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An Analytical Directory of the Latin Endings

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An Analytical Directory of the Latin Endings

Introduction

"M". Suppose a word ends in it. That word is either declinable, or a verb, or an adverb. As a declinable, it is either accusative, genitive, or nominative. How much more must one disclose before the set of possibilities is limited to one? How much can be told about the word at each level? To continue this initial illustration, uncover another letter, disclosing, perhaps, u:

–um. Instantly, finite verbs are omitted. Only adverbs and declinables are left. Adverb, or accusative, genitive, or nominative? Disclose another letter, perhaps i:

–ium. No refinement of case, but now at least the adverbs have disappeared from possibility. And though no case is omitted, nominative becomes very rare, possible only for neuter abstract nouns of the second declension like connubium Of the letters which occur before –ium — b, d, e, l, m, n, r, t, v — some refine, some do not. A, b, e, and m mean accusative. N and v mean genitive.() The idea, in short, is to do this systematically for the entire language.

The Sieve of Letters

Not every letter can end a Latin word. This privilege is accorded only to 15 letters, s, m, t, e, i, a, o, r, n, d, c, x, u, b, and l.

Conversely, no Latin words end in f, g, h, j, k, p, q, y, z.

How do they rank? Letting *De Bello Gallico 5* (2900 words occurring 7400 times) represent the language for this answer, the terminating letters fall out like this:

The letter s ends 668 different words occurring 1517 times.

t	539	1077
m	453	1145
e	373	1043
i	248	0488
o	184	0433
a	182	0461
r	153	0290
u	034	0069
c	015	0108
d	010	0120
n	007	0263
x	005	0094
b	003	0012
l	003	0007

The above raw data produces this frequency of terminating letters:

() Omitting, for n, the rare personal names Manium (written "M'."), Phanium the slavegirl name in Roman Comedy, and, for v, Livium.and the -pluvium compounds.

by vocabulary:	by total words:
s 23%	s 21%
t 1 8% m	16%
m 15%	t 15%
e 12%	e 14%
i 08%	i 06%
o 06%	a 06%
a 06%	o 06%
r 05%	r 04%
u 01%	n 03%
c 00%	d 01% (zero = Greek *ouden*,
n 00%	c 01%i.e., less than 1
d 00%	x 01%
x 00%	u 00%
l 00%	b 00%
b 00%	l 00%

Here are the final letters marking more than one case:

s 21 (nominative,	genitive,	dative accusative, ablative)	
m 16 (nominative,	genitive,	accusative,	)
e 12 (nominative,	accusative,		ablative)
i 6 (nominative,	genitive,	dative,	ablative)
a 6 (nominative,		accusative, ablative)	
o 6 (nominative,		dative,	ablative)
u __ (nominative,	genitive,	dative, accusative, ablative)	
55 %			

The converse expression, and a clearer one, is a sort of sieve: Pour the letters through tiers of screens, and let a letter stick wherever, for instance, a case ends with it. Zero out the letters which fall all the way through, and catch the letters which stick only once. The result is a

unique endings sieve :

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	v	w	x	y	z
nom	a		c	d	e				i			l	m		o			r	s		u			x		
acc	a		c	d	e							l	m						s		u					
abl	a		c		e				i						o				s		u					
dat			c		e				i						o				s							
gen					e				i				m													
verb					e				i				m		o			r	s	t						
adverb	a		c	d	e							l	m		o			r	s							
prep	a	b	c	d	e								m	n	o									x		
conj			c		e							l	m	n						t						
		b																								

Only b falls through. Interestingly, it is the reserve of the prepositions to have a single letter unique to the role:

–b sufficiently indicates *preposition: ab, sub, ob.*

The converse is interesting: every letter except b marks at least two roles.

The above severe limitation is of course an artifact of the Roman alphabet, which, like the Greek, had no separate letter to represent long 'a'. In speech, we would be able to add:

–aa is a unique marker of ablative.

As the text is now the language, we are left with a single letter uniquely marking any role.

It is no wonder that the case-endings are taught in a system of declensional sets, though the Romans did not. It is even possible that the declensional sets comprise the best way for computer analysis of Latin and for persons, but I doubt it. You cannot define a declension membership by the endings; you must know the vocabulary, and I never wanted to type in a dictionary. Even so deep an ending as itatum doesn't sufficiently mean genitive of third declension — with words like equitatum and peditatum, the clausula is accusative. Even given the vocabulary, there are built-in ambiguities within the separate declensions. Knowing you are in third declension does not spare you the hopscotching to resolve the choices for a final –is! Even given the limited vocabulary of Latin, one could hardly write a program which would (1) take membership in a declension to be a trigger to (2) apply that declension's endings. This is the received system. Its further and final disadvantage for the programmer is that loading the total vocabulary must precede analysis.

Even in reverse, starting from the endings, the received system is cumbersome. E.g. given –a, to go to the plural of any of the five declensions to see if the word is neuter, and then to try nominative and accusative; or to see if the word is the singular of the first declension, and then try nominative and ablative, is a non-starter for the Evelyn Woods Reading Dynamics. This one final letter has four branches, and requires potential understanding — a set of prospective guesses — at the meaning. Not programmable. And certainly not programmable at one pass, and therefore little help towards Latin speed-reading, by machine or human. Further, years of small-scale Latin analysis had shown no need of plural. This was very promising, for if a set of rules could be drawn up to trap all nominatives, the analysis could avoid either several sets of anticipatory branchings or retrospective loopings. In other words, an algorithm that had no need of the concept of number could be linear; a program counting on number would leave us at the cross-checkings of the crossword puzzle.

Finally, going at it a new way is almost guaranteed to add to knowledge; just programming the present system would be a description, in a computer language, of the known.

This work, however, is not written for machines. It is promised that the Latinist who reads it, studies it, or even dips into it now and again as into a box of chocolates will at some points be entertained, at others, amused, and will end up with both a desire to read more Latin, and a greater Latin reading speed, the better to enjoy reading the best of languages.

Basis and Explanation

This analytical dictionary of Latin terminations is based on the 2,959 different words (7,400 words total length) of *De Bello Gallico 5*. Confirmation of some generalizations was done via an Ibycus search through all of *De Bello Civili* . Other confirmations were

done by running my own programs through the other books of *All Gaul*. These are specified.

Why just Book Five? Two reasons:

1. Book Five is my favorite.
2. I want to be able to finish (and have some time left to do something else!). Limits are important. The mind that can see order in 200 output examples might simply dither helplessly if faced with 2000. *Difficile est omnia persequi et non necessarium* — Cornelius Nepos, *Atticus*.

When not actually specified with digits, relative frequency of examples is shown by sequence. Only if there is no discernible or significant difference in frequency are the illustrations given in alphabetical order. Any unalphabetic listing of instances is in order of decreasing frequency.

Verbs are not here unless the verb ending is shared with the declinables. e.g., is 'labor' a noun or a first person passive verb? Is –ere infinitive, second person passive, or a third declension singular ablative? Is a final –i passive infinitive, plural nominative, singular genitive, dative, or ablative? Let's see.

Some patterns are resorted to frequently, for instance

–one 25, 46

means that the ending '–one' occurs on 25 different words in *De Bello Gallico 5,* and that these 25 words occur forty six times, total.

–x–

'–x–' is to be read 'any consonant'.

For this part of the work, I eschewed quote marks except to help distinguish endings from words. Example: –alia is a clausula; 'alia' is an entire word. Similarly, –ea is a word-ending, 'ea' is a word.

The Final Letters

–a See separate chapter for cases. For the rest, if it ends in –a, these limits apply: it is either a noun, an adjective, or a preposition/adverb, in that order. There is nothing else in –a.

Here are the –a percentages by occurrence:

noun	42.6	per cent	(183 occurrences)
adjective	40		(172)
preposition/adverb	(19.4	(83)	
	100.0	(428)	

The –a percentages by vocabulary:

adjective	54 %	(99 words)
noun	37	(68)
preposition/adverb	08	(15)
	100.0 %.	(182)

–a ends 182 different words, with 461 occurrences, making –a words 6 % of the text.

The letters preceding –a are often useful:

–da In *De Bello Gallico 5* the gerunds and gerundives in –a are sufficiently identified simply by the –da: except for 'sling', *funda*, only a gerund(ive) ends in –da. All *Civili* adds eight other exceptions: 'secunda' (albeit historically a gerundive), 'commoda' and 'incommoda', 'Ilerda', 'praeda', 'umida' and 'taeda'.

'ea' Entire word. See **'ea'** excursus in the final –a chapter.

–ea Should be added to list of adverb suffixes just like –e, –iter, and –tim: a word ending in –ea is ten-to-one adverb over adjective. 'Idonea' is swamped by 'postea', 'interea', 'praeterea', 'propterea', antea' and the like. This generalization is confirmed by the text of Book Seven as well. In other words, the programmer's guide is 'adverb unless idonea'. Total, DBG 5: 11.

–ga is either noun — 'fuga', 3 — or the preposition 'erga', 1. Total: 4. (DBG 7 adds one occurrence of terga, with four more of fuga. Fuga is ablative.)

–ia is of course a large set exclusively composed of nouns and adjectives; forty different words end in it, with 71 total occurrences. Four-fifths are nouns (33–7). In total occurrences, nouns are 55–16 to adjectives.

Here are the **–ia subsets**:

–cia marks a noun: officia, aedificia. (in all *De Bello Civili,* two exceptions: latericia, *of brick*, and tribunicia, in 'vi tribunicia', *with a tribune's power.* Total: 2, hence the Ibycus check through *De Bello Civili.*

–dia marks a noun: subsidia, invidia Total: 2. In all *De Bello Civili,* media (4) and dimidia are the only exceptions to the generalization.

lia Noun unless –alia, either 'alia' itself, or 'navalia', for instance, and 'consimilia'. 'Milia' is an accusative extent phrase, or a direct object, and not working as a numerical adjective, as the word may in other cases. Accusatives: auxilia, consilia,

milia (extent or object), Ablatives: contumelia, familia, vigilia, Italia. Ten to one is the noun-to-adjective ratio in this set (33–3).

–**mia** is only 'praemia'.

–**nia** Except for 'omnia', everything in –nia is a noun. These are abstract or symbolic: 'Aquitania', 'Britannia', 'insignia'.

–**pia** Two element set in Caesar, *De Bello Gallico* 5 and all *De Bello Civili:* copia, inopia, both abstract nouns.

–**ria** This divides into two sets:

–aria marks an adjective.

–[not-a]ria marks a noun: –ria is a noun unless there is an 'a' right in front of it. Single exception: 'tria'.

–**tia** all are abstract nouns (benevolentia, amicitia) except tertia, *third* .

–**via** Three element set: conloquia, candavia, quia. (abstract nouns excepting quia.)

End of –ia subsets.

–**la** marks a noun, apart from 'ulla', 'nulla'. Examples: tela, bella, epistola.

–**ma** marks an adjective: prima, maritima, carissima.

–**na** sixty percent of these are adjectives; the rest, nouns. The nouns are limited in number, but include some high-frequency items. Here are the –na nouns:

signa, fortuna, the set in –men–,–min– (agmen, agmina), hiberna, pugna, annona.

The remainder are adjectives, e.g:

magna, perentina, una (subject of separate heading in the –a chapter).

–**pa** One item set: ripa.

–**sa** participial adjective unless 'causa', 'fossa', 'ipsa'.

All *De Bello Civili* confirms the generalization, adding 'falsa' to the non-participial adjectives. –sa, in sum, marks an adjective except for the nouns 'causa' and 'fossa'.

–**ra** Noun (castra, hora, itinera, mora, natura, onera, opera, pecora, terra) unless:

(a) preposition/adverb:

intra, extra, contra, supra, citra, frustra

(b) –iora, comparative adjective.

(c) the –ter, tra set: altera, nostra, sinistra

Total in *De Bello Gallico* 5: 21 words, 49 occurrences.

–**ta** All are adjectives from verb past participles, except the adverb 'ita'. E.g: facta, demonstrata. Of course some can serve as nouns:

acta, imperata.

–**ua** Adjective, unless aqua: sua, exigua, reliqua.

–**b** Everything ending in b is a preposition: ab (49) sub (9), ob (1).

–**c** 'C' itself is 100; ac is the conjunction; everything else is either an adverb (sic, 7; huc, 2; nunc, 1) or the pronoun 'hic, haec, hoc', which has this order of frequency: hoc, 12; hunc, 10; hac, 9; haec, 9, hanc, and huic, 4 each.

–d This set is comprised of pronouns and 'function words' exclusively. There are the prepositions ad (109 occurrences) and apud (6), the conjunctions sed (19) and quoad (2), plus the adverb haud (1).

The pronouns are all neuter, and thus, accusative unless near a state-of-being or passive verb, in which instance they are nominative:

quod (54), id (15), quid (8), aliquid (1).

–e A most frequent ending: 14 per cent of the language ends with an –e.

'e' itself, the euphonic equivalent of 'ex', occurs once in *De Bello Gallico 5*

.

–e is at first glance, an ending of but moderate confusion:

One thinks of 'ablative' for final –e. Then if one thinks of the paradeigm, with the various –ae's, one might say

All –[not-a]e's are ablative.

Then you must omit 'de' itself, then 'inde' and refine to:

All –[not-a]e's are ablative or adverbs.

This is a nice match, for ablatives relate to the verb anyway. It works until –le, 'ille'! then comes 'ipse'. Unfortunately, –e is also shared with verbs. One writes

The final –e is ablative or adverb unless in 'ille' or 'ipse' and when it is not preceded by 'a' or 'r'.

But the last exception needs exceptions for words like 'mare', and the entire set of third declension neuters, like latere, itinere, and vulnere. Let us, without further ratiocination, simply exhaust the –e clausulae:

–ae A most widespread ending; it suits noun, adjective, or pronoun, and four of the five major cases, nominative, genitive, dative, and accusative.

Relative frequency out of any ten –ae's:

nominative, 5; genitive 3.5; dative 1, accusative, 0.5.

For further on the cases, see the separate **ae** chapter.

47 different words end in –ae, with 95 total occurrences, 28 of which are quae.

The **–ae** subsets are:

–cae adjective: paucae, publicae. Total: 3. *De Bello Civili* confirms. It has 18 –cae occurrences, every single one an adjective.

–dae gerund(ives) excepting only praedae. Total: 5.

–gae fugae only. Total: 3.

–hae hae only. Total: 1.

–iae exclusively abstract nouns unless –ariae, and tertiae. Total: 7 with 19 occurrences, of which 5 are abstract nouns with 17 occurrences.

–lae two-item set: insulae (2) and nullae (1).

mae numerical adjectives decimae, septimae.

–nae adjective unless pugnae.

–rae indeterminately noun or adjective.

–sae one-item set, past participle visae.

–tae past participles, with but three one-occurrence exceptions, the Pirustae, octingentae, and multae.

–uae quae (28), reliquae (2), the Aeduae (1), and suae (1).

–vae two-item set: Samarobrivae (locative, 2), and silvae (1).

–xae one past participle, defixae.

End of –ae subset of –e.

As implied in the –e introduction, everything from –be through –me is either an ablative or an adverb:

–be one-item set, orbe.

–de The –de words fall into three sets:

1. adverbs (e.g. unde)
2. abstract nouns (caede; these are all third declension ablatives)
3. proper nouns from Greek (Elide).

–de sets 2 and 3 are unique ablatives.

–nde is an adverb: inde, proinde, unde, deinde. There are two other –de adverbs, incommode and timide; otherwise, if a –de is preceded by a vowel, it is an abstract noun, except for lapide, rock. Total, *De Bello Gallico 5:* 7 words, 11 occurrences. Total in all *De Bello Civili:* 11, 37.

–ce ablative of –x nouns (luce, duce, voce) and adverb publice.

–ie 'die' and its compounds meridie, pridie, and cotidie; acie, and egregie.

–me Only the letter –i– precedes: every –me is an –ime, and –ime is a superlative adverb (9, 17). Nothing else.

'ne' The question suffix goes on mirandum, velint.

–ne (46) Abstract nouns in –dine, –mine plus adverb mane and preposition/verb sine. 80 per cent of the final –ne's are abstract nouns, all of the third declension, and all ablative singular. These are the –tudo, –tudinis and –men, –minis sets, such as altitudo, longitudo, and agmen. The whole set, further broken down by preceding letter, looks like this:

–one 25, 46, broken down in next two entries:

–ione 22, 41 all abstract nouns, ablative.

–x–one 3, 5 all personal names, ablative.

–ine 12, 30:

–dine 6, 14 all abstract nouns, ablative.

–mine –men...–mine 4, 6.

homo...homine . . 1 'guy'

' **sine'** . . . . . 9 'without'

–ene 3, 3:

bene . . . . . 1 'well'
paene . . . . . 1 'almost'
Vorene . . . . . 1 vocative, 'Vorenus'

–ane,

–rne,

une All singletons, exhibiting only mane, carne, commune, each occurring but once in *De Bello Gallico 5.*

–pe adverbs, except spe: saepe, prope.

–re See three-letter subsets, below:

–are Infinitive except mare, Caesare, quare. Totals: 28 words, of which 25 are infinitives; 39 occurrences, of which 30 (77 per cent) are infinitives.

–ere This ending is 79 percent active infinitive. There are 69 words in –ere, occurring 109 times. Non-infinitives number 11, with 23 occurrences.
Here are the –ere's which are not infinitives: ,

7: fere
5: itinere
2: aere, opere
1: aggere, genere, latere, quare, temere, vetere, vulnere.

Stylistic excursus: It may be noted that none of these is the alternate past tense third plural, e.g. 'continuere' *they contained*. None are to be found in all the 11,000 words of *De Bello Gallico* Book 7, longest of the work. As Caesar's speech in Sallust's *Catiline* is liberally set out with euphonious –ere's on past tense verb stems, we must conclude that these are Sallust's, and that Sallutst's phrase 'verba huiusce modi' means we have the tenor, but not the words, of Caesar. Alas that Sallust's concept of literary style required homogenizing the words of incorporated speeches to his own!

–gre one-item set, aegre (2).

–ire 100 % infinitive. Totals: 7 words, 13 occurrences.

–ore Abstract nouns like labore, clamore, except the comparatives in –iore plus minore. Complete listing of –ore words which are not abstract nouns:

1. The set of comparatives in –iore (also 'minore).
2. future infinitives 'fore' and 'adfore'.
3. Two agent nouns, 'auctore ', 'quaestore (1 each).

Total: 19 words, 34 occurrences.

–rre One-item set, the infinitive referre.

–ure One-item set, 'iure'.

'se' Entire word. 66 times, including the sese variant.

–se Infinitive or 'ipse', viz:

–pse ipse only. 12 occurrences.

–sse Unique to infinitives: 'esse', –esse compounds, and past infinitives in –isse.

–te Abstract nouns, 68 per cent. The abstract noun subheading is, in descending order the –tas,–tatis set, e.g., pietate, civitate; then the –tus,–tutis set (plus salus, salutis — everything in –ute is an abstraction.); then the –rs, –rtis set (arte, morte, sorte. Everything in –rte is an abstraction.)

The exceptions, of course, are mostly the adverbs, exhaustively absente, certe, forte, insciente, obstinate, and repente. Then there are the objective nouns capite and lacte, and the agent noun hoste. Outside of this brief list, words in –te are abstract nouns. Totals: 32, 62, of which 21 are abstractions, with 42 occurrences.

–i More than five percent of the language ends in –i. See separate chapter for cases.

–bi only ubi, 'where'; five occurrences.

–ci Half of all words in –ci are the passive infinitives of compound third conjugation infinitives. Next fall tribe names, adjectives, and nouns.
total: 14 words, 21 occurrences.

passive infinitives:		**tribe names:**	**adjectives:**	**nouns:**
adduci	cognosci	Aduatuci	domestici	offici
deduci	interfici	Bibroci	pauci	loci
proficisci	refici	Catuvulci		
subduci		Segontiaci		
		Gallici		

–di:

Every –edi and –udi in Caesar is the passive infinitive of a compound verb. ('dedi', of course, does not occur in Caesar!)

–idi Of the four cases a final –i can fall into, –idi is uniquely genitive. The –idi set consists of personal names (Calidus, Calidi; Nasidius, Nasidi) and neuter collective nouns oppidum, oppidi; the sidium compounds, e.g., ob-, prae-, and subsidium, subsidi. In Caesar, concidi is the only –idi passive infinitive.

–ndi All are gerunds in the genitive: consistendi, colloquendi.
De Bello Gallico 5 total: 30 occurrences of 27.

–odi genitive of modus compounds: eiusmodi, incommodi. (no odium in Caesar.!)
End of –di subset.

'ei' Uniquely dative.

–ei In *De Bello Gallico 5,* –ei is a set exclusively built of abstract nouns, fides, fidei, dies, diei, res, rei, spes, spei. *De Bello Civili* adds the personal names Petreus, Petrei; Ptolemaeus, Ptolemaei, and the personal pronoun ego, mei.

–gi Outside of Gaul, all of Caesar's –gi words are passive infinitives, agi, tangi, coniungi. In Gaul, one meets native dative kings (rex ... regi) named like Cingetorix (...Cingetorigi).

'hi' Uniquely nominative.

–hi 'mihi' occurs in speeches. The ending is otherwise passive infinitive of traho, trahere and its compounds: extrahi, retrahi.

–ii doubly unique set: all are nominative plural; all apply to persons: alii, essedarii, legionarii.

–li Home of neuter nouns (bellum, belli; proelium, proeli; vallum, valli) third declension adjectives (mollis...molli, nobilis...nobili), pronouns (illi, ulli, nulli), diminutives (fusilli), people (populus, populi) and Gauls, Galli.
Total, *De Bello Gallico 5:* 14 words, 38 occurrences.

Tracking all –li words in *De Bello Civili* shows that they fall into all five final –i possibilities (the four cases plus passive infinitive), but the following observations or generalizations can be made: the neuters in this collection are, of course, uniquely genitive:

belli, periculi, pabuli, pili, castelli, valli, templi.

The third declension adjectives in –li, numbering ten with 18 occurrences, were entirely ablative: not one of the tali, difficili, tribunali, navali sort of words turned out to be dative.

'illi' is nominative 46 times in *De Bello Civili,* and dative once. The outside confirming markers for the dative are (1) it is in an indirect statement, (2) it is not the first element of its clause, and (3) there is a trailing linking dative:

neque hanc rem illi esse impedimento

The personal names in –li are uniquely genitive; in other words, if it begins with a capital letter, and is not 'Galli' or a place-name, it is genitive.

The place names in –li are locative: Neapoli, Amphipoli.

Six verbs occur with an –li passive infinitive: tolli (2), and compelli, consuli, expelli, propelli, noli (all once each).

–mi Nominative masculine plural of superlatives head up this list, including words where the superlative idea is less obvious, such as finitimi, ultimi, proximi, extremi. Except for animi, all *De Bello Gallico 5* words in –imi are superlatives. Also in the –mi set are a noun, fumi, and a passive third declension infinitive, premi. Total, *De Bello Gallico 5:* 9 words, 13 occurrences. All *Civili* adds the personal names Auximi, Septimi, uniquely genitive; the noun domi, locative, adjectives infirmi and primi (nom or gen) and incolumi, ablative.

–ni The largest category of words in –ni is of persons related to a place: Alexandrini, Romani, oppidani, domini. Also there are persons related to another person (Afraniani, Domitiani) or to an idea (veterani). As nouns, these are typically nominative, ten to one, in fact. Actual numbers: 50 nominatives, 5 genitives, in all *De Bello Civili.* As adjectives (populi Romani, for instance) they are likely to be genitive. 'Magni' and the other –ni words which are almost invariably adjectives (alieni, pristini, repentini) are genitive six to one over nominative.

Dative, easily the rarest case, is teasingly close to being sufficiently marked by –oni: excepting the passive infinitive of ponere plus its compounds (imponi, proponi) and the –onius names (Antoni, Galloni, Scriboni, Treboni), every –oni word in *De Bello Civili* is dative: Curioni, eruptioni, legioni, occasioni, religioni, Scipioni, sermoni, Varroni. An interesting note on the rarity of dative is that even 'uni' is plural nominative, not singular dative!

A small but frequently-met category is exclusively genitive: all of the–ni words related to time in *De Bello Civili* are genitive: anni, autumni, diuturni ,meridiani, nocturni.

Only three words in –ni are capable of being ablative, omni (*De Bello Civili*:, 20), communi (3), igni (2). Though these three are also capable of being dative, they are ablative, 24–1. The one is marked in advance by a uniquely dative form: exercitui quidem omni.

The abstract nouns in –men...mini, both being i-stems, are of course, uniquely dative. There is one, occurring once, flumini. Among *–ni* 's, the non –oni datives in *De Bello Civili* number, in sum 2, occurring once each.

–pi Passive infinitive. One word once in *De Bello Gallico* 5, recipi; *De Bello Civili* adds but four more instances, all passive infinitives: capi, corripi, intercipi, and interrumpi.

–ri Passive infinitive, though curiously, –pi is a surer sign of a passive infinitive than –ri; of 53 –ri words in *De Bello Gallico* 5, 20 are not passive infinitives. Of 101 occurrences of –ri words in *De Bello Gallico* 5, 61 are, 40 are not. The following –ri coverage breaks alphabetism to do vowels and consonants separately:

–ari, –eri, –iri work a bit better at denoting a passive infinitive:

–ari excepting Caesari, dispari, Indutiomari, mari, pari, rari, is passive infinitive.

–eri excepting alteri, imperi, liberi, mediocri, operi, Treveri.

–iri excepting viri.

In general, any other vowel to –ri is a noun: dolori, Tituri.

–ori Dative singular third declension nouns (6) unless preceded by i, in which case dative singular comparative (1)

–uri Denitive singular of a second declension masculine noun (Pisauri, muri) except when preceded by t or ss. These are plural nominatives of the future active participle (acturi, commissuri). The –uri's are a 50–50 split between these two (four each in all *De Bello Civili).*

–x-ri is, excepting ferri and compounds, not a passive infinitive, but an adjective: nostri, utri, mediocri, equestri.

End, passive infinitive coverage.

–si These are plural nominative past participles except si, nisi, etsi, ipsi.

–ti: not so purely past participle as –si. Taking another letter helps:

–ati: past participle except pati (passive infinitive, once), and civitati (dative, abstract noun, 5). Examples: dissipati, morati, conflictati.

–cti: purely past participle. Examples: nacti, interfecti, reiecti.

–eti: not past participle. Example: Tasgeti.

–iti: purely past participle. perterriti, vestiti.

–lti, and

–nti: not past participle: multi, conanti, tanti, recenti, ingenti, venti.

–oti: abstract noun, past participle, adjective: oti, negoti, permoti, toti.

–pti: past participle, adepti.

–rti: past participle (conferti, 2), dative abstract noun (parti, 1) and passive infinitive (reverti, 1).

–sti: Ariovistus, Ariovisti.

–uti: three item set:

1. past participle: secutus and compounds (of which insecuti alone appears in *De Bello Gallico 5)*
2. The 'ut' variant 'uti' (10) and its compound sicuti (1).
3. Dative of abstract nouns: saluti (3), virtuti (1).

End of –ti.

–ui:

–dui Only Aedui.

–ivi Captivi.

–nui Passive infinitive, minui.

'qui' Entire word. Nominative masculine plural, 42 occurrences.

–qui Passive infinitive marker excepting –iqui. Only –e-, –i-, –n-, and –o- precede, and they delimit nicely:

–equi Passive infinitive: sequi, insequi, prosequi 2, subsequi 2.

–iqui Nom. masc. pl: .reliqui.

–nqui passive infinitive, relinqui

–oqui passive infinitive, colloqui.

–rui passive infinitive, obstrui.

–sui, and

–tui: dative singular abstract noun: usui (1), exercitui (1)

–l: in *De Bello Gallico 5,* only nihil (12), procul (4), and simul (2) occur. A greater sampling from all *de Bello Civili* shows that the conjunctions simul (which always occurs singly) and vel (which always occurs in pairs!) are a plurality (44.15 per cent). The rundown:

conjunctions:	44 per cent
neuter nouns:	27 (nihil 24.7, tribunal and vectigal 1+ each)
'consul':	17
adverbs:	12 (procul 10.0, semel 2.)
numbers:	3 (l, xl)
	100

The declinables are very straightforward: consul is of course, uniquely nominative; nihil is 11-to-1 accusative: the one nominative nihil in *De Bello Gallico 5* is externally marked, immediately, by the state-of-being verb:

si nihil esset durius . . .

–al: tribunal, vectigal. See summary at –l.

–el: semel, vel. See summary at –l.

–il: nihil. See summary at –l.

–ul: consul, procul. See summary at –l.

'M.' Marcus.

'M' 1000.

–m: total in –m: 458 words, 1080 times: 15.4 percent of the words and 14 per cent of the text end in –m.

Relative frequency of the –m endings:

–um is 3-1 to either –em or –am; –im is sparse. In more detail:

–um ends 243 different words occurring 571 times. 8 per cent of vocabulary, 9 per cent total words.

excluding: cum 99 (subject of its own chapter)

secum 4
dum 4

–em ends 102 different words occurring (267)times.
3% vocab, 3% total words.

–am ends 91 different words occurring 184 times.
3% vocab, 2% total words.

–im ends 14 different words occurring 31 times. 0% vocab, 0% total words.

–am endings: It simply does not work to call every –am 'accusative' on sight. Only 39 per cent of the –am endings are accusative. Because the –am ending can be a verb outside of Caesar (who uses only one first person singular verb himself!), it seemed best to redress the balance with a sample from Cicero. The 482 –am words in book 8 of the *Letters to Atticus* fall out as follows:

accusatives . . . 193, 39%.
[inc. 'quam' 15, 03%][##]
[inc. place 14, 2%][@]
conjunctions . . 115, 23
[inc. 'quam' 85, 18%][##]
adverbs 83 17
verbs 72 14
suffixes . . . . . 19 3 e.g., –dam –iam, –nam, –quam.

Here, sorted by function, are the –am words which are not accusatives and not verbs:

Composites:		Conjunctions:		Adverbs:	
cuiquam	3	quam	85	etiam	41
quaedam	3	nam	23	iam	20
quadam	2	tam	14[1]	umquam	5
quidnam	2	utinam	4	numquam	5
quicquam	2	quoniam	4	postquam	2
cuiusdam	1	quamquam	1	coram	1
quisquam	1	tamquam	1	nusquam	1
quidam	1	palam	1		

The various –am endings:

–bam In *Ad Att.* 8 every –bam except albam is a verb.

–cam: only publicam.

–dam, preceded by anything but n ('–ndam', below), is the indefinite suffix. Strike and look under the resulting ending. Sole exception: praedam, 'loot'. Examples: cuidam, quidam, quodam. The other –dam's are the –ndam gerundives.

–ndam All gerundives: ducendam, deripendam, exspectandam, tenendam, transportandam, vastandam.

eam, entire word, occurs ten times in *Ad Att.* 8. Every one is the pronoun-adjective; none turn out to be the subjunctive first person verb.

[##] Yes, quam the conjunction is six times more frequent than quam therelative pronoun.
[@] City-names equivalent to 'ad' + place
[1]tam could also, of course, be entered as an adverb. As it is a correlative adverb, its job of introducing a clause must override.

To split 'eam' the pronoun from 'eam' 'I should go' seems to have been the job of the prefix: redeam, subeam, are, of course, unmistakably the verbs. Thus the prefix in this case is a *verb marker*.

–eam: adjective or verb:

meam 7 subeam 1
cinneam 1 timeam 1

–gam Only fugam 1

iam, entire word, is also suffixed to et, etiam; and to quo, quoniam in this order of frequency: etiam (41), iam (20) , and quoniam (4).

–iam One more preceding letter is usually definitive:

–ciam: all verbs: faciam, proficiam, sciam.

–diam: abstract nouns unless audiam, verb:

concordiam 3
iracundiam 1
verecundiam 1

–giam: only fugiam (1), verb.

–liam: region name, unless aliam (1)

Italiam 5
Siciliam 3
Apuliam 3

–niam: quoniam (4), pecuniam (1). –niam not verb

–piam: verb unless copiam (1): incipiam (2), excipiam, (1).

–riam: abstract noun unless –ariam, adjective, or 'reperiam', verb: Luceriam (8), memoriam (1), patriam (1).

–tiam: abstract nouns, once past 'etiam':

sententiam 3
tristitiam 1
neglegentiam 1
diligentiam 1
benevolentiam 1
molestiam 1

–lam All pronouns and nouns excepting the adverb palam: ullam and epistulam (five each), illam and nullam (three each).

mam All are adjectives except Romam.

maritimam 3
primam 1
dignissimam 1
summam 1

nam, the entire word, with its compounds utinam and quidnam would have to be flagged 'not accusative' by any analyzing program. Frequency: nam, 23; utinam, 4; quidnam,1. *Julius Caesar never says 'utinam'.*

–nam The remaining –nam's are three-to-one adjectives-to-abstract nouns:

adjectives:	pristinam 2	abstractions:	fortunam 1
	magnam 1		Tarracinam 1
	dignam 1		
	quartanam 1		
	unam 1		

–pam is only culpam (1), abstract noun.

–aram, and

–eram: These two endings alike denote a first person verb except for 'alteram' (2), miseram (1), and operam (1). The –eram ending, curiously enough, is only two-to-one for labeling a first person verb.

'miseram' is itself either 'poor [feminine singular accusative]' or 'I had sent.' Julius Caesar simply does not use miseram, either one.

The –eram breakdown:

verbs:	scripseram	2	adjectives:	alteram 2	noun: operam 1	
	eram	1		miseram 1		
	conieceram	1				
	audieram	1				
	memineram	1				
	inflammaram	1				
	intellexeram	1				

–oram Three item set:

'oram', almost always 'oram maritimam', 'shore', 5

coram, the adverb, 'openly', 1.

cognoram, contraction for –overam, 1.

–tram: all adjectives: nostram (2), utram (1).

–uram: all abstract nouns: curam (2), coniecturam.

–sam: any –sam which is not causam is an adjective, or pronominal adjective: *causam* (6); *falsam* (1), *defensam* (1), *ipsam* (1).

–tam is an adjective, once past *'tam'* itself: tam 14,pervulgatam 1, paratam 1, imperatam 1, tantam 1, notam 1, leptam 1, conscriptam 1, refertam, istam 1.

–u(v)am: Three adjectives, one noun; the rest are 'quam' and compounds of –quam:

quam	92	tuam	3	Capuam	7
umquam	5	novam	1		
numquam	5	suam	1		
cuiquam	3				
quicquam	2				
postquam	2				
tamquam	1				
quamquam	1				
quemquam	1 (sole accusative in column)				
nusquam	1				

–em The high frequency calls for a breakdown:

60 per cent of all words ending in –em are accusative, (166/267)

28% of all words ending in –em are adverbs, (70/267)

0% of all words ending in –em are verbs, and (27/267)

% of all words ending in –em are composite declinables in other cases. (4/267)

The –em adverbs: The –em composites:

autem	32,	11%	of all –ems.	eadem 7, 2%[++]
quidem	23,	8%	of all –ems.	eidem 1, 0%
eodem	7,	2%	of all –ems.	
equidem	2,	0%	of all –ems.	
item	2,	0%	of all –ems.	
pridem	1,	0%	of all –ems.	
saltem	1,	0%	of all –ems.	

–em: accusative unless listed above. Further:

–bem: urbem only.

–cem: agents, abstractions, adjectives, one adverb, one verb. *Ad Atticus* 8 had only:

lucem 2, dimicem 1, decem 1 Pollicem (slave name) 1, pacem 1, vicem 1. For a greater sampling, all *De Bello Civili* and then Cicero, *De Leg., De Fin*., and *Orat*. from Ibycus was done, sorted, tabled, and then lost in a machine accident. Ibycus's first 103 "finds" out of Cicero yielded this –cem picture with samples:

Agents:		Adjectives:		objects:		Abstracts:		verb:
iudicem	43	decem	20	codicem	12	vocem	6	explicem
haruspicem	3	audacem	2	crucem	2	necem		3
artificem		atrocem		arcem		lucem		
carnificem		infelicem		fornicem				
nutricem		mendacem		verticem		(=caput)		Adverb: vicem
rapacem		(=fur)						

Notwithstanding the existence of the verb iudicare, iudicem is only the agent, never the verb, though *iudex* is to *iudicare* as *dux* is to *ducere*, and *fex* is to *facere*. *–fex*, the agent from facere, occurs only in compounds.

dem, entire word, occurs twice in Ad Att. 8: 'that I should give . . .'

–dem: adverbs 3, 26, accusatives 5, 20, non-acc. composites 2, 8, viz:

quidem	23	idem	(all acc.) 9	eodem	7
equidem	2	eadem	(4/7 acc.) 4	eisdem	
pridem	1	eundem	2		
		pedem	1		
		grandem	1		
	26/54		20/54		8/54

–iem Abstract nouns, masculine, of the fourth declension: diem, meridiem.

–lem: consulem, 50 per cent; mallem,vellem, 12.5 per cent each, accusative of third declension adjectives, 25 per cent.

–nem Every –nem is accusative. 'Hominem' and its negated compound 'neminem' are first and fourth in frequency in this set. Most (57 per cent) of all –nem words are abstract nouns of the –ionem type, like condicionem, suspicionem. The –tudo...tudinem set is included, but rather less frequent. generally, the ending –nem, and absence from this table, should make a word an abstraction:

[++] Three are accusative, two are nominative, and two are ablative. See the 'ea' opusculum in the -a chapter.

Non-abstract nouns in the –nem set:

persons: hominem 6 names: Tironem 2 adjective: omnem 1
neminem 2 Curionem 1
Scipionem 1

16 words, 30 occurrences.

–pem: spes (2), ops (1), and turpis (1): Three words, four occurrences.

–rem: verbs, agent nouns, adjectives, abstract nouns. One more character of resolution helps:

–arem: all verbs except Caesarem.

–erem: all verbs except the adjective veterem.

–irem: one verb, sentirem.

–orem: agent nouns, comparative adjectives, and abstractions. Again, we need to pick up one more character, for it depends on whether the preceding letter is a 't', any other consonant, or the vowel 'i':

–torem Agent noun: — conservatorem, desertorem, moderatorem, perfectorem.

–iorem Comparative adjective — certiorem, meliorem,

–[consonant not 't']orem: abstract noun — morem, dolorem.

All of the –orem words are singletons in *Ad Att.* 8 except certiorem, which appears twice.

–sem: all eight are verbs, essem and misissem (2 each), then cognossem, fuissem, offendissem, scripsissem singletons.

–tem Forty percent with this ultima are accusative. This is because of the word autem; with autem out of the picture, the remnant –tem's are 90 per cent accusative. The other non-accusatives are item and putem. In other words, the programmer's case-calling summary is simple: *accusative* unless autem, item and putem.

Of the 61 –tem ultimas in *Letters to Atticus* 8, the breakdown looks like this:

abstract nouns (11, 18), adverbs (3, 35), adjectives (7, 7), and verb, (1,1)

Only six letters precede the final syllable –tem: of the vowels, only a, i, u; of the consonants, only l, n, and r, and they fall out like this:

–atem All are abstract nouns of the –tas...tatem set, led by auctoritas with three occurrences. The type is relatively rare in the accusative, just seven entries with nine appearances, all singletons exceptng the auctoritatem already mentioned.

–item: 'item' itself (twice) and comitem, agent noun (once).

–ltem: saltem only (aptly enough!), once.

–ntem: present active participle 5–1 over abstract noun. The abstract noun is mentem, once. others, singletons all: implorantem, redeuntem, sapientem (personal noun), vehementem, vigilantem. Quite rare in golden age, more common in first century as Petronius and others get used to making a participle serve as a pronoun.

–rtem: partem (4), expertem (1), and fortem (1) — abstraction or adjective.

–utem 'autem' is 11 per cent of the –em endings, all by itself. The others: abstractions salutem, virtutem (2 each); and one verb, putem, once.

–im: enim' comprises most (55.4 per cent) of this termination. The breakdown:

Conjunction:	Adverb:	Verb:		Noun:		
enim	46 (55.4%)	praesertim	5	velim	13 (15.7%)	vim 1
		interim	2	possim	2	
		partim	2	sim	2	
		statim	2	absim	1	
		confestim	2	dixerim	1	
				dubitarim	1	
				fecerim	1	
				quierim	1	
				senserim	1	
				transierim	1	

As there are compounds with 'enim', it may be worthwhile to observe:

–lim: Verb.
–nim: Conjunctions.
–rim: Verb unless 'interim'.
–sim: Verb (unless 'Tamesim', 'Thames', which occurs in Caesar.)
–tim: Adverbs.

End of –im endings.

–um: 1. summary of case-assignment
2. exhausting the preceding letters.

–um, 1. There are 214 different –um-words, appearing 614 times in *Ad Atticum* Book 8. Total vocabulary and total occurance make no difference: 78 per cent of the –um entries, and 77 per cent of the total words in –um, are in fact accusative. Still, blindly calling a word in –um accusative would be wrong once in every four or five occurances. More data is called for.

A further breakdown of the words in –um:

	Entries, %		Occurrences, %	
accusative adjectives:	93	(37.3 %),	162	(26.4%)
accusative gerund(ive)s:	20	8.0	26	4.2
acc. personal names:	28	11.2	45	7.3
acc. abstract nouns:	22	8.8	48	7.8
acc. object nouns:	22	8.8	57	9.3
acc. place nouns:	6	2.4	21	3.4
adverbs:	7	2.8	16	2.6
prepositions:	7	2.8	24	3.9
conjunctions:	5	2.0	123	20.0
verbs:	2	.8	23	3.7

As usual, we identify and assault the exceptions:

–ums not accusative by class are thus:

genitive plurals 10
functions 26.
verbs 3.7

These last two areas are best handled exhaustively by name, to leave –um 90 per cent accusative with these discounted.

–ums not accusative, individual:

cum,	conjunction/prep,	97
sum,	verb	15
tum,	conjunction	11
primum,	adverb	10
possum,	verb	8
num,	conjunction	6
quantum,	conjunction	5
dum,	conjunction	4
demum,	interdum, iterum, nondum, parum, paulum — all singletons.	

This leaves the –um genitives. Genitives in –um are preceded only by –i-,–n-, and (of course) –r-.

```
-um by next preceding letter:
         a b c d e f g h i j k l m n o p q r s t u x
     acc   b c d e     h i     l m n       r s t u x
     gen                 i         n       r
    conj     c d                   n           t
     adv       d               l m             t
           b     e     h
```

We can see at a glance that there are infix letters which by themselves suffice to mark an accusative: every

–bum is accusative;

–eum is accusative;

–hum is accusative. Yet there are no single infix letters sufficiently marking the minority genitive. There are, however, some good indicators: Every –tum which is genitive is also –itum. The –it- infix qualifies as a secondary, confirming marker for genitive plural: though accusative outnumbers genitive 8 to 1, genitive is almost 2–1 over accusative among the words ending –itum.

–i- confirms accusative, 11 to 1, a significantly better ratio than the over-all 8–1 accusative to genitive plural ratio of the final –um set. Further, the –ium genitive plural subset is minute: –ium is accusative unless the word is omnium or civium.

–n- is no help: –num is still accusative to genitive 8 to 1, the same ratio as the entire –um set. But knowing the minority set helps: in *Atticus* 8, the sole –num genitives are hominum, Ciceronum, and ordinum. *I.e., excepting hominum, Ciceronum and ordinum, any –num is accusative.*

–r- is 5 to 4, genitive to accusative. such letters as precede –rum are instructive:

–arum is genitive except for paraclarum and parum.

–brum is accusative: librum (membrum is rare, and not in *Atticus* 8.).

–erum is accusative: alterum, miserum, superum, verum. [Don't hold your breath looking for the exceptions dierum, iterum rerum, sperum — once past the title *De Rerum Natura*, they are a desert. "For that matter," asks St. Augustine, "what is the genitive plural of *spes* ?" The word was not in use, and terra incognita. These are paradigm words.]

–irum is accusative: virum.

–orum is genitive. –orum is, in fact, the only uniquely genitive ending.

–trum is accusative unless pronominal: castrum, magistrum, utrum, neutrum.
–urum is accusative

–um, 2, exhaustively, by preceding letter(s):
–bum: superbum, period.
cum: the conjunction, preposition. see separate chapter.
–cum: mostly compounds of 'cum': te- 9, me- 6, se- 2, nobis- 2, vobis- 1 'circum' (3) is exclusively the preposition in *Ad Att* 8, rather than the noun meaning 'circle'. All other –cum words are accusatives: locum 5, amicum 2, publicum 1.
dum: the conjunction. Four in *Ad Att* 8.
–dum: Accusative unless 'interdum' viz:
–idum: all accusative, and either 'town' or 'lepidus'. once each.
–ndum: gerund(ive) except nondum. The gerundive with form of esse outnumbers gerund with 'ad' 7 to 1 (20 to 3, raw numbers).
–odum: modum. thrice.
–rdum: interdum. once.
eum: the accusative of the pronoun. 17.
–eum: all accusatives: meum 9, gnaeum 3, deum 1.
–hum: two-item set: triumphum, dicaearchum.
–ium: Too common. Eleven letters precede, as noted below.
–bium: adjective or personal name: Fabium, dubium.
–cium: neuter abstract noun: iudicium 2, beneficium.
–eium: personal name: Pompeium 6, Petreium.
–hium: Place name, Dyrrachium.
–lium: Abstraction 12, adj. 2, personal name 1:

consilium 9	alium 2	Tullium
auxilium 2		
proelium 1		

–nium: Proper noun unless omnium, as follows:

Personal Name 4,	Place Name 4,	Genitive Plural 3:
Afranium 2	Corfinium 3	omnium 3
Trebonium	Samnium 1	
Coponium		

–pium: All personal names: Ampium, Eppium, Appium.
–rium: Abstraction, agent noun, adj, personal name: industrium, adversarium, necessarium, Curium — Once each.
–sium: Place names: Brundisium 14, Canusium.
–tium: Personal names 9, abstraction, adjective:

Domitium 7,	negotium, propitium
Trebatium	
Lucretium	

–vium: genitive plural 4, adjective 1, namely civium 4 , obsequium
–lum:
Abstractions 14, pronoun 12, adjectives 10, personal name 4, adverb:

exemplum 8	illum 12	solum 7	Lentulum 4	paulum.1
bellum 2		nullum 2		
fasciculum 2		amplum 1		

periculum 2

–mum:
Adverb 13, adjective 6, abstract noun 3, personal name:

primum 10	gratissimum 3	animum 3	Philotimum	
plurimum 2	maximum			
demum 1	potissimum			
	firmum			

num: the conjunction 6.

–num: adjective 13, place name 5, genitive 5, person noun 3, abstraction 2, plus one transliterated Greek name:

unum 8	Arpinum	hominum 3	dominum	signum	Aristoxenum
magnum 3	Formianum	ordinum	tyrannum	somnum	
dignum	Sidicinum	Ciceronum	vicinum		
paelignum	Picenum				
	Taenum				

–pum: one-item set: lupum 1.

–rum:

–arum is genitive except for paraclarum and parum.

–brum is accusative: librum (membrum is rare, and not in *Ad Att.* 8.).

–erum is accusative: alterum, miserum, superum, verum [iterum].

–irum is accusative: virum.

–orum is genitive. –orum is, in fact, the only uniquely genitive ending.

–rrum: personal name, Hirrum.

–trum: genitive pronoun 9, adjective 3, person noun 2, abstraction.

genitives: accusatives:

nostrum 8	utrum 2	magistrum 2	castrum
vestrum	neutrum		

–urum: future participial adjectives, without exception:
futurum, venturum 3 each
facturum, probaturum 2 each
six other analogs once each.

'sum' 'I am' 15.

–sum Even in Cicero, the adjectives far outweigh the obvious first-person verb. One abstraction:

ipsum 3	possum 8	casum
missum 3, plus singleton adjectives		
falsum	invidiosum	
interclusum	periculosum	
progressum		

'tum': adverb 11.

–tum Adjectives, almost all participial, excepting (a) those participles which are used as abstract nouns, (b), personal names, and (c), the word quantum.
(a). The abstract nouns:
conspectum, exercitum, factum, reditum, Senatum, sumptum. (Excepting factum, these above are all singletons in *Ad Att* 8; factum is a participle twice as often as a 'deed')

(b) The personal names:

Fabatum, Torquatum (both singletons).

–uum: universally accusative in *Ad Atticum 8:*

adjective 10, abstraction 1, agent 1:

tuum	6	triduum	servum
aequum	2		
iniquum	1		
reliquum	1		

The word passuum makes –uum in Caesar apparently quite different, 2–1 genitive-accusative (16–8). Without the word of mileage, Caesar is 8–1 accusative:

passuum15	suum	3	rivum 2
aestuum 1	perpetuum	2	
reliquum1			

Generalization: –uum is accusative unless passuum or aestuum.

–xum Adjective, fixum.

End of –um endings.

–n Of the 263 final –n words in *De Bello Gallico* 5, there is only one declinable, flumen. It is twice the object of 'ad', twice the subject of the verb.

The others:

in 186 non 48 tamen 20 quin 3 sin 1 Cn, for Cnae- 1.

End of –n endings.

–o See separate chapter for cases.

Because of the first person singular verbs, we are still — as with the **–m'**s above, in Cicero, not Caesar.

The sieve of letters before –o shows this to be all over the alphabet:

```
a b c d e f g h i k l m n o p q r s t u x
  b c d e   g   i   l m n       r s t u
```

Does the preceding letter define to any degree?

```
Sieve of letters before -o, by part of speech:**
     b c d e   g  i    l m n       r   t u  ]  verb
       c d e      i    l m n       r s t u  ]  adj
       c d e   g  i    l m n       r   t    ]  noun
       c d e      i    l   n       r   t    ]  name
         d        i    l m                  ]  abstr
              g         m                  ]  pronoun
                                   r   t    ]  prep
         d     g                       t    ]  adv
       c                                    ]  conj
    -b-                                -s-
```

** [considering only *Ad Att 8:* Obviously, co*p*o, fa*x*o would add p, x; ve*h*o, tra*h*o would add h.]

It is visible from the sieve that –b- , –h- , and –s- are the only infixes before –o to sufficiently mark anything. Infix letters –b- and –h- signify 'verb'. Infix letter –s-

signifies adjective. –g- comes close: its four appearances in the sieve mean that –go, when not in 'ego' and 'vulgo'* is a verb.

–bo: all verbs. six singletons.

–co: verb, adj, conj, name, noun

–ico: name, noun, verb, conjunction: Attico 16, amico 2, dico 2, idcirco 2, medico 1 [<- dative!] viatico 1

–rco: conj., idcirco, 2.

–sco: verb, requiesco, 1.

–do (17,37) The home of verbs (5,8) and gerunds gerunds, some abstractions and miscellany. One more letter is usually definitive:

–ddo: verb, addo.

–edo: verb, credo.

–ido: verb 3, name 2, adj 1: confido, Lepido, sordido

–ndo: gerund 6, verb 2: gerund unless –scendo, –hendo.

–odo: adverb, modo 16

–udo: nominative abstract noun, lippitudo multitudo.

eo, the whole word: see 'eo' subheading of separate **–o** chapter.

–eo (12, 39) verb 9, 31; adj 2,6; name 1,2. One more letter puts close limits:

–aeo: name, Gnaeo 2.

–beo:verb, habeo 6.

–deo: verb: video 14, doleo 2; singletons gaudeo, pendeo, respondeo.

–geo: verb, lugeo.

meo, entire word, adj, 5.

–neo: verb, maneo, 1.

reo: dative noun, 1.

–seo: verb, censeo, 4.

–go: (7, 46) verb unless 'ego' 39, vulgo1, [virgo]: intellego 2, diligo 1 lego 1

–io (53, 100) Very numerous, very local: this clausule is the home of nouns and verbs. The nouns are essentially abstractions, personal names, and nouns applying to persons. The potential adjectives in this category all turn out, when examined in situ, to be personal nouns. The –rius, for instance, is not the adjective relating to the base, but the person. 'Dubio' was the only –io adjective in *Ad Atticum* 8.

–io locates itself distinctly when put through the sieve:

Sieve of letters before –io:

	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t	u	x
adj		b																				
verb			c	d										n		p						
noun		c	d	e								l		n		p		r	s	t		
abst		c	d									l		n		p		r	s	t		
name			d	e								l		n		p		r	s	t		
pers												l						r				
plac																			s			

–bio dubio , 1. Could have been verb, noun, or adjective; ablative or dative: five possibilities! The one in *Ad Att 8* turns out to be the adjective, in the ablative case.

–cio Abstraction (4,6) and verb (3,8). Either –i- or –s- tellingly precede:.

---

*'Virgo' does not appear in the source sample. Obviously, the final form of this generalization must include it.

–icio: neuter abstraction (4,6) unless –spicio, verb:
beneficio 2 perspicio 1
officio 2
condicio 1
iudicio 1

–scio: verb (2,7):
scio 4
nescio 3

–dio:

–adio: name (1,1): Fadio.

–idio: abstraction (2,7) name (1,1):
praesidio 4 Considio 1
subsidio 3

odio: name (1,1): Clodio.

–udio: verb (1,1), abstraction (1,1): audio, studio

–eio: name (1,6): Pompeio.

–gio: Absent in *Ad Atticum* 8. I resorted to Caesar for this data.

–gio: (a). Abstract/collective noun when preceded by a vowel: legio, regio, religio. Nominative.
(b). Belgio.

Remaining **–o'**s from *Ad Att.* 8, as before:

–lio: abstraction. (1,7), name (2,3), person noun (1,3)
consilio 7 Laelio 2 filio 3
Tuscilio 1

–nio: name (4,7), verb (1,1), abst (1,1):
Corfinio 4invenio testimonio
Antonio 1
Samnio 1
Trebonio 1

–pio: verb or name: cupio 3, Scipio 2.

–rio: name 3,4; person noun 2,4:
Curio 2 adversario 3
Cemetrio 1 milliario 1
Pinario 1

–sio: person noun 2,3; nom abstraction 1,1; place name 1,1:
Canusio 2 mansio Brundisio
Dionysio 1

–tio:

–atio Uniquely nominative abstractions (6,11):ratio 5, deliberatio 2, plus singletons:
commend-, domin-, exspect-, or-

–ctio: nominative abstraction (1,1): traiectio.

–itio: name (1,10), abstraction (2,2):
Domitio 10 initio 1
vitio 1

The name is dative, 4 to 1 (eight occurrances to two); the *–itium* abstractions are ablative, ab initio, quo vitio.

–ntio Verb, sentio, 1
–otio Abstraction (2,2):
negotio 1
sacerdotio 1
–rtio Adjective, tertio, 1.
–lo: (11,31) abstraction (3,8) verb (2,8), pronominal adj.(2,6) personal name (2,5) personal noun (1,1), and adverb (1,1), in sum, all over the map! But internally, the ending is quite restricted being preceded only by –a-, –i-, –l-, –o-, and –u-:
–alo Verb, malo 3.
–ilo only nihilo, 2.
–llo bello, 5; illo, 4, Marcello, 3; ullo, 2.
–olo Only verb, volo, 5. [nolo, verb, doesn't occur in *Ad Att* 8.]
–ulo Lentulo,2; periculo and paulo, one each.
–mo Superlative adjective, abstraction, verb, and pronoun:

primo	(4)	animo	(7)	sumo	nemo
amplissimo		sermo		consumo	
extremo					
pernicisissimo					
tutissimo					

–no (13,47) Place names are a strong majority (26 of 46) of the words in –no, trailed by adjective, adverb, verb, and name:

Formiano	17	magno	9	omnino 8	decerno 1	Labieno 1
Piceno	4	alieno	1			
Paleno	2	uno	1			
Camerino						
Sidicino						
Teano						

–ro (24, 71) adjective (5,22) verb (12,17) name (1,19) noun (4,6):
–bro Adjective, noun: crebro, 2 libro
–cro Verb, obsecro, 2.
–ero Verb (9,14) except for 'Cicero', 'numero'.
–gro Noun, agro (1).
–oro Verb: laboro (1), ignoro (1).
'pro' Only the preposition; –pro does not occur (8).
–tro Adjective: 'nostro' (4), 'utro' (1).
–uro Future active participle 'acturo' (1).
–so Only pronominal adjective 'ipso' (7); no 'misso', 'praetermisso', or anything.
–to (27,46) First-person verbs (7,20), adjectives (6,9), participles (6,6) imperative verbs (3,3), relatives (2,2). –a-, –c-, –e-, –i-, –l-, –n-, –o-, –p-, –r-, –s-, –t-, and –u- precede, as follows:
–ato: participles 'armato', 'parato', once each.
–cto: verb 'exspecto' (4), participles 'derelicto', 'profecto' (adverb), 'facto', singletons all.
–eto: adjective: derelict
–ito: mostly verbals:

first person:	imperative:	adverb:	adjective:

dubito 3 animadvertito 1 subito 2 invito 1
cogito 1 scito 1

–nto: name, relatives, imperative: 'Quinto' (3), aliquanto, quanto, singlets.
–pto (2,2) participle or verb, 'incepto' or 'opto'.
–rto (1,1) 'incerto', adjective.
–sto (2,2) 'praesto', 'fausto' preposition, adjective.
–tto (1,1) 'mitto', verb.
–uto (2,10) verb adjective, 9 to one: 'puto' to 'tuto'.
–uo (8,12) Three to one, adjective:

adjective:		abstraction:	first person verb:
tuo	5	biduo	metuo
duo		triduo	
perpetuo			
perexiguo			
suo			

End of **–o;** end of *Ad. Att.* 8 as source; return to *De Bello Gallico* 5.

–r is very limited, very distinct, as is visible in this seive of letters before –r:

```
a b c d e f g h i k l m n o p q r s t u x
a       e                 o           u
```

The letters before –r, in bar graph:
–ar (Caesar, par, and terrear):
[redacted]
–er (qualiter frater):
[redacted]
–or (clamor, dolor, auctor, auctior):
[redacted]
–ur (abitrabatur through utuntur):
[redacted]

The letters before **–r**, in statements with actual per cents:

–ar ends 3 different words occurring 34 times.
1.9% vocab, 11.7% total words.
–er ends 19 different words occurring 89 times.
12.4% vocab, 30.6% total words.
–or ends 12 different words occurring 18 times.
7.8% vocab, 6.2% total words.
–ur ends 119 different words occurring 149 times.
77.7% vocab, 51.3% total words.
There are 153 **–r** words occurring 290 times.

–ar Besides Caesar (32) quite rare: terrear and par, once **–er:**
–fer Agent noun: aquilifer. Once.
'per', the preposition, 13.
–per Adverb: semper, paulisper. once each.

–ter Adverb, personal noun, preposition, and pronoun-adjective. One preceding letter does most of the sorting:

–ater Purely family: father, brother, [mother] pater, frater, [mater]

–iter Adverb:
circiter (20) celeriter (8) acriter (4) aliter, graviter, 2 each.

–[i]ter The 'i' of –iter can drop out after a liquid, e.g., difficulter. it stays where ambiguity would result from letting it fall out, as in 'alter', 'aliter'.

–nter Preposition inter (13), and adverb, diligenter, once.

–pter Preposition, propter, 6.

–ster Pronominal adjective: noster (1) [vester].

'uter' The pronominal adjective. once.

–x-or Abstract noun, agent noun, and 'minor'

dolor auctor minor
clamor .

Except for 'minor'. all are singletons:

–ior All comparatives, certior (3), longior (2), and singlets asperior, gravior, inferior, interior.

–uor quattuor, 'four'.

–ur Pure verb excepting 'femur'. In other words, verb 117, 'femur' one.

–mur Once 'utimur', once 'femur'.

–tur Pure verb; very frequent (116 in *De Bello Gallico* 5). Singular verbs (–[vowel]-tur) outnumber plural verbs (–ntur) 66 to 50.

–s- Past participle infix for third declension verbs whose present stem ends in a dental (d or t!). See –sis entry.

–s most frequent, least diagnostic, of all terminal letters. Here is a ranked overview:

There are 668 –s words occurring 1517 times in *De Bello Gallico* 5:

–is 255 different words occurring 577 times.
–is is 38.1% final '–'-s' words, 38.% total words.

–us 203 different words occurring 481 times.
–us is 30.3% final '–s' words, 31.7% total words.

–es 76 different words occurring 194 times.
–es is 11.3% final '–s' words, 12.7% total words.

–os in 71 different words occurring 147 times.
–os is 10.6% final '–s' words, 9.6% total words.

–as 50 different words occurring 91 times.
–as is 7.4% final '–s' words, 5.9% total words.

–ns in 8 different words occurring 12 times.
–ns is 1.1% final '–s' words, 0.7% total words.

–rs 2 different words occurring 11 times.
–rs is 0.2% final '–s' words, 0.7% total words.

–bs 2 different words occurring once each.
–bs is 0.2% final '–s' words, 0.1% total words.

–ps 1 word occurring 2 times.
–ps is 0.1% final '–s' words, 0.1% total words.
Per cent by entries:
–as,7.4;.–bs,2; –es, 11.3; –is, 38.1; –ns,1.1; –os, 10.6; –ps, 0.1; –rs, 0.2; –us, 30.3
Per cent by total words in –s:
–as, 5.9; –bs, 0.1; –es, 12.7; –is, 38; –ns, 0.7; –os, 9.6; –os, 0.1; –rs, 0.7; –us, 31.7.

Again, a sieve of the preceding letters may be useful visually:

```
a b c d e f g h i k l m n o p q r s t u x
a b     e       i       n o p   r     u
```

–as

This termination is 88.0 per cent accusative (80/91 in *De Bello Gallico* 5). Case summary:
Accusative unless –itas, –ltas, or the entire word 'alias'. In Caesar, alias is the correlative adverb: alias . . . alias . . — 'in some places . . . in other places . . . ' Please pardon an exception to an exception: a minority of the –itas words are participles and accusatives . . . Omniscience helps. So might another letter of refinement:

–cas: Adjective, publicas, 1.
–das Gerundives: aedificandas, armandas, faciendas, reficiendas, all once.
'fas' Once. no other –fas.
–gas longas, once. Rare. All Gaul adds only Belgas, Allobrogas, phalangas — all non-Latin words.
'has' Twice. no other –has.
–ias Abstraction except for adverb and adjective:

copias	12	alias	4	actuarias 1
controversias	2			
pecunias	1			
victorias	1			

–mas Superlatives all: plurimas (2), finitimas and maximas, once each.
–nas Adjective, 'magnas', 4; abstraction, 'fortunas', 2.
–pas One item set, ripas, once.
–ras litteras', (4), and two single adjectives, crebras and nostras.
–sas Nouns, casas and fossas, once each.
–tas:
–atas participle, collocatas, once.
–itas nominative abstraction, accusative plural participle:

civitas	5	dubitas	
humilitas		impeditas	
dispositas			

–ltas [–litas] Abstraction, facultas, 1.
–ntas - hundred: sexcentas, 1
–rtas portas. No other –rtas occurs in All Gaul. One could think of 'repertas', of course.

–utas Participle, institutas, once.

–uas Relative 'quas' and noun 'silvas' 6 each, plus four singleton adjectives, duas, reliquas, suas, and perpetuas.

–bs 'abs' and 'plebs', once each.

–es There are 77 –es words occurring 194 times.

Sieve of letters before –es

a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	u	x
		c	d			g		i		l	m	n		p		r		t	v	

Total frequency in De Bello Gallico 5:

		3	8			1		9		3	4	54		5		41		57	2	

–ces Instrument and agent: falces (1) and duces (2).

–des Persons, instrument, swamp: obsides (5), sudes (2), and paludes (1).

–ies Abstraction, adverb: dies (8), vicies (1).

–ges reges only. It occurs once.

–les Persons, abstraction, singletons all:

exsules valles
miles

–mes adjectives and abstraction: incolumes 3 fames 1

–nes abstractions, persons, adjectives, and material object:

10, 22 5, 13 2, 18 1, 1

–anes Adjective, inanes 1.

–ines Abstractions and 'homines':

testudines 5 homines 2
ordines 2
fines 2

–mnes omnes, 17.

–ones Abstractions or people, mostly depending on whether or not –i- precedes, viz:

–iones Abstractions, verbal and collective, plus 'centurions':

legiones 7 centuriones 5
munitiones 6
legationes 2
commutationes
septentriones
stationes
subductiones

–nones 'Senones', 2.

–rones 'Eburones' thrice, 'Ceutrones' once.

–unes 'funes' 'ropes', once.

–pes 'principes', period. Five occurrences.

–res Adjective to person, 3 to 1: If it ends in –res, it is an adjective unless an agent noun in –tores, or the three words uxores, fratres, and turres.

Adjectives:				Persons:	Object:	
maiores	4	priores	exploratores	fratres	turres	2
superiores	3	puberes	gubernatores	uxores		

alacriores	veteres	pabulatores	[matres]
ampliores		victores	[patres]
breviores			
certiores			
crebriores			
interiores			
horridiores			
humiliores			
latiores			
minores			
pares			

Words without numbers all singletons in *De Bello Gallico* 5. Bracketed words complete a set, but do not occur in *De Bello Gallico* 5]

–tes Persons, 12, 48. abstractions, 3, 7. and objects. one, once:

equites	14	civitates	5	caespites
milites	12	siccitates		
hostes	12	noctes		
Carnutes	3			
Ancalites				
audientes				
clientes				
parentes				
praecipites				
recentes				
redeuntes				
Trinobantes				

–tes summary:
–ates abstractions.
–ctes ditto.
–ites,
–ntes, and
–utes All persons, except caespites:milites equitesque, Ancalites, parents, Trinobantes, present participles,and Carnutes.

–ves Object, person: naves (2), eqves (1)

255 –is words occur 577 times in *De Bello Gallico* 5.

Sieve of letters before –is

```
a  b  c  d  e  f  g  h  i  k  l  m  n  o  p  q  r  s  t  u  x
   b  c  d  e     g  h  i     l  m  n           r  s  t  u  x
   5 12 13 39     5 16 39    20 31 32          90  1 134 49 1

[Total frequency of letters before -es, for contrast:
    0  3  8  0    1  0  9     3  4 54   5    41  0  57  2 0]
```

This shows three changes from the –es sieve: the addition of –e- ('eis'), and –s- (ablative past participles), and the falling out of –x-.

'is', entire word, occurs thrice in *De Bello Gallico* 5.
'bis', entire word, occurs once in *De Bello Gallico* 5.
–bis Exclusively nobis (3) and vobis (1).
–cis This ending would be extremely rare outside of the Gallic military context. Most are 'local'; all but one refer to people:

locis 5 Aduatucis paucis 2
Gallicis
Graecis
inimicis

–dis:
–edis 'essedis', 'chariots' 3
–ldis Meldis 1 'in Meldis' -> 'among the Meldi.'
–ndis Gerundives except glandis and fundis (once each): administrandis, cohortandis, oppugnandis, appellandis, faciendis, vastandis.
–odis 'incommodis', once.
–dis Ablative unless 'glandis', accusative. 11–1.
'eis' the entire word. 36 occurrences.
–eis Adjectives, and one object noun: Mediterraneis, ferreis, taleis ('with plant cuttings')
–gis Genitive shows up here. **–gis** is the genitive of a Gallic name, the ablative of persons, or the adverb magis. One more letter generally suffices:
–agis is unique to magis.
–igis is unique to names, and sufficiently marks genitive case. Gallic name, e.g., Ambiorigis, Cingetorigis.
–lgis is unique to Belgis.
–ugis is unique to fug- and its compounds, e.g.,perfugis.

–his occurs only as complete word 'his'. [extrahis, of course.]

–iis Persons and abstractions, with one object (gladiis) and one adjective (aliis). There are two datives in this set, 'Nerviis persuadet' and the more interesting 'militum et vigiliis periculum augeatur' Why didn't Caesar write 'militum et vigiliarum'? He had good taste, that's why. he at once avoids the infelicitous assonance and the brazen –arum. He is my preferred poet.

With the two datives out of 39 –iis events, –iis is thus, like the entire ablative-dative set, 95 per cent ablative. Here is the full **–iis** picture, with comment:

Abstractions:		Persons:		Adjective:	Object:	
praemiis	4	copiis	8	aliis 2	gladiis 1	
beneficiis	2	nuntiis	3			
iniuriis	2	Nerviis	1			
vigiliis	2	vigiliis	1			
viis	2					
officiis	1					
insidiis	1					
incendiis	1					
custodiis	1					
navigiis	1					
contumeliis	1					
proeliis	1					
consiliis	1					
vectoriis	1					
controversiis	1					
angustiis	1					

'Vigiliis' and 'insidiis' are capable alike of being used for the process and for the persons who do them; in the plural, a process/collective type of abstraction has a chance to cross the border into the realm of the personal noun. If 'the night is spent in watches', you have the process. If 'there is danger for the watches', you have the persons. This differs from 'copiae' where the 'supplies' are so commonly 'supplies of arrow-fodder' that the limiting genitive became a redundance.

–lis Objects, adjectives, abstractions, persons:

scalis	Gallis	1	periculis	illis
vallis	similis		bellis	Gallis
collis	tantulis		intervallis	
oculis	parvulis			
sagulis	nullis			
insulis	singulis			
solis				

As for the cases which occur in the **–lis** set, it is interesting that the dative and genitive, the two rarest, should show up so well, also that the third declension adjective should be such a minority:

–lis cases:

Nom.	Gen.	Dat.	Acc.	Abl.	
similis	solis	Gallis	collis	insulis	scalis
	vectigalis	illis		oculis	periculis
	vallis	tantulis		intervallis	Gallis
				bellis	singulis
				illis	parvulis
				sagulis	

–lis,preceding letters:

–alis scalis.
–ilis similis.
–llis Gallis, bellis, collis, illis, vallis, intervallis.
–olis solis.
–ulis: insulis, oculis, parvulis, periculis, singulis, tantulis.

–mis Adjectives , object nouns, abstractions, viz:

primis	6	armis	4	hiemis	3
proximis	4	remis	3	animis	1
summis	3				
finitimis	2				
maritimis	2				
incolumis	1				
maximis	1				
munitissimis	1				

–mis by preceding letter:
–emis Either hiemis, genitive, or remis, ablative.
–imis Adjective unless animis (6, 13); mostly primis (6).
–mmis Adjective, summis. ablative (3).
–rmis Object noun armis, ablative (4).
–umis 'incolumis,' once, accusative plural.

–nis ends 32 different words occurring 99 times.
–anis All persons: Germanis, Romanis, Hispanis (3,1,1, respectively)
–enis Only catenis, once.
–gnis magnis, signis (6,3, respectively). In Caesar, signis is an object.
–inis Abstraction, adjective. Genitives except finis, trinis, annotinis:

finis	9	omnis	2	hominis	1
		fluminis	2	annotinis	1
		agminis	2	trinis	1
		ordinis	1		
		multitudinis	1		

–nnis Uniquely annual: annis, quotannis — years, yearly. Twice, once, respectively.
–rnis Winter nights in camps: hibernis, nocturnis, once each, nothing else.
–onis is genitive: no **–onis** turns out, upon inspection, to be accusative plural. A unique (completely unambiguous) case-marker, and one has to go four letters deep to get it.

Abstracts/collectives all, except for Ciceronis:

Ciceronis	4	incursionis	defectionis	(Singlets
legionis	3	ligationis	profectionis	unless
munitionis	2	oppugnationis	contentionis	numbered.)
opinionis		factionis	sermonis	

–ris ends 32 different words occurring 90 times.

–aris Person-nouns except militaris.

Genitive, nominative, dative:

Caesaris 14 familiaris barbaris

militaris

['at barbaris consilium non defuit', the story of *De Bello Gallico* 5!]

–bris **'**crebris', once. Rare. All Gaul adds Cantabris, Cimbris, latebris, membris, tenebris.

–eris by case, ablative, genitive:

litteris	6	generis	4
ceteris	2	lateris	3
Treveris	2	itineris	1

liberis 1

Here, the *fifth* letter deep sorts the case in part. Only –b- –n- –t- and –v- precede. –n- (**–neris**) is uniquely genitive. The others remain ambiguous: **–b-, –t-, –v-** (**–beris,–teris, –veris**) are 'dablative'.

–gris Only agris 2, and aegris 1.

–oris Abstract/collective (except corporis!, and imperatoris) Genitive except horis.

–rris Only turris, 4. accusative plural 3, nominative singular 1.

'tris' Entire word. 2. Accusative.

–tris 4, 27, of which 25 are dablative. Only –s- and –a- precede:

castris 13 (1 dative) equestris (nom) 1 fratris 1

nostris 12 (2 dative)

–uris Nondescript; three words in three cases, pluris (acc), mensuris (abl), iuris (gen). Pluris twice, others oners.

End of –ris.

–sis Past participle in ablative absolute except Tamesis, ipsis, causis. The occurrence of the past participle is restricted: in the case of the –sis participle, the verb base ended in just t, d, or — one instance only — m: –mitt-, –cid-, –fend-, –gred-, and –prem-:

missis	3	oppressis	circummissis
dimissis	3	obsessis	summissis
succisis		amissis	intromissis
defensis		emissis	intermissis
progressis			

All other verbs have their past participle in –t-:

–tis Past participle in ablative absolute, except items 1–4 below:

1. legatis (3), a participle which competely succeeded in becoming a noun,
2. satis (2),
3. The abstractions in genitive –tatis, noctis 1, quietis 1, militis 1, multis 4 vultis 1, and
4. The entire set in –ntis, which we will soon come to.

The sieve is useful here.

Sieve of letters preceding –tis, participle (Y) or not (N):

a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	u	x
a		c		e				i		l		n		p		r	s		u	
?		Y		N				Y		N		Y		Y		N	Y		N	

–atis: half –tas, –tatis abstractions, and half participles, tied in *De Bello Gallico* 5:

–tas, –tatis abstractions	16	
participles	16	
'legatis'	3	.
'satis'	2	.

–ctis Participles 22, 'noctis 1.
–etis 'quietis' 1
–itis Participles,15 [inc. meritis], plus singletons 'militis', and 'circuitis'.
–ltis Not participle; either 'multis' or 'vultis'.
–ntis in *De Bello Gallico* 5, all –ntis are also –entis, of which the
–centis [ducentis, trecentis] and the
–mentis stramentis, impedimentis, detrimentis] are not present active participles.
Alternative expression:
–ntis is present active participle unless –ce- or –me- precede.
–ptis participle [acceptis]. . . .6
–rtis not participle (14) unless 'desertis' (1).
–stis not participle (10) unless 'gestis' (2).
–utis not participle (e.g., acutis, scutis, salutis, virtutis) unless 'distributis', 'constitutis'.

–uis In the general typographical convention, the preceding letter is a consonant, in which case the ending is restricted to suis 12, quis 7, reliquis 6, propinquis 2.
–vis This arbitrary letter variant, from the point of view of endings, merely tells that the fourth letter deep is a vowel or liquid.

navis	13	(accusative 12, nominative 1)
captivis	5	
silvis	6	
quantasvis	1	

–xis praefixis 1
End of –is.

–ns all nominative except preposition 'trans', adverb 'quotiens':

pugnans	3	trans	3
clamitans	1	quotiens	1
adhortans	1		
adulescens	1		
discedens	1		
praesens	1		

'os' entire word, once

–os such a nice, clean unambiguous ending! All are accusative except 'nos', which occurs thrice, and is nominative once. Given 70 –os's occurring 147 times, **–os** is thus 99.3 per cent accusative, approaching the purity of Ivory Snow.

An observation developed elsewhere, that the nominative prefers to head up its clause, is visible in the case of the one potentially ambiguous **–os.** When a potential ambiguity involves nominative, initial position stands as a secondary case marker.

Here is the one nominative:

> **Nos** nihil de eo percontationibus reperiebamus nisi. . . .

By contrast, each of the two accusatives falls deep in its clause:

> 1. et qui iam ante inimico in **nos** animo
> fuisset multo gravius hoc dolore . . .
> 2. . . regionibus quibus **nos** iter facturos cognoverat
> pecora atque homines ex . . .
>]

Sieve, letters before –os:

a	b	c	d	e	f	g	h	i	k	l	m	n	o	p	q	r	s	t	u	x
		c	d	e			h	i		l	m	n				r	s	t	u	
		5	1	13			3	14		7	4	15				31	2	21	30	

–cos are all people: Aduatucos, Bellovacos, Lecavos, perpaucos. In fact, all of the **–os** apply to persons except agros, annos, and equos! Even 'remos' turn out to be, not the oars, being worked at, but the Remi, the Gallic tribe.

An implication is that the above letters caught in the 'sieve before –os' are infixes signifying substantizable adjectives. Some are more obvious than others; some are more specific than others. As an infix, **–t-** and **–s-** are participial and relate the person to the past action of a verb. **–ri-** relates a person to an object or collective (essedarius); **–n-** relates a person to a place or collective: 'Romanos', 'tribunos' to respectively, 'Roma', 'tribus' the fourth declension noun. It may entertain to regard the whole set, conveniently arranged, with occurrences:

os	1	accersendos	1	Grudios	1	Pleumoxios	1	primos	1
Levacos	1	eos	13	alios	2	Gallos	4	novissimos	1
Bellovacos	1	hos	3	essedarios	1	nullos	1	nos	3
perpaucos	1	Esubios	1	nuntios	3	singulos	2	Romanos	1
Aduatucos	2	medios	2	Nervios	3	Remos	2	Germanos	2
Transrhenanos	1	annos	1	Treveros	3	temptaturos	1	venturos	1
magnos	1	tribunos	3	agros	3	facturos	3	perventuros	1
Morinos	1	barbaros	1	arbitros	1	defecturos	1	capturos	1
repentinos	1	fabros	1	nostros	8	ituros	1	futuros	1
Geidumnos	1	alteros	2	impetraturos	1	dedituros	1	comprehensos	1
missos	1	interfectos	1	repertos	1	equos	1		
legatos	11	traductos	1	expertos	1	aliquos	1		
natos	1	eductos	1	Aeduos	1	reliquos	2		
damnatos	1	quadringentos	1	continuos	1	suos	11		
paratos	1	aptos	1	quos	12	captivos	1		

–ps Only deinceps 2.

–rs Abstract/collective: pars, cohors. Nine, two occurrences, respectively. One preceding letter is extremely useful. See separate chapters for cases.

Frequency summary for –us, one preceding letter:

```
-bus ends 76 entries; occurs 222 times. 37.4% vocab, 46.1% total -us.
-cus ends  2 entries; occurs   3 times.  0.9% vocab,  0.6% total -us.
-dus ends  2 entries; occurs   2 times.  0.9% vocab,  0.4% total -us.
-gus ends  1 entries; occurs   1 times.  0.4% vocab,  0.2% total -us.
-ius ends 36 entries; occurs  93 times. 17.7% vocab, 19.3% total -us.
-lus ends  3 entries; occurs   6 times.  1.4% vocab,  1.2% total -us.
-mus ends  7 entries; occurs   7 times.  3.4% vocab,  1.4% total -us.
-nus ends 12 entries; occurs  36 times.  5.9% vocab,  7.4% total -us.
-pus ends  2 entries; occurs   7 times.  0.9% vocab,  1.4% total -us.
-rus ends  5 entries; occurs  20 times.  2.4% vocab,  4.1% total -us.
-sus ends 12 entries; occurs  16 times.  5.9% vocab,  3.3% total -us.
-tus ends 44 entries; occurs  67 times. 21.6% vocab, 13.9% total -us.
-uus ends  1 entries; occurs   1 times.  0.4% vocab,  0.2% total -us.
```

Sieve of letters before –us, and, for comparison, –os.

```
a  b  c  d  e  f  g  h  i  k  l  m  n  o  p  q  r  s  t  u  x
-us   c  d  e        h  i     l  m  n           r  s  t  u
-osb  c  d        g     i     l  m  n     p     r  s  t  u
Combined:
   b  c  d        g     i     l  m  n           r  s  t  u
```

–bus, excepting improbus - superbus - globus, sufficiently identifies Waldo Sweet's 'dablative case', separately treated. See the –bus chapter.

–cus Uniquely nominative: inimicus, locus.

–dus Rare. gerund or neuter noun, e.g., anteferendus, pondus.

–gus Moritasgus, a Gaul.

–ius Third commonest –us after –bus and –tus. Nominative, comparative, adverb, and genitive. An additional letter makes some unique distinctions:

–bius Personal name. 'Fabius'

–cius Personal name. 'Mandubracius'.

–dius neuter adverb over personal name, 2–1.

–eius Personal name. [not counting the complete word 'eius'.]

–gius Neuter adverb.

–lius Personal name over neuter adverb 3–1.

–nius Personal name over neuter adverb 2–1.

–rius Half and half, personal name, neuter adverb.

–tius Neuter adverb excepting the genitive 'totius', the name Tasgetius.

–uius Unique genitive marker: 'cuius' and 'huius'.

–vius Neuter adverb over personal name 3 to 1.

–lus: person over diminutive 4 to 1.

–mus: verb unless preceding consonant cluster is –ss- or –x-. I.e., videbamus, novissimus, maximus. ['eximus', and 'duximus' exist in the paradigms rather than in texts.] or: verb unless superlative.

–nus Personal names and persons, adverbs, adjectives, objects. Only –a-, –e-, –g-, –i-, and –u- precede.

–anus Either manus or Romanus. 4, 2, respectively.

–enus Personal name. 'Labienus', 'Vorenus'.

–gnus magnus.

–inus denotes an adverb except 'Sabinus'. Breakdown in next two entries:
–binus name, Sabinus.
–minus adverb. [minus], comminus.
–tinus adverb. protinus.
–unus person. Cassivellaunus, tribunus.

–pus neuter abstraction. tempus, opus.

–rus Future active participle is rare in the nominative. It is a minority even of the –urus. Here we have abstractions, names, adjectives: numerus, Indutiomarus, Caurus, durus, educturus.

–sus Participles, abstractions, one adverb, and one name.

deprehensus	1	casus	1	rursus 4	Crassus 1
lapsus	1	visus	1		
discessus	1	usus	1		
progressus	2				
transmissus	1				
iussus	1				
ausus	1				

–tus Participles, abstractions [masculine of fourth, neuter and feminine of third declension], and one adverb. Of course, since any participle can be converted into the verbal abstraction by a shift of declension, from second to fourth, it is not useful to look inside the word for distinctions. See the '–us' chapter for cases. Of the thirty one **–tus** entries, 11 are generally the abstraction:

versatus	nactus	provectus	imperitus*	circumventus
peditatus*	coactus	luctus*	veritus	intus
equitatus*	adfectus*	insuetus	tumultus*	motus*
hortatus	interfectus	exercitus*	ventus	permotus
factus	deiectus	introitus*	adventus	repertus

virtus
portus*
aestus*
secutus
locutus
Aeduus

–t- The past participle marker is an infix. The infix is a t (–t-) unless the verb stem ended with a dental, in which case it is –s-.** See –sis entry.

–t A very useful marker:*verb.* Basically if the word is at least three letters long and ends in t, it is a verb. The three letter minimum efficiently eliminates most exceptions, 'et' (met 136 times in *De Bello Gallico* 5) 'ut' (62 times) and 'at' (12 times). But 'aut' occurs 16 times and 'tot' four. This leads to the following refinement:

If the word ends in t and is not 'et', '–ut'&& , 'at', 'tot', or 'post', it is a verb.

This single net catches about 87 per cent of the verbs in *De Bello Gallico* 5, for it catches the 944 occurrences of –t verbs, and besides these, there are but 143 occurrences

** The one exception is premere, pressus..
&& This catches 'ut' (62), 'aut' (16), 'caput' (2), and 'sicut (1).

of –ur verbs. In other words, adding . . .or –tur . . . to the above generalization would make a net to catch essentially all or the Caesarian verbs.
End of –t.

–u is very exclusive, the most useful single final letter. The generalization: abstract/collective, and ablative of means, unless neu or seu. Only four letters precede: .

–eu is the correlative, either neu or seu. Three and four times respectively.

–nu is only manu, 5.

–su, and

–tu, excepting only noctu — unless it is connected with nocere? — are fourth principle parts transmuted by declension shift into verbal abstractions. Here they are in descending order of frequency:

equitatu	8	circuitu	2	usu	interitu
adventu	6	concursu	2	cruciatu	transitu
noctu	5	coactu		principatu	conventu
impetu	4	aspectu		fletu	motu
casu	3	prospectu		impulsu	portu
conspectu	3	discessu		ascensu	aestu
metu	3	missu		cursu	nutu
exercitu	2	niussu		fremitu	

End of –u.

–x 'ex' itself (83 times in *De Bello Gallico* 5). Every other **–x** is the nominative of a Gaul, alphabetically:

Segovax	1
Ambiorix	5
Dumnorix	3
Cingetorix	2

[Julius Caesar never did find the crafty and wily Sisiphus of a man, Ambiorix. Senex is in Comedia, not Gallia, and fornix is in Vitruvius.]