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Sommario

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Ricordo di Romano Lazzeroni

A pochi giorni dalla scomparsa, *Studi e Saggi Linguistici* ricorda Romano Lazzeroni, Professore Emerito presso il Dipartimento di Filologia, Letteratura e Linguistica dell'Università di Pisa, a lungo docente di Glottologia e di Sanscrito, maestro illustre, spiritoso e mai banale, figura di spicco della linguistica storica pisana nel panorama nazionale e internazionale.

I suoi primi articoli comparsi su SSL del 1962 (*Sibilanti indoeuropee e sibilanti ittite* e *Le più antiche attestazioni del nominativo plurale in -as in latino e la provenienza dei coloni pesaresi*) così come l'ultimo del 2016 (*Statività e modalità: i modi del perfetto*) ben compendiano il profilo di uno studioso che, con estrema lucidità ed ammirevole capacità di sintesi, ha saputo riesaminare questioni di linguistica greca, latina, italica e indiana in una prospettiva non tradizionale e alla luce della riflessione teorica contemporanea.

Nel corso dei decenni, il nome e l'opera di Romano Lazzeroni hanno scandito e accompagnato la storia della rivista. Collaboratore costante in veste di autore, è stato a lungo membro del Comitato Scientifico di *Studi e Saggi Linguistici* e ne ha quindi assunto la Direzione dopo la morte di Tristano Bolelli.

Dopo il volume dedicato agli atti del convegno in memoria di Tristano Bolelli (2002-2003), mi volle cooptare nella Direzione della rivista. Ne fui onorata ed anche intimorita: Romano rappresentava per me – come per molti – l'acutezza del pensiero e lo spirito critico personificati.

La collaborazione si è rivelata una delle esperienze più positive della mia vita professionale recente. I nostri incontri, dedicati a valutare preliminarmente i saggi pervenuti in redazione, selezionare di conseguenza i possibili revisori, decidere la sorte degli articoli, si trasformavano con naturalezza in occasioni di confronto scientifico dai quali ho avuto modo di imparare molto, sia sul piano dei contenuti che su quello del metodo.

Da ricercatore curioso qual era, ha convintamente sostenuto l'apertura della rivista verso tutti i settori della disciplina linguistica. In anni che hanno visto una profonda riorganizzazione delle sedi di pubblicazione, Romano Lazzeroni ha contribuito a consolidare la posizione di *Studi e Saggi Linguistici* nel campo delle riviste scientifiche nazionali e internazionali.

Lo ha fatto recependo con un approccio critico e mai passivo i vari criteri di scientificità di volta in volta proposti, nella ferma convinzione che, per una rivista che intenda essere utile strumento di ricerca, i soli ed imprescindibili punti di riferimento debbano essere l'originalità, la qualità e il rigore scientifico dei contributi editi.

Su questa stessa linea da lui tracciata intendiamo continuare a muoverci.

Giovanna Marotta

Pisa, 8 gennaio 2020

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Saggi

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Lexical subordination and compounding
Pāṇini's focusing on the non-head

Maria Piera Candotti, Tiziana Pontillo

Abstract

In modern linguistics since American Structuralism onwards the notion of 'head' as 'the most important unit' has been the main target of the analysis devoted to syntagms and compounds. This notion nevertheless has some serious drawbacks, which are increasingly discussed from different points of view and methodologies in recent studies. In this paper we try to face some of these issues by interpreting them in the light of Pāṇini's marked choice of concentrating on the 'non-head' constituent of complex words – precisely on the *upasarjana*. Pāṇini's approach is here submitted to the attention of modern scholars by virtue of its accounting for the undeniable crucial role of the subordinate element whose specifying function with all its lexical and figural strength prevails over the identifying role of the head with which it combines.

KEYWORDS: head, subordination, frozen case, *upasarjana*, Pāṇini.

1. *Aims and limits of the analysis*

This paper is dedicated to an analysis of Pāṇini's account of lexical subordination phenomena, with special focus on derivation and compounding[1]. The topic is of course crucial in most linguistic descriptions and Pāṇini's *modus operandi* is particularly worth a close scrutiny since it is radically different from the common approaches in modern linguistics. Our intent is thus to single out – from a definite linguistic angle – some important features of Pāṇini's description and interpret them in comparison with some well-known contemporary lexical and semantic theories. By doing this, more than attempting an evaluation or rating of any of these theories, our aim is to use comparison as a way of highlighting the linguistic and broader philo-

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[1] This paper is a joint work discussed and shared in its entirety by both authors. Maria Piera Candotti, however, is directly responsible for §§ 1, 2.1, 2.3, 3, 3.2, 4.1, and Tiziana Pontillo for §§ 2, 2.2, 2.4, 3.1, 4, 5. All translations are the authors', unless explicitly stated.

sophical implications of theoretical choices. Rigorous comparison, calls for interpreting differences «au sein même des ensembles dont elles font partie»[2]: only by recognising the inseparable link of each point of difference with the system that originated it we can bridge the gap between different cultural products and make comparison significant. We hope that what follows will trigger a deeper comprehension of Pāṇini's account of subordination phenomena in its linguistic, rhetoric and broader philosophical implications and provide some tools to uncover assumptions and repercussions of contemporary theories on subordination. A clearer awareness on such issues is, in our opinion, what must be principally desired from history-of-the-subject and comparative studies.

2. *Contemporary linguistic insights*

When it comes to describing subordination phenomena, a crucial syntactic and semantic principle of analysis in modern linguistics is that of 'headedness'. In particular, from American Structuralism onwards and especially in the contributions of generative morphologists, this has been the main target of the analysis devoted to compounds. In its earliest occurrences – as for instance in the very first study, i.e. in Bloomfield's *Language* of 1933, the notion of headedness actually concerns all kinds of syntactic constructions, including «two (or sometimes more) free forms combined in a phrase» (Bloomfield, 1933: 194) among which compounds. In a subordinative endocentric syntagm such as e.g. *poor John*, it defines that constituent «whose form-class is the same as that of the [resultant] phrase»(Bloomfield, 1933: 195). Bloomfield then uses this notion to identify the category of exocentric compounds, constructs, and phrases as those constructs whose resultant superior unit does not belong to the same form-category of any of the constituents. But he considers that «the exocentric constructions in all languages are few» (Bloomfield, 1933: 195)[3].

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[2]   As already pointed out in BIARDEAU (1964), a pioneering attempt to put in dialogue the philosophy of language of the Sanskrit tradition with Western philosophy and linguistics.

[3]   As examples from the English language he proposes the agent action construction (*John ran*) and cases of syntactic subordination: *if John ran*. Of course, from the point of view of Sanskrit, such a statement is at best a bit hurried: at least the productivity of the *bahuvrīhi* compound, envisioned as an alternate form of a syntactic construct, makes it difficult to relegate it to a marginal phenomenon.

Thus, and this is particularly important for our discussion, headedness became the basis of the common current distinction between endocentric and exocentric compounds, i.e. between compounds in which one or none of the respective constituents may be regarded as «the most important unit» in the syntactic unit (Scalise and Fábregas, 2010: 110; Bauer, 2012: 348)[4]. It is important to point out how, in these more recent studies, the focus for the identification of the head has shifted from a word-class, functional criterion to a semantic and syntactic one. Semantically, the head is defined as the most important unit insomuch that it is the constituent of the compound which denotes *the same object* that is denoted by the whole compound, for example (to use a classic Sanskrit compound) *vṛkabhayam* is the "fear of wolves" denoting a kind of fear and not a species of wolf. The compound has thus become a hyponym of its head.

Syntactically the head governs the syntactic agreement etc. in the sentence where the compound occurs. For example, a correct sentence (syntactic test) is (1):

(1) *tad*   *vṛka-bhayam*   *ugram*
     this.NOM.N   wolf.STEM.M + fear.NOM.N   mighty.NOM.N
     "This fear of wolves is mighty."

where the agreement of the pronoun *tad* and of the nominal predicate *ugram* in this nominal sentence is governed by the head *bhayam* "fear".

2.1. *Identifying the head of a compound*

A number of proposals have been made on how to identify the head of a compound[5]. The criterion of position was soon discarded, since it is actually a parameter depending on the single languages (Lieber, 1981; Selkirk, 1982). For example in Germanic languages the compounds are generally right-headed (e.g. Engl. *rock band*; Germ. *Rockband*) *versus* left-headed compounds in Romance Languages (It. *gruppo rock*). Moreover, we can add that even within the same language, the position of the

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[4] Nevertheless, as will be discussed below § 2.3 a strict relationship between the definition of exocentricity and that of headedness does not work fully satisfactorily in all cases. Or better, different ways of identifying the head may lead to different judgements on the exocentricity or endocentricity of the construct.

[5] For a classic list of parameters adopted for identifying the head of a syntactic structure see e.g. SCALISE and VOGEL (2010: 8).

head may be subject to numerous exceptions (2a) as against the default word order (2b):

(2a)   Skr. *naravīra-* "man-hero"   →   "heroic man"
(2b)   Skr. *vīrapuruṣa-* "hero-man"   →   "heroic man"[6]

Thus, several other criteria have been used for the identification of the head. One of the most widespread and fruitful consists in concentrating on what is known as 'percolation', i.e. the transmission of the properties of one constituent to the whole compound. As a consequence, the head in a compound is the constituent whose properties are transmitted, by means of this so-called percolation, to the whole compound. In particular, different theories focused on several different linguistic properties to be transferred. We can thus speak of the percolation of:

– the grammatical category (cf. Lieber, 1981):

(3)   *utpalam*   →   *nīl(o)tpalam*
      "Nymphaea.NOUN"   "blue.ADJ" + "Nymphaea.NOUN" = NOUN

– the morphological features (cf. Booij, 2007), such as gender:

(4a)   *utpalam*   →   *nīlotpalam*
       "Nymphaea.N"   "blue Nymphaea.N"
(4b)   *dāru*   →   *yūpadāru*
       "wood.N"   "sacrificial post.M" + "wood.N"
                        = "wood for the sacrificial post.N"

– the semantic type (cf. Allen, 1978):

(5a)   *utpalam*   →   *nīlotpalam*
       "Nymphaea"   "blue Nymphaea"
       hyperonym   hyponym of *utpalam*

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[6]   The example *naravīra-* is quoted by Renou (1961: 109). This kind of compounds is variously interpreted by modern scholars, we follow here Renou's interpretation who is more in tune with traditional Pāṇinian interpretation. Renou analyses these compounds as *karmadhāraya* compounds with inverted order of constituents but nevertheless does not deny a specific semantic input as he specifies that «l'inversion apparente des éléments atteste la tendance que ont tous ces composés d'apposition à mettre au dernier terme le nom qui marque la catégorie». As for the postulation of the origin of the Indo-European appositive compounds from the early combination of a proper or common noun with a classifying noun and even with a very early script determinative, see Bauer (2017: 34-61). Traditional grammar already accounted for cases where the position of head and non-head is not the predicted one; see below, § 3.1.

(5b) *dāru*   →   *yūpadāru*
       "wood"   "wood for the sacrificial post"
       hyperonym   hyponym of *dāru*

2.2. *Limits in the concept of percolation*

Yet, none of these 'transferences of properties' works in a fully satisfactory way. Contemporary scholarship has variously pointed out the difficulties stemming from any of the preceding criteria[7] and from the notion of head itself, at least when it comes to the syntactic analysis of compounds[8]. It is not the place here to retrace all the steps of the discussion, it is nevertheless important to highlight at least the major points of difficulty in order to correctly evaluate the import of Pāṇini's proposal. First of all, the percolation of grammatical category does not prove useful in all the, numerous, compounds with words sharing the same grammatical category (see e.g. *yūpadāru*). Moreover, the two most common grammatical categories involved (i.e. substantives and adjectives) are not so easily and straightforwardly distinguished. In fact, the category of adjective itself is quite a recent one in Western studies[9] and its heuristic adequacy in accounting for some languages, including some ancient Indo-European languages and Sanskrit in particular, is subject to question[10]. There has been an increasing awareness, triggered in particular by typological studies, of the difficulties in discovering some commonly shared morpho-syntactic features to discriminate substantives from adjectives[11]. The most relevant

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[7]   See, e.g. Bauer (2014: 18): «Numerous linguists of various schools have tried to find a definition of head; yet no one, as far as I know, has found a single, unambiguous definition that can be used for all grammatical structures».

[8]   See, e.g. the recent lexicalist attempt by Lowe (2015).

[9]   For a history of the birth of this category in Western studies see Alfieri (2014; 2015). Alfieri shows how the tripartite classification we tend to take for granted between (Alfieri, 2015: 361) «the noun meaning the substances, the verb meaning the actions and the adjective meaning the qualities» is not shared by Greek and Latin grammarians who worked with a fundamental bi-partite classification between nouns and verbs, much more similar to the one upon which Pāṇini's grammar is built. Alfieri (2014: 157) also shows how the tripartite approach is deeply linked with a logical/ontological outlook rather than a linguistic one, which characterized the re-interpretation of Aristotle's categories in the Middle Ages: «If language and ontology coincide, as medieval commentators supposed, the same notions should find their expression in all languages and all languages should show the same grammatical categories, the noun, the verb and the adjective».

[10]   See among many others Comrie (1993: 101, 104) for Indo-European studies.

[11]   Cf. the seminal work of Robert Dixon (1982) *Where have all the adjectives gone?* which radically questioned the presence of a class of adjectives in some languages. Such a strong tenet has been partially disavowed in Dixon and Aikhenvald (2004), where the authors suggest that in

of such features, that is the presence of a fixed gender for substantives, is of course relevant only for languages with gender marks and is not fully satisfactory even there[12]. The risk is having recourse to the notion of headedness itself in order to discriminate adjectives from substantives, as done in Hajek (2004: 355: «Adjectives are rarely reported to function as head of the noun phrase. Such a criterion is therefore extremely useful in distinguishing between adjectives and nouns»), which, from our present point of view, ends up in a circular argument.

Last but not least the categories of substantive/adjective are also particularly slippery in the field of semantic studies. If it has been maintained for some time that adjectives are semantically vague (i.e. that they have a semantic gap, a set of elements for which it is not possible to say whether they are part of the denotation or not, e.g. *tall*), whereas substantives are intrinsically 'sharp' (i.e. it is always possible to say whether a given element is part of the denotation or not, such as in the case of the substantive *table*), it is nevertheless hard to consider such a distinction as shell-proof anymore. This is partly due to the development of the so-called semantics of the prototype, which, in its attempt to bridge the gap between semantic and cognitive data, has proved at will the intrinsic vagueness of most of the substantives. By the way – even making an abstraction of the specific tenets of that school – it is a matter of everyday experience that there are adjectives (such as *odd* in the expression *odd numbers*) with a semantic gap tending to zero and that there are also substantives with relevant gaps (*a child*).

In a similar way, even the other features (gradability, dimensionality and so on) used to distinguish adjectives from substantives are not unfailing as there is a consistent number of in-between cases which are hard to account for[13]. We suppose that we can content ourselves with just one example, particularly important for the continuation of our discussion. Adjectives typi-

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all languages there is always some albeit rather subtle-grammatical criteria for distinguishing the adjective from other word classes.

[12]   Consider substantives with gender variation common in many Indo-European languages, such as it. *cavallo* m./*cavalla* f. "horse" vs *cavallo* m./*giumenta* f. Other possible discriminating features may be the use of comparatives or the non-co-occurrence with possessive pronouns, yet none of these identify an adjective class unquestionably. See also BHAT (1994) who claims that while it is improbable that one single discriminating criterion could cover all languages, sets of (interconnected) criteria may prove useful both in differentiating adjectives from other classes (in languages with adjectives as a formal distinct category) and in identifying them with other classes (for languages in which adjectives do not form a distinct category).

[13]   For a good re-discussion of most of these, one can refer to SASSOON (2013).

cally elicit one-predicate comparisons (6a), while substantives are characterized by inter-predicate comparison (6b):

(6a) Engl. *Marc is taller than John.*   but [??]*Marc is more a professor than John.*
(6b) Engl. *Marc is more a professor than a researcher.* but [??]*Marc is taller than thinner.*

Yet some substantives can also generate one-predicate clauses, such as in (6c):

(6c) Engl. *Marc is more a child than John*[14].

When it is possible to express the gradability of a given nominal, as happens in cases such as *taller* mentioned above, it is said that the nominal has an accessible dimension: this is considered a characteristic feature of prototypical adjectives; nevertheless, as shown by the examples above, substantives also have several dimensions which, in some situations, can be accessed and used to measure other meanings, as in the case of *Marc*, measured by his childish behaviour with respect to John. At this point one could even wonder whether there is a category to percolate at all.

The percolation of morphological features from the head to the other constituents, in particular of gender marks (see e.g. *yūpadāru*), presents the same difficulties of the previous one, perhaps even greater. Of course the feature is useless in those languages where no gender mark exists and even within gendered languages there are numerous examples where the feature cannot be used because all the members share the same gender.

Coming now to the third criterion, that is the percolation of the semantic type, it must be pointed out that, in some cases, it conflicts with the other two. For instance, in the Italian phrase *testa di legno* lit. "wooden head", an exocentric structure said of a stubborn person, a still different morphological head may be identified, namely *testa* "head.F", as the matching plural form shows in the following sentence referred to masculine referents:

(7) It. *Sono entrate le teste di legno.*
     "The wooden heads.PL.F entered.F"

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[14] In some languages, such as Italian, this is made even more evident by the absence of the, otherwise expected, article: *Marco è più bambino di Giovanni* vs [??]*Marco è più un bambino di Giovanni.*

The drawback of using the notion of head is particularly evident in the case of the exocentric compounds. Among these we find the well-known 'possessive compounds' (8a, b) such as Engl. *pale-face*, *red-skin*, *paper-back*[15], but also the so-called 'synthetic compounds' (9) such as Engl. *pickpocket*, It. *asciugacapelli* "dry" + "hair" → "hair dryer", in which the first member is given a verbal status, and even co-compounds in which none of the constituents is a hyperonym of the whole compound:

(8a) Skr. *satya-dharmaḥ*
      truth.N + religion.M
      "[Somebody] whose religion is the truth.ADJ.M"
(8b) Skr. *uddhṛt(au)danā*
      taken away.VB.ADJ + rice.NOUN.M
      "[Something denoted by a feminine noun: e.g. *sthālī* "a pan"] from which rice is
      taken away/drawn out.ADJ. F"
(9)   Skr. *mātapitarau*
      "Mother and father = parents"[16]

In all such cases, the compound is not a hyponym of one constituent, i.e. no constituent can be defined a hyperonym of the compound (Štekauer, Valera and Körtvélyessy, 2012: 80). On the other hand, it is not possible to say that there is never an identifiable head inside such compounds: besides the above-mentioned example *testa di legno*, where the morphological head is identifiable, even in compounds such as *red-skin*, internal hierarchy is undisputable, although the hypothetical internal head fails all three tests of percolation[17]. Somehow the whole criterion of percolation cannot be applied so smoothly in case of exocentric compounds, since the status of the head itself is either absent or problematic.

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[15]   While, in all probability, exocentric compounds were originally adjectival formations, and hence they are commonly termed possessive compounds (see e.g. the Germ. term *Possessivkomposita*, referred by THUMB and HAUSCHILD, 1959: 410-412 to both the old Greek *rhodo-dáktulos* and the old Indian *bahu-vrīhiḥ* types), most of the English examples are not (see e.g. BAUER, 2012: 351). Moreover, we should just recall JACOBI's (1897: 83 ff.) intriguing hypothesis according to which *bahuvrīhi* compounds might have played the role of a subordinate (relative) clause inasmuch as such clauses did not exist in the ancient Indian languages for a long time. On the other hand, we know that the relative pronoun could not have been such an early invented device devoted to adding pieces of information to the main sentence or better, merely about a unit included therein.

[16]   This is an example of class-maintaining co-compound, in the sense that noun + noun → noun. Many languages also have examples of class-changing co-compounds, following patterns such as adjective + adjective → noun.

[17]   Cf. BAUER (2008: 58-59). This, by the way, is not restricted to exocentric compounds. It has been noted (see ZWICKY, 1985 quoted by BHAT, 1994: 266-267) that different sets of discriminating features generally identify different constituents as heads in the constructs in which they occur.

2.3. *Limits to internal analysis of compounds*

In terms of Natural Morphology, exocentric compounds deviate from the binary, syntagmatic structure of motivated words, according to which each word-formation syntagma is based on the identification-specification scheme relation, where the *determinatum* identifies and the *determinans* specifies (Kastovsky, 1982: 152). Moreover, as has already been pointed out (Dressler *et al.*, 1987: 102), the most natural coinages are in fact the most diagrammatic ones, where a new meaning is accompanied by a new form. If the new meaning is added to *satya-* + *dharma-*, a new word-form is expected, while there is no additional word-form.

Yet, it is difficult to simply dismiss exocentric compounds as merely a marginal and unproductive category. Some languages, including Ancient Greek and Sanskrit show that the category is consistent and, more importantly, productive[18]. In order to offer a linguistic interpretation of the phenomenon of exocentricity, Whitney (1889: 501-502), followed by many recent scholars[19], postulated a zero morpheme conveying the meaning of 'having', which might diagrammatically represent the additional word-form and convey the additional meaning of the compound. By contrast we know that Pāṇini, even though he made an extensive use of zero-replacements in word-formation patterns, did not involve this device in describing the morpho-syntactic pattern of exocentric compounds.

Instead, the structuralist approach merely inscribes this linguistic phenomenon in the framework of the general tendency of speakers «to see a thing identical with another already existing and at the same time different from it» (Marchand, 1960: 11). Or, to put it another way, that these are examples of cases where the tendency towards the economy of expression overpowers the opposite trend towards the clarity (Ten Hacken, 2012: 358). It is thus not surprising that, among the latest studies on exocentric compounds we find the proposal to interpret most of them as figurative usages of endocentric compounds, be they metonymic or metaphoric. This is explicitly stated by Bauer (2008) as an alternative to the zero-reading:

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[18]   As shown by the two rules A 2.2.23-24 *śeṣo bahuvrīhih / anekam anyapadārthe*, "The remaining compounds are *bahuvrīhi* compounds. [They are] more than one word used in the meaning of another object of word" which teach such exocentric formations almost without restrictions. The rules will be commented on below (§ 4.2).

[19]   See e.g. Kiparsky (1982: 20) and Gillon (2007).

The alternative analysis is to say that there is no zero element at all, and these constructions are not exocentric. Rather they are interpreted according to the figure of speech synecdoche (sometimes called 'pars pro toto'). So *redcap* is a perfectly regular endocentric compound with a right-hand head, but it is interpreted as 'person who is habitually associated with a red cap' in much the same way as *crown* is interpreted as 'person or group of persons who are habitually associated with a crown' in the sentence *The Crown will not impose any charges for the use of its intellectual property.* (Bauer, 2008: 59)

Nevertheless this choice of interpreting the phenomenon of exocentricity on purely rhetoric grounds is not without flaws, considering that there exist at least some room for morphology in some languages, as testified by the retraction of accent that characterizes *bahuvrīhi* compounds in Sanskrit and by the marginal use of suffixed forms alternating with pure compounds.

2.4. Determinans *vs* determinatum*: fuzziness in the construction of meaning*

The semantic notion of heads shows some drawbacks also from the point of view of a more cognitive-oriented approach. The *determinatum/ determinans* relation, which is intimately connected with the analysis of the head as percolating its own semantic type to the meaning of the integrated form[20], has some limits in terms of its potential in describing the process of construction of meaning. Of course, the pattern remains a crucial means for the speaker (to stay with Sassoon, 2013: 55 based on Hampton, 1987) «to generate a gradable interpretation for the infinitely many possible complex expressions in language»[21], nevertheless it does not fully exhaust the description of the creation of complex/integrated meaning. Although the dimension set (that is the set of characterizing features) of the modified nouns is largely predictable from the union of the sets of the parts, yet,

– some dimensions fail to be inherited; in *male nurse* the dimension [+ feminine] of *nurse* is not inherited by the whole syntagm;
– other dimensions only characterise the whole and are not found in the parts: *pet birds*, for example, prototypically live in cages, a dimension

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[20]   See Kastovksy (1982) already quoted (§ 2.3).
[21]   As the author points out this allows the comprehension also of partially contradictory constructs such as *being red or white* or *male nurse*.

which does not come either from the notion of *pet* or from the notion of birds[22].

Therefore it is not possible to represent the construction of meaning as unidirectional and compositional, since all the meanings in an integrated form interact and modify each other. Even in simple cases such as "the blue Nymphea", as Sanskrit grammarians perfectly knew, there is no pure *determinatum* and pure *determinans* as both meanings modify each other: blueness is characterised as residing in a flower and the flower as being blue (see below, § 3.4). On the other hand, if one must find a predominant function in the construction of meaning, it should be that of the determinant since it has been proved that typicality ratings in modified nouns correlate more strongly with their rates in the modifier than in the head noun (Sassoon, 2013: 60): typicality ratings in *a man who is a liar* correlate more strongly with the dimensions of *liar* than with the dimensions of *man*. In other words the modifier plays a more crucial role in the construction of the final, integrated concept: *man* might be the hyperonym of the modified noun (a kind of man) but *liar* is crucial in identifying the specific referent.

This survey is not meant to be exhaustive. Nevertheless we hope that some points do emerge clearly and before moving on to the study of subordination phenomena as tackled by Pāṇini's grammar we would like to spell out some of them. First of all it seems necessary to highlight the ontological bias on the question of headedness in Western studies and its usage in classifying linguistic phenomena of subordination: the head is «the most important element» inasmuch as it determines the element in the real world denoted by the phrase or syntagm. We have seen how such an interpretation, which is strictly linked with the development of the recent, problematic, categories of noun and adjective, has shown some limits and, what is more, has not proved to be always consistent with the other means of identifying the head. On the other hand from the point of view of semantics and cognitivist research there has been an increasing awareness of the role of the so-called subordinate element in the construction of meaning. A second point of interest is the growing debate around endocentricity and exocentricity as a means to classify compounds and the tendency to interpret exocentricity

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[22]   For a discussion of this and other data concerning the inheritance of attributes in natural concepts see HAMPTON (1987).

more as a function of the whole word than as a result of the internal analysis of the compound and of the identification of the head.

3. Upasarjana *as a means to describe subordination phenomena*

We shall now turn to Pāṇini's description of compounds, which is constructed upon the concept of *upasarjana*, literally denoting the "action of pouring [something] upon [something else]". In other words, his analysis and the consequent classification of compounds does not focus on the head, but rather it relies on the non-head of each compound.

Pāṇini defines the concept of *upasarjana* in two rules, linked to each other through the copulative conjunction *ca*. The first rule simply states that each time Pāṇini identifies the *upasarjana* in the rules themselves by stating it in the nominative:

(10)   *prathamānirdiṣṭaṃ samāsa upasarjanam* (A 1.2.43)
       "What is stated by means of the first ending in a compound-[rule] is called *upasarjana*."

This is a metarule that has to do with the interpretation of Pāṇini's frame to teach compound. The analytical frame through which most of compounds is presented is *X*.NOM. + *Y*.INSTR. As a consequence, e.g. in (11) we know that the *upasarjana* costituent is the inflected word denoting a qualifying property, because it is inflected in the nominative case in the specific wording of the relevant rule.

(11)   *viśeṣaṇaṃ*   *viśeṣyeṇa*   *bahulam* (A 2.1.57)
       qualifying.NOM   qualified.INSTR   variously.ADV
       "[An inflected word denoting] a qualifying property variously combines with [an inflected word denoting] a qualified [object, to form a compound]."

Nonetheless, there are compound-rules where, if Pāṇini were to content himself with this single definition rule, problems would arise. For instance, in (12a) the units which are mentioned in the nominative, namely the indeclinables, *ku*, *gati*, *pra*, *ati*, *nis* etc., are in fact *non-upasarjana*s.

(12a) *ku-gati-prādayaḥ* (A 2.2.18),
       "[The indeclinable *pada*] *ku*- and the units termed *gati* (A 1.4.60) or included in the list beginning with *pra*- (A 1.4.58) [compulsorily combine with an inflected word, to form a *tatpuruṣa* compound]"

To content ourselves with a traditional example, in (12b) it is quite evident that the indeclinable particle *nis-* (expressed in the nominative) cannot be the *upasarjana* of the compound.

(12b) *niṣ-*   *kauśāmbiḥ*
      out of.PREV   Kauśāmbī.NOUN.F
      "[Somebody who has departed] from [the town named] Kauśāmbī.NOUN.M"

This is clarified in the traditional analysis of the compound as (12c):

(12c) *nis-*   *krāntaḥ*   *kauśāmbyāḥ*
      out of.PREV   gone.PPP.NOM.M   from Kauśāmbī.ABL.F

Thus, the second definition rule states that the *upasarjana* is recognizable even when it is not stated in the nominative and it does not occupy the first slot of the compound[23]:

(13) *ekavibhakti cāpurvanipāte* (A 1.2.44)
      "And what has one single ending, even when it is not in the first place [is the upasarjana]."

Independently of the case ending which applies to the resultant compound when it is used in a sentence – case ending which matches that of its head in the constituent analysis[24] – the non-head constituent is fixed once and for all. Again, following the traditional analysis, we can see how in the example in Table 1 *niṣkrāntaḥ* is inflected in different cases while *kauśāmbyāḥ* remains unchanged.

niṣkrāntaḥ "A departed.NOM"		→ *niṣkauśāmbiḥ* "[A man] coming from Kauśāmbī.NOM.M"
niṣkrāntam "A departed.ACC"	*kauśāmbyāḥ* "from Kauśāmbī.ABL.F"	→ *niṣkauśāmbyam* "[A man] coming from Kauśāmbī.ACC.M"
niṣkrāntena "With a departed.INSTR"		→ *niṣkauśāmbinā* "With [a man] coming from Kauśāmbī.INSTR.M"[25]

Table 1. *Compound with frozen case in second position.*

[23] The present reading of the two rules simultaneously – already advanced in PONTILLO (2003) – partially deviates from traditional interpretations, but it seems to solve both the supposed 'redundancy' of *ca* and the asserted mis-positioning of 1.2.44 which JOSHI and BHATE (1983: 217) indicated as a difficulty.

[24] The so-called *vigraha*, according to the indigenous current grammatical analysis.

[25] Example from KV on A 1.2.44.

The last condition enunciated in the rule ("when it is not in the first place") self-evidently refers to a quite common feature of endocentric Indo-European compounds, which is also clearly explained in another group of rules, which actually consist of one general rule and two exceptions: the default location for the non-head constituent is the first slot in a compound (14), whereas the reverse positioning must be accounted for by specific exception-rules such as A 2.2.31 and 38 which teach the second position for the *upasarjana* in restricted cases.

(14)   A 2.2.30 *upasarjanaṃ pūrvam*,
        "A constituent termed *upasarjana* is placed first [in a compound]."

3.1. *The morphological role of* upasarjana

The *upasarjana*-status of constituents is involved in establishing some crucial morphological restrictions in Pāṇini's formation of nominal compounded or derivational stems, which go far beyond the simple parameter of position, as the following actually productive rules clearly show:

(15)   *go-striyor upasarjanasya* (A 1.2.48)
        "[The final vowel of a nominal stem is replaced by a short vowel] when the nominal stem ends in the word *go* or in a feminine-affixed word, provided that these words are termed *upasarjana*s."[26]

This is why the final vowel of the above-mentioned example (*niṣkauśāmbi-*) is short, even though its etymon is a feminine word ending with a long vowel. Conversely, another set of provisions headed by A 4.1.14 concerns on the other hand constituents which are not *upasarjana*.

For instance, A 4.1.15 teaches to apply a feminine derivational affix *-ī* to several kinds of stems, including the primary derivative nominal stem *-cará-* "who wanders". Accordingly, the feminine affix *-ī* actually applies e.g. to the feminine nominal primary derivative stem *kuru-car-ī-* "wandering in the Kuru country.F", while it does not apply to the feminine nominal stem *bahu-kuru-carā-* "city (*nagarī*) where there are many wanderers from the Kuru country.F", where *cara-*, as a member of a *bahuvrīhi* compound, is an *upasarjana*.

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[26] Two examples offered by commentaries are *citraguḥ* "having brindled cows" as opposed to *gokulam* "a herd of cows" and *niṣkauśāmbiḥ* "who has departed from Kauśāmbī" vs *rājakumarīputraḥ* "son of a princess".

Similarly, A 4.1.54 teaches an option between the derivational feminine affix *-ā* and *-ī* for a specific set of nominal stems playing the role of *upasarjana*s. Accordingly, this option applies to the *upasarjana* compound nominal stem *candramukhī- / candramukhā-* "moon-faced", but not to the negative *tatpuruṣa* stem *aśikhā-* "without crest", where neither *śikhā* nor *aśikhā* are *upasarjana*s[27].

Some other rules (e.g. A 6.2.104) show how *upasarjana* is a technical term which also indicates the non-head constituent in secondary derivation.

(16) *pūrvápāṇinīyāḥ*
      "ancient disciples of Pāṇini"
      (*pāṇini-* is the *upasarjana* of the *taddhita* derivative stem *pāṇinīya-* "disciple of Pāṇini")

      To sum up, *upasarjana*:
a.   is a constituent in both compounding and secondary derivation,
b.   has fixed position in the syntagm, mostly the first place, i.e. the left-hand constituent,
c.   may trigger some specific morphological rules,
d.   has no syntactic valency outside the compounded/derivational stem, because its 'activity' is exhausted inside the syntagm.

It is only in this perspective that *upasarjana* – which is consistently not defined on semantic grounds in Pāṇini's grammar – is 'a subordinate constituent', namely because it is not independent at the morphological and syntactic level. And this is indisputably true, even though that same 'subordinate constituent' is essentially active in the construction of the final meaning of the resultant (compounded or derived) nominal stem.

3.2. Determinans *vs* determinatum *in Pāṇinian grammar*

As we have seen, the *upasarjana* is thus principally identified in Pāṇini's grammar through morphological and syntactic features. At this point one could wonder whether there is a role for semantics in the comprehension of linguistic subordination or, in other words, what possible

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[27] Negative compounds (*nañ-tatpuruṣa*) are classified by Pāṇini (A 2.2.6) as *tatpuruṣa* with only the first constituent (the negative particle itself) as *upasarjana*.

role the opposition *determinans/determinatum* plays in accounting for subordination. Early commentators were already aware of the difficulty of singling out the specific features of these determinant constituents, as is already apparent e.g. in Kātyāyana's comment on the inefficiency of the principle of distinction between a qualifying and a qualified word in compounds whose order of constituents is admittedly liable to an extended optionality, as established in the above-mentioned rule A 2.1.57 (§ 3). In fact, the classification of one of the constituents as an *upasarjana* derives from the enunciation of the term *viśeṣaṇa* in A 2.1.57 in the nominative case (A 1.2.43: see above § 3), but Kātyāyana defined it as an "unsettled matter":

"Because of the condition of being a determinans proper to both, the determinans and the determinatum, and because of the condition of being a determinatum, again proper to both, there is no certitude in establishing [which one is] the *upasarjana*."[28]

In compounds where the two members pertain to the same lexical category, for example where both are nouns, such as (16a, b) the analysis is indeed intrinsically ambiguous.

(16a)　*mukha-candra-*
　　　　face.STEM.N + moon.M
　　　　"face-moon.M"
(16b)　*rājarṣi-*
　　　　king.STEM.M + seer.M
　　　　"king-seer.M"

Is *mukhacandra* a shining and round feminine face envisioned as a moon (a moon-face) or a moon which is so fascinating that the poet dreams of his female partner's face? And what about the compound *rājarṣi-*? Is he a real king or an extraordinary (literally kingly) ascetic man? Is he an ascetic who plays the role of a leader or a leader who behaves as if he actually were an ascetic? But, as already emphasized in Candotti and Pontillo (2011: 73-74) such a decision is not even plain when one word which is generally used to denote a substance combines with another one denoting a quality, as happens in (16c) where everyday usage blocks the order of *padas* in the form

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[28]　M 1.399 ll. 4-5, Vt. 1 *ad* A 2.1.57: *viśeṣaṇaviśeṣyayor ubhayaviśeṣaṇatvād ubhayoś ca viśeṣyatvād upasarjanāprasiddhiḥ.*

kṛṣṇa-tilāḥ, whereas the relationship between *determinans* and *determinatum* does not allow to identify a unique *upasarjana*[29].

(16c) *kṛṣṇa-tila-*
         black.ADJ + sesamum.NOUN.M
         "black sesamum.NOUN.M"

A determined (qualified and/or identified) utterance is regularly the output of a dynamic relation between two constituents, even when the surface linguistic structure only includes one of the two constituents which can be recognized in the matching deep structure. This occurs in the usage of substantive adjectives, such as in the following example taken from Patañjali[30] when, in a liturgical context, it is required to bring "the white [one]" (*śukla-*.ADJ) or "the black [one]" (*kṛṣṇa-*.ADJ), with reference to a he-goat; if one takes something else which is white such as a ball of ground rice, he does not carries out what is required.

The mention of the mere colour-name to refer to an object designated by its colour is based on a common linguistic usage. The function of the colour-name, i.e. of the determinant constituent of the deep level combination "a black he-goat" goes beyond the aim of qualifying a substance, as the counterexample shows. The ritual rule is not put into practice by taking another 'black' substance. It is therefore clear that the mutual relation between the specifying and the specified constituent of such a kind of deep level linguistic combinations simultaneously re-determines both constituents. This is defined by indigenous Sanskrit grammar as *vṛtti* i.e. literally as a "revolving change" of the constituents[31].

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[29]   M 1.399 ll. 7-10 ad A.1.2.57 Vt. 1: "The linguistic unit *kṛṣṇa-* 'black' when it is connected with the linguistic unit *tila-* 'seed', occurs as an expression of a specifier. Analogously the linguistic unit *tila-* 'seed' when it is connected with the linguistic unit *kṛṣṇa-* 'black', occurs as an expression of a specifier. Both can become a specifier and both can become something that is specified".

[30]   M 1.399 ll. 23-24 ad A 2.1.57 Vt. 2; M 1.42 ll. 8-9 ad Vt. 13 ad A 1.1.1.

[31]   Bʜᴀᴛ (1994: 91-118) prefers to think in terms of de-categorisation and re-categorisation and shows how a given word category, when used outside its regular or categorial use looses some of its caracteristic features and assumes others. Even though it had often been restricted to the specific mechanism of a derivative nominal stem from a prepositional phrase, such as Sanskrit *ánuvrata-* "faithful" from *ánu vratám* "according to the observance" or Greek ἐνάλιο- "marine" from ἐν ἁλί "within the sea" (see the analysis of these two examples respectively in Rᴏᴜssᴇᴀᴜ, 2016: 5, 45), the term "(syntactic) hypostasis" has also been used to label the use of a combination of two inflected forms as basis of a new flection or derivation, exocentric compounds included (see e.g. Bʀᴜɢᴍᴀɴɴ, 1906: 72).

Pāṇini seems fully aware of such limits in the semantic analysis, when he prefers to avoid any evaluation of the "prevalence" of one constituent upon the other(s) and to promote an analysis of phrases which is strictly based on purely morphological and syntactic relations between constituents[32]. The independence of the notion of *upasarjana* from purely semantic considerations is evident also from his treatment of the so-called comparative compounds:

(17a) *śastrī-śyāmā-* [*devadattā*]
       knife.NOUN + black.ADJ
       "knife-black" [Devadattā]
(17b) *puruṣa-vyāghra-*
       man.NOUN + tiger.NOUN
       "tiger man (i.e. that tiger of a man)"

These examples come from a couple of Pāṇini's rule (A 2.1.55-56) exceptions to A 2.1.57, which we have analyzed in detail in Candotti and Pontillo 2017 where we proposed a fresh interpretation of both rules with ample discussion of the relevant issues. The first case is, accounted for by rule A 2.1.55 as a compound where the *upasarjana* – even though a substantive – plays, as predictable, the role of *determinans* (more specifically of an *upamāna*, a measurer) with respect to a second constituent with adjectival features (a word denoting something general):

(18)   *upamānāni*   *sāmānya-vacanaiḥ* (A 2.1.55)
       standards.NOM.N.PL   with words denoting something general.INSTR.M.PL
       "Inflected words which are standards[33] combine with [inflected words which are
       co-referent and which] denote something general [to optionally derive a *tatpuruṣa*
       karmadhāraya compound]."[34]

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[32] The struggle to maintain semantics outside the domain of grammar is also demonstrated by a couple of rules which have been handed down as a part of Pāṇini's grammar, even though their authorship has often been questioned (for a broad survey of scholars' evaluations, see Cardona (1976: 158-159; 193-194; 322, n. 68-73; 332-333, n. 192). These rules (A 2.1.55-56) discard the teaching of the *pradhāna* "principal member" (for which see § 4), the meaning of affixes, the meaning of time and the *upasarjana* itself as not pertinent to grammar, because meaning does not have grammar as its instrument of knowledge.

[33] *Upamāna-* is lit. "an instrument used to measure" according to A 3.3.117.

[34] The terminology involved in this rule and in the following one, i.e. *upamita*, *upamāna*, and *sāmānya*, is currently read as if it were part of an *alaṃkāra*-description of a simile, that is to say, by interpreting the single terms as subject of the comparison, object of the comparison, and *tertium comparationis* of a simile respectively. Such an interpretation is grounded on some hints coming directly from Kātyāyana and Patañjali as recorded in the commentary on A 2.1.55, which, nevertheless, has some serious drawbacks. See Candotti and Pontillo (2017: 361-369).

Against the traditional interpretation "[Devadattā] who is as black as a knife" which interprets the general property as the 'property shared' by the subject and the object of comparison, i.e. the 'measured' woman and the knife, our analysis of the compound is thus fully resolved within the members of the compound, interpreted as a "knife-black", a shade of black, by means of a construction also found in other languages, for example:

(19a) It. *verde mela*   lit. "apple-green" (a shade of green)
(19b) Engl. *nightblue*   (a shade of blue)

Even more extreme is the case of *puruṣavyāghra-* "that tiger of a man"[35] accounted for by A 2.1.56 where what is measured (*upamita*) is the *upasarjana*:

(20) *upamitaṃ*   *vyāghrādibhiḥ*
      A measured.NOM.SG   with 'tiger' and so on.INSTR.PL
      sāmāny(ā)prayoge (A 2.1.56)
      when a word denoting a general quality is not used.LOC.SG
      "[A nominal *pada*] denoting an object to be measured [optionally] combines with
      a nominal *pada* of the *gaṇa vyāghrādi*, provided that a nominal *pada* denoting
      a common/general quality is not used, [to derive a *tatpuruṣa karmadhāraya*
      compound]."

Here again, tradition – which, let us remember, favoured a head-centred approach – has proposed different analyses. However, from a strictly pāṇinian point of view, we maintain that here we are dealing with an identification ("tiger-man"), where "man" (*puruṣa-*) should be what is semantically measured by "tiger" (*vyāghra-*), but at the same time also the *upasarjana* in the compound. In other words what is measured here, i.e. "a man", also covers the role of a kind of *determinans* of the head noun "tiger"[36]. We could thus interpret it as "a tiger who is a man indeed"[37] or "tiger in human form" identifying, among the different kinds of tigers, the human one. We thus have a compound in which each of the elements interacts in the construction of the

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[35] For a generative approach to such a predicative reading of *puruṣavyāghra-*, which resorts to the Dynamic Antisymmetry perspective, see Mocci and Pontillo (2019).

[36] The choice between *determinans* (*viśeṣaṇa*) and *determinatum* (*viśeṣya*) undoubtedly becomes relevant at least from Kātyāyana's *vārttika*s onwards, when the term *upasarjana* becomes a synonym for "what is not principal" (*apradhāna*). On the equivoque that is assumedly derived from the transition from the grammatical to the rhetorical tradition of *rūpaka*-analysis, see Pontillo (2009: 18 ff.).

[37] Cf. e.g. the translation of *mukhacandra* as "cette lune qu'est le visage", of *saroṇṛpāḥ* as "les rois que sont les étangs" by Porcher (1982: 154, 164).

final meaning, the non-*upasarjana* which governs the syntax and the basic denotation of the final word and the *upasarjana* which is the measured and which at the same time constructs the specificity of that denotation. This helps us to better interpret those compounds where the *upamāna* "standard of comparison" is considered to be the real focus, e.g. in the *kāvya*-poetry and in the most ancient poetic tradition. In compounds such as the already mentioned *mukhacandra-* "moon-face", the standard of comparison, that is the moon, consistently plays the role of the non-*upasarjana*, i.e. of the member which holds the denotative burden, enters into a syntactic relationship with the other elements in the phrase, and fashions the morphological shape of the whole compound.

The divarication between morphology and semantics is here clearly spelled out: the *upasarjana* is said to play the role of the 'measured', i.e., in a rhetorical perspective, of the subject of comparison and a kind of implicit final referent not of the syntagm (where the referents are respectively the tiger and the moon) but of the whole metaphorical sentence.

4. Upasarjana *as a means to interpret compounds*

Now we shall try to focus on the advantages that descend from this *upasarjana*-oriented analysis of secondary derivational stems and of compounds, i.e. from Pāṇini's marked choice of merely concentrating on the non-head constituent of these complex words. In fact, he seems to have deliberately dismissed the analysis of compounds based on the identification of the head (*pradhāna*), which possibly had even been in use at least before Kātyāyana's age, as proved by Radicchi (1985: 33)[38]. By the way, such a concurrent pattern of explanation re-emerges quite early in commentarial practice since Patañjali already uses the feature of headedness to classify compounds: *avyayībhāva* compounds have the meaning of the first word as principal, *tatpuruṣa* compounds have the meaning of the last word as principal, *bahuvrīhi* has the meaning of another word [than the constituent members] as principal, dvandva have the meaning of both words as principal[39].

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[38]   Patañjali (M 2.205 l. 21 ad Vt. 3 ad A 4.1.14) explicitly states that "the technical term *upasarjana* is adopted in place of [the technical term] *a-pradhāna* that occurred in previous grammatical *sūtra*-works".

[39]   M 1.382 ll. 9-10 ad A 2.1.29.

It is thus now important to understand the motives that conditioned this choice made by Pāṇini in the broader context of his analysis of compounds. Compounding, in Pāṇini's grammar is a morpho-syntactic phenomenon involving inflected words (i.e. *pada*s)[40] whose endings are zero-replaced by rule (21) in order to create a compounded stem that receives new endings and alternates in usage and meaning with the analytical expression.

(21) [*luk* 58] *supo dhātuprātipadikayoḥ* (A 2.4.71)
      "A case-ending which occurs as a part of a verbal base or of a nominal stem is zero-replaced by *luk*" (whatever the nominal stem)[41]

This last acts as a constituent analysis of the compounded form. For instance, (21a) alternates with two possible analytical constructs (21b,c):

(21a) *yuddha-kuśalaḥ*
       battle.STEM + talented.STEM
       "talented in fighting (STEM + -*s*.NOM.SG)"
(21b) *yuddhe*   *kuśalaḥ*
       in battle/war.LOC.SG   talented.NOM.SG
(21c) *yuddheṣu*   *kuśalaḥ*
       in battles.LOC.PL   talented.NOM.SG

Therefore, and this is another important peculiarity of Pāṇini's description of compounds, stem status is not attributed to any of the compound members. The case-endings of both the constituents are equally zeroed[42] in the same way in both exocentric and in endocentric compounds, irrespective of the fact that in endocentric compounds one of the members is the head of the compound.

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[40] More precisely nominal inflected words, technically called sUP, as taught by A 2.1.4.

[41] With the exception of compounds such as *kaṇṭhe-kāla-* in the *throat*.LOC + *black*.STEM → "black-throated" taught in section A 6.3.1-24, which can be assimilated to the Latin type *terrae-motus*, where *terrae* is not a stem but an inflected word in the genitive exactly as *kaṇṭhe* is an inflected word in the locative.

[42] The compounding pattern is described in Lowe (2015: 91) as a mechanism consisting in adjoining non-projecting words (represented as X^) to inflected words (represented as X°). A non-projecting word is a word which does not head phrases (i.e. «it is not possible for another phrase to stand in a specifier, complement, or adjunct relation to such a word»), a concept which could perhaps fruitfully be compared with the mentioned feature of 'having a frozen syntactic relation with the other constituent' as taught for the *upasarjana* by A 1.2.44 (see above, § 3.1). By contrast, the postulation of an inflected word (as an input constituent) exclusively limited to the final constituent (instead of being extended to both the constituents) is quite far from Pāṇini's description.

Case-ending of the *upasarjana*	Example	Translation	The relevant *upasarjana*
II (accusative)	*grāma-gata-*	"who has gone to the village"	*grāmam*
III (instrumental)	*asikalaha-*	"a contest [fought] by means of swords"	*asibhiḥ / asibhyām*
IV (dative)	*yūpadāru-*	"wood [used] for the sacrificial post"	*yūpāya*
V (ablative)	*vṛkabhaya-*	"fear of wolves"	*vṛkebhyaḥ*
VI (genitive)	*rājapuruṣa-*	"king's man, royal servant"	*rājñaḥ*
VII (locative)	*yuddhakuśala-*	"talented in war/battles"	*yuddhe / yuddheṣu*

Table 2. *Frozen case in first position.*

Case-ending of the *upasarjana*	Example	Translation
II (accusative)	*prāptodaka-*	"[the village] which water reached"
III (instrumental)	*ūḍharatha-*	"[the ox] by which the chariot is drawn"
IV (dative)	*upahṛtapaśu-*	"[God Rudra] to whom an animal victim is brought"
V (ablative)	*uddhṛtaudana-*	"[the pan] from which rice is taken away/drawn out"
VI (genitive)	*citragu-*	"[Devadatta] whose cows are bright-coloured"
VII (locative)	*vīrapuruṣaka-*	"[a village] in which there are brave men"

Table 3. *Frozen syntactic relation of* bahuvrīhis.

Beside this syntactic constituent analysis, Pāṇini puts the already discussed analysis in terms of non-headedness (see above, §§ 3 and 3.1), which identifies as *upasarjana*:

a. the constituent taught in the nominative
b. which generally occupies the first position in a compound and that which, when it does not, is in any case recognizable by the fact of having a frozen syntactic relation with the second constituent.

The above mentioned *yuddhakuśala-* is thus accounted for by the rule (22):

(22) *saptamī*   *śauṇḍaiḥ* (A 2.1.40)
      a locative ending.NOM   with 'capable' and so on.INSTR
      "[A word] ending in the locative [combines] with words expressing capacity."

By making use of the analytical frame X NOM. + X INSTR. this rule teaches how to form compounds with the *upasarjana* as first member whose frozen relationship with the second member (restricted by a list of terms meaning capacity) is expressed in the locative. As is shown by the list of classic examples[43] in the preceeding table (Table 2), all the possible case endings and the triplets denoting the grammatical number can apply to the *upasarjana* in the constituent analysis of the compound under analysis.

To these traditional examples we must add the well-known case of co-referent compounds, a sub-class of *tatpuruṣa* compounds with a relation that cannot be described through any other morpho-syntactic marker but the agreement of case, which can by default be envisioned as a combination of two words inflected in the nominative case:

(23a) *mahābhāṣyam*.N
       "great commentary"
       alternating with "a commentary (*bhāṣyam*.N) which is great (*mahat*.ADJ.N)"
(23b) *latāmaṇḍapaḥ*.M
       "a creeper-bower"
       alternating with "a bower (*maṇḍapaḥ*.M) which is a creeper (*latā*.F)"

4.1. Upasarjana *as a key device to understand* bahuvrīhi

Such an analysis of compounds, focused on the non-head constituent, concentrates on a feature shared by both the endocentric and the exocentric

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[43] KV on A 2.1.24; 31; 36; 37; 40; 2.2.8.

compounds. Pāṇini finds the point of difference between the two in the fact that the feature of being *upasarjana* is all encompassing when we come to *bahuvrīhi* (i.e. prototypically exocentric) compounds. All the constituents of this kind of compound indeed are *upasarjana*s, as is taught in the general rule:

(24) *anekam*   *anyapadārthe* (A 2.2.24)
      more than one.NOM   in another word-meaning.LOC
      "Two or more inflected words optionally combine in the meaning of another inflected word (i.e., the meaning of an inflected word different from the constituents)."[44]

Since *anekam* is inflected in the nominative case, once again, on the basis of A 1.2.43 we know that it has to be classified as an *upasarjana*; thus all the members of such compound are its *upasarjana*s and consequently the head is obviously not included in the word-forms of the exocentric compound. As we can see in the preceeding table – a classic list of *bahuvrīhi* examples – in the constituent analysis, we have to suppose a specific fixed case and number ending to explain the relation between the whole combination of the non-head constituents and the head, which is outside the compound (Table 3).

For instance, in the example in the second line (25a), the frozen syntactic relationship between the whole compound *upasarjana* and the relevant word outside (in modern terms, the head outside) is expressed by the instrumental case as is evident also from the traditional analysis of constituents (25b):

(25a) *ūḍha-ratha-*
       driven.STEM–chariot.STEM
       "[The ox] by which the chariot is drawn."
(25b) *ūḍho*   *ratho*   *yena*   *saḥ*
       drawn.PPP.NOM   chariot.NOM   by whom.PRON.INSTR   this.PRON.NOM
       ūḍharatho   [*anadvān*]
       by which the chariot is drawn.NOM   [ox.NOM]
       "This by whom a chariot is drawn is the 'chariot drawing' [ox]."

In this traditional list, it happens that the relationships between the members inside the *bahuvrīhi* compound is always one of co-reference

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[44] The previous rule A 2.2.23 *śeṣo bahuvrīhiḥ* teaches the technical term *bahuvrīhi* for all the compounds included in the remainder of the section.

(*samānādhikarāṇya*), in other words the lexical material upon which the *bahuvrīhi* compound is constructed is a *karmadhāraya*. This is certainly a common and productive pattern, but nevertheless other examples of *bahuvrīhi* also exist (and commentators are aware of them) whose internal analysis highlights a subordinative construction:

(26a) *asi-pāṇi-* "one who has a sword in his hand"
(26b) *putra-kāma-* "desiring sons"[45]

Thus, since the non-head is always included in the linguistic material of compounds, be they endocentric or exocentric, this kind of analysis actually re-establishes equal opportunities for both types, instead of relegating the exocentric ones to a marginal and irregular class of compounds with respect to the supposed prototypical endocentric compound. There is no need to teach any dedicated rule to assure the right derivation of the exocentric compound stems, as far as the morphological features of their single constituents are concerned. It is actually a broadly applied general rule, namely A 2.4.71 (see § 4) which teaches a zero-replacement of any case-ending, whenever this case-ending occurs as a part of a verbal or nominal base.

And the substitution of a long vowel with the matching short one, i.e. the process of getting rid of the feminine mark of the constituents is taught by the above-mentioned A 1.2.48 (see § 3.1) a rule valid not only for all classes of compounds but also for all secondary derivational nominal stems.

(27a) *nis-* + *kauśāmbī*   →   *niṣkauśāmbi-ḥ*.NOUN.M
(27b) *maitri-*.M.SG [metronymic name of a teacher]
       "the son of *maitrī-*.F. SG"

One last important point deserves our attention: the all-encompassing subordination of constituents, that characterizes the exocentric compounds arises independently of the syntactico-semantic relation between the constituents. This is accounted for by Pāṇini in his mention of *anekam* in A 2.2.24 where no specific relation between the constituents is identified. We can see

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[45] As GILLON (2007: 2) points out at the beginning of his paper dedicated to exocentric compounds in English and Sanskrit, later tradition – departing from a strictly Pāṇinian procedure – classifies the *bahuvrīhi* compounds in several sub-categories following the internal analysis of the members: privative (*nañ-bahuvrīhi*), comitative (*saha-bahuvrīhi*), prepositional (*prādi-bahuvrīhi*), homodenotative (*samānādhikaraṇa-bahuvrīhi*) and heterodenotative (*vyadhikaraṇa-bahuvrīhi*) compounds. Unfortunately, in his article, he only concentrates on what he calls the "homodenotative" ones.

how this description works by applying it to *bahuvrīhi* compounds where the relationship between the members is patently subordinative, such as in the already mentioned case of *asipāṇi* "having a sword in his hands" (28a), which works exactly in the same way as *citragu* "having brightly coloured cows" (28b):

(28a) example   internal analysis   *upasarjana*
     asipāṇi   *asiḥ*.NOM *pāṇau*.LOC   *asipāṇi-*
(28b) example   internal analysis   *upasarjana*
     citragu   *citrāḥ*.NOM *gavaḥ*.NOM   *citragu-*

This provides us with an even stronger argument in favour of a purely morphological definition of *upasarjana* which avoids any semantic implication: an *upasarjana* is simply a word with a fixed relationship with another constituent of the syntagm that governs it, and a whole compound may be classed as *upasarjana* if it shows such a feature.

5. *Comparing theories*

It may be interesting to note that a growing awareness of this possibility of bridging the gap between endocentric and exocentric compounds may be seen in the most recent contributions on compounding. Indeed, Štekauer (1998), in order to just explain exocentric compounds, distinguishes two steps, (even though he considers that only the first has word-formation relevance) i.e.:

1. he describes the operation that we called the postulation of a combination of the inflected words matching the compound, as «the formation of an auxiliary, onomasiologically complete syntagm – with both the base and the mark included»;
2. and then focuses on the so-called 'shortening' of word forms, which in the case of exocentric compounds consists in cancelling the head of the compounds, such as the word *man* in the compound *red-skin* where the auxiliary onomasiologically complete syntagm is *red+skin+man*[46].

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[46]   This is a major difference with Pāṇini's model which does not zero-replace the non-*upasarjana* at all even though he makes extensive use of zero devices. This also derives from the fact that Pāṇini extensively employs this possibility of a stem (any stem) acting as an *upasarjana* with reference to other words and does not limit it to specific world-classes, such as adjectives or *bahuvrīhi* compounds.

Nonetheless, the head (= non-*upasarjana*) constituent (i.e. that which identifies the denoted object) in the exocentric compound is not zero-replaced at all in Pāṇini's grammar: the possibility for any word to have a referent other than its own is accepted by Pāṇini even for non complex formations such as the substantivized adjective. None of these phenomena is accounted for with zero-replacement as zero is specifically reserved to account for variation.

Again, in accordance with Pāṇini's model, modern scholarship is becoming increasingly aware of the fact the distinction between endocentric and exocentric constructs does not involve the internal relationship between the constituents. Both a subordinate and an appositive/attributive compound can be endocentric as well as exocentric, as is shown in Scalise-Bisetto's recent (2012) classificatory model with three classes of compounds[47]:

SUBORDINATE	endocentric: ex. *steamboat*
	exocentric: ex. *loudmouth*
ATTRIBUTIVE / APPOSITIVE	endocentric: ex. *snail mail*
	exocentric: ex. *green-eyed*
COORDINATE	endocentric: ex. *girl-friend*
	exocentric: ex. *mother-child*

Furthermore, if we take into account the identification or specification schema = *determinatum/determinans* relation, which, for instance, Kastovsky emphasized in 1982 (he considered the exocentric compound as a deviating formation), we could reflect on the *upasarjana*-based model to realize how Pāṇini somehow selected the most durable linguistic material.

In fact, the identifying role of lexemes (i.e. its capacity to signify the *determinatum*) seems to be less important and almost unnecessary in several classes of word-formation[48]. See for instance the series of formations generated when a secondary derivational nominal stem is taught as equivalent to a compound or a syntagm:

(29) *upagoḥ*.GEN *putraḥ*.NOM
   "Upagu's son", alternating with *upagu-putra-/aupagava-* (A 4.1.92)

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[47] This model is also adopted by Lieber (2010: 140); cf. Lieber (2012: 87).

[48] By the way, this seems to find some support not only from a linguistic perspective but also from a cognitivist one. We make reference here to a crucial study by Hampton (1987) where the author illustrated some experiments on the effects of the dominance of attributes in concept conjunctions, showing, among other things that «greater weight is given to a concept for predicting typicality in a conjunction when the concept occupies the qualifier position than when it is head noun position in a conjunctive phrase» (Hampton, 1987: 63). See above, § 2.4.

On the one hand, the gradual disappearance of the linguistic material which conveys the sense of *putra-* is self-evident, even though the son is indeed identified, while, on the other, the function of the specification is indispensable. The name of *upagu-*, i.e. the *upasarjana* has to be compulsorily mentioned, i.e. included in the relevant formation.

To sum up: in an *upasarjana*-relation, in the easier endocentric schema, the two stems have a fundamental influence on each other – a specific kind of influence which can be explained as a case-relation – which is commonly conveyed by some inflection marks or by the grammatical agreement. From the syntactic point of view, one stem blocks the function of the other stem (i.e. the *upasarjana*) with which it combines, but if we concentrate on the plastic representation of the meaning, we could say that it releases the *upasarjana*, which somehow stops working as a dependent inflected word (subordinate in a hierarchic sense) and starts being preponderant in the imagery of speaker and listeners: it really depends on the action of pouring something upon (*upasṛj-*) the head and of colouring it. Its specifying function with all its lexical and figural preponderance prevails over the identifying role of the stem with which it combines (cf. March-and, 1960 and Kastovsky, 1982 categories). This is why, among the classical parameters adopted for identifying the head of a syntactic construct, perhaps the most evidently misleading parameter could be «the head is an obligatory constituent in the phrase»[49].

On the other hand, the frozen syntactic relation, holding between the upasarjana and the other constituent of a compound, described by Pāṇini and – within thoroughly different descriptive patterns of compounding – by modern contributions[50] clearly accounts for the ambiguous status of the compounding mechanism, which is definitely intermediate between syntax and morphology. In fact Pāṇini's technical opportunity for a morpheme of preserving the syntactic relation with its head conveyed by the zeroed inflectional markers may be an effective device to account for lexical subordination in a number of morphological processes such as compounding[51].

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[49] See e.g. Bauer (2004, [1990]: 172).

[50] See e.g. both the «non-projecting category» also used to describe the constituent labelled as *upasarjana-* by Pāṇini in Lowe (2015: 88-94) – cf. above, n. 46 – and the proposal «to integrate morphological structures into the hierarchical analysis and to identify the head, not by applying the criterion of category consistency, but by defining the syntactic relation with its complement» in Bauer (2014: 19).

[51] Significantly a comparable frame is applied by Pāṇini to describe secondary derivation.

List of Abbreviations

ABL = ablative

ACC = accusative

ADJ = adjective

ADV = adverb

F = feminine

GEN = genitive

INSTR = instrumental

LOC = locative

N = neuter

NOM = nominative

M = masculine

PL = plural

PPP = passive past participle

PREV = preverb

PRON = pronoun

SG = singular

VB.ADJ = verbal adjective

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

Serena Barchi

Abstract

This paper aims at proposing a synoptic account of vowel prosthesis in word-initial *s*C 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₊s*C into #*is*C and the aphaeresis of #V*s*C into #*s*C).

Keywords: prosthesic vowel, Substandard Latin, Koine Greek.

1. *Introduction*

The insertion of an epenthetic vowel before word-initial *s*C currently characterizes Ibero-Romance and Gallo-Romance languages, Logudorese Sardinian and some Tuscan subvarieties[1]. This phenomenon is documented

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[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. AD[2]. 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 Africa[3] 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 *s*C 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 *s*C 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).

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[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 phenomenon[8]; 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 prosthesis is particularly frequent in specific lexemes which are quite widespread both in Latin and Greek (e.g. στεφαν-, στρατ-, *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 prosthesis.
(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).

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[4]   Cf. *http://manfredclauss.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 prosthesis 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 script[9] and, more rarely, Greek texts are written in Latin script[10]. Some bilingual texts are written in both Latin and Greek script[11].

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 Places[12], this record has allowed a geolinguistic overview (see Figure 2).

From a quantitative point of view, 647 forms with prosthetic vowel have been recorded[13]. 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 1[14].

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[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. <εισrτρωμεντις> ∼ <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 #*in*₊*s*C into #*is*C is more likely than a reanalysis with subsequent insertion (*i*#*s*C > #*s*C >#V*s*.C), which is otherwise evident in Albertini tablets and Ravenna Papyri (see below § 5.1). As regards Greek inscriptions, forms such as ἐστήλη / ἰστήλη / εἰστήλη 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 *prouinciae* Syria and Sardinia and the *regiones*

Region	Prinz	*Alii*	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 *s*C in each area, as Figure 1 intends to show[15].
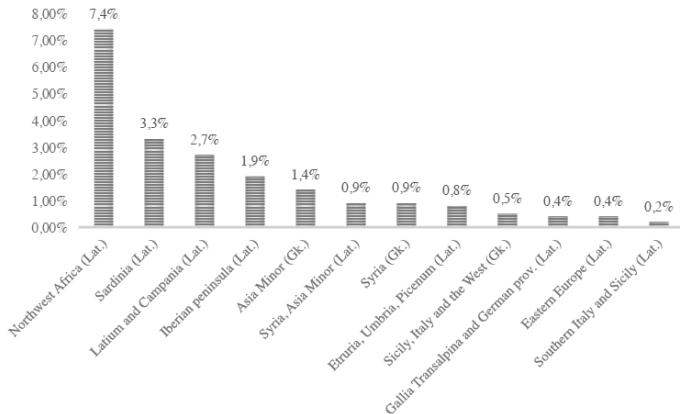

Figure 1. *Relative frequency of the forms with vowel prosthesis (1ˢᵗ c. BC-8ᵗʰ c. AD).*

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 *s*C 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 *s*C clusters, filtered according to various regions and provinces. The results have been subsequently undergone to a program which has allowed the grep of initial *s*C. 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 *s*C – 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 prosthesis 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 use[16]. In this area 23 forms with prosthetic vowel are attested. In (1) some of these forms are shown according to chronological order[17]:

(1)   a. *is·cis* (= *scis*?; *CEL* 79, approximately 50 AD)
       b. εἰστατήρων (= στατήρων; *O. Did.* 373, 88-96 AD)
       c. ἰστατῆρα (= στατῆρα; *O. Did.* 425, 125-140 AD)
       d. ἰσστρατιώτης (= στρατιώτης; *I. Did.* 7, 177-192 AD)
       e. Ἴσσμαράγδω / Ἰσμαράγδου (= Σμάραγδ-; *P. Med.* 46; 3rd c. AD)
       f. ἐσπέρματα (x 2) (= σπέρματα; *P. Sakaon* 70; 338 AD)
       g. ἐσχοινίου (= σχοινίου; *P. Sakaon* 70; 338 AD)
       h. ἰστοργῆς (= στοργῆς; *Milne Cairo Mus.* 77.9282; 4th c. AD)
       i. ἰσκ[ρ]ίβαις (= σκρίβας; *Stud. Pal.* 1.3.; 455 AD)
       l. εἰσταδιάρχη (= σταδιάρχη; *SEG* XXXII, 1588; 6th-7th c. AD)

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[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 prosthesis 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 ostracon 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 *s*C cluster[20]. 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 reasons[22]. 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 στατηρ-, with different graphicizations due obviously to itacism[24]. 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 στατῆρα. In the Latin word *statera*, which is continued in many Italian di-

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[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 στρατ-.[27] 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 <Y> instead of <OY> 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 <istupendiorum> (*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. ἰσταρτηγα (= στρατηγός; *SEG* XV.850, 168 AD; Dura Europos)
   b. εἰσκότλα (cf. lat. *scutella*; *SEG* VII 371, 2nd c. AD; Dura Europos)
   c. εἰσπύλλ[α (cf. lat. *spinula*; *SEG* VII 371, 2nd c. AD; Dura Europos)
   d ἰστήλην (= στήλην; *IGLSyr* V, 2396; 196 AD; Emesa)
   e. ἰστα(ρτηγα) (= στρατηγός; *MUSJ* 36.1.1959; 250-256 AD; Dura Europos)
   f. ισφηνη (= σφήν?; *SEG* VII, 431; Dura Europos)

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[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), <ἀγορασσθῇ> (*O. Did.* 425). See also (1e), in which the forms Ἰσσμαράγδω / Ἰσμαράγδου are due to different hands.

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

[28] The form ἰσκ[ρ]ίβαις is to be interpreted as a nom. sg. (= σκρίβας); 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 σκρίβα is generally more attested in Greek papyri and it is indeclinable (see τὸν σκρίβα 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 *s*C due to Aramaic substrate and such examples are generally reported[30]. Actually, Semitic languages generally avoid word-initial *s*C 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 *s*C are written with initial <א> /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, ʔSṬRṬYS for στρατιώτης, ʔSṬLʔ for στολή, ʔSQRTWR for *scriptor*, ʔSQWTL for σκουτέλλιον/σκούτλια)[31]. Nonetheless, such spellings are not systematic[32] 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:

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[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 <א> is documented in various initial consonant clusters (not only *s*C, but also ππ, ξ and *muta 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. אכלין for Κλέων in *CIS* I, 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 *scŭtŭla* "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(ŭ)l*). The form εἰσκότλα is to be connected with *scutŭla* 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 <o> instead of <ου>, which is probably a clue of a proto-Romance merger between /ŭ/ and /ō/ in /o/ in tonic position[35]. Additionally, it is worth mentioning that εἰσκότλα is in agreement with δύο. 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. *spinŭla* "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 φίβλα (*col*. II, l. 3) results from the syncope of *fibŭla* "buckle" (cf. It. *fibbia* "buckle"). For similar outcomes, see e.g. φιβλατώριν in Egyptian papyri (cf. Daris, 1991: 297; 3rd c. AD)[36] and *fiblis* in *CIL* III 536 (3rd c. AD).

(iv) The form τορἀλλια is a *hapax* in Greek[37]. 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.

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

[34] The word *scŭtella* derives from *scŭtra* (**scutro-lā > *scŭtṛla > scŭtella*). Hence, the back-formation *scūta* (with ū due to juxtaposition with *scŭtum*) and subsequently *scŭtŭla* have been created (cf. *DELL* and *EDLIL*, s.v. *scŭtra*). Such ¹*scŭtŭla* "dish" is not to be confused with ²*scŭtŭla* "wooden cylinder", which is a borrowing from Greek σκυτάλη "staff, cudge".

[35] Rovai's stance (ROVAI, 2015: 77) on the use of the Greek grapheme <o> as a clue of an opener pronunciation of Latin /ŭ/ 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 *s*C. 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 *s*C. 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 Latinism[39] and the noun *stipendium / stupendium* is attested with vowel prosthesis in Latin inscriptions all around

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[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 ἰσκρηναρίου (= *scriniarius*, *MAMA* V, 301; 5th-6th c. AD).

the Roman Empire[40]. 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 Ἰσκοπελλιανῷ)[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 Empire[43,] often preceded by the 'default-nomina' Αὐρήλιος and Φλαούιος[44].

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 στήλη) 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* escole *ped*[*itum*]. (*MAMA* XI, 72; 390 AD)

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[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 Ἰσκοπελλιανῷ (*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 Πόπλειος Ἰστεμένιος (*MAMA* IX 294; 133 AD, from Aizanoi) – perhaps corresponding to Publius Steminius – 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 well[45].

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. φέγγος 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 ἢν 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 prosthesis[46], 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-ισπευδ[47]. 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 inscriptional data

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[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), ἰσπουδῇ (*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 prosthesis 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 ones[48], 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 peripherical 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 Campania[50] and the forms with prosthetic vowel firstly appear in Campania as well[51]. 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 Αὐρήλια, 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 adaptation[53], 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 *Ism-* 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-

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[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 L_2 Latin speakers (maybe with Oscan L_1). 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 attestation 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 (Σπῆνις 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 I 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 declension[57] 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 conss.

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

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[56] See <Isspes> (*CIL* VI 7974, 1st-3rd c. AD, from Rome) and Ἰσπής (*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 *s*C 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 Antica[61] (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 *s*C. 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 *bir 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 subjacent 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 dedi-
cation. This copy contains some variants, namely <SUCCONDICIONE>
(l. 1.7) instead of <SUBCONDICIONE> (l.11) and especially <HER-
MESSPEPOND[IT> (l.1.5) instead of <HERMES·ISPEPOND(IT)> (l.13).
It could be assumed that the first text shows a tendency towards the defini-
tion of morphemic and word boundaries (note the use of the *interpunctum*),
on the contrary the second text exhibits simplification in internal and ex-
ternal 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
boundary[62]. 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 rela-
tive 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-cul-
tural 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,

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[62]   For the use of the punctuation in documentary Latin, see mainly WINGO (1972) and SCHIR-
RU (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 formula[63].

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 Fourna, 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 phenomena[65]. 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 ostracon, 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-

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[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)*+*s*C 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 *s*C (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 phenome-
non 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 writ-
ing 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 Visigotic cursive, is attested in one inscrip-
tion 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-conso-
nantal contexts (see *in te isperabi* and *in ispe*).

A Greek inscription from Myrtilis, dating back to the 6th c. AD, con-
tains the form ἐσταμινιᾶς. As Consani (1999: 84) highlights, this develops
from a Latin basis (*i*)*staminia* which has been integrated in Greek morphol-
ogy (for a parallel example, see εἰσταβλαρις < 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 *s*C 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 realiza-
tion of an epenthetic vowel before *s*C 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 prosthesis 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_2 e $C_1C_2C_3$ 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 *s*C clusters, phonological processes occur especially when a *s*C-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, ɪ, 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 VsC (cf. Lausberg, 1971: § 356; Sampson, 2010: 57-58), thus creating a sC word-initial phonological pattern. In (11) some examples are shown:

(11) a. #VsC > # ØsC ~ #[e, ɪ, 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 > #ØsC ~ [e, ɪ, i]sC
   strumentum ~ *istrumentum, scribo* ~ *iscribo* (Albertini tablets, Ravenna Papyri, § 4.2)
   c. #$ex_+(s)C$ > #esC > #ØsC ~ [e, ɪ, 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

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[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 *s*C, 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 *s*C require the allotrope *lo* of the determinative article, instead of the consonant-ending *il* (cf. Marotta, 1993; 1995). Furthermore, outcomes such as it. *fèsta* "feast" (< FĔSTA), in which /ĕ/ is not diphtongized, shows that the syllabification was *fes.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 <IΣ·ΠΗΡΑΝΤΙΑ>.

Secondly, preconsonantal /s/ is often geminated, see e.g. <Antisstia> (*CIL* VI 11920), <Callisstrato> (*ICUR* VIII, 21708), <resscribere> (*T. Vindol.* 645)[67]. Such spellings, which are attested also in non-literary Greek (e.g. <Ἀβάσσκαντος> *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 *s*C cluster are not always confirmed by empirical analysis, and in some case the *status* of *s*C 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[ορουν]των (*Tit. Calymnii* 112) is of too uncertain reading to be taken into account. One can assume that a left-insertion was favored by

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[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 *s*C- 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 prosthesis 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 <ΤΟΕΙΣΤΗ/ΦΑΝΟΝ> (= 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 prosthesis 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 prosthesis. 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]πενδίων, ἰστατῆρα, εἰσκότλα, ἐισπύλλα). On the other hand, Latin words which appear to be permeable since the 1st c. AD to

the development of vowel prosthesis 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 restructuration 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 prosthesis 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 *s*C-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)

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[68] Nevertheless, a direct connection between vowel prosthesis 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 prosthesis 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 *s*C, 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 prosthesis 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 *s*C 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 contact[69], 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 were Aramaic, NeoPunic and Libyan languages were spoken, the pronunciation of Greek and Latin words with initial sC 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 sC 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

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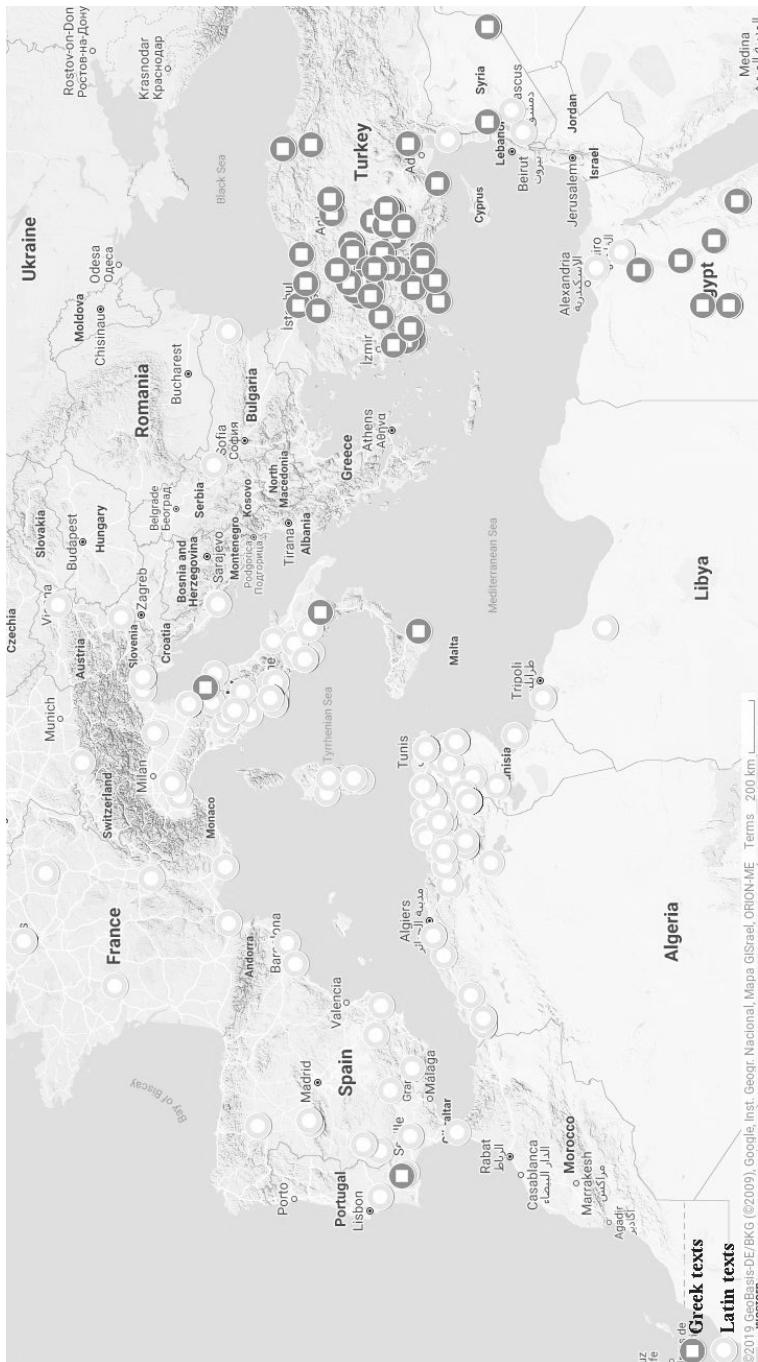
Figure 2. *Geolinguistic overview of the attestations of vowel prosthesis in Latin and Greek (1ˢᵗ c. BC-8ᵗʰ c. AD).*

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Vowel-zero alternations
in Government Phonology and Strict CV Theory

Laura Bafile

Abstract

According to strict CV syllable theory, all coda-onset clusters are CVC sequences, where V is an empty nucleus. This hypothesis sharply distinguishes Strict CV from other autosegmental theories and has significant consequences on a theory of empty categories. In particular, the CVCV representation of 'vowel-zero' alternations must distinguish between two kinds of empty nuclei, the invisible one, contained in coda-onset clusters, and the one that surfaces in alternation sites. By looking at the 'syncope-epenthesis' phenomena of Emilian Italian dialects, this paper argues that such distinction is not empirically well founded and defends a more restrictive hypothesis about empty nuclei.

Keywords: Government Phonology, Empty Nuclei, vowel-zero alternation, syncope and epenthesis.

1. *Introduction*

In the field of formal approaches to the syllable, the Strict CV theory (Lowenstamm, 1996; Ségéral and Scheer, 2001; 2008; Scheer, 2004; Scheer and Ziková 2010; Scheer and Cyran, 2018; among others) has introduced a radical change of view compared to other autosegmental models. The core of the proposal is the fundamental assumption that the sequence CV is not just the fundamental syllable type, but rather the only syllable type in all the world's languages. Inevitably, this assumption has profound consequences on the principles of phonological analysis. As a result, although strict CV is an outgrowth of Government Phonology (GP) and the two models share common epistemological goals and some central principles, they differ from each other in crucial aspects. Although the Strict CV proposal has been brought forward on the basis of a considerable amount of phonological phenomena belonging to different languages, such radical change in the

approach to the syllable and to phonological structure in general remains debatable (cf. Pöchtrager, 2011; van Oostendorp, 2013).

This paper is specifically concerned with the different approaches of classical GP (cf. Kaye, Lowenstamm and Vergnaud, 1990; Kaye, 1990a; 1990b; 1992; Charette, 1990; 1991; Harris, 1994; among others) and Strict CV to vowel-zero (V/Ø) alternations. By taking into account here syncope/epenthesis alternations in an Italian dialect of Emilia-Romagna, we will highlight that a crucial insight of GP concerning the nature of empty nuclei is lost in the deeply revised model of Strict CV, and we will argue in favour of a more restrictive theory of empty categories.

Sections 2 and 3 of the paper contain a presentation of some essential aspects of syllable theory in classical GP and Strict CV respectively. In section 4, the issue of consonant clusters resulting from syncope in a dialect of Emilia-Romagna will be presented. Section 5 is devoted to a discussion of some theoretical implications concerning the notion of empty nucleus. Section 6 contains some concluding remarks.

2. *The syllable in Government Phonology: a sketch*

The three subparts that make up the traditional model of syllable structure in autosegmental phonology, onset, nucleus and coda, are maintained in GP. However, the syllable in itself is a merely descriptive notion and onset, rhyme and nucleus are the only constituents at this level of phonological structure (cf. Kaye, Lowenstamm and Vergnaud, 1990; Harris, 1994: 45)[1]. As far as the coda is concerned, in GP it is just a post-nuclear position within the rhyme and is not considered an independent node in the phonological hierarchy. This statement is based on the observation that the coda is not universally present in syllabic inventories and that it does not branch (cf. Kaye, 1990a; Lowenstamm and Vergnaud, 1990; Harris, 1994)[2].

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[1]   As VAN OOSTENDORP (2013) highlights, if clusters with raising sonority are analysed as complex onsets, and codas are regarded as complements within the rhyme, then it follows that a sequence onset-rhyme corresponds exhaustively to a syllable. Therefore, the syllable is in fact an available notion in GP. The same is not true for strict CV representations, where a syllable may correspond to a variable number of CVs (see section 3).

[2]   Consonant clusters occurring at the right edge of a word, as in English *carp*, seem to challenge the non-branching argument concerning the coda. However, empirical evidence supports the analysis of seemingly branching codas as coda-onset sequences (see below in this section). Moreover, phonological processes that are typically conditioned by the presence of a coda, e.g. stress placement and vowel

According to independent parametric options, onsets, rhymes and nuclei may branch. The *Binarity theorem* (cf. Kaye, Lowenstamm and Vergnaud, 1990) restricts to two the number of skeletal slots that may associate to each constituent. Given a locality constraint concerning the relation between the '×' positions within each constituent, branching nuclei embedded within branching rhymes are generally excluded[3]. The structure of branching and non-branching constituents is shown in (1):

(1)   a. Non-branching   b. Branching

```
     O          R              O          R          R
     |          |             / \         |          |
     |          N            /   \        N          N
     |          |           /     \      / \         | \
     ×          ×          ×   ×   ×   ×      ×   ×
```
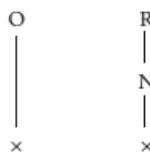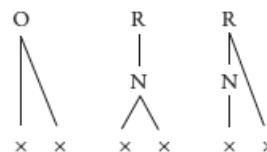
The relations holding between units of phonological representation are asymmetric. GP inherits from autosegmental phonology this fundamental conception, expressed by the *Licensing Principle* (cf. Ito, 1986; Goldsmith, 1990). In any phonological domain, each unit must be licensed by another one. By *a-licensing* (autosegmental licensing) each skeletal position licenses melodic content, a relation expressed by association lines. *P-licensing (*prosodic licensing) refers to the asymmetric relations holding between '×' positions within syllabic constituents, between syllabic constituents and at the higher level of nuclear projections. At each level, there is a licensor, the head, and a licensee (cf. Harris, 1994; 1997).

A terminological clarification is useful at this point. As noted by Scheer (2004: 147 ff.), the words *government* and *licensing* are used in a rather inconsistent and confused way in GP literature. For example, Kaye (1990a; 1990b) and Kaye, Lowenstamm and Vergnaud (1990) actually define *government* all the various kinds of relations between skeletal positions; the word *licensing* is also used in some cases (e.g. *coda licensing*, see below) although with a rather vague meaning. In order to avoid confusion, we will use *licensing* to

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lengthening, are «never sensitive to a putative branching/non-branching coda distinction» (KAYE, LOWENSTAMM and VERGNAUD, 1990: 201).

[3]   HARRIS (1994: 77 ff.) discusses the special case of English forms like *shoulder* and *angel*, in which a coda occurs after a long vowel or a diphthong. Referring to the specific melodic requirements that constrain super-heavy rhymes in English, Harris puts forward a possible GP treatment of this peculiar structure. We will not take into account this specific issue.

refer to a-licensing and to the different forms of p-licensing in which a head sanctions a licensee, thus allowing its existence.

A special relation, which is crucial for the representation of V/Ø alternations, is the one holding between an empty nucleus and the nucleus on its right. This configuration, whereby the empty nucleus is allowed to remain empty, is called *proper government* by Charette (1990), Kaye (1990b), Kaye, Lowenstamm and Vergnaud (1990)[4]. We will maintain here this label.

In the onset-rhyme domain, the nucleus is the head, and as such it projects to the higher layer of the prosodic structure, i.e. the foot. Within a syllable, a nucleus is necessary for a coda, if present, and for the onset (*Onset licensing*; cf. Harris, 1994: 160). However, the coda also depends on the onset on its right, with which it often shares features of melodic content, as shown by phenomena of homorganicity in nasal-consonant clusters and more generally by assimilation in coda-onset clusters. The asymmetric relationship holding between a coda and the following onset is expressed by the principle of *Coda licensing* (cf. Kaye, 1990a; Harris, 1994: 160). Therefore, the coda enjoys double licensing, by the nucleus within the rhyme and by the following onset. Onset and coda licensing are exemplified in (2) with the Italian word *carta* "paper". The arrow indicates licensing:

(2)　a.　Onset licensing　　　　b.　Coda licensing
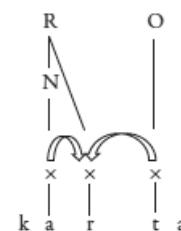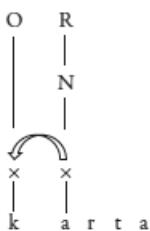
The variety of phonotactic patterns that languages actually exhibit cannot be described by plainly referring to the syllabic constituents thus defined, because there are discrepancies between surface phonological forms and the principles that inform the representation.

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[4]　Proper government follows from the fundamental assumption of GP that empty categories may be postulated in phonological representation only provided some specific conditions are met. This conception is expressed by the *Empty category principle* (which explicitly recall the ECP of syntactic theory).

Languages that have consonants or consonant clusters in word-final position are one apparent violation of the aforementioned principles of licensing. A traditional account of forms like English *fat* and *fact* is that -*t* and -*kt* are a simple and a branching coda respectively. In GP, such analysis is excluded by Coda licensing, since no onset is available as a licensor (branching codas are also excluded for independent reasons mentioned above). Actually, rich empirical evidence exists of final consonants that actually behave like onsets, and not like codas. The main evidence comes from pre-final vowels, which display the same behaviour as the vowels of internal open syllables, thus showing that the final consonant does not close the syllable, i.e. is not a coda (cf. Kaye, 1990a; Harris, 1994; Harris and Gussmann, 1998). However, if final consonants must be represented as onsets, an apparent conflict arises with the Onset licensing principle, and here empty nuclei come into play: languages may have final consonants if they allow an empty nucleus to occur in final position, where it fulfils its role of licensor (see 3a).

In word-final position, the empty nucleus is licensed parametrically, which means that it needs not be governed by a following nuclear position. Depending on further parametric options, a final nucleus may or may not also license the preceding onset to license a coda, as in English *fact* (see 3b), and may or may not license an onset to branch (cf. Charette, 1990). The latter option, for example, is available in French, e.g. *vitre* (see 3c), but not in English.

(3)   a.

b.

c.
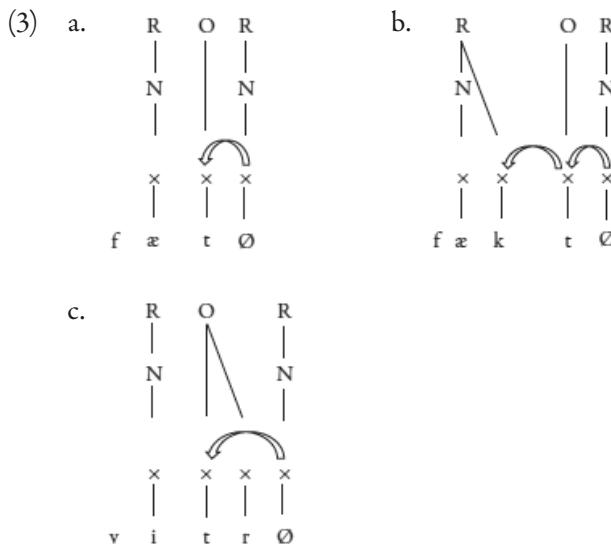
Empty nuclei are also required by *s*-consonant (*s*C) clusters in word-initial position.

The traditional analysis of *s*C clusters relies on a distributional axiom whereby initial and final syllable boundaries match with permissible word-initial and word-final boundaries respectively (cf. Kuryłowicz, 1948; Pulgram, 1970). Accordingly, given the existence of word-initial *s*C clusters, *s*C is described as a double onset, and a sequence containing /s/ followed by *muta cum liquida* is described as a triconsonantal onset. More recent approaches to *s*C sequences, adopting a non-strictly distributional conception of the syllable, focus on other aspects of the question (cf. Lowenstamm, 1981; Chierchia, 1986; Kaye, 1992; Marotta, 1995). Those analyses maintain that a *s*C cluster, due to its raising sonority profile, corresponds to a coda-onset sequence. Moreover, they refer to robust evidence that the /s/ of word-internal *s*C makes a closed syllable with the preceding vowels. Therefore, word-internal *s*C clusters are almost uncontroversially analysed as heterosyllabic[5]. As far as word-initial *s*C clusters are concerned, various solution were proposed in the literature about the syllable, in order to place a word-initial /s/ followed by a consonant outside of the onset[6].

In GP, the representation of *s*C is completely consistent with the general theory of syllable: given that a coda must receive double licensing, the sibilant of *s*C clusters is licensed by a preceding empty nucleus. Indirect empirical evidence supporting this analysis comes from phrasal phenomena which show that the initial empty nucleus has a tendency to get some melodic content. For example, some Sardinian varieties show prothesis when the *s*C cluster follows a consonant in phrasal contexts, e.g. in Sardinian /skɔla/ → [sɔi in iskɔla] "I am at school" (Lai, 2015: 44)[7]. For Italian, evidence in favour of the empty nucleus analysis comes from the selection

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[5]   See MAROTTA (1995) for a thorough discussion of various kinds of arguments concerning the syllabification of both internal and word-initial *s*C clusters in Italian. Her conclusion, also based on experimental measurement of the duration of preceding vowels, is that *s*C clusters are consistently heterosyllabic. A contrary position is expressed by BERTINETTO (2000; 2004). His opinion, also based on experimental results about Italian, is that none of the arguments advanced in favour of the heterosyllabic analysis is sound and persuasive enough to allow any generalisation.

[6]   For example, KENSTOWICZ (1994: 260-261) treats the /s/ in this position as an 'appendix', i.e. an independent constituent, while according to CHIERCHIA (1986) and RUBACH (1999) the sibilant in #*s*C- sequences is left non-syllabified and is directly attached, after syllabification, to the syllable or to the prosodic word nodes.

[7]   Prothesis is also observable in Italian now crystallized forms like *pe*[*r is*]*critto*, instead of *pe*[*r s*]*critto* "in writing".

of the masculine singular definite article. Two forms are available before a word-initial consonant, *il* and *lo*; significantly, before a *s*C cluster, the form ending in vowel is selected, while *il* occurs before simple or complex onset (see among others Marotta, 1993).

The licensing of *s*C clusters is exemplified in (4) with the Italian word *scalino* "step". The representation in (4a) corresponds to the lexical form and to the form in utterance-initial position: the initial coda is licensed by an empty nucleus. In (4b), in a phrasal environment, the word is preceded by the article *lo.* Here, the final nucleus of the article, available for licensing, takes the place of the initial empty nucleus:

(4) a. R   O   R   b. R   O   R
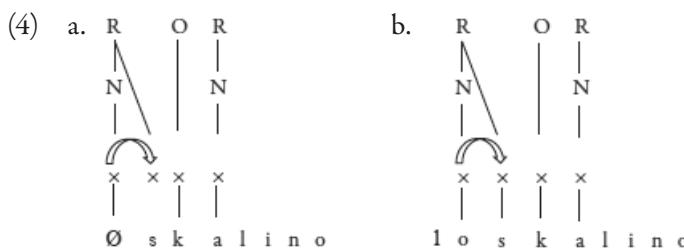
The third kind of circumstances in which empty nuclei play a role in phonological representation is the 'vowel-zero' (V/Ø) alternation, whereby a given vocalic position may be either filled or empty, according to a regular pattern. This phenomenon is cross-linguistically widespread, and particularly common in Slavic languages. Some Northern Italian dialects, that will be taken into account in section 4, also show a V/Ø pattern known as syncope/epenthesis alternation.

In the alternation site, the 'ghost' vowel only appears when no successive vowel is contained in the word (5a), otherwise it remains hidden (5b). The examples in (5) refer to Poland (Szpyra, 1992: 277).

(5) a. Nominative sg.   b. Genitive sg.
     rubel   *rubl-a*   "ruble"
     koper   *kopr-u*   "dill"
     sen   *sn-u*   "dream"

At first sight, the consonants in the words in (5) are assigned a new prosodic structure after the attachment of a final vowel. For example, in the *rubel / rubl-a* pair, /b/ and /l/, an onset and a coda respectively (6a), are rear-

ranged as a complex onset (6b). For brevity, the structure of the rhyme is not included in the following representation.

(6)   The representation of V/Ø alternation: the resyllabification analysis

a.
```
        O  N Coda                    b.                O   N
        |  |  |                                         /\   |
        x  x  x                                        x x   x
        |  |  |                                        | |   |
        r  u  b  e   1                                 r u b  l   a
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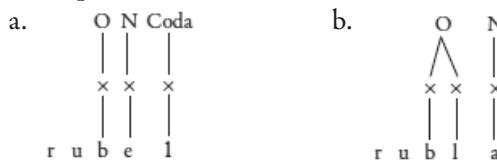
In GP, such an analysis is excluded by a core principle of phonology, namely the *Projection Principle*, whereby the syllabic constituency established in the lexicon remains constant throughout the derivation (Kaye, Lowenstamm and Vergnaud, 1990). In this theorisation, ghost vowels correspond to empty nuclei, which may or may not be properly governed, i.e. followed by a contentful nucleus. The consonants flanking the empty nucleus maintain the syllabic status established in the lexicon. In (7a), the internal nucleus is not properly governed and epenthesis takes place. (In the following examples the black arrow indicates government; the arrow pointing upward indicate the site of epenthesis):

(7)   The representation of V/Ø alternation: the empty nuclei analysis

a.
```
        O   N   O   N              b.          O   N   O   N
        |   |   |   |                          |   |   |   |

        x   x   x   x                          x   x   x   x
        |   |   |   |                          |   |   |   |
        r   u   b   Ø   l   Ø                  r   u   b   Ø   l   a
                    ↑
                    e
```
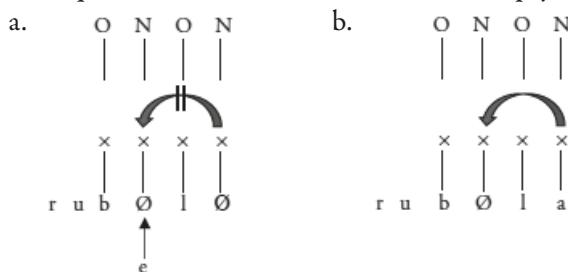
Proper government is also blocked when a consonant cluster (coda-onset or branching onset) intervenes between the potential governor and the preceding empty nucleus (Charette, 1990; Kaye, 1990b). This configuration in illustrated in (8) and (9). The examples in (8) are from Moroccan Arabic (Kaye, 1990b). Given a templatic lexical representation /kØtØbØ/, empty nuclei emerge with melodic content, i.e. the epenthetic vowel [ɨ], when they are not properly governed. The geminate, corresponding to a coda-onset sequence, blocks proper government in (8c):

(8)   a. [ktɨb] "write.Pf.3Pl"   b. [kɨtbu] (Pf.3Sg)   c. [kɨttɨb] (3Sg.Caus)

$$N \quad N \quad N \qquad\qquad N \quad N \quad N \qquad\qquad N \quad N \quad N$$

k Ø t Ø b Ø   k Ø t Ø b u   k Ø tt Ø b Ø
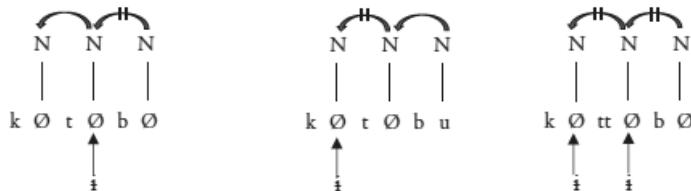
The examples in (9) refer to the schwa/Ø alternation in French (Charette, 1990):

(9)   a. [rəvny] *revenu* "come back"   b. [səkrɛ] *secret* "secret" (*skrɛ)

$$N \quad N \quad N \qquad\qquad\qquad N \quad N$$

/r Ø v Ø n y /   /s Ø kr ɛ /

ə   ə

In (9b), the branching onset blocks proper government and a schwa emerges, although the final nucleus is occupied by a full vowel.

3. *The syllable in Strict CV: a sketch*

The claim that the only syllable type is universally CV was put forward by Lowenstamm (1996). Starting from the analysis of alternation patterns in Semitic languages, Lowenstamm argues that the diversity of syllabic structures (CV syllables, clusters, geminates) displayed by inflected forms of different roots is only apparent, since all of them may be mapped on a same CVCVCV template. Crucially, the templatic analysis is then extended to non-templatic languages. The argument is that the occurrence of long vowels, on the one hand, and of geminates or coda-onset clusters, on the other, follows a common pattern in both a templatic language like Classical Arabic and a non-templatic one like Italian[8]. Examples of this parallelism are the following (Lowenstamm, 1996):

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[8]   LOWENSTAMM (1996) does not take into account the role of stress in vowel lengthening and the different contrastive value of long vowels compared to geminates in Italian; the focus is restricted to syllable structure.

(10) Classical Arabic   Standard Italian
      ka__tt__aba   *fa__tt__o*
      ka:taba   *fa:to*
      **ka:__tt__aba*   **fa:__tt__o*

According to Lowenstamm, the fundamental identity in these forms suggests a generalisation regarding both templatic and non templatic languages. In this approach, the distribution of long vowels and geminates is attributed to one and the same underlying structure, i.e. a sequence of non-branching onsets and nuclei. The representations in (11), refer to Italian [fatto] "made" and [fa:to] "fate"; vowel lengthening is blocked in (11a) because V_2 is trapped between C_1 and C_2 and therefore not available for linking to melodic content:

(11) a. C V_1 C_1 $V_2$$C_2$ V   b. C $V_1$$C_1$$V_2$$C_2$ V
          | | \ / | | \ / | |
          f a   t   o   f   a   t o
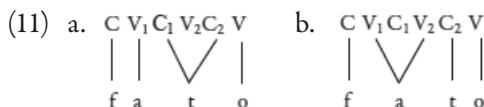
In Strict CV the presence of empty nuclei is pervasive, because they have a part in the representation of any word containing a consonant cluster[9]. Empty nuclei contained in coda-onset clusters must be governed by a following contentful nucleus, and cannot be governors themselves. The representation of coda-onset clusters is illustrated in (12) with the Italian word *cantante* "singer".

(12)
          C V C V C V C V C V
          | | | | | |
          k a n   t a n   t e
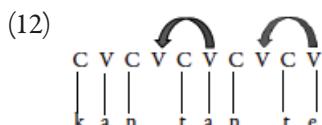
The same representation accounts for the word-initial *s*C clusters, which require a special structure in GP terms, as shown in (4). A word like Italian *scalino* is simply analysed as containing an empty nucleus in between the two consonants of the cluster (/sØkalino/).

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[9]   The status of clusters corresponding to a branching onset is a complex and debated issue that is not relevant to the topic of this paper, and will not be taken it into account here. In what follows, we will generally refer to coda-onset clusters.

As far as final empty nuclei are concerned, Strict CV maintains the GP theorisation whereby their presence is regulated by a parameter: languages that allow final consonants have parametrically governed empty nuclei[10]. A final empty nucleus, in turn, can or cannot govern an empty nucleus on its left, depending on a finer parametrisation. If the final nucleus is a governor, final clusters are possible, if it is not, only single consonants are allowed[11]. The examples in (13) refer to English. In (13b), the final empty nucleus governs the internal nucleus:

(13) a. *fat*   b. *fact*

$$
\begin{array}{cccc}
C & V & C & V \\
| & | & | & \\
f & æ & t &
\end{array}
\qquad
\begin{array}{ccccc}
C & V & C & V & C & V \\
| & | & | & & | & \\
f & æ & k & & t &
\end{array}
$$
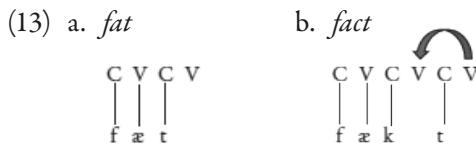
Let us now consider the issue of V/Ø alternations in the Strict CV approach (cf. Scheer, 2004; 2012b; 2019). In this regard, a clear example comes from Polish. Two forms of the noun *cyfra* "number.Nom.Sg" are compared in (14). In the first (14a), the prefinal nucleus is governed by the final one and remains silent. In the second, the corresponding internal empty nucleus is followed by an empty nucleus and remains ungoverned; the insertion of the epenthetic vowel [e] takes place.

(14) a. *cyfr* (Gen Pl)   b. *cyferka* (Diminutive)

$$
\begin{array}{ccc}
V & V & V \\
| & | & | \\
c\ y & f\ Ø & r\ Ø
\end{array}
\qquad
\begin{array}{cccc}
V & V & V & V \\
| & | & | & | \\
c\ y & f\ Ø & r\ Ø & k\ a
\end{array}
$$

e
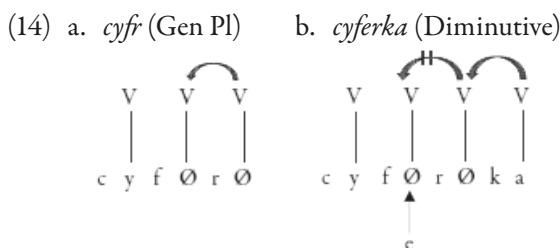
[10] Scheer (2004: 625 ff.; 2012a), also basing on Piggot (1999), confutes the GP claim that all final consonants are onsets (defended, among others, by Kaye, 1990a; Harris, 1994; Harris and Gussmann, 1998; see also fn. 19).

[11] We will not discuss the subtler variation that distinguishes languages like French, which show in word-final position both coda-onset clusters and branching onsets, from languages like English, which only allow coda-onset clusters; a universal implicational hierarchy (coda-onset<complex onset) has been observed in this regard (cf. Kaye and Lowenstamm, 1981). See Charette (1990; 1991) for an account of this variation in GP terms. In the proposal by Cyran (2008; 2010), developed within a Strict CV model, the variation concerning final clusters results from the interaction of two scales, a complexity scale and a strength scale. The former (simple onset<coda-onset<complex onset) concerns the structure that must receive licensing, the latter (empty nucleus< schwa<full vowel) the strength of licensors. Cavirani and van Oostendorp (2017) develop the hypothesis of a markedness hierarchy concerning empty categories.

The Strict CV assumption that any kind of cluster consists of a CØC sequence (with the exception of some kinds of complex onsets) has a significant consequence for the account of the case in which proper government involving a final and a prefinal empty nucleus is blocked by an intervening cluster. The difference between the GP and the Strict CV account of this specific configuration is illustrated in (15) where the analysis by Charette (1990) of the example in (9b), repeated in (15a), is compared with the Strict CV analysis in (15b):

(15)   [səkrɛ] *secret* "secret" (*skrɛ)

a.

N   N

| |

/s Ø kr ɛ /

↑

ə

b.

V   V   V

| | |

s Ø k Ø r ɛ

↑

ə
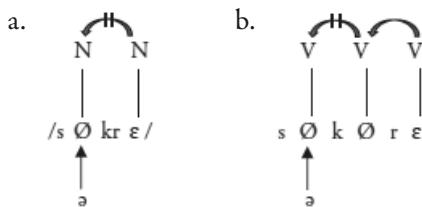
In the Strict CV representation, the blocking effect due to the intervening cluster follows directly from the general mechanism of government and no special stipulation is required to derive the correct results. We can conclude that Strict CV offers a simpler explanation in regard to this specific issue. However, in section 5 we will consider other aspects of the V/Ø phenomenon and analyse some problematic consequences of the CVCV approach.

4. *When empty nuclei are visible: syncope and consonant clusters in the dialect of Finale Emilia*

Most Northern Italian dialects, differing from Standard Italian with regard to prosodic structure, show among other features the weakness of unstressed nuclei. Generally speaking (but a subtler complex variation is observable in different dialects), final vowels have undergone diachronically a complete deletion, so that their content is no longer available. An exception in this regard is final /a/, which is preserved in most varieties (cf. Rohlfs, 1966: 169-173; Loporcaro, 2011; Benincà, Parry and Pescarini, 2015)

Several Northern dialects, particularly in the Piedmont and Emilia-Romagna areas, also show vowel deletion in word-internal positions. In

most cases, however, this process has not produced a complete elimination of the affected vowel. In fact, in the alternation among forms of an inflectional or derivational paradigm, the deleted vowel may reappear, with some light, schwa-like melodic content, provided certain contextual conditions are met. This V/Ø alternation pattern goes under the traditional name of syncope/epenthesis (cf. Repetti, 1995a; 1995b; Loporcaro, 1998; Passino, 2013a).

Syncope/epenthesis alternations may result from different configurations[12].

Syncope may target the pretonic string of the word. The following examples refer to the dialect of Finale Emilia (Province of Modena) that show both epenthetic and non epenthetic forms (data regarding this dialect here and in the examples that follow, have been collected by the author through field work). The Standard Italian corresponding form is also indicated for comparison:

(16) a. Finale Emilia   Standard Italian
          No epenthesis
          dmanˈde "ask.Pres.2Pl"   *domandate*
          vˈdiva "see.Past.3Pl"   *vedévano*
          pˈka "sins"   *peccati*
          sˈɲora "lady, madam"   *signora*

      b. *Epenthesis*
          alˈdam "manure"   *letame*
          alˈkar "to lick"   *leccare*
          anˈvada "snowfall"   *nevicata*
          arˈbatar "to retort"   *ribáttere*

As Passino (2013a) observes, the emergence of an epenthetic vowel before the cluster created by vowel deletion cannot always be explained by only referring to prosodic conditions (i.e. government relations). In fact, the occurrence of a cluster in word-initial position also depends on the melodic properties of the consonants flanking the vowel that undergoes syncope. We will not take into account pretonic syncope in this paper, and we refer to

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[12]   In this section we will use the words *epenthesis* and *epenthetic* in a merely descriptive sense, to refer to a default vowel that emerges only in specific contexts. We do not mean that the process consists in the insertion of a vowel; on the contrary, we believe that it should be considered the result of the vocalisation of an empty nucleus that is present in the lexical form.

Passino (2013a) for an analysis of this phenomenon in Emilian dialects. In what follows, we will focus on V/Ø alternations in the postonic section of the word.

A first pattern of postonic syncope/epenthesis is caused by the deletion of a final vowel that is preceded by a consonant cluster. In the forms affected by final vowel deletion, the cluster occupies the word-final position. Because of language-specific requirements, this configuration may be not allowed in some dialects. A second source of potential final clusters is the syncope in proparoxytones, i.e. the deletion of the postonic vowel.

Final clusters are repaired in different ways. The example in (17) and (18) illustrate the treatment of word-final coda-onset clusters (17) and of complex onsets (18) in some Northern Italian dialects. We can see that the final clusters may be preserved (17a, 18a), may be simplified by the deletion of the second consonant (17b), may be resolved by the insertion of a non-etymological final vowel (17c, 18b) or by the insertion of an epenthetic vowel between the two consonants (17d, 18c,d). The forms in (18c, d) are examples of V/Ø alternation due to epenthesis. The data from Olivone (Canton Ticino), Breme (province of Pavia) and Urbino are in Savoia (2015: 363-369), the example concerning Carrara is taken from Cavirani (2015):

(17) a. Standard Italian
forno "oven"

Olivone	a.	ˈfoːrn
Breme	b.	ˈfuːr
Urbino	c.	ˈforne
Finale Emilia	d.	ˈforɐn

(18) b. Standard Italian
magro "lean"

Carrara	a.	ˈmaɡr
Urbino	b.	ˈmɛɡre / ˈmɛɡra (FSg)
Breme	c.	ˈmaɡar / ˈmaɡra (FSg)
Finale Emilia	d.	ˈmaɡɐr / ˈmaɡra (FSg)

Notably, considerable variation is observable among dialects as far as the treatment of final clusters is concerned. Beyond the observation that complex onsets are less tolerated than coda-onset clusters (see fn. 11 and reference therein) a valid generalisation is hardly possible on this topic. In fact, it is quite clear that prosodic variables, i.e. syllable structure and government relations, are only one of the relevant factors. As already observed about the pretonic syncope, whether a final cluster is preserved or resolved

also depends on the melodic content of the consonants involved. Such an issue certainly deserves specific investigation and is left for future work. The examples in (19), (20) and (21) from Finale Emilia, can give a sense of such complex variation. In this dialect, final obstruent-liquid clusters (19a), corresponding to both etymological complex onsets and cluster produced by syncope, are regularly resolved through the insertion of the only epenthetic vowel available in this language, i.e. [ɐ]. The same holds for final stop-obstruent (19b), non-homorganic nasal-stop (19c), obstruent-nasal (19d), vibrant-nasal (19e), vibrant-liquid (19f) and non-homorganic nasal (19g) clusters. Instead, variation (occasionally free variation) is observable in vibrant-obstruent clusters (20), that show non-extensive epenthesis. Final /l/-stop (21a) and /s/-stop (21b) clusters are generally preserved. At the end of the list we put in (22) two last examples of epenthetic forms the we will comment in section 5.

(19) a. *obstruent - liquid*

ˈpegɐr / ˈpegra	"lazy.MSg / FSg"	Standard Italian	*pigro*
ˈkavɐr / ˈkavra	"goat.FPl / FSg"		*capra*
ˈvedɐr	"glass.MSg"		*vetro*
ˈpjegɐr / ˈpjegra	"sheep.FPl / FSg"		*pécora*
ˈtavɐl / ˈtavla	"table.FPl / FSg"		*távola*
ˈmandɐl / ˈmandla	"almond.FPl / Fsg"		*mándorla*

b. *stop - obstruent*

salˈvadɐg / salˈvadga	"wild.MSg / FSg"	*selvático*
ˈmɔrbɐd / ˈmɔrbda	"soft.MSg / FSg"	*mórbido*
ˈvedɐv / ˈvedva	"widower / widow"	*védovo*

c. *non-homorganic nasal - stop*

ˈumɐd / ˈumda	"damp.MSg / FSg"	*úmido*
ˈgomɐt	"elbow.MSg"	*gómito*
ˈstɔmɐg	"stomach.MSg"	*stómaco*

d. *obstruent - nasal*

ˈpɛtɐn / pɐtˈnar	"comb.MSg / to comb"	*péttine / pettinare*
ˈordɐn / urdˈnar	"command.MSg / to command"	*órdine / ordinare*
ˈazɐn / azna	"donkey.MSg / FSg"	*ásino*
ˈɔrfɐn / ˈɔrfna	"orphan.MSg / FSg"	*órfano*

e. *vibrant - nasal*

ˈkarɐn / ˈkarna	"meat.FPl / FSg"	*carne*
inˈvɛrɐn	"winter.MSg"	*inverno*
ˈferɐm / ˈferma	"still, firm.MSg / FSg"	*fermo*

f. *vibrant - liquid*

'mɛrɐl / 'mɛrla	"blackbird.MSg / FSg"	*merlo*
'torɐl	"yolk.MSg"	*tuorlo*

g. *non homorganic nasals*

'femɐn / 'femna	"female.FPl / FSg"	*fémmina*
'semɐn / 'semna	"to sow.Pres 1Sg/3Sg"	*sémino / sémina*

(20)   *vibrant - obstuent*

'ɔrt	"vegetable garden.MSg"	*orto*
'sord	"deaf.MSg"	*sordo*
'kɔrp	"body.MSg"	*corpo*
'furb *or* 'furɐb	"astute.MSg"	*furbo*
'serk	"seek, try.Pres.1Sg"	*cerco*
'larɐg / 'larga	"large.MSg / FSg"	*largo*
'ɔrdz	"barley.MSg"	*orzo*
'mars	"rotten.MSg"	*marcio*

(21) a. */l/ - stop*

'elt	"tall, high.MSg"	*alto*
'kald	"hot, warm.MSg"	*caldo*
'kolp	"hit.MSg"	*colpo*
'palk	"stage.MSg"	*palco*
'fals	"false.Msg"	*falso*

b. */s/-stop*

'most	"must.MSg"	*mosto*
'bɔsk	"forest.MSg"	*bosco*
'vrɛsp	"wasp.FPl"	*vespe*
'mastʃ	"male.MSg"	*maschio*
'dezd	"wake.Pres.1Sg"	*desto*

(22)   *Other epenthetic non alternating forms*

'tɔzɐk	"poison.MSg"	*tóssico*
'salɐs	"willow.MSg"	*sálice*

Previous analyses of syncope/epenthesis in Italian dialects mostly maintain the traditional view that the vowel that emerges in alternation sites is the result of a strategic insertion, aimed at reshaping the segmental sequence and repairing syllable structure (cf. Repetti, 1995a; 1995b; Loporcaro, 1998). As shown in section 2 and 3, such approach conflicts with the fundamental

assumptions of GP and Strict CV and we will not deal with this issue here (see Passino, 2013a for discussion).

For the purpose of this paper, some aspects of the rich and complex variation exemplified above are specifically relevant.

First, the emergence of the epenthetic vowel is not limited to the cases of V/Ø alternation; in fact, forms like *vedɐr* "glass", *ɡomɐt* "elbow" do not alternate. However, we consider [ɐ], in these forms as in all the others, to be an epenthetic vowel with the effect of giving content to an empty nucleus that must be filled. The empty nucleus is contained in the lexical representation, and in fact, in this case, it is an etymological vowel. Indeed, this is not always the case, as different forms exist, e.g. *larɐɡ* "large", *furɐb* "astute", in which [ɐ] does not correspond to an etymological vowel. Nevertheless, the empty nucleus corresponding to the epenthetic vowel is part of the lexical form in both the former and the latter examples.

A second consideration is that the underlying empty nucleus, even when it does not vocalise, is indirectly detectable in the surface form of the words. Some phonotactic peculiarities support this statement. In systems like the dialect of Finale Emilia, the sequences consisting of non-homorganic stop-stop and nasal-stop are not allowed in lexical forms. The same holds for *s*C sequences in which the two consonants have opposite value of the feature [voice]. In contrast, forms like *salvadɡa* "wild", *mɔrbda* "soft", *umda* "damp", *femna* "female", *pka* "sin", *sɲora* "lady" show such anomalous phonotactic behaviour, thus revealing that the two consonants are adjacent at the surface level, but separated by the empty nucleus in the lexical representation. Further support for this argument comes from data relating to another Emilian dialect, spoken in Ligonchio (province of Reggio Emilia; data collected by the author):

(23) Ligonchio   Standard Italian
    a. *Syncope*   b. *No syncope*
      o tˈtava "suck the milk.Past.3Sg"   i ˈtɑtni (Pres.3Pl)   *tettáva, téttano*
      o cˈcar "the spoon"   *cucchiáio*

These examples contain pseudo-geminates in initial position. As the alternation with the non-syncopated form in (23b) and the comparison with the Italian counterpart (from Latin COCHLEARIU(M) "spoon") show, these initial clusters are the result of the deletion that cancels the intermediate vowel of an unstressed position, e.g. *tettáva* → *tØtáva*. Notice that word-in-

itial geminates are ungrammatical in this language, as well as in most Ita-lo-Romance languages. In fact, the initial sequence in the examples in (23a) is not a geminate, but is simply the sequence of two structurally separate consonants, which happen to be contiguous on the surface phonological representation because of the (temporary) deletion of the vowel that keeps them apart in the lexical representation.

The arguments just put forward support the idea that epenthetic vowels are lexically established empty nuclei that may or may not assume phonetic form, depending on a complex interaction of different conditions. These arguments are certainly conflicting with a traditional account of V/Ø alternations conceived as deletion/insertion of vowels and resyllabification. Interestingly, they are also at odds with some significant aspects of the Strict CV theory of empty nuclei. We will develop this issue in the next section.

5. *The approach to 'ghost' vowels in GP and Strict CV: theoretical premises and implications*

In this section, we will argue that given its conception of empty nuclei, the CVCV model cannot offer an accurate characterisation of the syncope/epenthesis phenomena described in section 4. Firstly, let us take into account the question concerning the exact nature of empty nuclei.

We have seen in section 2 that for GP, empty nuclei have the function of formally expressing some peculiar features of the phonological string: final consonants that behave like onsets, word-initial *s*C clusters and word-internal vowels that alternatively do or do not emerge to the phonetic surface. In regard to the latter issue, in section 4 we have drawn attention to the fact that empty nuclei are either directly or indirectly detectable in the phonological string: even when they are silent, they are 'visible' (and, crucially, recognisable by the speaker and the learner) through indirect empirical evidence.

In Strict CV, given their pervasive presence in the phonological representation, where they replace branchingness in syllabic constituents, empty nuclei are conceived in a different way.

Scheer (2004: 91-91) states that there are three types of empty nuclei: plain contentful nuclei (24a); nuclei with no melodic content, that Sheer calls 'true' empty nuclei (24b) (we will henceforth adopt this label

for clarity); nuclei with floating melody (24c). In (24) [M] stands for 'melodic content':

(24) Three types of empty nuclei (Scheer, 1994: 92)

   a. V   b. V   c. V

       |

     [M]   [M]
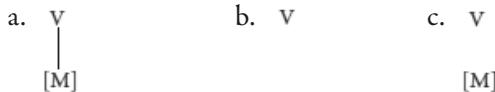
According to Scheer, the nuclei of the third type are the ones involved in V/Ø alternations. They are empty but endowed with lexically established melodic content. Yet, such segmental material is floating, i.e. not steadily associated to the corresponding V position (put in different words, not p-licensed); the association to the V position only takes place when the nucleus is not governed. This theorisation accounts for the fact that in some languages, instead of a single 'default' vowel, more than one vowel alternates with zero; therefore, the content of the alternating vowels must be lexically established (see Scheer, 1994: 88 on Slovak; Passino, 2013a discusses the same issue referring to Emilian dialects).

Notice that the idea that lexical melodic content may be paired with a given empty nucleus could also be adopted in a GP approach to V/Ø alternation, when empirical evidence shows that this is the case. However, it is debatable that this is the better hypothesis for all languages, including those like the dialect of Finale Emilia, in which only one epenthetic vowel alternates with Ø in all the contexts and the forms. The crucial point is that, in a CVCV representation, the stipulation in (24c), combined with a further assumption, cannot be dispensed with in the account of V/Ø alternation. The additional assumption concerns the governing abilities of final empty nuclei, and is considered to be universal (Scheer, 2004: 644-645):

(25) Final empty nuclei can only govern nuclei that do not possess any floating melody in the lexicon.

Crucially, if (24c) and (25) were not assumed together in the theory, wrong predictions would result. For sake of illustration, let us consider the case of a language like the one of Finale Emilia, in which some coda-onset clusters are possible in word-final position. The comparison between a non-epenthetic and an epenthetic form is in (26). Both words are represented in the lexicon as containing two empty nuclei in a row. However, V_2 in *kolp* is

a 'true' empty nucleus, while V_2 in *larɐg* has floating melody. Given (25), V_3 can govern V_2 in (26a), but cannot in (26b).

(26) a. ['kolp]   b. ['larɐg]

C V_1 C V_2 C V_3 C V_1 C V_2 C V_3
| | | | | | | |
k o l Ø pØ   l a r ɐ g Ø
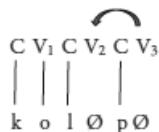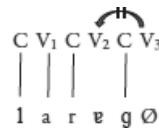
If [ɐ] in (26b) were not contained in the lexical representation, a wrong outcome would result, because in such configuration the final nucleus would be able to govern V_2 and the vowel would be cancelled. The same result would be produced if we wanted to dispense with the stipulation in (25). In this case, the final nucleus would be strong enough to govern (and delete the vowel) in both (26a) and (26b). To sum up, the two assumptions in (24c) and (25) are the necessary representational tool of Strict CV to distinguish between 'true' consonant clusters and alternation sites and to avoid wrong derivations; however, we will show that they fail to provide a revealing insight to some subtler aspects of the phenomena described in section 4.

More recently, Scheer (e.g. 2012b; 2019) has slightly revised the statement in (24), by admitting that, under restricted circumstances, the vocalisation of an empty nucleus may simply consist in the emergence of a default vowel that is not lexically established; such condition is illustrated by the example in (14) above. Let us now consider how this revision may affect the account of V/Ø alternations in the dialect of Finale Emilia.

As already observed, in this language one single epenthetic vowel occurs in all relevant contexts. This is consistent with the hypothesis that epenthesis is just the 'default' vocalisation of an empty nucleus, with no floating melody involved. However, this hypothesis raises a drawback for the CVCV representation. The forms in (22) repeated here in (27a), are epenthetic, non-alternating words. In (27) they are compared with words that contain a word-final cluster resulting from the deletion of the former final vowel (27b).

(27) a. *Epenthetic*   b. *Non-epenthetic*
        'salɐs "willow" / 'salØsØ/   'dols "sweet" / 'dolØsØ/
        'tɔzɐk "poison" / 'tɔzØkØ/   'bosk "forest" / 'bosØkØ/

The forms in (27a) contain the epenthetic vowel [ɐ] that corresponds to an empty nucleus in the lexical form; in fact, this empty nucleus is the trace of an etymological vowel (*salɐs* < Latin SALICE(M), *tɔzɐk* < Latin TOXICU(M)). On the contrary, the forms in (27b), that present very similar or identical final clusters, are not affected by epenthesis and the cluster is preserved. In spite of this, they would receive the same representation, i.e. two empty nuclei in a row, in a strict CV account. This produces the wrong prediction that epenthesis should take place in both (27a) and (27b), which is actually not the case. We believe that this last example further highlights the weakness of the model in accounting for this kind of syncope/epenthesis phenomena.

In a more general perspective, we argue that the formalism of strict CV theory and its conception of empty nuclei is not able to properly characterise the distinction between 'true' empty nuclei and alternating empty nuclei, that in fact are two different kinds of objects. The empty nuclei required by the representation of syllabic branching never manifest segmental content nor interrupt the phonological adjacency between the two consonants of coda-onset or complex onset clusters. On the contrary, this is clearly what happens to empty nuclei in alternation sites, at least in languages like the one of Finale Emilia. This notwithstanding, the two kinds of empty nuclei are given exactly the same representation on the CVCV tier. The burden of differentiating between the two distinct objects is entirely shifted to the melodic level. This is clear in (26), where the two representations are identical in the CVCV tier. Then, if floating melody is excluded, as in (27), the two representations are completely identical. We believe that this modelling is inadequate.

More precisely, this modelling implies the conceptualisation that, on the one hand, an empty nucleus paired with melodic content is a heavier constituent and therefore requires a harder governing effort, compared to a perfectly empty nucleus; on the other hand, that an empty nucleus is a weaker governor compared to a contentful nucleus. This explains why vocalisation takes place in (26b) as opposed to (26a). This is a plausible hypothesis, whose validity is independent of the representational format, and is in fact developed in different models[13].

The questionable side of this theorisation is the representational one, i.e. the fact that the CVCV representation fails to differentiate a coda-onset

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[13]   This conceptualisation explicitly recalls CYRAN's (2010) theory of complexity scale and licensing. See also CAVIRANI and van OOSTENDORP (2017) on the same issue.

cluster from a cluster resulting from syncope. As observed above, the two kinds of clusters are different because: i) the consonants of the latter cluster are sometimes separated by a vowel that rises to the surface form, while the consonants of the former never are; ii) the consonants of the latter cluster show sometimes signs of underlying non-adjacency, while the consonants of the former never do.

Our argument is that the only way to capture this difference is to express it in the skeletal (or CVCV) tier. This is illustrated in (28), where Strict CV and GP are compared.

(28) Representing the difference between coda-onset clusters and 'syncope' clusters

　　　['loŋg] "long.MSg" (cf. ['loŋga] FSg)　　['umɐd] "damp.MSg" (cf. ['umda] FSg)
a. Strict CV / 'l o n Ø g Ø /　　　　　　/ 'u m Ø d Ø /
b. GP 　　　 / 'l o n g 　Ø /　　　　　　/ 'u m Ø d Ø /

In (28), the sequence [ŋg] in *loŋg / loŋga*, is an etymological coda-onset cluster that is preserved also word-finally, whereas the cluster [md] is the result of syncope. Syncope has stripped the etymological content from the postonic nucleus causing the presence of an empty nucleus in the lexical form[14]. In surface phonology, this results in a non-homorganic cluster ([md] is impossible in coda-onset clusters), alternating with vowel epenthesis. The comparison in (28) shows that only (28b) is able to locate in the lexical representation the difference between the two kinds of clusters, while (28a) fails to capture this essential difference.

Crucially, such drawback is an unescapable consequence of the fundamental assumption that any kind of consonant cluster is to be represented as a CVC sequence. In the next section we will discuss some issues connected to this assumption.

5.1. *Government, licensing and Coda Mirror*

Although Strict CV is an outgrowth of GP, their conception of government and licensing diverge in a significant way.

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[14]   As already observed, the syncope of a former full vowel is in most cases the cause for the presence of empty nuclei in lexical representation, and therefore of epenthetic vowels, but not always. In forms like *fuɾʋb, laɾɐg*, the empty nucleus is not etymological but must have steadily entered the lexical form in some previous stage of the language.

In autosegmental phonology as well as in some model of GP, licensing and government are essentially configurations that organise the units of phonological structure[15].

We have seen that in GP government is a static relation, which expresses in formal vocabulary regularities observed in specific circumstances. In respect to V/Ø alternation, government defines the pattern of vocalisation of empty nuclei. Thus conceived, government is not the cause of vowel deletion, it is just a necessary condition for it. For example, the syncope phenomena in Northern Italian dialects are the result, typical of those systems, of a weakening process that affects unstressed vowels. The cause of vowel deletion is the absence of stress, and government is only a condition for the relevant nucleus to be empty. In a similar way, p-licensing involves syllabic constituents and nuclear projections in asymmetric relations whereby a recessive position must be sanctioned by a head. Therefore, for example, the reason why an onset licensed by a stressed nucleus may be preserved against lenition but the onset licensed by an unstressed nucleus may not is not licensing, is stress.

Strict CV has deeply modified the way of understanding government and licensing. In this theory, they assume the role of activities that any contentful nucleus normally exerts on preceding positions. Government and licensing are deemed to be two opposite forces, a positive and a negative one, immanent to phonological representation (cf. Cyran, 2006). Licensing supports and strengthens while government weakens and destroys the melodic content of CV positions. In this view, the two lateral relations are more than mere conditions for the application of segmental processes, since they may themselves cause strengthening or weakening of CV positions[16].

The conception of licensing and government just outlined is connected in an essential way with the notion of Coda Mirror (Ségéral and Scheer, 2001; 2008). The goal of this theorisation is to obtain a strong generalisation about phonological organisation such that one and the same mechanism, i.e. the interaction of opposite forces, accounts for both the static (phonotactic distribution) and the dynamic (phonological processes) properties of utteranc-

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[15]   We ignore here the terminological problem described in section 2. We maintain that (proper) government is the relation that sanctions empty nuclei, and licensing the relation that sanctions any unit of the phonological representation except the head of a given domain.

[16]   For example, SCHEER (2009) and PASSINO (2013b) analyse phenomena of consonant gemination in sandhi, in Corsican and in Italian respectively, as due to the presence of an empty strong position, i.e. a C that is licensed but not governed.

es. More specifically, Coda Mirror theory aims at a unified explanation of lenition and fortition, such that these phenomena may be formally connected to their environment.

Ségéral and Scheer (2001; 2008), Scheer (2004) observe that the set of strong positions, i.e. the word-initial and the post-coda position (#_ ; C_) is the mirror image of the set of weak positions, i.e. the word-final and the coda position (_# ; _C). The beginning of the word is usually described as a strong position[17]. In Strict CV terms, a word-initial (or utterance-initial) boundary corresponds to an initial empty CV.

In the explanation of the specularity of Coda Mirror, the definition of licensing and government, whereby government destroys and licensing supports, plays a crucial role: strong positions are the ones that receive licensing but not government, while weak positions are neither licensed nor governed[18]. The (utterance) initial and the post-coda consonants are licensed but not governed, and therefore they are in a strong position. Instead, given that the internal empty nucleus is inert, the consonant in coda is not supported by licensing, and is not governed either. For this reason it is expected that the coda position may be a site of weakening phenomena, while the reverse holds for initial and post-coda positions[19]. The representation of Italian *carta* in (28), illustrates the activity of the nuclei, which license (white arrow) a preceding consonant but must govern (black arrow) a preceding empty nucleus:

(28)

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[17]   In most Italo-Romance languages, this characteristic is actually restricted to the utterance-initial position, because in those systems word boundaries are ignored in phrasal phonology by the so called 'resyllabification' process (cf. VOGEL, 1982), with the result that sometimes a word-initial C is placed in an intervocalic context.

[18]   A well-known problematic issue concerning the Coda Mirror theory is that a cross-linguistically typical lenition site, i.e. the V_V environment, does not share the condition of the 'coda' environment, because intervocalic consonants are both licensed and governed. The issue is dealt with by SCHEER and ZIKOVÁ (2010) through the stipulation that when both licensing and government are exerted on the same position, government prevails and licensing is suspended.

[19]   As far as word-final consonants are concerned, in Strict CV terms, in languages with coda-like final consonants, final empty nuclei are unable to govern and licence, while languages with onset-like final consonants have final empty nuclei that can govern and license. In this model, a final consonant that behaves like a coda is arranged in the same configuration as an internal coda, i.e. it is followed by an empty non-governing, non-licensing nucleus.

The enhanced role of licensing and government in the representation of phonological structure is clearly consistent with a theory-internal necessity, i.e. to provide motivation for the fundamental assumption that syllabic constituents do not branch. In fact, the assumption that any kind of segmental sequence corresponds to a sequence of CV raises an essential questions, that need to be answered: why is it the case that a C before an empty V should be weak, and a C after an empty V should be strong? The activity of licensing and government is the answer. However, a legitimate question is whether this theorisation has a sufficiently strong independent motivation.

Basing on evidence coming from syncope/epenthesis of Italian dialects, we argue that the V/Ø alternation hints at the presence in the skeleton of a vocalic unit, different in nature from 'true', invisible empty nuclei: a vowel that, when conditions are met, surfaces with its melodic content. This is consistent with the fact that consonant clusters resulting from syncope differ in an essential way from coda-onset clusters. The latter consist of structurally adjacent units, while for the formers adjacency is only superficial, as distributional facts described in section 4 clearly show.

This state of affair questions the Strict CV representation, in which the two kinds of empty nuclei, the 'true' and invisible, and the alternating one, are differentiated at the melodic level, but identical in the CV tier, which is the relevant layer for the representation structural adjacency.

6. *Conclusions*

In this paper we have compared the approach to V/Ø alternations according to GP and Strict CV theory. On this specific subject, we have argued that the latter theory does not offer a clear characterisation of the empty nuclei that are involved in this kind of process. This argument, in turn, raises a more general issue that concerns the very notion of empty nuclei and could challenge a core assumption of the theory, i.e. that CV is the only syllable type.

Some of the fundamental tenets of Strict CV phonology have been taken into critical account by van Oostendorp (2013). One the one hand, van Oostendorp questions the basic assumption that the syllable structure is flat and that all prosodic relations are horizontal, i.e. non-hierarchical, and argues that such strong claim is not supported by uncontrover-

sial evidence. In the same line of argument, some segmental phenomena of Italo-Romance varieties suggest that the foot is not just a descriptive notion (cf. Scheer and Szigetvári, 2005) and should be maintained as a relevant constituent of phonological structure (see Savoia, 2015 among others). On the other hand, van Oostendorp draws attention to the risk that some aspects of the representational system of Strict CV may simply be notational variants of a classical autosegmental representation of the syllable.

On the first issue, the formal distinction between coda and onset, which in Strict CV are unified under the single category 'C', is a good illustration of the point. We believe that the distinction should be maintained at least in light of distributional facts. Cross-linguistically, it is frequently observed that the consonants displayed by a coda in a given language are a subset of the consonants that may occur in an onset; among other things, this is one of the empirical motivations for the Coda licensing principle (cf. Harris, 1994: 158 ff.). Thus, at least from this point of view, onsets behave as a homogeneous class. Instead, if considered from the point of view of lateral relations of Strict CV, the positions that display the full inventory of consonants do not make a natural class. More specifically, the contexts (#_) and (C. _) ('.' stands for syllable boundary) have in common the Coda Mirror configuration (+licensing, -government), but (V_V) does not.

In strict CV terms, the homogeneous class of consonants displaying the entire set of the segments existing in a language (i.e. the 'onset') can be defined by the fact that they are followed by full vowels, while codas are followed by empty nuclei. However, we find this a weak argument. Firstly, those definitions correspond exactly to the classical definitions of 'onset' and 'coda'. Moreover, if 'C before a contentful nucleus' and 'C before an empty nucleus' are relevant definitions that identify relevant classes, then it is not clear why we should dispense with them in the first place. The fact that those definitions are necessary to account for (at least) distributional regularity show that 'C', 'V', 'licensing' and 'government' are at the same time too much and too little to express all the relevant generalisations concerning phonological structure. In sum, we believe that the asymmetric distribution of consonants, that cannot be defined by referring to Strict CV lateral relations, is a positive argument in favour of the categories 'onset' and 'coda'.

This bring us to the second issue addressed by van Oostendorp (2013), mentioned here above. The question is whether the formal vocabulary of Strict CV provides better results than GP for a model of phonological competence and acquisition. Both theories (and any phonological model, for that matter) consider CV the prototypical syllable. Obviously, the point is how to account for the more complex variety of structures observable in the world's languages and how to provide a plausible model of the speaker's competence and of acquisition. In this regard, the assumption that invisible empty nuclei are a better conceptualisation than branching constituents is debatable.

A reasonable supposition is that the child expects to find alternating Cs and Vs in the phonological input; when clusters are met, the original hypothesis must be replaced by more complex representations. Whether this expansion of the phonological competence consists in the statement 'my target language has codas' or instead in the statement 'my target language has empty nuclei and unlicensed/ungoverned C positions' could be just a matter of notational variants.

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Cronaca di etimologia sanscrita. Parte IV

Daniele Maggi*

Abstract

With this Report (here the n° 4) we present recent bibliographical information and, occasionally, renewed discussion about a series of etymological problems of Sanskrit, particularly Vedic, lexicon. Our principal aim is to supplement the *Etymologisches Wörterbuch des Altindoarischen* by M. Mayrhofer (last *Nachträge und Berichtigungen* 1999-2000). So with our Report we would like to provide a tool similar, even though more modest in its proposals, to the *Chroniques d'etymologie grecque* and *latine* published in the «Revue de Philologie, de Littérature et d'Histoire Anciennes» – whose points of reference were at the starting, in their turn, the etymological dictionaries respectively by Chantraine and Ernout-Meillet. In close connexion with etymology we will also consider problems related to the interpretation of Vedic texts and the reconstruction of cultural *realia*. The present number includes lexemes from *aryamán-* to the end of the letter *a*, along with a supplement to nn. 1-3.

R. Ronzitti is the author of the entries *alā́bu-, alíklava-, ávara-, ásṛj-* (entirely); *ARṢ²*, *avaṭá-, AŚ⁽³⁾, aśītí-, áśru-, aśvatará, aṣṭá-, ásita-, ásu-, ásura-, ásthi-, ahám* (partially, with D. Maggi); D. Maggi of the entries as mentioned before and of the remaining ones.

Keywords: Sanskrit etymology, Sanskrit lexicon, Indo-European.

a-[1]

Knobl, *Mid-word cæsura* (2009), p. 157, nota 57, con rinvio a Forssman, *Eine besondere Gebrauchsweise*, cit. in CESc I, p. 159; Lowe, *Negated participles* (2011). Sul tipo di td. *Unmenge, Unsumme* (cfr. sscr. *ábhva-*) Seiler cit. da Meier-Brügger (a sua volta cit. in CESc II, p. 124, voce *ábhva-*).

a-[3]

Ittzés, *Augment and vṛddhi-derivation* (2014).

aṃśú-

Kim, rec. (2008) di RIVELEX I, p. 191.

* *Collaboratori alla ricerca in corso*: Daniele Maggi; Rosa Ronzitti. Le voci o parti di voci non siglate o siglate [D.M.] sono di Daniele Maggi; le voci o parti di voci siglate [R.R.] sono di Rosa Ronzitti.

aṁhatí-
Pinault, *Vedic reflexes* (2014), ma cfr. la rec. di Schmitt (2017), pp. 158-159.

ákṣa-
Oguibénine, *Un paradoxe lexicographique* (2014); Anthony-Ringe, *The In-do-European homeland* (2015), in partic. pp. 201-202; 203.

akṣápana-
Falk, *Bruderschaft*, pp. 112-115.

ákṣi-
Oguibénine cit. qui sopra, voce *ákṣa-*.

agní-
Jurewicz, *Fire and cognition* (2010), con la rec. di Dore-Pontillo (2012).
Silvestri, *Le metamorfosi indoeuropee del fuoco* (2016), in partic. p. 630 (sscr. *agní-* da separare da lat. *ignis* se in quest'ultimo si tratta di *$\ast i^\circ$* i.e.).

ajagará-
Knobl, *Mid-word cæsura* (2009), p. 171 e nota 102.

átithi-
Hintze, *Avestan research* (2017), p. 48.

AD
Composti in °*ādya-* (in partic. *annādya-*, *brahmādya-*): Falk, *Bruderschaft*, pp. 45-46.

adás
Dunkel, LIPP II (2014), p. 191, nota 47, muovendo, come Mayrh., EWAia I, p. 62, da *adó* rispetto al quale *adáḥ* rappresenterebbe una forma ipercorretta, analizza piuttosto *adó* come *ad* (pertinente a *$\ast e$-* "besagter, der erwähnte" > sscr. *a-*[2], EWAia I, p. 35) + "*áu̯*" con "(Neo-)Vollstufe der ferndeikt.*$\ast u$*" > sscr. *u* (*ū̆*)[1], EWAia I, p. 209. Analogamente *asáu* (nom. sing. msch. femm.)

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[1]   Dunkel distingue due diversi *u* in ved.: "Koordinierendes 1. *u*" < 2. *h_2u*, variante (accanto a 1. 3. *h_2u*) di 2. *h_2o* (accanto a 1. 3. *h_2o*) " 'dabei, dazu; und; auch' Konjunktion, wort- und phrasen-verbindend; Adverb, emphat." (p. 822) e 2. *u* "anaphorisch-korrelatives" < "*$\ast u$* 'dort' Partikel, ferndeiktisch, antithetisch" (p. 817 ss.). "Spuren einer ferndeiktischen Funktion von ved. 2. *u*" sarebbero

sec. Dunkel, *ibid.*, p. 192, nota 52 è per **asó < as* (**e-s*) + lo stesso "*áu̯*"; il grado pieno lungo si sarebbe introdotto per analogia ai nominativi *dyáuḥ* e *gáuḥ* (diversamente sec. Kupfer, *Demonstrativpr.*, 2002, p. 368 *asáu < *sau-* con *a°* secondaria per analogia alle forme oblique del tipo di *amúm*, acc. sing. msch., per cui cfr. già EWAia I, p. 62 cit.; ma non mancano oscurità nell'esposizione della Kupfer, sulla quale comunque sia si basa Niederreiter in RIVELEX I, 2006, pp. 667-668).

adhidevana-
/ *ādevana-*: Falk, *Bruderschaft*, pp. 75-81; 115.

anala-
cfr. qui sotto, voce *AR*[1].

antarīpa-
(Pāṇini): Delamarre, '*La terre entre les eaux*' [2016].

antarvā́vant-
Schmidt, *Bṛhaspati und Indra*, p. 102.

áp-
McCone, *OIr* aub.

ápi
Pinault, *Grec* ἤπιος*: védique api.*

abhicara-
L., "Diener" (EWAia I, p. 92, voce *abhí*; III, p. 11): Kümmel, *Umbrisch* amboltu [2014], cfr. in partic. p. 37.

abhinidhāna-
Aufderheide, *Die Bedeutung von* abhinidhāna *in den Prātiśākhyas* (2015-2016).

---

conservate in alcuni luoghi rigvedici, ma RVS X, 95, 15*ab* ("O Pururavas, stirb nicht, flieg nicht fort; mögen dich die erbarmungslosen Wölfe *dort* nicht fressen", p. 822, corsivo nostro) non è affatto cogente in tal senso.

amŕ̥ta-

Il significato equivalente a quello del gr. ἀμβροσία – o "nettare" ecc. – è continuato, oltre che in m.ind. e n.ind. (cfr. CDIAL (I), p. 25, n° 571), anche nel prestito in tamil *amiḻtu/amutu* (e altre varianti), cfr. Veluppillai, *Offrande d'ambroisie* [2013].

amla-

Sec. Fenwick, *Descendants* (2016) *amlá-* < **h₂em-ró-* (da cui anche lat. *amarus* ecc.) come *āmlá-* "tamarindo" (solo in L.; accenti secondo la Fenwick); tale preforma avrebbe influenzato **méh₂l-o-* (> gr. (dor., eol.) μᾶλον "mela", μῶλυ ecc.) trasformando quest'ultimo in **h₂mél-o-* dal quale a sua volta sarebbe provenuto sscr. *āmrá-*, neu., "mango" (il frutto), *āmrá-*, msch., "id." (l'albero; così accentato secondo la Fennwich). La vasta comparazione non tiene programmaticamente conto dell'aspetto semantico[2].

AY¹

: *YĀ¹*: Kulikov, *The Vedic roots variants* (2011).

áyas-

Da un prestito ario, con la laringale ancora conservata, si originerebbero i nomi degli armeni, *hay*, sing., e dell'Armenia, *Hay-k̇* "the land of metal or iron", riflessi in fase antica dal nome di regione ittito *Ḫayaša-*, secondo Martirosyan, ArmInhLex (2010), pp. 382-385; tale etimologia è criticata da Kitazumi, *Zum Problem der Gleichung* (2013). Sulla possibile penetrazione della parola aria anche in abkhazo cfr. lo stesso Martirosyan, op. cit., pp. 384-385.

AR¹

Di F. Bader da registrare anche (oltre all'art. menzionato in EWAia I, p. 106), *De lat.* arduus *à lat.* orior, cfr. Ronzitti, *Due metafore* (2014), p. 196, nota 350. Per la radice 4) *ar* di Pinault cfr. qui sotto, voce *arí-*.
Di Pooth (cfr. CESc III, p. 97, nota 2) cfr. successivamente *Gr.* ἔρι- [2016], dove l'a. rinvia altresì all'ancora suo *Die Diathesen* (2014), cap. 6°.
álarti (RVS VIII, 48, 8) e *alarṣi* (VIII, 1, 7) sec. Thi., rec. all'EWAia, vol. I e vol. II, fasc. 11, pp. 324-325 (cfr. anche il suo precedente art. cit. in EWAia I, p. 70, voce *anala-*) da un tema intensivo *alal-/alar-* "becoming well fed, big,

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[2]   Su gr. μῶλυ (Fenwick, *Descendants*, pp. 449-453) cfr. la diversa spiegazione in Atti SIG 2014 (2016), pp. 57-58.

high", a sua volta da una radice *AR/AL* "to feed, nourish, satiate, satisfy", che si ritroverebbe in *anala-* "insatiable" > "fire", *áram/alam* "enough" come omonimo di *áram/alam* "fitting, fittingly" e, di nuovo con raddoppiamento, in *alalābhávantīḥ* "becoming well-fed, big, high" (RVS IV, 18, 6). Cfr. ancora *alā́bu-* se "che ha l'acqua come nutrimento" (cfr. qui sotto alla voce), *alíklava-* se *ali-* "che si nutre di" (cfr. EWAia I, p. 127), *śi(ṁ)śumā́ra-* e *śiśū́la-* se "sein Junges (*śíśu-*) nährend" (cfr. EWAia II, pp. 641-642). Dalla stessa radice proverrebbe inoltre *alají-* se questo può essere connesso con lat. *altare*, *ad-oleo* (cfr. qui sotto alla voce), posto che "bruciare" si sia sviluppato da "nutrire (il fuoco)", cfr. più recentemente de Vaan, EtDictLat (2008), p. 24. Riguardo a *álarti*, *alarṣi* Jamison in Jamison-Brereton, RV II (2014), p. 1129 "Potency and battle fervor are on the rise" (RVS VIII, 48, 8*a*, *álarti*); p. 1022 "Are you on the rise?" (VIII, 1, 7*c*, *alarṣi*), ma quanto a *alalābhávantīḥ* (IV, 18, 6) la medesima, *ibid.* I, p. 586 "These (waters) flow, <u>babbling</u>, like truthful women together shouting their witness" (vv. *ab*), laddove Gotō in *Das heilige Wissen* II (2013), p. 148 "Diese (Wasser) strömen, <u>indem sie sich lebhaft bewegen</u>, wie die dem Ṛta folgenden (Frauen) miteinander schreien", con la nota, p. 488: "Lautsymbolisch: *alal-* oder *alalā*-werdend".
Ulteriore bibl. sulle diverse radici *AR* in Hintze, *Avestan research* (2017), p. 46.

AR[2]
Su *álarti* ecc. cfr. qui sopra, voce *AR*[1].

áraṇya-
(EWAia s.v. *áraṇa-*): *vána-*: Oguibénine, *Qu'est-ce que la forêt?* (2007).

áram
Ved. qui sopra, voce *AR*[1].

arí-
A una radice di forma **h₁ar-* è ricondotto gr. ἔρις da Janda, *Purpurnes Meer* (2014), pp. 194-227, sulla base delle corrispondenze anatoliche (cfr. anche CESc III, voce *arí-*, p. 108, nota 27); si tratta, secondo Janda – purtroppo senza discussione di Loma, *Krieg und Frieden* (cit. in CESc III, stessa voce) –, di una radice verbale da identificare nella radice 4) *ar* di Pinault per cui cfr. CESc III, voce *AR*[1], alla quale Janda attribuisce, piuttosto che il significato di "accorder, conférer, attribuer", quello reciproco nel rapporto di scambio e cioè specificamente "(den Siegerpreis) erlangen, gewinnen" (cfr. p. 202); dunque ἔρις *"der gewon-

nene (Kampfpreis), das gewonnene (Entgelt)" > (in prima istanza) "Wettstreit" (cfr. pp. 203; 205). A gr. ἔρις è senza dubbio apparentato, secondo Janda, il sscr. *arí-*, con grado pieno rispetto al grado zero della forma greca, ma lo studioso rinvia "a altro contesto" – finora a chi scrive non noto – l'approfondimento del termine sanscrito come anche dell'autoetnonimo degli indoirani (p. 227, nota 493); si può indovinare (cfr. in particolare p. 197) un valore iniziale di *arí-* quale "che contende per il premio della gara", corrispondentemente al composto con *su-* e grado zero *sūrí-*, il nome del patrono del sacrificio, già interpretato da Pinault come "qui possède (et donc, qui donne) une bonne rétribution".

Per Crevatin, *Ārya* [2017] "[...] è possibile ammettere che egli [l'*arí-*], una persona di mezzi, poteva ben essere un patrono, ma non era il *nostro* patrono. [...] L'*arí-* non è un estraneo alla gente vedica, alla sua cultura e alla sua religione, è estraneo al *nostro* gruppo, può essere (e di fatto è) una persona socialmente rilevante e un 'patrono', ma spesso è inevitabilmente il nostro rivale" (p. 23); se tuttavia "l'etnico *Ārya-* mette in primo piano il rapporto con l'*ari-*, il patrono" (*ibid.*), non è chiarito che cosa allora signifihi precisamente *árya-* in rapporto a *arí-*.

Gli ari tornano decisamente gli "Eccellenti" (con un *caveat* sull'applicazione in senso razzistico di tale significato) in Pooth, *Gr.* ἔρι- [2016], già cit. qui sopra, voce *AR*[1], il quale riconduce a *AR-*[2], compattato con *AR* di *r̥tá-* ecc. (~ gr. ἀραρίσκω), anche, fra gli altri, *arí-*: da un supposto significato base del verbo "treffen" si svilupperebbe da un lato "vortefflich, trefflich" e quindi *arí-* nella "Bedeutung" di "Edelmann, Herr", dall'altro "an den man gerät, [...] mit dem man aneinandergerät, den man trifft", da cui *arí-* nelle "Bedeutungen" sia di "Gast" che di "Feind" (e gr. ἔρις "Kampf, Streit, Zank" ecc.[3]). Al di là dell'impressione di unità derivante dalla manipolazione delle rese in tedesco, si deve dire che Pooth niente discute di quanto sia comparso dopo Thi. su *arí-* né prese di posizione recenti sulla materia da lui trattata quali quelle di Loma e di Dunkel. Inoltre, riguardo al rilievo dato da Pooth alla "Bedeutung" di "Edelmann, Herr", sembra opportuno distinguere fra significato e referenza, cfr. l'osservazione fatta in CESc III, p. 111-112[4].

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[3] L'a. sostiene infatti – e questo è a nostro parere l'aspetto più interessante del suo contributo – la comparabilità di discendenti da forme radicali del tipo risp. h_1er- ~ h_1ar-, trattata ampiamente come generale problema ricostruttivo.

[4] Riguardo specificamente al passo citato a sostegno della sua posizione da Pooth, p. 107 (RVS VIII, 2, 14), il discorso che vi si fa è piuttosto quello della fama che si diffonde, per cui l'attenzione prestata da uno "straniero" è del tutto al suo posto, cfr. Jamison in Jamison-Brereton, RV II (2014), p. 1027, con il *Comm.* al passo.

arigūrtá-, arídhāyas-, ariṣṭutá-
Cfr. Janda cit. qui sopra, voce *arí-*, in particolare pp. 225-227.

áruṣ-
Willi, *Ares the Ripper* (2014), senza discussione di Hajnal (cfr. CESc III, pp. 114-115), oltre a accogliere la connessione con a.nord. *ørr* "scar", propone, attraverso un'analisi di *áru-ṣ-* come formato con un suffisso *-es-/-os-* al grado zero, l'ulteriore connessione, in realtà non nuova (Leumann cit. da Mayrh., EWAia I, p. 113)[5], con il nome greco Ἄρης < *$h_2 \cdot reu\text{-}s$ (nom. di un nome radicale), acc. *$h_2 \cdot reu\text{-}m$, da cui, con applicazione della legge di Stang, *$h_2 \cdot rēm$ da cui a sua volta muoverebbe la reinterpretazione del nome come un tema in *-ē-* (eol. Ἄρευς dunque non secondario). A questo quadro etimologico non sarebbe più pertinente itt. *erman-/armn-* "infermità" (*h_1°, cfr. Kloekhorst, EtDictHitt, 2008, p. 248), mentre lo sarebbe, in ambito anatolico, luvio cun. *ḫaru̯a-* "path" in quanto "a track where the ground is 'ploughed up' or 'weeded up'". D'altra parte, l'a. si domanda se la radice *$h_2 \cdot reu\text{-}/h_2 reu$- (anche, secondo il medesimo, in sscr. *RAV²* "verletzen, wundschlagen, wundschleuern", EWAia II, p. 440) non possa essere in ultima analisi la stessa di lat. *aro*, *aratrum* ecc. (rappresentata in sscr. dal nome del "campo", *urvárā-*), nata da un tema di presente in *-w* formato da quest'ultima (*$h_2 \cdot rh_3 \cdot wé$-) e successivamente aniṭ-izzata; così, ammettendo un certo grado di fluidità semantica fra l'"aprire", detto in particolare della terra, e il "ferire" (cfr. il significato di luvio cun. *ḫaru̯a-* come descritto da Willi), le forme indiane con *-van-* – e *-un-* – citate in CESc III si verrebbero a porre in maniera ricostruttivamente elegante accanto a *-var-* di *urvárā-*.

arṇavá-
EWAia I s.v. *árṇa-*, pp. 116-117. Sorba, *Vocabulaire de la mer* [2010].
Altri nomi del "mare" (sscr. ep. e class.): Pontillo, *"Attributes" of the sea* I-II (2007; 2008)[6]; sulla scarsezza dei passi, ancora nel *Rāmāyaṇa*, in cui si rifletta una diretta conoscenza del mare, cfr. II, pp. 301-302.

árjuna-
árjunī-: Janda, *Elysion* (2005), pp. 333-334; 370.

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[5]   Risale a Fick, cfr. Leumann, EWSS 1, p. 22.
[6]   Cfr. anche Pontillo, *Une étude lexicale* (2005).

árma-
Schmitt, rec. (2006) di RIVELEX I, p. 379.

* * *

aryamán-
Hintze, *Avestan research* (2017), pp. 44-45.

árvan-
Olsen, *The complex of nasal stems* (2004), p. 226 e nota 18 (sulla duplice uscita tematica *-van-* e *-vant-*), con la rec. (2007) di Hill, p. 18; Swennen, *D'Indra à Tištrya* (2004), pp. 60-70, cfr. la rec. (2010) di Pinault, pp. 228-229; Swennen, *Portrait du cheval sacré* (2007), pp. 179-195. In RVS V, 54, 14*c* Renou, EVP X, p. 32 non segue Lüders cit. in EWAia I, p. 122 su *árvantam* per *árvaṇvantam*, ma Neisser (cit. anch'egli *ibid.*): "vous conférez un coursier à Bharata, un prix-de-victoire"; ugualmente Scarlata in *Das heilige Wissen* II (2013), p. 299; Jamison in Jamison-Brereton, RV II (2014), p 733. Su *an-arván-* cfr. CESc III, voce *áruṣ-* (p. 114).

arvā́ñc-
LIPP II (2014), pp. 667-668: da una base "*au-Ø réh$_1$ 'schau zurück!'" > "herwärts", cioè l'antecedente di av. *aorā°* ecc. "herab".

árśas-
Mayrh., *Fortsetzung* (2005), p. 13.

arśasāná-
Mayrh., *Personennamen* (2003), p. 13. La contraddizione in *Das heilige Wissen* I (2007) fra p. 244, con la nota a p. 692 (dove si corregga "29" in "20", RVS I, 130, 8, Gotō), e p. 383 (II, 20, 6, Ježić) illustra la difficoltà di decidere se si tratti di nome proprio o no.

ARṢ[1]
Mayrh., *Fortsetzung* (2005), p. 13. Quanto al confronto con itt. *ārš-^{zi}/arš-* sia Gotō, *"I. Präsensklasse"*, p. 105, con rinvio a Oettinger, che Kloekhorst, EtDictHitt (2008), p. 209 ritengono che la flessione originaria del presente fosse atematica. Sec. Pronk, Sanskrit *(v)r̥ṣabhá-* [2010], non deriva da questa radice *r̥ṣabhá-* "toro", da ricostruire piuttosto con *$w°$ iniziale conservato in *vr̥ṣabhá-*, agg. "virile", sost. "toro", e la cui perdita in *r̥ṣabhá-* potrebbe risalire alla fase i.e. comune.

ARṢ[2]

"Hineindrücken" come significato intermedio fra "stoßen, stechen" e "voll-stopfen" (in *ny-ṛ̀ṣṭa-* "angefüllt, vollgestopft"), cfr. *pári + ARṢ* "festdrücken" (VIA I, p. 168, voce *ṛṣ*, n° 26), appare un'alternativa ragionevole all'attribu-zione di *nyṛ̀ṣṭa-* a *ARṢ*[1] (per cui cfr. EWAia I, p. 123; Niederreiter in RIVE-LEX I, 2006, pp. 529; 531; 532, entrambi con riferimento alla Joachim). Ugualmente del tutto ragionevole è, per RVS I, 52, 7*ab*: *hradáṁ ná hí tvā nyṛṣánti ūrmáyo ' bráhmāṇīndra* [...] una traduzione "Denn, wie Wogen einen Teich, erfüllen dich die Dichterworte [...] o Indra" (Dōyama in *Das heilige Wissen*, I (2007), p. 99; per l'idea di contenitore associata a *hradá-* cfr. RVS III, 36, 8): *(ny)ṛ̀ṣanti*, con rigv. *ṛṣán* (AVS *ṛṣati*), oltre al sopra menzio-nato rigv. *nyṛ̀ṣṭa-*, apparterrebbe a *ARṢ*[2], mentre *árṣati* ecc. a *ARṢ*[1]; il fatto che *arṣanti* in RVS I, 58, 6*c* abbia per soggetto lo stesso *ūrmáyaḥ* di I, 52, 7*a* (EWA-ia I, p. 123, cfr. poi Niederreiter in RIVELEX I, pp. 530; 532) non è in realtà una prova che il verbo sia il medesimo (cfr. Gotō, *"I. Präsensklasse"*, p. 105). *arṣaṇí-* in AVS(Ś) IX, 8, 13*b*, piuttosto che "stechender Schmerz" (EWAia, luogo. cit., seguendo PW I, col. 453), (pl.) "throbbings in the head", Zysk, *Healing*, p. 47 con la nota a p. 165 (risp. "pangs" alle stt. 16 e 21) [D.M.]. Bader, rec. all'EWAia, fascc. 1-4, p. 239 mette in dubbio il raffronto con itt. *haraszi*, che sarebbe piuttosto un presente in *-s-* da *h_2er-h_3-* [R.R.]. Cfr. comunque sia qui sopra, voce *áruṣ-* [D.M.].

ARH

Mayrh., *Fortsetzung* (2005), p. 21. Oguibénine, *Notes*, pp. 321-326 (com-prendenti il § 2. *Le sort du participe present védique* árhan(t)).

álakam

"Invano": il collegamento con *aram* "adeguatamente" è giustificabile seman-ticamente in base al valore diminutivo del suffisso *-ka-*, Katsikadeli in RI-VELEX I (2006), p. 536.

alakta-

Olivieri, *Ricerche etimologiche*, con il supplemento di R. Ronzitti (2016) all'interno della nota 2.

alají-

"Entzündung des Auges", *alají-* "Name einer Augenkrankheit (Suśr)", EWAia I, p. 125. Piuttosto distanti sono i significati forniti da Zysk,

Healing, pp. 32, nota 9; 48 (trad. di AVS IX, 8, 20); 166-167, risp. per *alají-* "small abscess or boil" e per *alajī-* ("in later medical texts") "a pustule (*piṭakā*) located on joints, genitals and fleshy parts"; il significato attribuito da Zysk a ved. *alají-* proviene dai dati come da lui forniti relativamente a *alajī-* e dal contesto della stanza atharvavedica menzionata. Al di là del rapporto causa-effetto fra infiammazione e produzione di un essudato (cfr. PW I, col. 457), per l'etimologia è ovviamente rilevante il punto di partenza, che può condurre a ep.+ *alāta-* "tizzone" e lat. *altare*, *ad-oleo* ecc. (Burrow cit. EWAia, luogo cit., cfr. anche EWAia III, p. 15, voce *alāta-*) se *alají-*, *alajī-* sono almeno in prima istanza "infiammazioni" piuttosto che "escrescenze" o simm.

alā́bu-

L'indagine etimologica condotta da Ghosh, *Austric lexical elements* (2004) sui nomi antico indiani di alcune cucurbitacee privilegia per *alā́bu-* l'ipotesi di un prestito da lingue austroasiatiche (khmer *lbow*, annamita *lbâ'u* "Lagenaria vulgaris"). Nella coppia *alā́bu-/lābŭ́-* (quest'ultimo solo lessicografico, mentre il primo è attestato da AVS+) *alā́bu-* sarebbe forma con *a-* iniziale derivante dal prefisso protomunda *k(V)-* (con riduzione alla sola vocale). Un'etimologia i.e. alternativa è recuperabile se si considera il termine un continuante del composto *h_2ol-o-h_2b-u-* "che ha l'acqua come nutrimento". Questa ricostruzione dà conto della variante senza *a-* iniziale in quanto dal grado zero *h_2l-* in *h_2l-o-h_2b-u-* > *lābŭ́-*. Il fitonimo *alā́pu-* "cocomero" (MS *lā́pu-* "ein bestimmtes Gerät"?) può essere interpretato secondo l'analogo, e per metà coincidente, *h_2ol-o-h_2p-u-* 'che ha l'acqua come nutrimento'. Per *h_2el-* "nutrire" cfr. IEW, pp. 26-27 = LIV² (2001), p. 262; *h_2eb-* "acqua" corrisponde a *ab-* di Pokorny (IEW, p. 1) così come il sinonimo *h_2ep-* (NiIL, 2008, pp. 311-317) corrisponde a *2.* $ă̆p$-* di Pokorny (IEW, pp. 51-52)[7] [R.R.].

alā́yya-

(*alā́yyasya*, RVS IX, 67, 30): Mayrh., *Personennamen* (2003), p. 13. Jamison in Jamison-Brereton, RV III (2014), p. 1298 "of the one not to be stilled", dunque con *alatṛṇá-*.

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[7] Cfr. inoltre Rau, *Staat und Gesellsch.*, p. 22.

alíklava-
Das, *Ai.* alíklava- "feindverletzend" (detto di uccelli da preda) [R.R.].

álina-
Ulteriore bibl. rispetto a EWAia I, pp. 127-128 in Mayrh., *Personennamen* (2003), p. 13.

alinda-
Cfr. CESc III, voce *ararínda-* (pp. 102-104).

áva
Schmidt, rec. all'EWAia, fascc. 1-8, p. 352. Schneider, *Syntax und Wortarten* IV: III [2010]. LIPP II (2014), voce *ꞏaṷ*, pp. 100; 102-105 (p. 105 bibl.); non con gr. αὔ (come sec. EWAia I, p. 129; cfr. in partic. LIPP II, p. 103, B. 1); quest'ultimo piuttosto con sscr. *u* (LIPP II, p. 336), cfr. comunque sia già EWAia I, p. 209, con rinvio a un precedente lavoro dello stesso Dunkel.
In composizione con *SVAR*: Panse, *Old Marathi avasvara*.
ava-hrut- in AVŚ(Paipp.) III, 40, 6 *ava-hrud-evās* (accanto alla possibilità alternativa *ꞏa-vi-hrud-evās*) sec. Hoffmann cit. EWAia II, pp. 824-825, voce *HVAR* (pp. 92-93 = 754-755).
Prestiti ari del tipo composizionale di *áva* + *STHĀ* nelle lingue finnovolgaiche, p.e. mordvino (mokša) *vasta* "luogo, letto", sec. Blažek, *Toward the Fenno-Ugric cultural lexicon* (2003), p. 97.

ávakā-
Zysk, *Healing*, p. 251.

avaṭá-
Il campo semantico del "buco" è trattato da Bodewitz, *Pits* (1999) [R.R.]. La connessione etimologica sia con *avár* sia con *avatá-* può essere riconsiderata sotto altra prospettiva tenendo conto di Dunkel, LIPP cit. sotto questi ultimi due [D.M.].

avatá-
LIPP II (2014), p. 102 e nota 36, voce *ꞏaṷ*.

avatāra-
Couture, *From Viṣṇu's deeds* (2001).

avatsārá-

Mayrh., *Personennamen* (2003), p. 13; Katsikadeli in RIVELEX I (2006), p. 550. Non nome proprio in RVS V, 44, 10 sec. Scarlata in *Das heilige Wissen* II (2013), p. 280 ("vom Heranschleicher"), con la nota a p. 576; similmente Jamison in Jamison-Brereton, RV II (2014), p. 717.

avamá-

LIPP II (2014), pp. 101 e nota 30, voce *ꞌau̯.*

avár

avár/avás: LIPP II (2014), p. 100, voce *ꞌau̯.*

ávara-

LIPP II (2014), p. 101; 100, nota 22, voce *ꞌau̯*: non da *avár*, ma da *ꞌáu̯-ero-*; così pure da *avár* neppure av. *aorā°* ecc., cfr. qui sopra, voce *arvā́ñc-*. Sulla semantica di *á°*, oltre a Katsikadeli in RIVELEX I (2006), pp. 557-558, cfr. ancora Renou, EVP XV (1966), pp. 167-168. [D.M.]. Su *avārá-* "l'altra riva" interpretata come "Quasi-Vriddhidehnung" di *ávara-* cfr. Zehnder [2009-2010], p. 195 [R.R.].

avasá-

L'eventuale separazione di sscr. *a°* da lat. (> it.) *avena*, lit. *avižà* "id." ecc., russo *ovës* "id." ecc. non lascerebbe questi ultimi senza una controparte aria, data l'esistenza di termini apparentati medio e neo-iranici indicanti cereali e specificamente l'"avena" (non menzionati nei dizionari etimologici più recenti di de Vaan, EtDictLat, 2008, pp. 64-65 e Derksen, EtDictSl, 2008, pp. 384-385), i quali d'altra parte provvedono di altri aspetti la già difficile problematica dei rapporti fonetici fra il termine latino e i termini baltici e slavi e di questi ultimi fra loro (indicata nei due dizionari cit.): a partire dalla documentazione ir. possono infatti darsi, secondo Blažek, *Toward the Fenno-Ugric cultural lexicon* (2003), pp. 96-97, ricostruzioni come "*ꞌawĝ̊-*" (khotanese *ḫau* "oats") o "*ꞌawes-*" (il medesimo, in alternativa, e una serie di altri: pashtō *važai* "ear of corn" ecc.); a quest'ultima si ricondurrebbe, secondo Blažek, con una tematizzazione in *-a-*, anche sscr. *avasá-*, che mostrerebbe dunque un significato generico, "food" (insieme con av. *auuaŋha-* "provision", cfr. EWAia I, p. 133, con rinvio a Humbach) a fronte di significati più specifici, testimoniati anche nelle lingue ugrofinniche in possibili parole di prestito ario (finl. *vehnä* "grano" ecc.; per

tali termini ugrofinnici Blažek prende tuttavia in considerazione anche un'altra possibile fonte aria, rappresentata in sscr. da *vesana-* "floor of a particularly vegetable product").

aviṣyú-: su *aviṣyavaḥ* in RVS VIII, 67, 9 cfr. Albino, *Eine textkritische Note* (1999); mentre Albino – che suppone una corruzione del testo – riporta alla fase di tale corruzione la connessione con *AV^I*, Jamison, *Comm.* suppone "a portmanteau pun, combining 'greedy' with an association with √av 'help', resulting in 'greedy/eager to help'". Sec. invece García-Ramón, cit. qui sotto, voce *AV^I*, pp. 163-164, una radice *AV* "mangiare" (*ā́vayaḥ*, °*at*, qui sotto, voce *AV^I*), da cui questi derivati nominali, risulterebbe piuttosto dalla specializzazione di *AV^I* "aiutare" – ma in prima istanza "run (to/for)" –, a partire appunto da tali derivati ("desire food/eat greedy").

avasā́na-

anavasáḥ RVS VI, 66, 7: Jamison in Jamison-Brereton, RV II (2014), p. 866 "without halt", dunque con *avasā́na-* (*áva* + *SĀ*), come *ánavasyantaḥ* IV, 13, 3 "nicht loslassend, nicht aufgebend" Katsikadeli in RIVELEX I (2006), p. 181 (che diversamente per *anavasáḥ* si attiene a EWAia I, p. 133 "ohne Zehrung"), "who do not unharness" Jamison in Jamison-Brereton, RV I (2014), p. 576; *anavasáḥ* e *ánavasyantaḥ* si trovano in contesti anche per altri aspetti vicini, cfr. *yāti sā́dhan* VI, 66, 7 ~ *ártham* IV, 13, 3 (dipendente da *ánavasyantaḥ* sec. la Katsikadeli, ma cfr. le diverse interpretazioni sintattiche, ciscuna diversa dall'altra, di Jamison, lg. cit., di Scarlata, *Wurzelkomposita* (1999), p. 327 e di Id. in *Das heilige Wissen* II (2013), p. 137, che peraltro per *ánavasyant-* offre un'ulteriore possibilità interpretativa, *ánavas-yant-* "nicht {fremde} Hilfe suchend", *Wurzelkomposita*, pp. 327, nota 457; 577; si veda inoltre *ibid.*, pp. 576-577 sulla sequenza *ā́vasā́* [*ā́* ...] di RVS III, 53, 20*d*).

AV^I

Le forme *ā́vayaḥ*, °*at* non sono il causativo di *ávati* ma suppliscono la 2ᵃ e 3ᵃ sing. impf. di *átti*, cfr. EWAia I, pp. 61; 133. Sul possibile orientamento del verbo, in "at least part of the frequent references to «favour (received)» in the Ṛgveda", "towards implications such as «to acknowledge with approval»", in ultima analisi "ringraziare", che andrebbe in rapporto con lo svolgimento semantico esibito dal gr. χάρις, dal lat. *gratia* ~ *gratiae* ecc., cfr. Gonda, *Indra hymns*, pp. 138-140. Cfr. inoltre Mayrh., *Fortsetzung* (2005), pp. 14; 23 (laringale iniziale); Blanc, ἐπηετανός (2005), in partic. pp. 132-136 (§§ 3-5:

Emplois de la base AV- en sanskrit); 138 ("les eaux comme secourables"), non considerato da Beekes, EDG I (2010), p. 439; García-Ramón, *From* run *to* desire (2012), ultimo a noi noto di una serie di lavori dedicati all'argomento, secondo cui, sulla base di luv. gerogl. *ḫuu̯ia-ᵐⁱ* "courir, s'enfuir", questo sarebbe stato il significato primario, poi evoluto in "«courir après, désirer» – gouvernant un accusatif directionnel, secondairement réanalisé en accusatif d'objet d'une racine «désirer» (la victoire)", cfr. lat. *sub-curro* ecc. (citazioni da Garnier, rec. di Mem Gusmani I, 1, 2014, p. 99); Langella, *Hermes* ἐριούνιος [2015], in partic. pp. 270-279: difende l'accostamento con sscr. *AVᴵ* di °ούνης, °ούνιος in ἐριούνης, ἐριούνιος, già (1892) proposto da Johansson[8].

ávi-

Mayrh., *Fortsetzung* (2005), p. 21, con ulteriore rinvio bibliografico, da cui ancora ulteriore bibl. Inoltre (EWAia III, p. 552) Schmitt, *Vedisch* ávya-, avyáya-, ávyaya- (1997), il quale "concludes, contrary to Sommer [cfr. EWAia I, p. 135], that both *ávya-* and *ávyaya-* could be equally archaic" (Weiss, rec. della Fs Beekes, p. 66).

avós

Kupfer, *Demonstrativpr.* (2002), pp. 94-102: "[...] mit dem Demonstrativpronomen *adás* zusammengehört" (p. 94); "eine Zugehörigkeit zum Paradigma des Demonstrativpronomens *idám* als assimilierte Form, wie von Klein (1977) [cfr. EWAia I, p. 135] vorgeschlagen worden ist, entfällt

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[8]   Preferendo tale accostamento a quello con gr. εὐνή proposto invece da Thi., duroṇa- *n.*, pp. 443-444 = 919-920 (con ἐρι° ~ sscr. *arí-*: "whose bedstead is at the stranger's"). Un ancora diverso accostamento (non considerato dalla Langella, come da Beekes, EDG I (2010), p. 459, che ignora anche Thi.) è indicato da Loma, *Krieg und Frieden* (2009), p. 290, nota 12, che confronta il secondo membro del composto di cui ἐριούνης, ἐριούνιος sarebbe il derivato aggettivale con ion. (epigr.) οὐνή ~ att. ὦνος "prezzo d'acquisto", (e qu. sscr. *vasná-* "id."), mantenendo per il primo membro l'interpretazione di Thi.; dunque l'intero composto "Handel mit den Fremden". Che la parola veicoli piuttosto la nozione di ospitalità è reso verisimile dalla contestualizzazione di ἐριούνιον con ἄγγελον nell'incipit dell'inno omerico a Hermes (v. 3), tenendo conto che negli inni vedici Agní è insieme "ospite" (*átithi-*) e "messaggero" (*dūtá-*) e i due epiteti sono frequentemente contestualizzati; che sussistono elementi di connessione fra le due figure divine di Hermes e Agní, cfr. CESc I, p. 163; che in RVS X, 110, 1 Agní, acceso, appare come messaggero (*dūtáḥ*) nella casa dell'uomo, dove "nella casa" = *duroṇé*, appunto l'appellativo analizzato da Thi. nel contributo menzionato come un composto il cui secondo membro corrisponderebbe al gr. εὐνή come in ἐριούνης, ἐριούνιος (*duroṇá-* "luogo con cattivo letto", detto dall'ospitante all'ospitato in segno di modestia: dunque *duroṇá-* in primo luogo "casa ospitale"). Per il tipo di relazione fra gr. ἐρι° e sscr. *arí-* – parallelismo semantico o apparentamento etimologico – cfr. CESc III, voce *arí-*, in partic. p. 109, nota 27.

somit" (p. 102); sulla preistoria della forma, all'interno del paradigma che comprende *adás*, pp. 361-371 (ma l'esposizione della Kupfer non è esente da oscurità). Sec Dunkel, LIPP II (2014), *avóḥ* < "**au̯o-*" (cfr. p. 112) a sua volta "departikulativ" < "**au̯* 'weg, fort, ab' Adverb, lokal" (p. 96 ss.)[9]; per *avóḥ* in luogo dell'atteso *aváyoḥ* p. 111, nota 3, cfr. anche Kupfer, *Demonstrativpr.*, p. 365.

avyayībhava-
Sadovsky, *Dvandva, Tatpuruṣa and Bahuvrīhi* (2002), pp. 352; 358.

AŚ[(3)]
Da **h₂ek̂-*. È introdotta da Bader, rec. all'EWAia, fascc. 1-4, p. 230: "cette racine doit être définie comme s'appliquant à ce qui est pointu et ressort, par opposition à **pei-k/g-*, qui s'applique à ce qui est pointu et s'enfonce" [R.R.]. Cfr. EWAia I, p. 136, voce *aśáni-*. Cfr. inoltre Klingenschmitt, *Mittelpersisch* (2000), pp. 193-194 = 467-468, nota 7 su "**ać-u̯an-*" (stessa radice) come base per denominazioni del "ferro" nelle lingue iraniche e sugli eventuali riflessi in queste e nell'av.rec. *aspərənah-* < "*áć-u̯r̥-na-s*", interpretato come "mit Spitze Versehenes", "Gewandnadeln" o "aus Eisen (älter vielleicht Bezeichnung der Bronze oder eines anderen Metalles [...]) Gefertigtes", "Kleinteil aus Eisen" o simili, del paradigma supposto per l'antecedente dell'itt. *hekur* "roccia" (su quest'ultimo cfr. tuttavia la netta presa di posizione di Kloekhorst, EtDictHitt, 2008, p. 339); per quanto riguarda lo sviluppo semantico Klingenschmitt indica il parallelo dell'it. *acciaio* ecc. dal lat. *acies* "punta, taglio" [D.M.].

aśáni-
"Donnerkeil, Pfeilspitze", EWAia I, p. 136, cfr. Katsikadeli in RIVELEX I (2006), p. 589. Sull'impiego del termine come designazione dell'arma di Indra e il suo 'significato' di "Donnerkeil" (in realtà un "sens figuré" nella RVS) rimangono notevoli le considerazioni di Renou in Benveniste-Renou, *Vr̥tra et Vr̥θragna*, pp. 128; 132-133.

AŚ[I]
In av.rec. *kahrkāsa- -āsa-* è piuttosto un suffisso, de Vaan, *The Indo-Iranian animal suffix* **-āćá-* (2000), p. 284.

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[9]   Per l'altra delle due diverse fonti, sec. Dunkel, di i.ir. "**au̯*" cfr. qui sopra, voce *adás*.

aśītí-

Blažek, *Indo-European "eight"*, pp. 209-210 (ricostruzione del numerale "80" e analisi delle forme neoindoarie) [R.R.]. Miyakawa, *Die altindischen Grundzahlwörter* (2003), pp. 146-147, cfr. pp. 101-102 per il numerale "8"; Rau, *Vedic Sanskrit* aśītí- [2009]; Byrd, *Syllable* (2015), p. 125, cfr. p. 52, nota 35, cfr. Steer, art.-rec. (2016), p. 101 [D.M.].

áśman-

Come osservò Nagy, Perkū́nas *and* Perunъ, p. 122 riferendosi a sscr. *párvata-*, si ha qui il caso di una medesima parola che nella fraseologia vedica "stands for either Indra's *target* ('rock, boulder, mountain') or his *weapon*"; lo stesso avviene nel caso di *áśman*, "*Fels*, besonders häufig von den Felsen, in welchen nach dem Indra-mythus die Kühe eingeschlossen waren" (Grassm., Wb, p. 139, voce *áçman*, n° 1, cfr. Nagy, Perkū́nas *and* Perunъ, p. 121) ma altresì arma di Indra (Nagy, *ibid.*, p. 120; "Schleuderstein", Gldn., IV, p. 60); si aggiunga che l'*áśman-* racchiude fra l'altro anche, come nel famoso inno della visione di Varuṇa (RVS VII, 88, 2*cd*; su quest'inno cfr. *Arte e letteratura*, 2016, pp. 3-26), il sole, il quale a sua volta è detto altrove (V, 47, 3*c*) pietra (*áśmā*) dai molteplici riflessi in mezzo al cielo. Su termini apparentati insistono in altre lingue i.e. diversi aspetti del mito che fanno capo ai diversi impieghi della parola in vedico: in aggiunta all'ampia bibl. cit. in EWAia I, p. 138, si confronterà, sul complesso connesso nel folklore russo con la "pietra ardente" (russo *kamen'*, cfr. paleosl. *kamy*), Sestri, *Forma linguistica* (2009); Ead., *Affinità culturali* (2011), in partic. p. 267[10] e CESc I, pp. 183-184; sulla "pietra [*akmuō̃, sic*] di Perkū́nas [*sic*]" (lit.) e altri paralleli, Bader, *La langue des dieux*, pp. 89-90, nota 201 (con rinvio a Gimbutas, *Perkūnas/Perun*, p. 475) e, della medesima, il luogo cit. qui sopra, voce *AŚ*[(3)].

áśru-

Dunkel, *A typology of metanalysis*, p. 14 (fa risalire il sostantivo a **daśru-* (cfr. gr. δάκρυ) con degeminazione della doppia dentale in contesti come *tád #*

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[10]   Mentre la Sestri pensa che le forme slave si originino da una metatesi – anzi, una doppia metatesi –, la Bader, lg. cit. qui sopra, voce *AŚ*[(3)] supponeva una radice "**(h₂)k-(ᵉ/ₒ)h₁-*" come forma ampliata di **h₂ek-*. Quanto alla consonante "*centum*" dello slavo – e di lit. *akmuō̃* accanto a *aśmuō̃* – la difficoltà, indicata dalla Sestri stessa, di una depalatalizzazione secondo Matasović sarebbe superata nel quadro del generale sviluppo del fenomeno *satəm* sostenuto da Lipp, *Palatale* (2009), che pone l'assenza delle condizioni per la palatalizzazione alla base delle forme "*centum*" slave e baltiche, cfr. in partic. vol. I, pp. 13-14 per quelle qui citate).

dáśru) [R.R.]; Kloekhorst, EtDictHitt (2008), p. 391, voce *išḫaḫru-*. Hara, bāṣpa *and* aśru; Id., *Hot tears* [D.M.].

áśva-

Una connessione con il nome del "cane" era supposta, oltre che da Van Windekens [1976], cit. EWAia I, p. 140, anche da Mishra, *Two etymologies* (1975)[11], che collegava ulteriormente entrambe le parole con *āśú-* "veloce" (a differenza di van Windekens, per il quale la radice sarebbe stata "*$\hat{k}eu$- «luire, briller»"). L'antica interpretazione etimologica del nome del "cavallo" come "il veloce" (già in Bopp, cfr. EWAia, luogo cit.) è ancora in tempi più recenti ripresa (nonostante quelle che a van Windekens parevano "obiezioni insormontabili d'ordine fonetico", p. 63 del suo articolo) oltre che da Hamp (1990, cfr. la discussione in Gippert cit. qui sotto) da Schindler in Tremblay, rec. di Mayrh., AKS II, p. 151 (con *āśú-*, gr. ὠκύς < "*$\bar{o}$-$h_1\hat{k}\acute{u}$-", cioè un composto con la preposizione corrispondente a sscr. *ā́*, su cui cfr. la critica di Zimmer, rec., 2001, di Mem Bökönyi, p. 53, nota 17[12]) e appunto da Gippert, *Hippologica Caucasica*, pp. 613-614, con la nota 3 ("*$h_1\bar{o}\hat{k}u$-" con "exzeptionelle *$\bar{o}$*-Dehnstufe der Wurzelsilbe" e "*$h_1e\hat{k}u$-o-" "«Vr̥ddhi»-Bildung"), che respinge altresì le connessioni con termini semitici e caucasici avanzate da Gamkrelidze e Ivanov (i quali peraltro non caldeggiavano – diversamente da come sembrerebbe risultare leggendo in sovrapposizione la rec. cit. di Zimmer e il contributo stesso recensito – un prestito dal caucasico all'i.e., ma semmai il contrario, cfr. Gamkrelidze-Ivanov, *Indo-European and the Indo-Europeans*, pp. 478-479; Gamkrelidze, *PIE 'horse' and 'cart'*, p. 39[13] e Mayrh, EWAia I, p. 140 (che cita un contributo precedente dei due autori); una rassegna della bibliografia relativa alle supposte relazioni fra il termine i.e. ricostruito e termini in lingue non i.e. è presentata da Raulwing, *Horses*, 2000, pp. 106-108); sulla funzione morfologica di *-o-* in "*$h_1e\hat{k}$-u-o-" cfr. Steer, *Ai.* methí- [2008], p. 147, cfr. p. 151[14]; la derivazione del nome del "cavallo" dall'astratto per "veloci-

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[11] Cfr. altresì Watkins cit. da Raulwing, *Horses*, 2000, p. 105.

[12] L'"Unterricht" da cui Zimmer pensa provenga la spiegazione di Schindler è, secondo la testimonianza di Lipp, *Palatale*, I (2009), p. 75, precisamente la conferenza *Zu Form und Funktion der indogermanischen* o-*Stämme* tenuta da Schindler il 1° dic. 1989 a Freiburg.

[13] Anche se la direzione del prestito risulta più chiara in quanto è detto a proposito dei termini semitici e egiziano nella versione che si legge in Gamkrelidze-Ivanov, *Indo-European and the Indo-Europeans*, p. 478, nota 21.

[14] Il quale peraltro segue fedelmente l'insegnamento di Schindler, stando sempre alla testimonianza di Lipp cit. qui sopra.

tà”, “*$h_1 o\hat{k}$-u-/*$h_1 e\hat{k}$-u-” risulta particolarmente importante per Lipp, *Palatale* I (2009), pp. 75-76[15] perché i contesti fonetici provvisti da casi come il dativo o il locativo del nome matrice in *-u-* consentirebbero di far scattare la palatalizzazione *satəm*, poi estesasi anche al derivato (su “manipolazioni” del genere si devono tuttavia registrare le perplessità di Pinault, rec., 2010, p. 170[16]).

~ giudeo-tat ʕäsb, Authier, *Grammaire juhuri* (2012; notizia dalla rec. di Borjian, 2015, p. 624). Sui riflessi di “*$E_1 é\hat{k}\underset{\cdot}{u}o$-$s$” in albanese cfr. Huld, *An Albanian reflex* (2004)[17]; in slavo (“*$h_1(e)\hat{k}\underset{\cdot}{u}o$-”) Blažek, *On 'horse' in Slavic* (2010)[18]; su arm. ēš “asino” de Lamberterie, *Traces de la langue poétique* (2006), pp. 213-223 (cfr. Gamkrelidze, *'Donkey'*, p. 612, nota 4; per il significato cfr. sscr. *aśvatará-* “mulo”).

Derivati e composti: Ivanov, op. cit. in EWAia I, p. 141, voce *aśvatthá-*; Id., *Etymological studies*, cfr. Mayrh. in Sprache, IC 31a, n° 199 (su *aśvasārathya-*). *áśvāvant-*: sulla voc. lunga cfr. ancora Tremblay, luogo cit. (che discute Mayrh., AKS II a proposito appunto dei casi di *ā* avanti a °*v*[..]. Composti: Swennen, *Notes d'onomastique* (2002: composti con *áśva-* risp. a.ir. *aspa-* al 2° membro), cfr. anche Id., *Indra entre Inde et Iran* (2009), pp. 305-308; Sadovski, *On horses and chariots* (2009). *āśvàśva-* (~ av.rec. *āsu.aspa-*): Swennen, *D'Indra à Tištrya*, (2004), pp. 394-395. *r̥jráśva-*, nome proprio (con il sintagma corrispondente e il corrispondente nome proprio av. rec. *ərəzrāspa-*): Mayrh., *Personennamen* (2003), p. 22, con rinvio a Swennen; Schmitt, *Griechische Umdeutung eines “skythischen” Ethnonims* (2006). *háryaśva-* ~ ir. [*zariašba*], antroponimo, su una tavoletta trovata a Persepoli in scrittura elamita (continuato dall'antroponimo pers. *Zarāsp*): Swennen, *D'Indra à Tištrya*, p. 225 e *passim*, con le osservazioni di Schmitt, rec. (2005), pp. 341-342; Skjaervø, rec. (2008), p. 296, nota 5; Pinault, rec. (2010), pp. 227-228; Swennen, *Indra entre Inde et Iran*, pp. 307-308 e le ulteriori osservazioni di Schmitt, rec. (2010) di Fs Kellens, p. 159 (popolo degli Ζαριάσπαι nella Battriana ecc.). Av.

[15]   Per tale derivazione ulteriore bibliografia ivi, nota 211 e Raulwing, *Horses*, pp. 102-105.

[16]   Secondo Lipp luv. ger. *aśu-* “cavallo” – come *śwan(i)-* “cane”, *śuran-* “corno” – non dimostrerebbero dal canto loro una triplice rappresentazione delle dorsali in questa lingua, ma sarebbero prestiti dall'indoario; l'ipotesi non è ritenuta credibile né da Pinault, rec., p. 170 né da de Vaan, rec. (2011), p. 8 (con rinvio a Kloekhorst), meno scettico peraltro sulla soluzione alternativa di una palatalizzazione determinata contestualmente in luvio.

[17]   [§ 1.] *The problem of the horse*; [§ 2.] *The principal Indo-European term for 'Horse'*.

[18]   Dello stesso Blažek cfr. precedentemente *Is Indo-European* *H_1ekwos 'horse' really of Indo-European origin?* (1999), cit. in Mayrh., *Fortsetzung* (2005), p. 13.

yuxtāspa- e *vīštāspa-*: García-Ramón: *Av.* Yuxtāspa *und* Vīštāspa (2005); Agostini, *Eschatological seers* (2014), in partic. pp. 53-56 (*vīštāspa-*). Su av. *haēcaṭ.aspa-* cfr. qui sotto, voce *aśvín-*. *áśvapati*: West, *Poetry and myth* (2008), pp. 145-146. *áśvamedha-*: ved. alla voce.

Riguardo al cavallo in epoca vedica e prevedica, come anche nella storia indiana posteriore, una questione rilevante è relativa all'animale come cavalcatura, della quale si è occupato Falk, *Das Reitpferd im vedischen Indien* [non solo nell'India vedica], che investe problematiche su cui cfr. successivamente, fra gli altri, Neu, *Der hethitische König*; Drews, *Early riders* (2004); Anthony, *The horse, the wheel* (2007).

Dell'importanza del cavallo nella cultura i.e., in connessione con la regalità, testimoniano le proiezioni i.e. del sacrificio dell'*áśvamedha-* (qui sotto), cfr. anche ved. *viśpála-*, nome di una cavalla che vince nella gara per la supremazia fra le *víś-*, con la conseguente espressione, si può presumere, di chi incarni tale supremazia, ~ lusitano *Trebopala*, cfr. Maggi cit. EWAia II, p. 562.

aśvatará-

Su *-tara-* come formante di zoonimi nelle lingue indoeuropee e sull'interpretazione della parola come "che si avvicina, somigliante al cavallo" cfr. Schaffner, *mūstella*, *mūstēla* (2006), p. 41 [R.R.]. Diversamente Lazzeroni, *Fra mondo indiano e mondo mediterraneo* (2005), pp. 5-6, sec. cui in "*aśvatara-* «mulo» [...] il suffisso [*-tero-*] non designerebbe la somiglianza: «quasi cavallo», ma la differenza e l'opposizione, qualificando l'animale «di specie cavallina» rispetto all'asino" (è la tesi di Benveniste, accolta da Lazzeroni). L'identificazione di tale funzione "contrastiva" del suffisso sarebbe quella "tradizionale" secondo Cuzzolin, *Comparative and superlative* (2011), p. 594 ("an elementi is singled out as opposed to, or in contrast with, another element or a whole set of other elements («*particularizing* and by implication *antonymic*»)", citaz. da Sihler). Cuzzolin riprende piuttosto la tesi, da lui già sostenuta, secondo la quale *-tero-* esprimerebbe, almeno primariamente, il "surpass comparative", per cui *aśvatará-* "mulo" significherebbe allora "*«plus cheval»* (par rapport à l'âne)", cfr. Martzloff, rec. (2013) di *New perspectives* IV, p. 119. Martzloff critica tale tesi, mantenendosi a favore della funzione "différenciative", che, applicata a *aśvatará-*, è fatta tuttavia sfociare nella somiglianza: "«dont les qualités sont *du côté de* celles du cheval» (sans être tout à fait un cheval), d'où *«comparable au cheval»*" [D.M.].

aśvatthá-

Poi *pippala-*, msch. (al neu. dalla RVS – *píppala-* – nome del frutto, cfr. EWAia II, p. 133).

Biswas-Debnath, *Aśvattha*; Crevatin, aja ekapād, pp. 61-62.

Pinault, *Nom de l'hôte*, pp. 471-472, modificando un'ipotesi di Emenau (cfr. EWAia I, p. 141), deriva il nome da **a-sva-sth(i)ta-* "qui n'est pas debout, dressé par lui-même", giustificato botanicamente, ma cfr. la perplessità di Klein, rec. (2001) di *Sprache und Kultur*, pp. 26-27. Sulla motivazione botanica, invece, dell'identificazione dell'*asvatthá-* con il fuoco (che, con riferimento al mito di Agni rifugiatosi in quest'albero sotto forma di cavallo, svolge un ruolo, a seconda della derivazione sostenuta, etimologico o, p.e. nel caso di Pinault, paretimologico) cfr. Gotō, *"Purūravas und Urvaśī"* (2000), pp. 93-94, nota 53.

aśvamedha-

Le indicazioni bibliografiche fornite qui sotto tralasciano quanto già cit. in Swennen, *D'Indra à Tištrya* (2004), le cui pp. 176-227 sono dedicate complessivamente a Vājapeya, Agnyādheya e Aśvamedha e p. 208ss. specificamente all'Aśvamedha, cfr. anche pp. 39-43; Id., *Portrait du cheval sacré* (2007).

Koppers, *Die Religion der Indogermanen*; Id., *Pferdeopfer*, quest'ultimo già cit. in Swennen, *D'Indra à Tištrya*, qui ripreso per menzionare la critica mossa a questo autore da Lincoln, *Ecology*, p. 9; Bhawe, *Die Yajus des Aśvamedha*; Kirfel, *Der Aśvamedha*; Horsch, *Gāthā- und Śloka-Literatur*, p. 278 e nota 1; Krick, *Der vieräugige Hund*; Gonda, *Die Religionen Indiens* I, pp. 168-172 ~203-208 (dettagliata descrizione del rito); Pascal, *October horse* ("Gegen Dumézils Vergleich mit dem ved. *aśvamedha*", cfr. M. Peters in Sprache, IC 29a, n° 640); Chakrabarti, *Pāriplava*; Campanile, *La ricostruzione*, pp. 42-45; Polomé, *L'Aśvamedha est-il un ritual de date indo-européenne?*; Sergent, *Genèse*, pp. 335-339 (puntuale esposizione degli elementi di confronto con le altre tradizioni i.e. e dei principali contributi a partire da Dumézil); Oberlies, *Religion* I, pp. 288-289; 290-292; Kulkarni, *Aśvamedha* (2004); Oberlies, *Honig, Bienen und Zwillinge* (2007); West, *Poetry and myth* (2008), pp. 415-417 (con ulteriori riferimenti); Teshima, *Die Entwicklung* (2008: ed. e trad. dell'inizio della sez. sull'Aśvamedha del *Vādhūlaśrautasūtra*), con la rec. (2014) di Voegeli. Assegnano senz'altro alla RVS l'apparizione dell'A. Mylius, *Wörterbuch des altindischen Rituals*, p. 36 (il riferimento è a I, 162-163); Jamison, *Sacrificed wife, sacrificer's wife*, pp. 78 (I, 162 è "the RVic

Aśvamedha hymn", con il seg. "the two Aśvamedha hymns", cfr. Ead. in Jamison-Brereton, RV I, 2014, p. 343); 74-88 (a proposito di X, 86); Witzel, *Development*, p. 313, nota 287 ("found already [l'A.] in RV 1.162-163; apparently even earlier at 4.38-42 [*sic*: piuttosto 38-40, cioè i tre inni dedicati al cavallo Dadhikrā?], 4.42. 8 [se Daurgaha è altro nome di cavallo secondo la leggenda della nascita di Trasadasyu come narrata da ŚB XIII, 5, 4, 5]"; del medesimo sull'A. cfr. anche *Ṛgvedic history*, pp. 326; 329; 333 e nota 74) e il nome stesso del rituale potrebbe essere attestato in RVS V, 27, 4-6 *aśvamedha-*, che qui come appellativo non potrebbe essere che un composto possessivo "the [...] performer of the Horse Sacrifice", Proferes, *Sovereignty* (2007), p. 70, cfr. la rec. (2009) di Thompson, p. 365 (bensì nome proprio sec. Mayrh. EWAia II, p. 377; Id., *Personennamen*, 2003, p. 14; Scarlata in *Das heilige Wissen* II, 2013, p. 245; Brereton in Jamison-Brereton, RV II, p. 689; ma anche come nome proprio – e nome proprio, si noti, di un *sūrí-*, di un nobile patrono del sacrificio, RVS V, 27, *4b* – non farebbe che attestare il medesimo riferimento a quel sacrificio: la tipologia del nome sarebbe quella, p.e., di un Astianatte e allora dal gioco di parole con *medhā́m* in corrispondenza colonnare al v. *d*, cfr. la nota di Scarlata, p. 552, verrebbe un invito a porre attenzione a ciò che come nome parlante direbbe[19]); limitativamente, "la liturgie de l'*aśvamedha* n'existait pas à haute époque védique"[20], Swennen, *D'Indra à Tištrya*, p. 212, con una critica di Dumézil, pp. 217-218, ma cfr. Pinault, rec. (2010) del prec., pp. 226-227, che gli rimprovera il mancato riferimento al libro della Jamison cit. qui sopra. Che l'A. fosse o no in qualche forma in uso nell'ambito da cui sono usciti gli inni più antichi, resta il fatto che almeno alcuni elementi del rituale classico – e tra i più clamorosi –, oltre forse al nome stesso (cfr. qui sopra), sono di ascendenza i.e. – la presenza di elementi comparabili anche al di fuori del mondo i.e. non è di per se stessa un'indicazione a sfavore dell'indoeuropeità – e testimoniano l'importanza del cavallo in connessione con l'acquisizione – precisamente, l'estensione –

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[19] È un nome proprio il gallico *IIPOMIIDUOS*, cfr. Puhvel cit. EWAia II, p. 377, ma cfr. Pinault, *Gaulois* Epomeduos (2007). In realtà l'interpretazione di *aśvamedha-* come appellativo/aggettivo nel contesto di RVS V, 27, 4-6 consentirebbe di evitare il paradosso di un patrono del sacrificio, Tryaruṇa, che invitasse Agni a donare a un altro patrono del sacrificio, Aśvamedha: piuttosto la st. *4 yó ma íti pravócaty ˺ aśvamedhāya sūráye | dádad ṛcā́ saním yaté ˺ dádan medhā́m ṛtāyaté ||* sarà da intendere: "[... Tryaruṇa, fine st. prec.] che «a me [il poeta]» proclamerà [*íti* dopo *me*], «(e) al patrono che compie il [/al patrono, all'esecutore del] sacrificio del cavallo [cioè Tryaruṇa stesso] (Agni) doni, a chi va al guadagno con l'inno, doni il sapere al veritiero»".

[20] Ma p. 73: "Que ce soit dans l'hymne RS 1. 163 au cheval d'*aśvamedha* [...]" (perché questo inno non apparterrebbe a "haute époque védique"?).

di un dominio territoriale, vuoi che, a seconda dei ruoli rivestiti nel rapporto sessuale uomo-animale, si tratti di una giumenta che rappresenta la terra su cui il dominio deve esplicarsi, come nel rituale irlandese, vuoi che, come in quello indiano, il cavallo – maschio – rappresenti il re stesso, che aspira a dominare sulla nuova terra segnata dal cavallo lasciato errare per un anno. Cfr. anche Houben, *The Vedic horse sacrifice* cit. qui sotto, voce *áhiṁsā-*.

È nell'A. in cui ci rivolge al cavallo con ben noti diversi nomi, cfr. West, op. cit., p. 161; Atti SIG 2014 (2016), p. 66, nota 67.

aśvín-

Le indicazioni bibliografiche fornite qui sotto tralasciano quanto già cit. in Zeller, *Zwillingsgötter* (cit. in EWAia).

Dumézil, *Les deux Palès*, partic. p. 116 e nota 2 (con rinvii a Wikander); Di Giovine, *Gli Aśvin sul far dell'alba*; Pirart, *Les Nāsatya* I; II (1995-2001), in partic. I, pp. 15-25 (comprendenti lo studio intitolato *Les noms des Aśvin*); Oberlies, *Religion* I, pp. 178-183; Id., *Pūṣans Zahnlücken* (2000), pp. 374-375 (ascendenze i.e. dei loro miti, in partic. per ciò che riguarda i loro rapporti con Uṣas/Sūryā); Parpola, *Les Nāsatyas* (2004-2005); Jog, *Aśvins* (2005), con la trad. ingl. dei testi relativi dalla RVS, AVS e dal MBh e una raccolta di altri testi vedici e classici nell'originale; West, *Poetry and myth* (2008), pp. 186-193 (p. 187 *aśvín-* = "having (to do with) horses", ma cfr. la critica di Schmitt, rec., 2008, p. 70); Nikolaev, *Avestan Haēcaṱ.aspa* (2012): il mito degli Aśvin "rescuing the drowning Sun Maiden from the sea" trova un parallelo – che getta luce sulle sparse attestazioni vediche – nella mitologia baltica e un riflesso nel nome proprio av. *haēcaṱ.aspa-*; Oberlies, *Rigveda* (2012), pp. 50-51; 127-130; 215-216; Norelius, *Crossing the waters* (2017), in partic. sul mito di Bhujyu salvato dagli Aśvin.

áṣatara-

Hapax. Pirart, *Les Nāsatya* I, p. 324 < *á-tkṣta-tara-* "n'ayant pas encore fait l'objet d'un façonnage" (senza troppa convinzione); Dōyama in *Das heilige Wissen* I (2007), p. 759 "Diese (Opfer)werke haben wir für ihn (gerade) zu den gesprenkelteren (bunter) gemacht" traduce un testo emendato (+*kárma karmáṣatarāsmai*, cioè +*kárma. karmáṣatarā. asmai* orig. *tā́ karmáṣatarāsmai* RVS I, 173, 4a), con *karmáṣa-* per *kalmáṣa-* sulla scorta di Old. cit. EWAia I, p. 142; Jamison in Jamison-Brereton, RV I (2014), p. 372 "we have done these more attainable *deeds [= ritual activities] for him", basato sulla stessa integrazione di un secondo +*kárma* non però sostituito a *tā́*

(senza il quale il verso sec. l'ipotesi di Dōyama sarebbe un ottonario), con diversa scansione in *pada* ([...] *karma. ...tară. asmai*) e con il segmento °*ă̄ṣa*° avanti a °*tară* riferito alla radice con la palatale *AŚ/NAŚ* (dissimilazione per *aṣta-tară*, cfr. il *Comm.* al passo; ma si ricadrebbe nella medesima difficoltà indicata da Pirart, luogo cit., rispetto alla propria interpretazione).

aṣṭá-
Blažek, *Indo-European "eight"*. Prakash, Aṣṭau: discute l'esistenza di un tema in nasale *aṣṭan-* [R.R.]; Miyakawa cit. qui sopra, voce *aśītí-*; Lipp, *Palatale*, I (2009), pp. 89-92 (accoglie la derivazione < "*h_2ek- ~ *$h_2e\hat{k}$- 'spitz, scharf'", ma cfr. de Vaan, rec., 2011, p. 4).
áṣṭakā-: Sprockhoff, *Zum altindischen Totenritual* (2003) [D.M.].

áṣṭrā-
Wojtilla, Óind *áṣṭrā-* (2002); Katz, *Studien* (2003), p. 187.

aṣṭhīvánt-
Anche °*aṣṭhīvá-*, primario sec. Lubotsky, *The I.-Ir. word* (2002), p. 321; "Skt. *aṣṭhīvá(nt)-* is generally glossed 'knee(-joint)', but this translation is wrong. The analysis of the passages clearly shows that *aṣṭhīvá(nt)-* rather refers to a part of the leg between the knee and the ankle, i.e., a shank, shin-bone", *ibid.*, p. 319a; i commentatori antichi hanno attribuito a *aṣṭhīvá(nt)-*, non più ben compreso, il significato di "rotula" per l'associazione con °*aṣṭhilā́-/aṣṭhilā-*, *ibid.*, p. 322a. Su quest'ultimo termine, sec. Lubotsky di origine non i.e., cfr. *ibid.*, pp. 321b-322a. Lubotsky non respinge invece l'associazione di *aṣṭhīvá(nt)-* con il nome dell'"osso", analizzando la parola, sulla base del confronto con l'av. *ascuua-* interpretato anch'esso come "shin, shank", come un composto < i.ir. "*Hast-(s)kiHua-*, which yields *Hast(s)čiHua-* after palatalization" e dove il 2° membro sarebbe una parola i.e. per lo "stinco" (russo *cévka* "shin(-bone) of a horse, bobbin" ecc.)[21]. Cfr. anche qui sotto, voce *ásthi-*.

AS[1]
Sulla possibilità che *ásant-* testimoni o meno l'attacco laringalistico della radice (Mayrh., EWAia I, p. 144; Id. *Fortsetzung*, 2005, p. 13, con bibl. ulteriore) cfr. Di Giovine, *Tracce* (2012), con le recc., riferentisi a Mem Gusmani

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[21] *Aṣṭhivánt-* "Kniescheibe" e, insieme con *aṣṭilā-*, < *aṣṭhi- "ein runder Gegenstand" (a sua volta ~ *aṁśú-*) invece sec. Kim, rec. (2008) di RIVELEX I, p. 194.

II, 1, di Garnier (2014), p. 99; García Trabazo (2016), pp. 95-97; quanto alla relazione cronologica fra *ásant-* e *ásant-*, discussa da García Trabazo, proprio *ásant-* come forma più antica sarebbe coerente con lo sviluppo del participio negativo dall'i.e. all'indoario secondo il quadro presentato da Lowe, *Negated participles* (2011), in partic. pp. 32-36. Un attacco laringalistico per la particella rafforzativa *sú*[2] consente di spiegare un fenomeno di alternanza quantitativa nella RVS (Mem Campanile II, p. 546): ciò ha un riflesso per la determinazione dell'antecedente i.e. di *AS*[1] se l'avverbio *sú*[1] "bene" è formato dalla stessa radice verbale e un impiego di tale avverbio ha dato origine alla particella *sú*[2] (EWAia II, p. 736[22]).

Sul rapporto fra *AS*[1] e *BHAV*[1], le due traduzioni in sequenza di due passi della RVS con *sánti* risp. *bhavati* + dat. "les protections vôtres qui sont pour celui qui a peiné" risp. "il se trouve un gué pour lui", date da Haudry, *L'emploi*, p. 43, sembrano attenersi all'antica interpretazione di *AS*[1] come copula e *BHAV*[1] espressione dell'"esistenza" (Bopp, *Das Conjugationssystem*, p. 6 = 50).

Tichy, *Die Nomina agentis*, p. 169, nota 45, con le tabelle di Kupfer, *Kopula und Nominalsätze* (2000), pp. 291-292, pone invece l'opposizione nei termini di *AS*[1] "sein": *BHAV*[1] "werden", articolandola tuttavia all'interno delle categorie grammaticali: la mostrerebbe l'indicativo presente con valore attuale, l'indicativo imperfetto e il participio presente, laddove "im zeitstufenlos verwendeten Indikativ Präsens", come anche nel congiuntivo, nell'ottativo e nell'imperativo "soweit hier *überhaupt* ein Bedeutungsunterschied vorhanden ist", "bezeichnet [...] *bhū* 'im gegebenen Fall werden o. sein' und *as*", come ugualmente la frase nominale, "'für längere Zeit o. grundsätzlich sein'"[23];

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[22] Segue Mayrh. Dunkel, LIPP II (2014), pp. 299 e nota 2; 304 e nota 30; 305, che d'altro canto per *ū* – da scindere per di più, secondo il medesimo, come *u*, in due diverse entrate lessicali, cfr. qui sopra, nota 1 – vede, al di fuori del nesso con *sú* seguente, fonti etimologicamente, non analogicamente giustificate, nella fattispecie da *h_2u* seguente (eventualmente con aṁreditạ, *$h_2u\,h_2u$*), p. 339, nota 24. In generale le "ragioni metriche" manifestano tutta la loro debolezza laddove si consideri che, accanto a forme linguistiche 'sbagliate' poste nelle collocazioni metriche 'giuste', si danno forme linguistiche 'giuste' nelle collocazioni metriche 'sbagliate' e che gli uni come gli altri casi possono spiegarsi partendo da dati linguistici, come p.e. la *collocazione* della prima sillaba di *ávase* in una sede metrica forte in quanto legittimata da una tradizione metrica che aveva in principio posto 'giustamente' in tale sede una sillaba chiusa o, di converso, una *forma linguistica* alterata, p.e. la prima sillaba di *ádeva-*, perché legittimata dalla forma lunga del prefisso privativo altrove linguisticamente giustificabile, come in *ásant-*, e di lì estesa dai poeti a formare un doppione metricamente conveniente, ulteriormente legittimato dalla connessione concettuale.

[23] Ma l'essere per natura risp. l'essere transitorio possono essere espressi in opposizione contestuale anche da forme quali il participio presente *satī́* risp. l'indicativo (o ingiuntivo) aoristo (*á*)*bhūt*: RVS VI, 47, 20*b urvī́ satī́ bhū́mir aṁhūraṇā́bhūt* "la terra, che pure è larga, è diventata stretta".

la Kupfer, peraltro, semplifica le distinzioni, impiegando unicamente il parametro [+Dyn(amisch)] : [–Dyn], valevole, per $BHAV^1$ risp. AS^1, nell'indicativo presente, imperfetto e nel participio presente, con un'apparente neutralizzazione dell'opposizione fra i due verbi negli altri modi del presente tranne l'ingiuntivo, nel quale si dà solo AS^1, in alternativa alla frase nominale (in realtà la RVS testimonierebbe un'unica forma in un unico luogo di ing. – pres. – di AS^1, interpretabile anche in altro modo, cfr. Niederreiter in RIVELEX I (2006), p. 640, nota 50 e, in generale, Praust cit. dal medesimo, p. 637); per quel che riguarda poi tutti gli altri tempi e modi in cui i due verbi sono attestati compare naturalmente, nella sua Tab. 1, solo $BHAV^1$, laddove per le 3[e] persone dell'ingiuntivo aoristo torna l'opposizione [+Dyn] : [–Dyn], ma qui fra $BHAV^1$ e frase nominale, e nel perfetto indicativo, per cui è data la stessa alternativa (di nuovo senza indicazione di distinzioni) che per i modi del presente diversi dall'indicativo e dall'ingiuntivo. Era proprio il perfetto (indicativo) invece la categoria grammaticale sensibile per la determinazione del valore lessicale ("divenire") di $BHAV^1$ nell'impostazione di Di Giovine, *Studio* I, p. 304 (cfr. poi Kümmel, *Perfekt*, 2000, pp. 344-350[24]); AS^1, dal canto suo, sarebbe entrato in quella casella solo come "risultato di una innovazione non particolarmente antica" (Di Giovine, op. cit., p. 248. Ciò non toglie, tuttavia, che l'analisi testuale possa cogliere la possibilità di impieghi propriamente perfettivi del perfetto di AS^1, cfr. Fs Gusmani II (2006), p. 1020, nota 52; anche attestazioni del tipo di RV VII, 86, 4*ab* in Kümmel, op. cit., p. 111 comportano una struttura dei rapporti temporali assolutamente di tipo perfettivo).

Benedetti, *Vedico* durasyáti coglie una distinzione fra le due radici verbali nella composizione nominale, osservando la "tendenziale incompatibilità di **es-* con la composizione nominale", a cui supplisce "**bheṷə-*" (pp. 16-26); lo stato di cose è esemplificato in sscr. da *abhí* + *AS* ~ *abhibhū́-* (pp. 22-24); inoltre "*bhū-* tende a fornire non solo i composti nominali corrispondenti a sintagmi verbali con *as-*, bensì anche le forme di ingiuntivo del verbo 'essere'" (p. 24, nota 45). Ulteriore bibl. in VIA I, pp. 159-160 (AS^1); 307-308 ($BHAV^1$).

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[24] *Babhū́v-* in quanto "(geworden sein und nun) sein" si contrappone dunque al presente di AS^1 (come alla frase nominale) e ciò in un senso che nell'interpretazione di Kümmel verrebbe a essere il rovescio di quello indicato dalla Tichy per impieghi in tempi/modi nei quali opererebbe l'opposizione "im gegebenen Fall werden o. sein" : "grundsätzlich sein", essendo il "Sein" di *babhū́v-* per Kümmel "meist ein 'von Natur aus sein'".

AS[2]

"The root *as* forms verbs of throwing: they relate to the causing motion by exerting an instantaneous force on the moved entity [ess.: RVS III, 30, 17*d*; 24, 1*b*]. The root *sū* [EWAia *SAV*[T2]] relates to the action of causing motion by imparting force on the moved entity [ess.: RVS V, 82, 3*ab*; X, 37, 4*cd*]", Danesi, *Particle-verb constructions* (2013), pp. 82-83. In composiz. con *ā́*: Kim, rec. (2008) di RIVELEX I, p. 190.

asanā́-: Kim, *Untersuchungen* (2010), p. 393, con rinvio a un suo lavoro prec.
astrá-: *pāśupatāstra*: Pelissero, *Arjuna e la cerca delle armi* (2007).

asacadviṣ-

Kim, rec. (2008) di RIVELEX I, p. 190.

ásāmi-

Ved. voce *átathā* in CESc I, p. 166.

así-

S[chmidt], rec. di EWAia, fascc. 1-8, p. 352. Nikolaev, *K dejstviju* (2005), cfr. Matasović, rec. (2007) di Fs Herzenberg, pp. 32-33.

ásita-

Ancora Melchert, *Luvian lexical notes*, p. 214 con itt. *ḫanzana-* "nero", ted. *Amsel* "merlo", gr. ἄσις "fango" [R.R.]. Cfr. Kloekhorst, EtDictHitt (2008), p. 293, con riferimento all'ancora successivo Melchert, *Phonology* [D.M.].

asiddha-

Bronkhorst, Asiddha *in the* Aṣṭādhyāyī; Sharma, Asiddha *and* asiddhatvat (2012).

ásu-

Moisson, *Le védique* ásu- portava elementi a favore dell'interpretazione "spiri-to vitale" e della corradicalità con *AS* "essere". Haudry, *Les adjectifs germani-ques*, p. 118 pensa piuttosto alla stessa base che si trova nel nome del "sangue", **(H)ésH₂-r/n-*, e ricostruisce un sostantivo **h₁ésu-/*h₁su-* "fluido vitale" [R.R.]. Sul concetto Wachs, *Seele oder Nicht-Ich*, p. 25; Oberlies, *Rigveda* (2012), pp. 334-335.
Kui., *Note* difende *ahū-* < *ahu-* come nom. sing. di *ahu-* "signore" in Y 27.13*a* e 29.6*b*; l'interpretazione come strum. sing., per cui cfr. Schlerath, *Altin-*

disch asu-, p. 144 = 485, è invece seguita più recentemente, fra gli altri, da Schwartz, *Gathic compositional history* (2003), p. 202; Skjærvø, *The spirit* (2011), p. 124, ma d'altro canto, ad es., West, *Hymns* (2010), p. 47 Y 29, *6b* "indeed no patron has (yet) been found, nor a ruling [...]", che può tuttavia corrispondere a un'interpretazione di *ahū* come parte di uno dvandva scisso, cfr. Schlerath, lg. cit. Cfr. anche qui sotto, voce *ásura-*, in partic. nota 32 [D.M.].

ásura-

Rispetto alla tesi secondo cui Ahura Mazdā e Varuṇa sarebbero eredi di un'unica divinità i.ir. (cfr., fra gli altri, Narten, *Zarathustra und die Gottheiten*; e i.e., Oberlies, *Rigveda*, 2012, p. 65), va ricordata la posizione articolata a suo tempo espressa da Crevatin, *Due problemi*. II: ir. **baga-* equivale a ved. *devá-* (p. 25), "laddove nella religione pre-zarathustriana gli *Ahura* godevano di particolare privilegio nella gerarchia divina", le loro funzioni dovendo essere state anche "più rilevanti di quelle degli *asura* vedici" (p. 21); all'interno degli *Ahura si è poi prodotta una gerarchizzazione, evt. solo "maggiormente precisat*a* e consolidat*a*" da Zarathustra (p. 20), analoga e con "risultati [...] *storici*" (p. 22; corsivo dell'a.) analoghi a quanto avvenuto in India, in questo senso essendo comparabili le due figure di Ahura Mazdā e Varuṇa. Il quadro cosmogonico preso come modello di riferimento da Crevatin è quello di Kui., di cui cfr. più recentemente *Ápaśyaṁ jāyā́m* ("Aditi [...] was the mother of those Asuras who 'went over' to the Devas and became the *Ādityas*"; "when", infatti, "the primordial hill is opened", "some of the Asuras side with the Devas, whereas the rest is banished and expelled to a region on the fringe of the ordered world", p. 106, con rinvii a sue opere precc.)[25]. Si rivolgeva, tuttavia, fra gli altri, a Kui. la critica di Hale, *Ásura-*, che osservava come il plurale della parola fosse assente dai libri 'familiari' della RVS, escludendo così il suo impiego per indicare una classe di dei in fase antica; il plurale comincia a apparire (con certezza) nei libri I, VIII e X (10x), orientandosi dapprima verso la "designazione" di "signori" umani e particolarmente ostili. Il riferimento umano del termine è più recentemente enfatizzato da Nath, *The Dāsas*: "in einem ausführlichen Anhang [...] sieht er in *asura* ursprünglich Angehörige der ersten arischen Einwanderungswelle", cfr. la rec. – complessivamente positiva – di Mylius, p. 379.

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[25] Sostiene poi la complessa dicotomia alla base della storia del pantheon con riferimenti a prestiti dall'i.ir. Witzel cit. qui sotto nel testo.

Ancora più recentemente Scharfe, *ex occidente lux?* (2016), accogliendo Hale, op. cit. sostiene lo sviluppo degli *ásura-* demoni dagli *ásura-* umani ostili: non si tratta di una "gradual devaluation" del termine, poiché "the term was always ambivalent, it is just that there were in later Vedic texts more frequent references to hostile human «bosses»" (p. 58). Né d'altronde gli *ásura-* postrigvedici né i *daēuua-* avestici sarebbero veri e propri demoni: piuttosto "counter-gods". "I suggest" – sostiene Scharfe – "[...] that the dominant role of the Iranian Ahura Mazdāh and the disgraced *daēuuas* (whether we credit this development exclusively to Zarathustra or not [i *daēuua-* furono primitivamente adorati nella religione iranica anche secondo Scharfe]) were the model for the late Vedic role of Prajāpati and the misguided Asuras [nel cui conflitto contro i *devá-* questo dio emerse assumendo il ruolo di un supervisore orientato, analogo a quello di Ahura Mazdāh nella contesa fra "God Will" e "Evil Will"], who were raised to a level at which they became serious rivals of the gods in mythologic tales[26]" (p. 59)[27].

Sulle sue peculiari posizioni era ritornata, dal canto suo, Boyce, *Mithra the King and Varuna the Master* (2001): nella formula av.rec. *miθra ahura bərəzanta*, *ahura-* vale bensì per *Varuna – in quanto Apąm Napāt e, altrove, Baγa[28] – ma distinto[29] da Ahura Mazdā, divenuto l'Ahura principale al di sopra degli altri due, Miθra e *Varuna).

Quanto a un altro sintagma av., oltre quello ora citato, fra i principali nella problematica del rapporto fra *ahura-* e Ahura Mazdā, cfr. Gershevitch, *mazdåsča ahuråŋhō* ("Lord Mazdah in his integrated consistence of Lords"[30]). Rinviene dal canto suo in ciascuna Gāθā passi in cui si "fa la distinzione fra Mazdā e un *ahura* anonimo" Kellens, *Le jour se lève* (2013), pp. 63-64; 68.

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[26] Gli *ásura-* sono nella loro fase demoniaca plurali e anonimi, mentre nessuna delle divinità tipicamente *ásura-* nella RVS cessa di far parte del culto tardo-vedico.

[27] La direzione del movimento culturale oriente ← occidente sarebbe ancora più antica: l'emergere nel pantheon i.ir. di divinità che rappresentano concetti astratti è attribuita da Scharfe a un'influenza babilonese e in effetti la coppia *ásura-* (/Ahura): *devá-* trova un confronto impressionante con bab. *bēl* (~ ebr. *baʿal*) "lord": *ilu* "god", il primo valendo nell'opposizione come il termine marcato; anche *bēl* (come *baʿal* ecc.) è inoltre impiegato "in secular contexts" ("king, lord [etc.]") e può riferirsi a personaggi negativi (pp. 66-67).

[28] Per quest'ultima identificazione cfr. già Dietz, *Baga and Miθra*, p. 114.

[29] Altrimenti ritenuto non distinto, come secondo Narten, *Die Aməša Spəntas*, p. 60.

[30] Diversamente Narten, *Die Aməša Spəntas*, p. 55ss. "o Herren (und) auch der Weise", Y 30. 9 (l'altro passo in cui compare il sintagma è Y 31.4), considerando anche Y 30. 9 secondo il tipo individuato da Zwolaneck, *vắyav índraśca* (cfr. Narten, op. cit., p. 58, con ulteriori rinvii).

Sul significato di *ásura-/ahura-*: Narten, *Zarathustra und die Gottheiten* conferma "Herr, Gebieter"; di Polomé (cfr. Schlerath, *Altindisch* asu-, p. 146 = 487; EWAia I, p. 148; Hale cit. qui sopra) si veda anche il più recente *Divine names*, p. 56 con la nota 1 a p. 61, in cui, fermo restando come "più plausibile" il confronto con l'itt. *ḫaššu-* e *ḫāš-ⁱ/ḫašš-* "generare"[31], accreditato ormai anche dall'EWAia, il significato di *ásura-* è descritto, sulla scorta di Srinivasan, come "charged with vital energy": si mette con questo in evidenza l'ingorgo etimologico per cui un valore radicale quale "generare" è attribuito alla ragione denominativa di itt. *ḫaššu-*, sscr. *ásura-* ecc. laddove sarebbe ancor meglio al suo posto nel caso di sscr. *ásu-* e av. *ahu-* "vita" separati invece dai precedenti nell'impostazione di Schlerath e, sulla base delle sue conclusioni, di Mayrh.[32]; accoglie il collegamento con il verbo ittito anche Skjærvø, *Ahura Mazdā and Ārmaiti* (2002), p. 402, che mette in rilievo l'idea di paternità, traducendo comunque sia Ahura in quanto nome del dio supremo di Zarathustra "reigning Lord", cfr. p. 403, trad. di Y 27.13 (Ahura Mazdā = "literally, «the All-knowing (ruling) Lord»", Id., *The spirit*, 2011, p. 13) [D.M.]. Moisson, *Le védique* ásu- continua invece a analizzare *ásura-* come derivato di *ásu-* [R.R.], pur tacendo sul vero argomento ostativo indicato da Schlerath (cfr. il rinvio a p. 130, nota 31).

~ gr. ἤϊε, epiteto di Apollo, sec. Nikolaev, *K dejstviju* (2005), discusso da Beekes, EDG I (2010), p. 512.

Prestiti nelle lingue ugrofinniche: mentre Schmid, *Zur Frage der Datierung* (non cit. da Rédei, UEW 1, p. 18) concludeva da prestiti quali il mordv. (erza) *azoro* "Herr" "daß es noch in historischer Zeit außerhalb des indischen Subkontinents indoarische Sprachen [...] gegeben haben muß" (citaz. da Mayrh. in Sprache, IC 26b, nº 166), Witzel, *The Ṛgvedic religious system* (2004), in partic. pp. 591; 585, nota 3 (ma si vedano in generale sugli Asura le pp. 587-594), aggiungendo alle lingue riceventi il ket (Siberia occ.) e il buriato (lingua mongola), desume da tali prestiti che il concetto i.ir. di *Asura

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[31]   Alle forme ittite sono da aggiungere altre a queste apparentate in luvio, che comportano una radice *h₂ems- (con °*m*°), cfr. Kloekhorst, EtDictHitt, 2008, p. 319. In *On the source*, del 1952, p. 453 Polomé aveva peraltro pensato a una radice diversa, i.e. "*xen-*" "tie" (cfr. gr. ἡνία "redini" ecc.).

[32]   Si chiedeva dal canto suo se non si dovesse preferire "die direkte Gleichung heth. *ḫaššu-* «König» zu ai. *ásu-* (= avest. *aŋhu-*) «Leben»" Kammenhuber, *Protohattisch-Hethitisches*, nota 9 a p. 80; il confronto era pensato come radicale, cfr. *Zur Stellung*, p. 72 (entrambi i lavori cit. da Schlerath, *Altindisch* asu-, p. 146 = 488), dove si chiarisce anche l'esclusione, di converso, dalla serie proprio di i.ir. "*asuras*" e di germ. "*ansuz*", a favore della pertinenza di un parallelismo con germ. "*kuningaz*"; cfr. più recentemente Eichner, *Indogermanische Seelenbegriffe* (2002) cit. da Hintze, *Avestan research* (2017), p. 43.

"was developed in the Northern Steppes, close to the Uralic and Ket peoples [...]. Time and location are clear: c. 2000 BCE, in the wide steppe belt comprising, among others, the 'land of cities' (Arkhaim, Sintashta). In any case, we do not have to look for a BMAC origin of the concept" (p. 593). Di livello i.ir. ("in einer Frühform" della parola, Mayrh., EWAia I, p. 147) sono i prestiti nelle lingue ugrofinniche anche sec. Katz, *Studien* (2003), pp. 169; 170 ("frühurarisch"/"urarisch"); Blažek, *Indo-Iranian elements* (2005), pp. 162 con 181, ma cfr. anche la sua discussione su *t* in termini obugrici, pp. 168-169; "Ar. oder frühuriranisch" Rédei, luogo cit.

La relazione storica fra l'ir. *ahura-*/Ahura e l'ind. *ásura-*(/Varuṇa) deve inoltre essere considerata alla luce del fatto che "le nom du dieu Ahura Mazdā est mentionné sur une tablette cunéiforme assyrienne dont le contenu pourrait bien remonter à la fin du deuxième millénaire BC." (Oettinger, *Herkunft*, 2015: non visto; citaz. ripresa da Haudry, rec. (2016) di Fs Kellens (*b*), p. 169a; cfr. Hintze, *Avestan research*, 2017, p. 43, con rinvio a un suo lavoro precedente), cioè parecchi secoli prima del Varuṇa nel trattato ittito-mitannico [D.M.].

asū́rta-
Nikolaev, *Homeric ἀάατος* [2015] (*a. rájas* ~ ἀάατον Στυγὸς ὕδωρ).

asūsū́-
EWAia II, p. 714, voce *SAV*[TI]. In luogo di AV(Śaun) X, 10, 23*b asūsvàḥ* la Paipp (Orissa, XVI, 107, 3*b*) ha *asusvaḥ*, metricamente tuttavia insoddisfacente (Kaśm. *asāsvaḥ*).

ásr̥j-
S[chmidt], rec. all'EWAia, fascc. 1-8, p. 352.
asn-: Jamison, *Linguistic and philological remarks*, p. 68 propone di interpretare la forma *asnā́m* (MS III, 9, 6) come gen. pl. di *asthán-* "osso", separandola dal tema *asán-* "sangue" [R.R.].

asáu
Gösta, *Zum Gebrauch der* w-*Demonstrativa* (non cit. né da Kupfer, *Demonstrativpr.* né da Dunkel, LIPP); LIPP II (2014), p. 192, voce **e-* (cfr. CESc III, voce *adás*); p. 818, voce **u* "dort"; diversamente da Gösta (e altri), Dunkel non considera affini le basi pronominali di sscr. *asáu* e av. *hāu* (rec.) ecc. (cfr. p. 192, nota 52), ma sì la particella.

ásthi-

Corrispondenti in iranico: Fanaie-Hajiani-Mahmoudi, *An etymological study* (2016), pp. 400; 409-410; 415 [D.M.].

Elbourne, *Aspiration by /s/* (2001), pp. 211-212 discute le varianti con retroflessa nel duale *ūrvaṣṭhivé* (VS, ŚB)/*ūrvaṣṭivé* (VS, MS) "coscia e ginocchio": "the rare variant -ṣṭ- is nothing more than a graphic phenomenon". Nega l'idea di Hiersche che l'aspirazione dell'occlusiva dentale sia causata dalla sibilante precedente [R.R.], sostenendo, al contrario, la disaspirazione in greco in circostanze regolate in modo discusso più finemente in *A rule of deaspiration* (2012) [D.M.].

Ved. anche *aṣṭhīvánt-*; *ásṛj-* per la forma *asnā́m*.

asmá-

LIPP II (2014), pp. 566-574, voce **nó-* "uns". Hoffmann-Forssman, *Flexionslehre* (2004), p. 160 danno a.av. *ə̄hmā́* sia per strum. che per acc., mentre av.rec. *ahma* solo per acc.

*asvadá-

Congettura di Hoffmann, *Vedica*. 6 a ŚB I, 7, 4, 10.

ásvaveśa-

Fritz, *Zur Etymologie* (2007): "hausstandlos", da *véśa-* (~ gr. οἶκος ecc., EWAia II, p. 585) nel significato di *"casa", da confrontare con ted. *Schweige* "Viehhof", cioè "eine Art Einzelhof", caratterizzata da "landwirtschaftliche Spezialisierung auf Viehhaltung und Milcherzeugung" e da una collocazione "abseits vom Dorf", < "urgerm. **su̯é-u̯ai̯γ-ṓ*", per il quale è possibile un significato "was eigenes Haus hat" (*véśa-* piuttosto che il non sinonimo *veśá-* – che entra invece in gioco nell'interpretazione riferita qui sotto –; per lo spostamento dell'accento sul suffisso **-eh₂-*, con cui si giustificherebbe l'applicazione della legge di Verner, cfr. in sscr. *rasā́-* "umidità" e nome di fiume accanto a *rása-*, msch. "succo" ecc., cfr. AiGramm II, 2, p. 241); diversamente Niederreiter in RIVELEX I (2006), p. 682 da *veśá-*, quindi "«keinen [*a-*] eigenen [*sva-*] Bewohner habend»", metaphorisch «einer, der keine Anhänger hat»"; Jamison in Jamison-Brereton, RV II (2014), p. 932: "bereft of his own clansmen".

AH²

Kümmel, *Perfekt* (2000), p. 117, basandosi sull'avverbio *addhā́* come derivato da *AH*, suppone per l'antecedente i.-ir. di quest'ultimo una "Grundbe-

deutung [...] 'kundtun, bekannt machen, (eine Meinung) äussern'"; tale origine dell'avverbio *addhā́* è tuttavia respinta da Gotō (ved. alla voce, CESc I, p. 170 e in partic., del contributo di Gotō, p. 200 e n. 34), cfr. anche LIPP II (2014), cit. CESc III, p. 90.

áha

Kwella, *Flußüberschreitung*, p. 105; Kozianka, *Partikeln* (2000), pp. 225; 227; 229-230; LIPP II (2014), p. 286.

áhan-

Witczak, *Il vedico* áhar (2001): l'indoeuropeità della parola assicurata da basco *egun* "giorno" (e, con riflesso dell'eteroclisia, *egur-aldi* "tempo atmosferico") come prestito dal lusitano.
ahanā́ RVS I, 123, 4*a*: Gotō in *Das heilige Wissen* I (2007), p. 680 dubitativamente "eine Adverb-Form aus *áha*"; Jamison in Jamison-Brereton, RV I (2014), p. 286 "in her greatness", se (cfr. il *Comm.*) *gr̥hám-gr̥ham ahanā́* è da restituire come *gr̥hám-gr̥ham mahanā́* (entrambi all'oscuro del lavoro di Sani cit. EWAia II, p. 827).

ahám

Un'ampissima annotazione alle ricorrenze rigvediche del pronome nelle sue varie forme in RIVELEX I (2006), pp. 687-732 (Katsikadeli), ma cfr. la critica di Klein, rec. (2008), p. 308. [D.M.].
Bader, rec. all'EWAia, fascc. 1-4, pp. 239-240 (segmenta **e-ĝ(h)om* "avec, pour second constituant, une particule du thème **ĝ(h)e* [...] qui peut prendre d'autres formes") [R.R.]; Shields (2008) cit. voce *ay-* (~ *i-*), in CESc II, p. 130; Dunkel (2007) cit. ugualmente ivi; LIPP II (2014), pp. 201; 202-203; 595-602.
ahaṁkāra-: "to be understood in its origins to mean «the utterance, or cry, *ahám*,» and not, as is often assumed, «ego-maker»", van Buitenen (1957), sviluppato da Thompson, *The Brahmodya*, p. 21 (citaz. da quest'ultimo); Hulin, *Le principe de l'Ego* [D.M.].

áhi-

Kwella, *Flußüberschreitung*, p. 31; Watkins, *How to kill*, in partic. pp. 460-468; 499-504; 510-524; Slade, *How (exactly) to slay a dragon* [2010]; Oettinger, *Wörter für 'Schlange'* (2010): due "Wortsippen", una che indicava la "(im Trockenen oder im Moor lebende Landschlange" (sscr. *áhi-* ecc.), l'altra che

indicava la "Wasserschlange" (lat. *anguis* ecc.); che poi "die beiden Wörter sich gegenseitig beeinflußten und dadurch die Verhältnisse erst so unklar gemacht haben, ist kaum verwunderlich", cfr. la rec. di Schmitt (2012) della Fs Melchert, p. 88; Janda, *Musik* (2010), p. 76 e altrove; Fanaie-Hajiani-Mahmoudi, *An etymological study* (2016), pp. 394; 404-405 (corrispondenti iranici; n.b. bab. /ajik/ "red earthworm").

áhiṁsā-
Schmidt, *The origin of Ahiṃsā*; Tull, *The killing*; Schmidt, *Ahiṃsā and rebirth* ("[...] he also discusses in detail the work that has appeared after his earlier article of 1968, especially that of J.C. Heesterman", Witzel, *Introduction*, p. XVII – ma non l'art. di Tull); Bodewitz, *Hindu* ahiṁsā (1999); Schmithausen, *A note* (2000); Tsuchida, *Ahiṃsā* (2000); Houben, *The Vedic horse sacrifice* (2001), con la rec. di Oberlies (2006, ved. sotto Fs Parpola), p. 383; Heesterman, *Non-violence* (2003).

ahī́-
Cfr. CESc I, p. 164, voce *ajá-*. *ahīśū́-*: Mayrh., *Personennamen* (2003), p. 15; Katsikadeli in RIVELEX I (2006), pp. 741-742; *ahīśúvaḥ* RVS X, 144, 3 "[...] at those puffing up like snakes [/swelling like fertile cows] [= clouds?]", Jamison in Jamison-Brereton, RV III (2014), p. 1630.

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Recensioni

SSL

Gloria Gagliardi (2019), *Linguistica per le professioni sanitarie*, Pàtron Editore, Bologna, ISBN 9788877734383, pp. 1-314.

Esce, per i tipi di Pàtron, il primo manuale di linguistica espressamente dedicato alle professioni sanitarie. L'autrice ha al suo attivo diversi anni di studio dedicati alle patologie del linguaggio, per le cui diagnosi ha elaborato metodi quantitativi e strumenti psicometrici, combinando approccio computazionale e statistico con una prospettiva di linguistica generale e psicolinguistica. Il volume si compone di otto capitoli: I. *Il linguaggio e le lingue storico-naturali*; II. *Farsi e disfarsi del linguaggio: metodi e prospettive per l'analisi delle funzioni linguistiche*; III. *Fonetica*; IV. *Fonologia*; V. *Lessico*; VI. *Morfologia*; VII. *Sintassi*; VIII. *Pragmatica*. Completa il manuale un ampio numero di *box* di approfondimento, distribuiti nei diversi capitoli.

Il panorama della manualistica relativa al settore scientifico-disciplinare L-LIN/01, *Glottologia e linguistica*, ossia il campo degli studi teorici, storici, sperimentali e tipologici sul linguaggio, è particolarmente fiorente. Alla base di questa ricchezza di strumenti, di diverso orientamento teorico e con diversa focalizzazione rispetto all'oggetto di indagine, vi è senz'altro la molteplicità di aspetti che lo studio del linguaggio e delle lingue storico-naturali (verbali o gestuali come la lingua dei segni) coinvolge, e che vanno dalle proprietà dei codici verbali all'analisi delle strutture linguistiche nei loro diversi livelli, allo studio della variabilità in sincronia, così come del mutamento delle lingue nel corso del tempo, con inclusione sia delle tematiche socio- ed etnolinguistiche sia dei più recenti approcci di carattere cognitivo, neuro- e psicolinguistico, con le relative e importanti implicazioni nell'ambito dell'acquisizione e perdita delle lingue.

In un tale contesto la *Linguistica per le professioni sanitarie* si inserisce con una fisionomia e uno scopo ben precisi. Il manuale è infatti caratterizzato da un approccio fortemente interdisciplinare, che mostra come la linguistica si collochi effettivamente al crocevia di numerose discipline (antropologia, intelligenza artificiale, filosofia, psicologia e neuroscienze cognitive), e

si rivolge a un *target* altrettanto chiaramente individuato e costituito principalmente da quanti svolgono attività di diagnosi, cura e riabilitazione di patologie che coinvolgano il linguaggio e, secondariamente, da esperti disciplinari che vogliano accostarsi allo studio degli aspetti ontogenetici e/o deficitari della comunicazione. Per questo motivo il volume costituisce un manuale *ad hoc* per gli insegnamenti linguistici impartiti nei Corsi di Studio delle Classi di laurea e di laurea magistrale delle Professioni sanitarie.

Queste ultime sono finalizzate alla costruzione di percorsi formativi atti alla realizzazione di diversi profili professionali[1] di cui alcuni, come la professione del logopedista, devono garantire il raggiungimento di competenze professionali specificatamente indirizzate verso attività di prevenzione e nel trattamento riabilitativo delle patologie del linguaggio e della comunicazione in età evolutiva, adulta e geriatrica. Il raggiungimento di tali competenze è assicurato anche dall'attivazione, nei relativi Corsi di Studio, di un numero sufficientemente congruo di crediti formativi in discipline concernenti le Scienze del linguaggio[2]. Anche la formazione in alcune delle professioni della terza classe (ad es. audiometrista, audioprotesista) può prevedere, ed è opportuno che preveda, l'acquisizione di nozioni e strumenti metodologici e critici per lo studio del linguaggio all'interno dei relativi Corsi di Studio.

L'attività dei laureati nell'ambito di tali figure professionali, e principalmente in quella del logopedista, essendo volta all'educazione e rieduca-

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[1]   *Classe delle Lauree in Professioni sanitarie infermieristiche e professione sanitaria ostetrica* (L/SNT1, relativa ai profili professionali di infermiere, ostetrica/o, infermiere pediatrico)*, Classe delle Lauree in Professioni sanitarie della riabilitazione* (Classe L/SNT2, relativa ai profili professionali di educatore professionale sanitario, fisioterapista, logopedista, ortottista e assistente di oftalmologia, podologo, tecnico della riabilitazione psichiatrica, terapista della neuro e psicomotricità dell'età evolutiva, terapista occupazionale), *Classe delle Lauree in Professioni sanitarie tecniche* (Classe L/SNT3, relativa ai profili professionali di tecnico audiometrista, tecnico di laboratorio biomedico, tecnico di radiologia medica, tecnico di neurofisiopatologia, tecnico ortopedico, tecnico audioprotesista, tecnico della fisiopatologia cardiocircolatoria e perfusione cardiovascolare, igienista dentale, dietista), *Classe delle Lauree in Professioni sanitarie della prevenzione* (L/SNT4, relativa ai profili professionali di tecnico della prevenzione nell'ambiente e nei luoghi di lavoro, assistente sanitario). A queste quattro classi corrispondono altrettante classi di lauree magistrali con equivalenti profili professionali in uscita (LM/SNT1, *Scienze infermieristiche e ostetriche*; LM/SNT2, *Scienze riabilitative delle professioni sanitarie*; LM/SNT3, *Scienze delle professioni sanitarie tecniche*; LM/SNT4, *Scienze delle professioni sanitarie della prevenzione*).

[2]   Con il Decreto Interministeriale 31 gennaio 2018 n. 52, recante modifiche al decreto 19 febbraio 2009 e al decreto 8 gennaio 2009, le classi delle lauree (L/SNT2) e delle lauree magistrali (LM/SNT2) in professioni sanitarie della riabilitazione hanno introdotto nell'ambito *Scienze della Logopedia* un sottoambito *Scienze del linguaggio teoriche e applicative* contenente i SSD L-LIN/01, *Glottologia e linguistica* e M-FIL/05, *Filosofia e teoria dei linguaggi*, ai quali sono riservati 5 CFU obbligatori per le lauree e 3 CFU obbligatori per le lauree magistrali.

zione di quelle patologie che provocano disturbi della voce, della parola, del linguaggio orale e scritto e degli handicap comunicativi non può pertanto prescindere né dalla conoscenza della facoltà del linguaggio, abilità naturale dell'essere umano che, in assenza di deficit specifici, porta all'acquisizione e apprendimento di una lingua storico-naturale, né dalla conoscenza dei deficit verbali stessi, così come dall'acquisizione degli strumenti metodologici finalizzati al loro trattamento. È quindi certamente benvenuto nel panorama della manualistica un volume che dia ampio spazio ai disordini del linguaggio, prevedendo non solo un capitolo specifico a ciò dedicato (II. *Farsi e disfarsi del linguaggio*), sottoarticolato in disturbi del linguaggio dell'età evolutiva e dell'età adulta, quanto anche frequenti richiami, nei diversi capitoli del volume, a patologie che colpiscono aspetti specifici della produzione linguistica (così, ad esempio, i deficit dell'elaborazione fonetico-acustica come le disfonie e le dislalie, i disturbi della fluenza, la disartria e l'anartria, trattate nei *box* di approfondimento 11-14 al § 3. *Fonetica articolatoria* o la disprassia orale nel *box* 16 al § 4. *Fonazione*, tutti all'interno del capitolo III. *Fonetica*; il disordine fonologico e la disprassia verbale nel *box* 21 al capitolo IV. *Fonologia*; il disturbo socio-pragmatico comunicativo nel *box* 40 del capitolo VIII. *Pragmatica*). Per i disturbi dell'eloquio non inquadrabili in una precisa patologia, sempre nei *box* di approfondimento trovano spazio elenchi di alterazioni qualitative della produzione linguistica con riferimento ai diversi livelli: quelli di natura fonologica nel *box* 18, quelli di natura lessicale e semantica nel *box* 28 e quelli di natura morfo-sintattica nel *box* 37.

I molteplici punti di vista dai quali viene trattato l'oggetto di studio costituiscono senz'altro un pregio del volume, che richiede tuttavia al docente che lo adotti un particolare impegno nell'individuare strategie didattiche che, preservando la pluralità degli argomenti e il punto di vista del linguista, non comportino la rinuncia all'approccio psico- o neurolinguistico, così come agli approfondimenti empirici espressamente dedicati alle patologie del linguaggio o alla descrizione dei processi neurofisiologici che sottostanno alle azioni linguistiche. Nel capitolo I. *Il linguaggio e le lingue storico-naturali*, ad esempio, in cui vengono trattati i fondamenti biologici del linguaggio, le nozioni basiche di semiotica che descrivono l'oggetto di studio e le sue proprietà essenziali sono affiancate da un ampio approfondimento sulle teorie *embodied*, che fa emergere la loro rilevanza per gli studi sul linguaggio e in particolare il forte impatto che esse hanno sui modelli teorici della competenza linguistica, a partire dalla considerazione secondo la quale l'informazione di tipo linguistico è una conoscenza fondata sull'interazione

tra corpo e ambiente fisico. Segue una terza parte in cui vengono introdotti gli 'assiomi' del metodo scientifico della linguistica, ossia i principi e i metodi con cui la scienza linguistica costruisce il proprio oggetto e che consentono di superare i classici paradossi della disciplina, ossia la sua natura perlopiù non osservativa, la variabilità dell'oggetto di studio (eteroclisia) e il suo uso riflessivo. Infine, dopo la presentazione delle canoniche dicotomie saussuriane, chiude il capitolo un nuovo cambio di prospettiva, che riconduce all'approccio neuro- e psicolinguistico con la presentazione dei principali modelli della competenza linguistica (teorie modulari e teorie connessioniste).

Più in generale la prospettiva in cui si pone il volume, di linguistica generale e sincronica, escludendo di fatto ogni accenno al mutamento, prefigura le strutture del linguaggio come un sistema pressoché statico, benché costruito a partire dall'osservazione e valutazione delle concrete produzioni dei parlanti. La problematizzazione dello scarto tra statico e dinamico, così come tra astratto e concreto, costituisce in effetti uno degli aspetti lasciati parzialmente in ombra da questo nuovo manuale, peraltro estremamente generoso nel delineare le nuove prospettive verso cui oggi può dirigersi, e di fatto già si sta indirizzando, la scienza del linguaggio.

Queste più recenti prospettive di ricerca costituiscono proprio la base su cui è costruito invece il capitolo II. *Farsi e disfarsi del linguaggio: metodi e prospettive per l'analisi delle funzioni linguistiche*, sottoarticolato negli indirizzi principali dell'analisi linguistica (fondata sullo studio dei dati a partire dalla costruzione di *corpora* annotati), dell'analisi psicolinguistica (condotta attraverso diversi compiti sperimentali) e dell'analisi secondo i metodi delle neuroscienze cognitive (che prevede osservazioni cliniche, pratiche chirurgiche e tecniche elettrofisiologiche, morfologiche e morfometriche). Segue un'ampia e dettagliata sezione sui disordini del linguaggio dell'età evolutiva, dove viene evidenziata l'interdipendenza tra i livelli del sistema linguistico dovuta all'integrazione delle diverse abilità di tipo senso-motorio, cognitivo, sociale ed emozionale su cui si fonda l'acquisizione del linguaggio (approccio neuro-costruttivista). Questa interdipendenza, che comporta quadri patologici piuttosto eterogenei nonché alterati in proporzioni diverse (cfr. la tipizzazione clinica del DSL nel *box* 4), ha importanti implicazioni in merito all'individuazione e valutazione dei disturbi. Un accurato elenco delle afasie (lesioni cerebrali acquisite), delle demenze (lesioni cerebrali diffuse che comportano deficit neuropsicologici multipli) e dei disturbi psicotici (dovuti a un processo di disgregazione della personalità psichica) occupa invece la seconda parte del capitolo dedicata ai disturbi del linguaggio dell'età adulta. A proposito della valutazio-

ne del paziente e del monitoraggio della malattia e della relativa terapia, il *box* 6 introduce il concetto di 'repertorio linguistico individuale', aprendo in questo capitolo anche ai concetti di varietà (diatopia, diastratia, diafasia, diamesia) e variante, sin qui esclusi dalla trattazione. In parallelo all'opportuno richiamo all'intrinseca e costitutiva variabilità delle lingue, e quindi alla complessità del repertorio linguistico del singolo parlante, trova spazio nello stesso *box* un approfondimento su un fattore di recente introduzione nei test neuropsicologici ma di estremo rilievo nella valutazione dei deficit. Si tratta della "riserva cognitiva" (*cognitive reserve*, CV), ossia un indice influenzato dalle attività intellettive svolte dal singolo soggetto in ambito scolastico, lavorativo e nel tempo libero, il cui valore, se alto in funzione delle abilità cognitive, delle capacità strategiche e delle conoscenze acquisite nel corso della vita, mostrerebbe la capacità del cervello di tollerare maggiormente gli effetti di una lesione cerebrale o del decadimento cognitivo legato all'età o a patologie dementigene.

I capitoli III. *Fonetica* e IV. *Fonologia* parimenti affiancano, alla presentazione più tradizionale dei livelli di analisi, un ampio spazio dedicato, nel capitolo III, all'anatomia e fisiologia dell'apparato fonatorio e all'ontogenesi del linguaggio in tutte le fasi del periodo preverbale e della successiva acquisizione dei suoni linguistici (*box* 8) e, nel capitolo IV, allo sviluppo fonemico (*box* 19-20), cui segue l'approfondimento sui disturbi fonetico-fonologici in produzione (rispettivamente nei *box* 10-16 e nei *box* 18, 21). In conclusione del capitolo IV trova nuovamente collocazione una parentesi problematica sulle difficoltà della segmentazione in elementi minimi e sulla mancanza di invarianza nel segnale acustico (assenza di corrispondenza biunivoca tra fonemi, loro realizzazione articolatoria e corrispondenti caratteristiche acustiche), con le relative ricadute sulle teorie della percezione linguistica (passive o *bottom-up* e attive o *top-down* come la *Motor Theory* di Liberman *et al.*, 1963 e Liberman e Mattingly, 1985 o la Fonologia Articolatoria che, spostando il problema sul piano motorio, assegnano al parlante la capacità di comprendere le stringhe linguistiche in virtù della propria capacità di produrle).

Il capitolo V dedicato alle unità del lessico include in realtà gran parte della semantica, in una prospettiva dapprima linguistica con approfondimenti sulle proprietà semantiche del lessico, le relazioni di significato e le implicazioni lessicali (*box* 23), quindi in prospettiva neurolinguistica (memoria semantica e relativi correlati neurali nel *box* 24) e infine anche evolutiva (formazione del lessico mentale nel *box* 25). Come negli altri capitoli, i *box* successivi sono dedicati alla valutazione neuropsicologica della produzione lessicale e alle relative alterazioni qualitative dell'eloquio.

La suddivisione invece della morfosintassi nei due capitoli VI. *Morfologia* e VII. *Sintassi*, che nell'architettura del manuale appare meramente strumentale, fa sì che la prospettiva linguistica percorra entrambi i capitoli, mentre quella evolutiva e quella clinica relativa alla misurazione di anomalie e devianze siano collocate in chiusura del solo capitolo VII.

In un manuale dedicato a quanti si occupano degli aspetti deficitari della comunicazione non poteva infine mancare il livello di analisi pragmatico (capitolo VII. *Pragmatica*) dove, al pari degli altri capitoli, trovano collocazione, nelle ultime sezioni, gli approfondimenti sullo sviluppo della competenza pragmatica (*box* 39), i disturbi e le terapie riabilitative delle abilità comunicative (*box* 40-41).

Pur considerando l'impiego in ambito prevalentemente professionalizzante, nel volume si avverte tuttavia l'assenza di una focalizzazione più puntuale e autonoma della semantica, che attraversa piuttosto lessico e morfosintassi, quale semantica lessicale e dei significati morfologici e sintattici di una lingua. Nella ricchezza (talvolta quasi sovrabbondanza) degli approfondimenti disciplinari e pluridisciplinari, manca infatti una definizione esplicita di semantica, di significato e di senso, così come un'apertura maggiore ai problemi teorici che alcune proprietà semantiche dei segni linguistici, come la vaghezza, comportano rispetto ai possibili modelli di analisi del significato (analisi sèmica e teoria dei prototipi), aspetti cardinali della scienza del linguaggio nella misura in cui, come sottolineava De Mauro (1971: 10), «data appunto la sua conformazione semantica, una lingua storiconaturale è il sistema semiologico più ricco di capacità semantiche».

Resta inoltre auspicabile, eventualmente in una futura riedizione del volume, un apparato di esercizi che consenta, in analogia alla maggior parte dei manuali linguistico-disciplinari attualmente disponibili, la concreta applicazione delle nozioni teoriche illustrate nel testo[3] e una migliore grafica delle parti notevoli che accompagni la lettura, ottimizzando l'uso del grassetto presente nell'indice, che attualmente evidenzia capitoli, *box* e altre sottoparti del volume ma che potrebbe, quando più opportunamente specificato e distribuito, offrire un'utile mappa di argomenti 'notevoli'. Un indice tematico costituirebbe allo stesso tempo un comodo strumento aggiuntivo.

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[3]   Le prove d'esame degli insegnamenti linguistici e principalmente di linguistica generale, prevedono correntemente lo svolgimento di esercizi, a scelta multipla o a risposta aperta, sui diversi livelli di analisi della linguistica, e in tale direzione si vanno orientando anche i test universitari di valutazione delle competenze disciplinari per la misurazione dell'apprendimento degli studenti. La disponibilità di un eserciziario rappresenta pertanto un utile corollario di un manuale di base.

Al di là di quanto sopra osservato, la *Linguistica per le professioni sanitarie* rappresenta senz'altro uno strumento nuovo e prezioso: nuovo, perchè costruito a partire dalle più recenti conquiste della riflessione teorica, così come della pratica empirica, prodotte da linguistica, psicolinguistica e neuroscienze cognitive; prezioso, perché la ricchezza delle nozioni, qui presentate e discusse senza tacerne le eventuali problematicità, nonché la numerosità dei *box* di approfondimento costituiscono un valore aggiunto che, a parere di chi scrive, non sono affatto collaterali al manuale in sé. E ciò soprattutto in considerazione della finalità del volume, che riposa nelle parole di Jakobson (1989, [1972]: 22) citate in apertura del capitolo dedicato ai disordini del linguaggio e secondo le quali la comprensione della «natura e la struttura del particolare modo di comunicazione che ha cessato di funzionare» costituisce un aspetto imprescindibile dello studio del linguaggio inteso nella sua totalità e che, in quanto tale, non può più permettersi di ignorare le anomalie del parlato (sia quelle normalmente tollerate sia quelle patologiche) così come la considerazione del reale comportamento dei parlanti nell'interazione comunicativa.

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