ~ *in istoria*). The cases (11b) and (11c), which feed (11a), call into account also morphological considerations. Phonetic developments of /ns/ and /ks/ clusters lead to $[i,e]_sC$, with the opacization of morphemic boundaries. This result in fact is identical to a sC -beginning lexeme with prosthetic vowel. For such a reason, vowel prosthesis is written with hypercorrect spellings with *ex-* and *ins-* as well (see *Exstefaniae*, *ICUR* II 5066 and *hinstromentis P. Ital.* 2.35)⁶⁶. It is worth noticing that the cases (11a, 11b, 11c) are particularly widespread in Africa and are attested since the 1st c. AD as well: this could be interpreted as a clue that prosthesis, aphaeresis and reanalysis surface together as complementary processes (see Adams, 2016: 635), and a further analysis in this sense is still needed.

The insertion of a prosthetic vowel before /s/ in sC clusters would thus account for the heterosyllabicity of /s/ (Marotta, 2016: 487). Further considerations in this sense are needed, taking into account on the one hand the Romance data, and on the other hand some peculiar writing uses which emerge in non-literary Latin texts. First of all, from a geolinguistic perspective, vowel prosthesis is actualized in those Romance areas in which final

⁶⁶ See the examples provided by SCHUCHARDT (1866-1868, II: 337-365) and ERNOUT (1954).

consonants are still kept (Weinrich, 1958: 232; Lausberg, 1971: 295-297): an epenthetic vowel is developed between final consonant a word-initial sC, and /s/ is associated with the Coda-position. Similarly, in Italian literary tradition, as well as in some Tuscan varieties, the prosthetic vowel is usually inserted after consonant (see fn. 1), and in Standard Italian words beginning with sC require the allotrope *lo* of the determinative article, instead of the consonant-ending *il* (cf. Marotta, 1993; 1995). Furthermore, outcomes such as *it. fĕsta* “feast” (< FĔSTA), in which /Ĕ/ is not diphthongized, shows that the syllabification was *fĕs.ta*.

Textual evidence of non-literary Latin texts clearly shows a tendency of preconsonantal /s/ to be associated with the Coda-position. Besides the data provided by vowel prosthesis, other phenomena should be taken into account. First, the sibilant and the following consonant are often divided at the end of the line (see e.g. <Rus | tici> in *CIL* VIII 12115). An even more cogent clue is provided by the use of syllabic punctuation (see e.g. <IS·PE·RA·BI> in *CIL* X 8189 and <ΙΣ·ΠΗΡΑΝΤΙΑ>).

Secondly, preconsonantal /s/ is often geminated, see e.g. <Antissia> (*CIL* VI 11920), <Callistrato> (*ICUR* VIII, 21708), <resscribere> (*T. Vindol.* 645)⁶⁷. Such spellings, which are attested also in non-literary Greek (e.g. <Ἀβάσκαντος> *IG* II² 2240), as well as in Oscan (e.g. **passtata** “porticum”, cf. Buck, 1904: § 162), hint that preconsonantal /s/ was somehow attracted by the previous syllable. Indeed, such geminations are particularly attested together with vowel prosthesis (see e.g. <Isstercoria>, *ICUR* III 6932; <Isstabilis>, *AE* 1975, 392; <isspirito>, *ICUR* VI 17165; ἰσστρατιώτης, *I.Did.*7).

This notwithstanding, theoretical frameworks which strictly establish the heterosyllabicity of sC cluster are not always confirmed by empirical analysis, and in some case the *status* of sC cluster is undecidable (Bertinetto, 2004). In fact, Preference Laws concern general and probabilistic tendencies rather than aprioristic rules.

In this respect, it is worth noticing a particular cohesion between /s/ and the following consonant in Latin, as it is clearly evidenced by the fact that anaptyxis is never attested, with the exception of the *testis unus* σιπιριτους, which appears in a Latin *defixio* in Greek script (*Aud.* 270). The form σιτεφ[α]νοφ[ορου]των (*Tit. Calymnii* 112) is of too uncertain reading to be taken into account. One can assume that a left-insertion was favored by

⁶⁷ See COTUGNO and MAROTTA (2017).

inherent properties of syllabic /s/ (Andersen, 1972: 34; Marotta, 1999: 300) and by a morpho-lexical constraint aiming at maintaining a formal identity in *sC*-beginning roots (Sampson, 2010: 71-72).

5.2. *Diachronic and historical aspects*

Textual evidence suggests that the phenomenon was spread all around the Roman Empire since its first attestations, both in SL and KG. Thus, the main questions to take into account are: i. whether such a phenomenon had a polygenetic or monogenetic origin; ii. which language – Latin or Greek – was responsible for triggering.

One can hypothesize that at the beginning the insertion of vowel prothesis was a phonetic natural process, relating to speech chain and speed and speaker's morpho-lexical awareness of the word phonological form. In order that such a phenomenon is coopted into the grapho-phonetic and phonological levels, some conditions occur which single out sociolinguistic aspects as well. Looking at the data from a diachronic point of view, it is quite evident that at the beginning the insertion is sporadic and emerges in polygenetic points in which the graphemic and phonological levels are weaker, namely in loanwords (especially with heterography) and in words whose phonological structure is particularly permeable to the development of the epenthesis. As a matter of fact, the earliest attestation is <TOEISTH/ΦANON> (= τὸν εἰστέφανον, *IG XIV 654*), inscribed upon a golden crown and datable around 300 BC. This refined artifact was discovered within a grave in the site of Serra Lustrante, where Magno-Greek culture was penetrating. This text has been accurately studied by Consani (1995; 1996; 1999; 2006), who hypothesizes that it has been written by an Oscan L_1 speaker with Greek L_2 . Therefore, linguistic interference sheds light on an episodic fact which will surface in Latin-Greek diasystem during the imperial period.

As regards Latin, the first attestations concern non-native elements: vowel prothesis appears at the beginning in the personal name *Smyrna* (1st c. BC). In this case the synchronicity of two conditions, namely a foreign name not fitting in Latin phonological system due to /sm/ cluster and the spread of such a name due to social factors favored the surfacing of vowel prothesis. Slightly later (1st-3rd c. AD), in the Greek-speaking areas, phonetic spellings emerge in words referring to military life, trade and everyday lexicon (ἰστρατιώτης, ἰσ[το]πενδίω, ἰστατήρα, εἰσκότλα, εἰσπύλλα). On the other hand, Latin words which appear to be permeable since the 1st c. AD to

the development of vowel prothesis are *spes* and *scis* (if the reading of *CEL* 79 is right). The force impressed in the pronunciation of these monosyllables could have favored the syllabicity of /s/, with the subsequent metrical restructuring of the word. In the case of *Spes* the insertion is simultaneous with a metaplasm of flexion (*Ispes, -tis; Ispes, -nis*).

From the 3rd c. AD, it is likely that this process was more integrated within the phonology of the Latin-Greek diasystem. It is particularly attested in Rome, Asia Minor and Northwest Africa, which were the areas with the highest demographic consistency and cultural liveliness: the contact between these areas determined the circulation of persons (and anthroponyms) and religious doctrines (the main episcopates were therein)⁶⁸. Some evidences from Rome and Asia Minor suggest that the process was regulated according to prosodic and phonotactic constraints; on the other hand, Northwest Africa and Iberian Peninsula show a tendency to extend vowel prothesis in all contexts.

From the 5th-6th c. AD an isogloss linking Northwest Africa, Sardinia and Iberic Peninsula is evident, foreshadowing the Romance developments. It is likely that in Iberian Peninsula the process was so extended to all *sC*-initial words that the subjacent form of the word changed, as it might be inferred by two paraetymologies provided by Isidorus (12), in which the words *scurra* and *scarus* are matched with *esca*.

- (12) a. *Iscurra vocatur, quia causa escae quempiam cosectetur.* (10, 152)
 b. *Escarus dicuts eo, quod escam solus ruminare perhibetur.* (12, 6, 30)

⁶⁸ Nevertheless, a direct connection between vowel prothesis and Christianity, highlighted by Schuchardt and Prinz, might have been overestimated for two main reasons. As a matter of fact, Christian Rome inscriptions are particularly abundant around the 3rd-5th c. AD and it is just in this period that vowel prothesis appears to be more documented and phonologically productive, being nevertheless attested in non-Christian documents as well. Secondly, many lexemes involved in the definition of Christian lexicon and onomastics begin in fact with *sC*, such as *spes* (and the personal names *Spesindeus, Spesina* etc.), *spiritus, Sterculus, Stratonice, Stephanus* etc. However, these lexemes relate to Christianity only from the 3rd c. AD, when theology refunctionalized their meanings: personal names such as *Spes* and *Stephanus* and nouns such as *spiritus*, for instance, are attested at the beginning in non-Christian documents. *Spes* is documented with vowel prothesis since the 1st-2nd c. AD (*CIL* X 754) whereas the first attestation in Christian inscriptions dates back the second half of the 3rd c. AD (*ICUR* VIII 22391). Similarly, the name *Stephanus* became a Christian name around the 3rd c. AD, due to both the cult of the protomartyr (KAJANTO, 1963: 97) and the assumption of this name by an influent Bishop of Rome (Pope Stephanus I, 254-257 AD). On the other hand, the fact that many words related to Christianity begun by chance with *sC* and that Christianity became from the 4th c. the official religion could have feed the process in terms of lexical frequency.

On the other hand, in the Greek part, after the division of the Empire and especially the Gothic war, which determined the separation between the Latin-speaking and the Greek-speaking worlds, vowel prosthesis is no more attested.

A final important question to dwell on is which language, whether Latin or Greek, was responsible for triggering. On the one hand, the first attestation appears in Greek, on the other hand, Latin examples are more numerous and continuous. It could be assumed that Latin and Greek, who had been always in a strict contact⁶⁹, had the same predisposing factors in the development of vowel prosthesis, due to both a structural affinity and the naturality of the process itself. Actually, vowel prosthesis is attested in situation of intense interference not only at the lexical level, but also at the morphological and morphosyntactic one, as Consani (1999) highlights. Nevertheless, quantitative data, chronology and the analysis of the linguistic material suggest that the grapho-phonetic and phonological surfacing of the phenomenon was triggered by Latin, as a consequence of social and historical events. Moreover, one cannot rule out the hypothesis that in those areas where Aramaic, NeoPunic and Libyan languages were spoken, the pronunciation of Greek and Latin words with initial *ɣC* by a *L*₁ speaker of those languages could have converged in a positive transfer with the Latin and Greek forms with vowel prosthesis.

6. *Conclusions*

This study aimed at providing a synoptic analysis of the phenomenon of vowel prosthesis in word-initial *ɣC* both in SL and KG, in the line of Dressler (1965) and Consani's (1999) perspective. The collected data, which integrate all the documentary sources, bring a not insignificant quantitative update, which shows an areal phenomenon and allows the reconsideration of some aspects: in particular, the process results to be more widespread in Iberian Peninsula than is usually supposed, especially in relative terms; on the contrary, in Asia Minor KG the frequency of vowel prosthesis is not so high. An overall analysis of the Greek documentation allows to hypothesize that vowel prosthesis in KG was triggered by Latin and that the substrate hypothesis (Phygian, Aramaic, and African dialects) is to be revised. It can be generally

⁶⁹ For Latin and Greek contact, see e.g. ADAMS (2003) and LORENZETTI (2014a; 2014b).

assumed that a natural euphonic process of both Latin and Greek turned out to be integrated in the Latin-Greek grapho-phonological diasystem during the Imperial period and that Latin was mainly responsible for spreading it even in those Eastern territories in which Latin element is generally only inferred. This phenomenon is particularly documented in African Latin, both in relative and absolute terms, and it is likely that such an area was one of the points of major innovation and diffusion of the process, especially in Sardinia and Iberian Peninsula (see Pellegrini, 1978; Fanciullo, 1992; Lorenzetti and Schirru, 2010).

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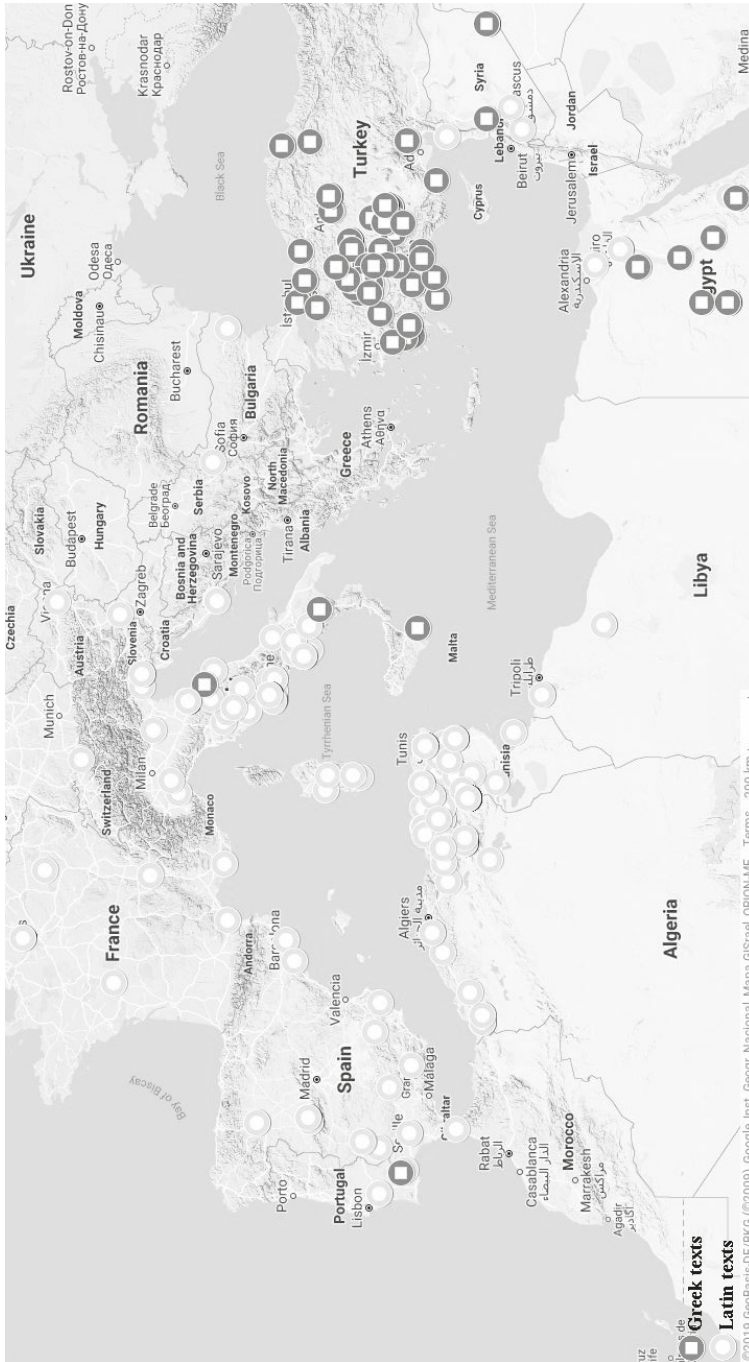


Figure 2. Geolinguistic overview of the attestations of vowel prosthesis in Latin and Greek (1st c. BC-8th c. AD).

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