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RECONSTRUCTING COMPOUND ACCENTUATION: ON THE PRE-LATIN INITIAL STRESS

Martti Nyman

1. Introduction

Since Dietrich (1852) and Skutsch (1913) it has been customary to account for the accentual history of Latin in terms of three subsequent periods, viz.

- (1) a. Proto-Indo-European "free" accent >
- b. Pre-Latin initial accent >
- c. Classical Latin penultimate (or three-syllable) rule.

Although it is endorsed to by such latest authorities as Leumann (1977:246–8), Sommer/Pfister (1977:73f.) and Allen (1978:83),¹ this kind of three-stage system is unlikely.

Firstly, the postulated prehistorical stage (1b) involves a basic processing strategy that is entirely opposite to that implied by (1a) and (1c). The initial accent, as a hypothetical wholesale system, presupposes the relevance of the beginning of a word, whereas in historically attested Latin, accentual processing was based on a right-to-left scanning of the syllable structure within a word.

Secondly – and as a corollary to the preceding point –, whatever natural continuity can be conceived between (1a) and (1c), it is disrupted by the postulation of (1b) as a wholesale system.

Thirdly, the assumption of (1b) has given rise to dispensable speculations in terms of external influences: "Das Aufkommen der neuen Anfangsbetonung... sucht man meist durch fremden Einfluss zu motivieren als Adstrat-

¹ For a review of older literature, see Lepsky (1962:216–230).

oder Substratwirkung von Sprachen mit erschlossener Anfangsbetonung, nämlich – mit absteigender Wahrscheinlichkeit – von Etruskisch, Oskisch, Keltisch, Germanisch, Mittelmeersprachen” (Leumann 1977:247). I side with Pulgram who argues that ”it seems strange that Latin, or any language, should borrow accentuation from another language and not much else” and that ”there is no evidence of a bilingualism on the part of the speakers of Latin that was sufficiently wide-spread and enduring to account for the transmission of a structural trait” (1975:99).

Fourthly, the assumption of (1b) also creates the dispensable obligation to account for the mechanism that allegedly created (1c) from (1b). Despite the pet theory, according to which the secondary accent of stage (1b) was reinterpreted as primary in (1c), there is really no convincing explanation: ”Auslösung und Ablauf dieses Wandels sind unerkennbar” (Leumann 1977:248).

2. Preliminaries to an explanation

2.1 Accent as a causally relevant factor

Initial accent has been invoked to account for some instances of vowel syncope and especially the so-called medial vowel weakening (MVW) à la *facit:conficit*.² As such, initial accent is an entirely plausible structural conditioning factor for such reductive phenomena. Indeed, it is definitely far more plausible than the sometimes alleged inherent strength of the initial syllable, an assumption refuted by Kent (1931). Neither do the other word-dynamic factors adduced by Monteil (1974:91f.) explain, without the additional factor of initial accent that he omits, why MVW systematically affected the second syllable. It is to be borne in mind, however, that in historical linguistic explanations we always have to do with multiple causation. Initial accent, whether pith or intensity, does not suffice to predict reductive phenomena in the following or preceding syllable. Finnish, for example, is an initially-stressed language, and yet there are comparatively few reductive phenomena. Such a state of affairs was coped with by Schmitt (1924) who proposed a typological distinction between languages with a strongly centralizing and languages with a weakly centralizing accent. Basically the same typology is

² For a clear and systematic exposition, see Niedermann (1953:22–42).

made use of by Van Coetsem et al. (1981) in terms of dominating and non-dominating accentual prominence.

Basically, there is no question of the validity of the initial accent as a conditioning factor. In fact, a good deal of cases of MVW is explained by the initial accent assigned by the Latin three-syllable rule; e.g. **pérfacit* > *pérficit*; **cón+tenet* > *cóntinet*; **ánamos* > **ánimus*; etc. However, there is a lot of instances of vowel reduction not explained by the historical Latin accent rule (e.g. **cónfactum* > *conféctum*, etc.). It is my claim that such cases do not call for the maximal assumption that there was a whole distinct "Akzentperiode" (1b) with an entirely different principle of accentual processing. It is possible to isolate the recalcitrant cases and account for them in terms of a few natural grammatical principles.

2.2 A hypothesis

Such an approach is proposed by Pulgram (1975:100–113), but although I think he is on the right track, Pulgram's proposal needs theoretical elaboration and completion.

Pulgram hypothesizes "that a certain type of words, especially verbs with prefixes, where for good reasons pronounced occasionally with an emphatic initial stress accent, that this stress eventually became a regular feature of them and thus, being phonetically more intense than the grammatical but non-distinctive accent that was placed according to the three-syllable-rule, brought about the vocalic phenomena usually laid to initial stress" (100–1). Thus, Pulgram proposes that the grammatical accent was overshadowed by extragrammatical emphatic stress accent (accent d'insistance): "in compounds of *facere* an accentuation **cónfácere* was possible, so that the lexeme bore both the emphatic (stronger) and the grammatical (weaker) accent, exactly as in *incroyáble*, and *incrédible*" (104). Whereas the grammatical accent was non-functional, according to Pulgram, the emphatic accent did serve a linguistic purpose, and "since furthermore it did not in any manner disturb the phonological system of the language, it acquired such an edge over the grammatical accent that **cónfácere*, and eventually, through weakening of the less-stressed vowel, **cónfícere*, became the normal pronunciation for this type of verbal compound" (104–105). So, occasional emphasis may harden into permanent change: "instead of *underéstitute* one hears frequently *únderestímate*, no doubt the phonetic equivalence of *únderéstitute*, so pronounced to

emphasize the contrast to *overestimate*⁺” (107). Other types of recalcitrant cases (on which below) are explained by means of the same principle.

2.3 A critique

Pulgram’s use of emphatic accent as an explanatory principle has aroused misgivings. Thus, Poultney doubts “whether the instances of emphatic stress on verbal prefixes would have been frequent enough to account for the incidence of vowel-weakening in Latin compounds, which is after all very high” (1978:396). Liénard asks “pourquoi cet accent <d’insistance> qui prend momentanément le pas sur le premier (*fácere*) provoque-t-il des transformations phonétiques, et notamment la fermeture des voyelles pour disparaître ensuite sans laisser d’autres traces (*conficere*)” (1977:832). Both of these objections are justified, and so we need an explanatory principle that is more systematic than Pulgram’s extra-grammatical principle of emphatic accent.

Because he presupposes the classical Latin three-syllable rule for pre-Latin as well. Pulgram is forced to resort to an extra-grammatical principle of accentual prominence. But this is an inordinate premise. It is quite plausible to think that pre-Latin accentuation was closer to the PIE system, i.e. freer than the classical Latin system: “Zunächst steht es wohl ausser Frage, dass für das Uritalische principiell vorausgesetzt werden darf, dass seine Betonung der freien der indogermanischen Grundsprache noch näher gestanden ist, als in den daraus hervorgegangenen Töchttersprachen” (Stolz 1886:149). But the relative freeness must, of course, be circumscribed in an acceptable way. This will be attempted in sec. 3 below. It is sufficient here to mention the accentual type *fácilius* which is unequivocally attested in Plautus (Thierfelder 1928; cf. Allen 1969:200–2). It is also to be borne in mind that the historical Latin three-syllable rule was not without exceptions, either. There were cases in which the “ratio” (i.e., the phonologically conditioned accent rule) was contradicted by “usus”; witness e.g. *vīgintī* (usus)/*vīgintī* (ratio). But synchronically there were presumably, and quite expectably, also conflicting “rationes” (or functional principles) governing accentual processing. From the phonological point of view, it was an asset to generalize the phonologically conditioned accent rule to all instances; but quite conceivably, accentuation was able to do services to the morphological and syntactic subsystems as well by co-signalling grammatical and derivational functions (*distrurbāt* ‘disturbavit’

<Lucr. 6,587>; *-ās* 'ian-', e.g. *Arpinās* 'an Arpinian') and by indicating enclisis (e.g. *turpé#que*; *turpé#ve*; *egó#met*; etc.).³

3. Determinative compounds and accentual downgrading

Besides the prosodic behavior of true enclitics and prepositional phrases (cf. Schoell 1876:135–40; 177–93), there is hardly any discussion among Latin grammarians concerning word-group prosodics. Unlike Pāṇini who gives detailed rules of Sanskrit compound accentuation, there is no such discussion in Latin grammarians. Obviously this is due to the fact that there was not much to say: The Latin accent was for the most part phonologically conditioned.

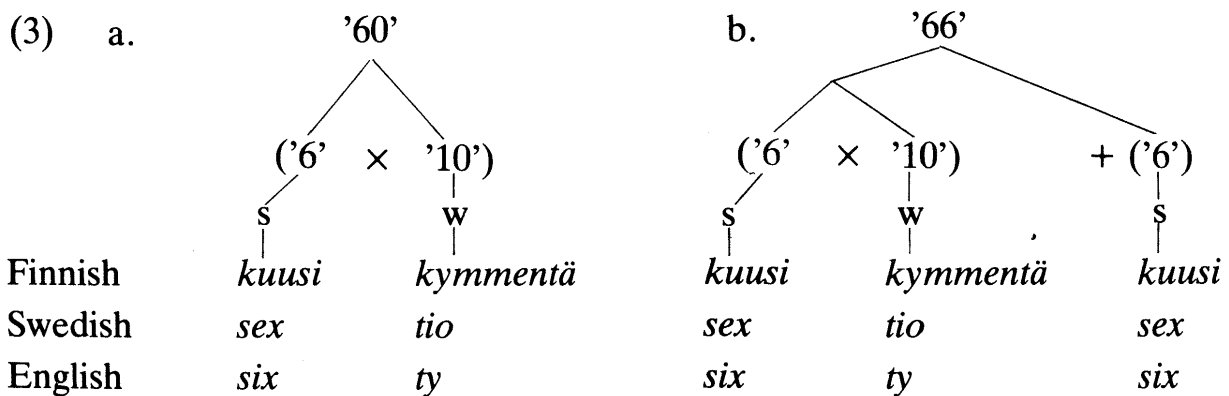
The accent is "free" in a given language if there are, in principle, no phonological constraints on the whereabouts of the accent in a word. In such circumstances, the accentuation is free to be harnessed for morphological purposes or to comply to the teleology of communicatively motivated distribution of prominence. The latter is relevant in compound accentuation.

Compounds fall roughly into two types (Salus 1965), viz. (a) phrasal or coordinating compounds (Pāṇini's *dvandva*; e.g. *suovetaurilia*); (b) determinative compounds (subsuming Pāṇini's *tatpuruṣa* 'dependent determinative' [e.g. *latifundium*], *karmadhāraya* 'descriptive determinative' [e.g. *agricola*], *dvigu* 'numeral compound' [e.g. *triplex*], *bahuvrīhi* 'possessive compound' [e.g. *flavicomus*]; Salus, 40–1, 55). In principle, each member of a phrasal compound carries its own accent, but due to rhythmic factors the members are not equally prominent. In phrasal compounds, the accentual prominence tends to be lodged on the last constituent. A determinative compound may be looked upon as consisting of a head ("determinatum") and its modifier ("determinans"): The former represents a generic concept, specified by the latter. Thus, the compound as a whole denotes a subordinate concept in relation to the determinatum; for instance, German *Pferd* addresses the field 'horse', and the determinantia *Reit-*, *Renn-*, *Zug-*, *Karren-*, *Saum-*, *Wild-* subcategorize the field (cf. Risch 1944:4).

³ The sociological status of the pre-enclitic accent is obscure. However, the fact that grammarians were concerned with this phenomenon indicates that there was no absolute norm governing pre-enclitic accentuation. So, it is likely that both *turpéque* and *túrpeque* types were in use (for some discussion see Allen 1978:87–88).

In historical Latin, compounds were automatically subjected to the three-syllable rule. However, given that the accentuation was freer in pre-historic Latin, it is feasible to conjecture that, in the formation of a determinative compound, it was the first constituent, the modifier, that was accentually prominent. Such an enclitic pattern can be visualized as [+#-] or [s # w] (in which 's' and 'w' mean strong and weak accentual prominence, respectively). Such a tendency to downgrade the accentual prominence of the second member of a determinative compound is evidenced by many Indo-European languages and also by languages belonging to other families (cf. Rischel 1982:204–8).

For example, complex numerals involve, probably universally, multiplicative and additive concatenations (cf. Andersson 1975:19). It may be fruitful, especially for etymological purposes, to make the generalization that multiplicative compounds arise as determinatives (e.g. '60' <i.e. (6 × 10) > in (3a)), whereas additive compounds are dvandvas⁴ (e.g. '66' <(6 × 10) + (6)> in (3b)):



In determinative compound numbers (3a) the accent of the second constituent is rather strongly overshadowed by the accentual prominence of the first member (*kúusi*#*kýmmentä*, *séx*#*tìo*, etc.). This is apt to condition various reductive phenomena (e.g. Fin, [kuusikymmentä] > [kuuskyⁿt]; cf. Swed. *tio* [ti:u] '10', *sextio* [sekstiu] '60'), which may lead up to reinterpreting the non-prominent elements as unaccented affixal or affix-like units (e.g., coll.Fin. +*kyt* <*kuuskyt* '60'>, coll.Swed. +*ti* <*sexti* '60'>, Engl. +*ty* <*sixty*>; etc.).

⁴ This holds for subtractive concatenations as well, which can of course be considered on a par with additive compounds.

It is my claim that most of those reductive phenomena ascribed to the workings of pre-Latin initial accent are consequential upon accentual downgrading. This presupposes that the cases at issue involved determinative compounds and that in such compounds the accent fell on the first constituent. That this was indeed the case will be made evident in sections 4 and 5 below.

4. Vestiges of pre-Latin determinative compound accent

Although the classical Latin three-syllable constraint on accent placement has obscured the earlier situation in most cases so that no traces of a conjecturally different pre-Latin accentuation can be detected, there are nevertheless some old compounds that can be cited as evidence for an earlier [s#w] pattern in compound accentuation.

4.1 Decads

Vīgintī '20', *trīgintā* '30', and very probably all decads possessed an "irrational" prosodic shape, at least in those varieties of Latin which ushered in Romance languages (of. Väänänen 1981:35, 119). Now, I propose that Latin *vīgintī*, *trīgintā*, etc. preserve the etymological locus of accentual prominence: Early PIE **(d)wí#d(e)kmt*, **trí#d(e)kōmt*, and so on (of. Szemerényi 1960:132, 136) and their pre-Latin reflexes listed in (4) were originally determinative compounds, in which the second constituent was nonprominent by dint of accentual downgrading:

(4)				
	<i>*(d)wi</i>	<i>#d(e)kmt</i>	> <i>*wi#kenti</i>	> <i>vīgintī</i>
	<i>*tri</i>	<i>#d(e)kōmt</i>	> <i>*tri#kenta</i>	> <i>trīgintā</i>
	<i>*k^wetwr</i>	<i>#d(e)kōmt</i>	> <i>*kwadra#kenta</i>	> <i>quadrāgintā</i>
	<i>*penk^we</i>	<i>#d(e)kōmt</i>	> <i>*kwenkwe#kenta</i>	> <i>quinqūāgintā</i>
	<i>*seks</i>	<i>#d(e)kōmt</i>	> <i>*se(k)s#kenta</i>	> <i>sexāgintā</i>
	<i>*septm_o</i>	<i>#d(e)kōmt</i>	> <i>*sept(a)ma#genta</i>	> <i>septuāgintā</i>
	<i>*okto</i>	<i>#d(e)kōmt</i>	> <i>*okto#kenta</i>	> <i>octōgintā</i>
	<i>*newn</i>	<i>#d(e)kōmt</i>	> <i>*neuna#genta</i>	> <i>nonāgintā</i> .

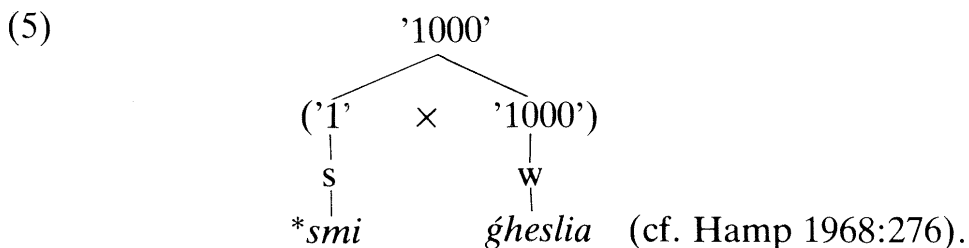
Cf. Szemerényi (1960:25). That the locus of pre-Latin accentual prominence was preserved in *vīgintī* (etc.) is quite understandable, because numerals form

a conceptually closed system consisting of a set of relatively transparent formation principles.

It is probable that the basic constituent analysis presented in (4) lingered on in historical Latin: To rationalize the accent placement in the syllable preceding the *-gintā* element, *-gintā* had to be analyzed as a word-like unit, an enclitic suppletive of *decem*. So, in *quadrāgintā* the accent was in its etymological position, but it was probably also (re)interpreted as a pre-enclitic accent, i.e. *quadrā#gintā* (cf. *egó#met*; *quíd#agitur* [whence allegedly *igitur* by MVW; cf. Leumann 1977:82]; *vidē#licet*; etc.). Also innovations such as *sexāgintā* indicate that some internal analysis was made in the process of lexicalization. Obviously *-āgintā* was used as a prototypal schema (in the sense of Bybee/Slobin 1982; cf. sec. 5.3 below) in the formation of Latin decads. But lexical processing involves flexible mental operations capable of retrieving lexicalized units in different appearances according to the speaker's communicative intentions. The dynamic character of phonetic plan construction is well brought forward by Linell (1982), and the variability of plan-construction appears in the phenomenon called "lexicalization out of casual speech" (Nyman 1978). Also "junctural tightening" (cf. Baldi 1979:55) involves a mental operation that makes the lexical item appear in a new light; and it is by means of a similar operation that *trīgintā* could be adjusted for being operated on by the penultimate rule: *trīgintā*. In other words, it was possible to conceive of *trīgintā* (etc.) both as a word-group (*trī#gintā*) and as a single word *trī+gintā*).

4.2 *Mille*

The same pattern can be seen in Latin *mīlle* '1000' as well if we analyze this word in the way suggested by Sommer, Szemerényi and Hamp (for references see Hamp 1968), viz.



Now, given the prosodic configuration visualized in (5), phonetological reduction in the second constituent is not contrary to expectation. It is true

that the geminate *-ll-* is problematic: *Mille* is evidently a retrograde singularization of ^(*)*mīllia*, now felt as a plural form of an unanalyzable lexical unit, but the regular outcome from **mih(e)hlia* would have been *mīlia*. However, Sonderentwicklungen are typical of numerals. If we bear in mind the well-known tendency "Cj > CCj" (cf. Devine/Stephens 1977:133 fn.8), e.g. *meliorum* > epigr. *melliorum*, etc.; see Väänänen 1966:36; Oscan *Kaisillieís* 'Caesilii', etc.; see Buck 1905:65; Old French data in Avalle 1969), the geminate *-ll-* can be unforcibly derived from the allegrissimo form **mīhlja* (= Hamp's **mīhlia* plus "Glide Formation", which is a ubiquitous casual-speech rule; cf. Nyman 1978; 1981). Accordingly, **mīllia* (< **mīllja* < **mī(h)lja*) involved lexicalization out of casual speech.

Pre-Lat. **(smi^l#)gheslia* corresponds to the adjectival stem **ghéslio+*, which can be reconstructed from Greek (Ion.) χείλοι, (Lac.) χήλιοι, (Lesb.) χέλλιοι. Indo-Iranian points to the variant **ghéslo+*: Skt. *sahásram* = Av. *hazaṇrəm* '1000' < **sm+ghéslom*. PIE **ghéslo+* (**ghéslio+*) is supposed to resist further analysis,⁵ and so Specht's (1939:11) assumption of a non-IE loan has perforce suggested itself as a *faute-de-mieux* explanation. But the IE connection of **ghéslo+* is more probable than not. If the word is analyzed as **ghés+lo+*, we get the pertinentive suffix *+lo+* (cf. Nyman 1977:171–2) attached to the root **ghes+* 'hand' which is now definitively established by Duchesne-Guillemin (1938) and Schindler (1967:244–9): Hittite *kešsar*, Luwian *iššari+*, Lycian *izri+*, Tocharian A *tsar*, B *šar* (cf., however, Van Windekens 1976:521), Greek χείρ (< **khesr+*), Armenian *jeṛn* (generalized from accusative; < **ghesr+m*), perhaps even Albanian *dorë* (< **ghesrā*), all point to PIE **ghes+ōr* (gen. **ghes+r+és*); and Skt *hástā+* = Avest. *zasta+* 'hand', Lith. *pazastis* 'armpit', perhaps even Lat. *praestō* 'quod prae manibus est' [Gellius 5, 15, 3] (< **prái#hestōd* 'at hand') point to the derivative **ghes+to+* (on which see Duchesne-Guillemin 1938:219–20).

Whereas the formal fit is perfect, it is not self-evident semantically that the number '1000' should be designated by "one hand". The expected numeral

⁵ "Die gemeinsame idg. Grundlage wäre **gheslo-*, dessen ursprüngliche, gewiss konkrete Bed. unbekannt bleibt" (Frisk II 1099); "**gheslo-*, terme dont la signification comme l'analyse se dérobent" (Chantraine, 1260); "**gheslo-*, das nicht näher analysierbar ist" (Mayrhofer III 452).

meaning of (the fingers of) hand is 'five' (e.g. Yukaghir *kunel* '5' <'the fingers all together'> Kovács 1960:125; PIE **dek̑m̑* '10' may be traced to **dé#kem* 'two hands', Jensen 1952; cf. also Gk. πεμπάζω 'I count by fingers': Gmc **fingra*+ 'finger' is a derivative of PIE **penk^we* '5'). It is also possible to trace Finnish *kymmen(nen)* '10' to *käm̑men* 'flat of the hand' (cf. Kovács 1960:127, 129); the change "ä > y" may have resulted from a vocalic assonance after *yhdeksän* '9' (for parallels, see Wheeler 1887:10f.<with lit.>).

"One hand" is an icon of '5', whereas "one hand" as a designation of '1000' must be a symbol; i.e., it presupposes some obsolete convention of signifying the number of '1000' by means of one hand. The existence of such a symbol must remain hypothetical in the present context, but certainly it is a possibility. Words for 'hand' are often connected with the idea of power (e.g. Latin *manus* and Greek χείρ), which is often associated to great numerals. They also metonymically designate an indefinite quantity, a "handful" of something (e.g. *manipulus* "poignée d'hommes" <cf. French *poigne* 'fist'>); and in such contexts the number designated may depend on the size of what the hand is full of. The idea of intensity and power as well as that of an indefinite quantity may have given rise to signifying '1000' by means of one hand.

4.3 Additional instances

As further instances for old compound accentuation consider the following (incomplete) sample:

Māvolō comes from the determinative compound **māgis#wolo* (Leumann 1977:207). *Cōntio* presupposes **có#wentio* 'come-together', because pre-accentual /w/ was resistant to loss (which rules out **co#wéntio*; cf. Leumann 1977:136; Sommer/Pfister 1977:127). *Cūria* is likely to come from **có#wir+ia*. However *proprius* is etymologized, the accent must be lodged on the first syllable (**próp(a)trios*, **pró#privo*; cf. Bader 1962:279). *Súrpuīt* (e.g. Plautus, Capt. 760) presupposes *súrripuit*. *Dēnuo* presupposes **dē#nowo*. *Repperi* (< **ré#peperi*), *rettuli* (< **ré#tetuli*), *reppuli* (< **ré#pepuli*), *reccidi* (< **ré#ceccidi*) are to be subsumed under the *fācilius* type of archaic pattern; cf. Sommer/Pfister 1977:158; Leumann 1977:96, 587. But all of the above instances also evidence for earlier compound accentuation, as does also *propitiūs* <**pró#petios*.

5. MVW and accentuation

5.1 On the nature of MVW

Persistence of pre-Latin freer accentuation in *māvolo*, *cóntio*, *cūria*, *próprius*, *súrpuít*, *réttuli* (etc.) provides a safe ground for considering MVW in relation to accentuation. But first some words concerning the general nature of MVW are in order. The relevant data are well-known and easily accessible in any handbook of Latin historical phonology.

MVW involves a Lautgesetz that has more exceptions to it than regularities. Exceptions have been explained away in terms of analogical interference and recomposition, temporal differentiation, and additional phonological constraints (cf. Niedermann 1953:32–36; Sommer/Pfister 1977:89–91; Bader 1960). Whereas these factors are likely to have been locally relevant in some cases (e.g. *enico* > *eneco*: *neco*), it has to be admitted with Janson (1979:46–59) that the traditional view of MVW needs re-assessment: Cases of MVW can be looked upon as reflexes of lexical diffusion. MVW started its spread through the lexicon from post-accentual /a/ and /e/ but petered out before affecting but a part of those lexemes meeting this structural description. Thus, Janson (1979:51) accepts the prehistoric changes "a>i" ("a>e" in closed syllables) and "e>i", but abrogates the reality of the subprocesses "o>i" (except for *ilico* 'at once' which he considers a casual speech variant of **én#stlocōd*) and "u>i". Apropos of the type *homo:hominis*, *cognitus:nota* he points out (51 fn.7) that "the hypothesis of a change *o>i* competes with the hypothesis of an original *o/e* alternation". The same holds for *memini* 'I remember' (cf. Greek μέμωνα) as well, which may very well come from **mémenai* (cf. Mayer 1953:267f.). *Inquilinus* is likely to come from **én#quelinos*. The type *novitas* involves a morphological change: the -i- is a composition vowel. The same holds for *indigena* (<**endo#gena*) as well; cf. *antigena*. *postigena* (gloss.). On *angina* (ἀγχόνη), *apica* (cf. ἄποκος) and *Proserpina* (-φόνη) see 5.3 below. The alleged change "u>i" is supposed to be evidenced by *caput:capitis*, *manica:manus*, and *corniger:cornu*. Whereas the latter two involve composition vowel (Janson 1978:52), *capitis* is likely to come from the ablaut variant **capetis* (Nyman 1977:175; cf. Graur 1929:27f.).

5.2 MVW and compounds

Cases such as those adduced in sec. 4 above make it probable that, in prehistoric Latin, irrational accent placement was allowed in compounds, as

far as their members stood in a recoverable [modifier#head] relation to each other.

Most of those cases of MVW not accounted for by the Latin three-syllable rule or by the archaic four-syllable rule (à la *fácilius*) involve determinative compounds. The largest group consists of the [ADVÉRBS#VÉRBS] structure, which includes PREFixed VERBS (Ga) and REDuplicated VERBS (Gb):

(6) a. [PREF#VÉRBS]

E.g., *constituit* < *kón#statu+it;
coercet < *kó#ark+et;
perfectus < *pér#fak+tos;
delectat < *dē#lek+t+at (cf. *lacio*);
contingit < *contengit < *kón#tang+it;
conculcat < *kón#kalk+at;
 etc.

b. [RED#VÉRBS]

E.g., *pepercī* < *pé#park+ai;
fefellī < *fé#fall+ai.

The behavior of the RED element is comparable to that of a word, and so the spelling *VHE VHAKED* /fe#faked/ 'fēcit' in the controversial *Fibula Praenestina* is structurally motivated, whatever its provenience is. (For a general discussion of reduplication see Marantz 1982.)

Another clear-cut group consists of privative, NEG-prefixed ADJECTIVES; i.e., [NEG#ADJ]:

(7) a. Tatpuruṣas: *inimīcus* < *én#amīko+s;

integer < *én#tag+ro+s;
incestus < *én#kas+to+s;
ineptus < *én#ap+to+s;
inficētus < *én#fakētos;
irritus < *én#ra+to+s;
insulsus < *én#sal+so+s;
difficilis < *dís#faki+li+s

b. Bahuvrīhis: *inermis* < *én#arm+is;

imberbis < *én#barb+is;
iners < *én#art+is (cf. *inertia*);
expers < *éks#part+is.

There is also a minor group of compounds which evidence for the accentual pattern [S # W]:

- (8) *sōlstitium* < **sōl*#*statiom*;
mūscipula 'mouse-trap' < **mūs*#*cap*+*ulā*;
naustibulum 'ship-shaped vessel' < **náu*#*stablom* ('nach gr. ναύ-σταθμός?'; Leumann 1977:399; cf. Bader 1962:318);
malluviae 'hand-water' < **mán*#*lawiai* (Bader 1962:15);
benivulus < **béne*#*wolos*.

Benivulus is explained by Pulgram in terms of contrastive accent: " **Bénévolus* in distinction from **malévolus*, leads to weakened vowels in *benívolus* and *malívolus*" (1975:109). But *béni*#*volus* and *máli*#*volus* are to be subsumed to the archaic *fácilius* type of accentual pattern.

Enclitic compound accentuation is evidenced by several other compounds showing MVW, such as *praeceps* < **prái*#*capit*+, *contubernālēs* < **kón*#*tabernā*+*lēs*, *biennis* < **dwí*#*anni*+*is*, *amb(i)egnus* < **ámbi*#*agno*+*s*, *dīmidius* < **dís*#*medjos*.

There are a few instances of irrational accent that appear not to involve compounds. Consider the word *Achīvī* and *olīva* which derive from **Achaiwoi* (< Gk. Ἀχαι(F)οί) and **elaiwa* (< Gk. ἐλαί(F)α), respectively. According to Sommer/Pfister (1977:86), these words were initially accented: **Áchaiwoi*, **élaiwai*. It is probable, however, that the change "ai > ei > ī" in a medial position was independent of the accent. For instance, compound accentuation cannot be held responsible for *perīsum* (a variant of *pertaesum*), because this would be the only instance of MVW in intensive adjectives formed by means of *per*+ (cf. André 1951). Sommer/Pfister (1977:75) also adduce the word *cicendula* 'firefly', which they connect with the verb *candeo*. The correct form of the word is likely to be *cicindēla* (Leumann 1977:382), which involves a reduplicated form of *candēla* 'light, candle'; i.e., **cí*#*candēla* > **ci*#*cendēla* > (progr.ass.) *cicindēla*. This is an additional evidence for the claim that the RED element has the status of a word (cf. *fé*#*fell*+*ai*, etc.).

Sicilia comes from **Sícelia* by the four-syllable rule. Also *familia* may be derived from **fámelia* by the same rule, unless it is analyzed as **fámilja* /fa.mi.lja/ and derived by means of the three-syllable rule; cf. *dīmidius* < **dís*#*medjos* (i.e., /dis.me.djos/).

5.3 Schemas

There are a few residual cases that appear problematic in view of two claims made in the present paper.

First, the "o > i" type of MVW was denied in accordance with Janson (1979). Yet, the following instances apparently testifying to an "o > i" change can be brought forward:

- (9) *apica* 'sheep without wool on the belly' < Gk. ἄποκος (οἶζ)
(Rocco 1953:96ff.);
angina 'quinsy' < Gk. ἀγχόνη (Rocco, 98ff.);
flēmina 'bloody swelling about the ankles' < Gk. φλεγμόνη;
Proserpina (n.pr.) < Gk. Περσεφόνη.

The formula "o>i" indicates the formal correspondence relation obtaining between the Greek source and the Latin target, but the historical process is likely not to have been a phonetic one. Rather, the words listed in (9) have probably been adjusted to Latin-specific schemas (cf. Bybee/Slobin 1982),⁶ viz. "...ica]" and "...ina]", both of which involve typical noun endings (whereas "...oca]" and "...ona]" are not typical of Latin). Greek loans such as *māchina* (< μᾶχάνᾱ) and *trutina* (< τρυτάνη) are probably to be considered in the same terms: The typically Greek noun schema "...ανη]" was adjusted to the Latin schema "...ina]" (cf. *acina*, *asina*, *domina*, *fascina*, *femina*, *fiscina*, *fuscina*, (*sub*)*lamina*, *pagina*, *sarcina*, etc. The same holds for Gk. "...υνη]": Gk. σιβύνη > Lat. *subina*; cf. also *techina* < Gk. τέχνη.

Second, it was held that the irrational accent occurred only on the first constituent of a compound syntagm. This claim seems to be contradicted by

- (10) *talentum* < Gk. τάλαντον;
Tarentum < Gk. Τάρας; gen. Τάραντος;
Agrigentum < Gk. Ἀκράγας gen. Ἀκράγαντος;

It is doubtful, however, whether the MVW "a > e" in these cases can be ascribed to initial accent. Also the above words are likely to have been

⁶ Bybee/Slobin's (1982) concept of "schema" is strikingly similar to Hermann's (1931) concept of "Muster" (see, e.g., Hermann, 95). Rather than a novelty, "schema" involves a precisation.

adjusted according to a Latin schema, viz. "...*entum]*" (*argentum*, etc.; cf. also the instrumental suffix +*mentum* which accords to the schema).

A phonotactic schema is also involved in *canistrum* 'reed-basket' (< Gk. κάναστρον) and in *praefiscinē* 'without offence' < *praefascine*, in which the outcome predicted by MVW would have been ***capestrum* and ***praefescinē*, respectively. These words were aligned to words such as *calamistrum* (cf. *calamus*), *capistrum* (cf. *capio*), *rāpistrum* (cf. *rāpum*).

6. Summary

Medial vowel weakening as well as some instances of vowel syncope in Latin must be ascribed to the accentual prominence of the preceding syllable, but this does not warrant the conclusion, usually made, that there was a pre-Latin *état de langue* in which every word was initially accented. There is reason to believe that pre-Latin accentuation was freer, i.e. closer to the PIE system, than the classical penultimate rule, in some circumscribable respects. Besides the *fácilius* type, some vestigial instances of freer accentuation can be brought forward (*vīgintī* and other decads; *mille*; *mavolo*; *malluviae*; etc.) and related to principles of compound accentuation. Most of the pertinent cases involving medial vowel weakening follow the same principles. The residual instances are explained in terms of morphological schemas which define prototypical word-shapes in Latin. The nature and domain of medial vowel weakening as an innovatory process was considered.

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