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I. DEPENDENCY GRAMMAR

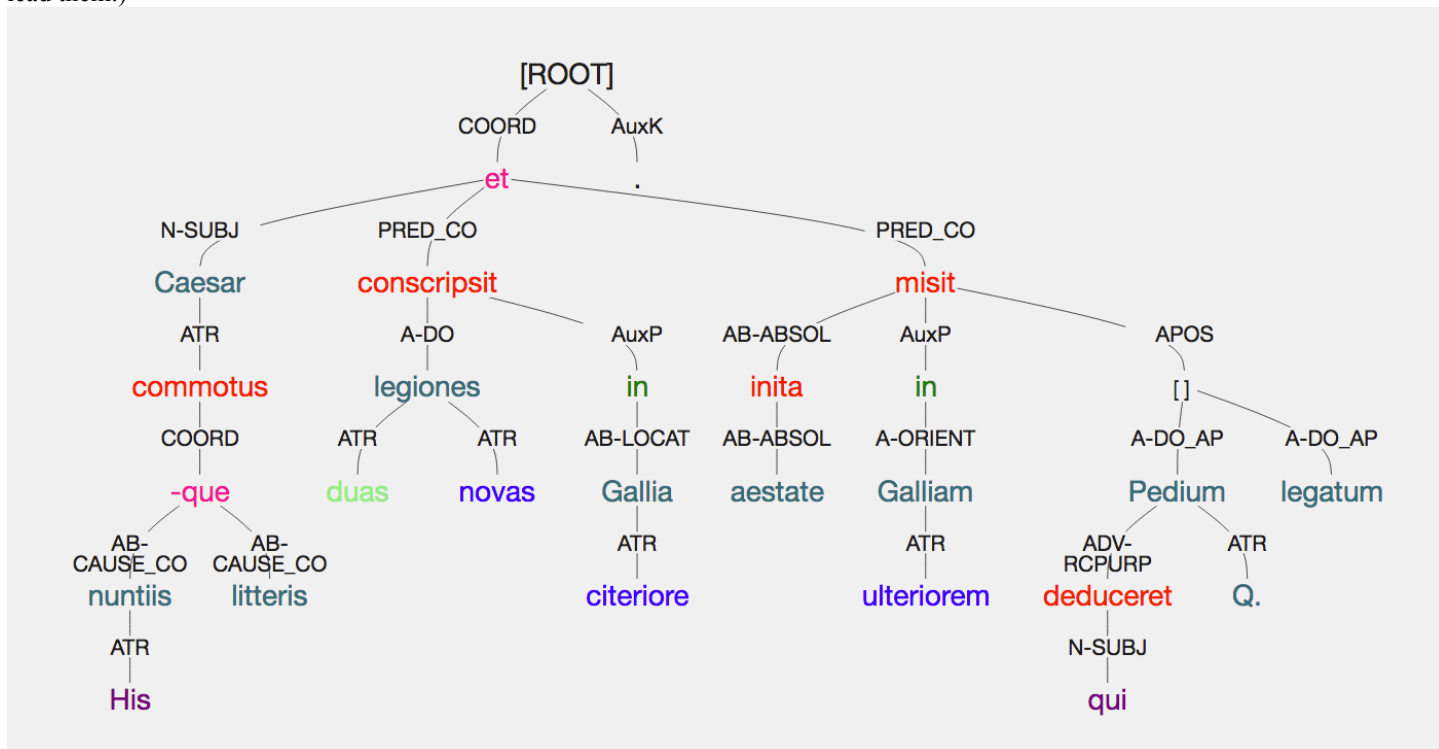
In essence, Latin words and constructions have one modification: one syntactic relationship with another word or structure within the sentence: e.g. an adjective modifies its noun, a *nominative subject* modifies its verb, a purpose clause modifies a verbal form in its main clause, *et cetera*. A form is dependent on the word or structure that it modifies, and this dependency is visualized by hanging (*dēpendere*) the word from the word or structure that it modifies.

Crucially, word order in Latin is both semantic and syntactic, so the Latin must be constructed with the left to right sequence foremost, with each syntactic expectation resolved by connection to the needed form in sequence within its own clause or level of subordination.¹ Similarly, the semantic force of verbal (and other) forms directs the reading of many of the forms that modify them: e.g. only certain verbs will construe with a *Complimentary Infinitive*; an infinitive modifying a verb that is not from this set of verbs would thus not be a *Complimentary Infinitive*, no matter how similar the syntax might appear.

It is important to realize that many of the terms for case usages or types of construction also describe the semantic force of the construction, not just the syntax: the *Accusative Direct Object* (A-DO) and the *Accusative Interior Object* (A-INTOBJ) are both accusative (morphologically) adverbial modifiers (syntactically), but their semantic force is distinct, and thus requires a different descriptive tag.

¹ An obvious example of misconstruing syntactic connection based on reading out of sequence is the error of taking the verb of a *Relative Clause* as the main verb of the sentence. Much less obvious forms of error are avoided by recursively considering the word order in determining modification.

EXAMPLE: *Caesar BG 2.2*: His nuntiis litteris -que commotus Caesar duas legiones in citeriore Gallia novas conscripsit et inita aestate in ulteriorem Galliam qui deduceret Q. Pedium [] legatum misit. (Caesar, disturbed by these messages and letters, conscripted two new legions in closer Gaul and, with summer having been entered, he sent Q. Pedius, as legatus, into further Gaul, in order that he lead them.)



- His** – demonstrative pronoun adjectivally modifying *nuntiis*, ATR (attributive) tag
- nuntiis** – noun in coordination with *litteris* modifying *commotus*, AB-CAUSE (*Ablative of the Cause*) tag and _CO (coordinated) subtag
- litteris** – noun in coordination with *nuntiis* modifying *commotus*, AB-CAUSE (*Ablative of the Cause*) tag and _CO (coordinated) subtag
- que** – enclitic coordinator coordinates *nuntiis* and *litteris*, COORD (coordinator) tag
- commotus** – participle adjectivally modifying *Caesar*, ATR (attributive) tag
- Caesar** – subject of the coordinated predicate [*conscripsit et misit*], N-SUBJ (*Subject Nominative*) tag
- duas** – numeral adjectivally modifying *legiones*, ATR (attributive) tag
- legiones** – Direct object of *conscripsit*, A-DO (*Accusative Direct Object*) tag
- in** – preposition joining the prepositional phrase [*in citeriore Gallia*] to the verb *conscripsit*, AuxP (preposition) tag
- citeriore** – adjective adjectivally modifying *Gallia*, ATR (attributive) tag
- Gallia** – noun indicating where the action of *conscripsit* occurred, AB-LOCAT (*Ablative of Location*) tag
- novas** – adjective adjectivally modifying *legiones*, ATR (attributive) tag
- conscripsit** – part of coordinated predicate [*conscripsit et misit*], PRED (predicate) tag and _CO (coordinated) subtag
- et** – coordinates *conscripsit* and *misit*, COORD (coordinator) tag
- in ita** – participle within Ablative Absolute construction [*in ita aestate*] modifying the verb *misit*, AB-ABSOL (*Ablative Absolute*) tag
- aestate** – noun within Ablative Absolute construction [*in ita aestate*] modifying the verb *misit*, AB-ABSOL (*Ablative Absolute*) tag
- in** – preposition joining the prepositional phrase [*in ulteriorem Galliam*] to the verb *misit*, AuxP (preposition) tag
- ulteriorem** – adjective adjectivally modifying *Galliam*, ATR (attributive) tag
- Galliam** – noun indicating toward what where the action of *misit* was directed, A-ORIENT (*Accusative of Orientation*) tag
- qui** – subject of *deduceret*, N-SUBJ (*Subject Nominative*) tag
- deduceret** main verb of the clause [*qui deduceret*] modifying its antecedent *Pedium*, ADV-RCPURP (*Adverbial – Relative Clause of Purpose*) tag
- Q.** – praenomen adjectivally modifying *Pedium*, ATR (attributive) tag
- Pedium** – noun in apposition with *legatum*, A-DO (*Accusative Direct Object*) tag and _AP (apposition) subtag
- [] – placeholder node added to allow apposition of *Pedium* and *legatum*, APOS (appositional node) tag
- legatum** – noun in apposition with *Pedium*, A-DO (*Accusative Direct Object*) tag and _AP (apposition) subtag
- misit** – part of coordinated predicate [*conscripsit et misit*], PRED (predicate) tag and _CO (coordinated) subtag

II. BASIC INSTRUCTIONS

Create a Perseids Editor Account:

- I. in Firefox (or Chrome) go to <http://sosol.perseids.org/sosol/signin> ;
- II. follow the instructions to create an account.

Start a New Text for Treebanking:

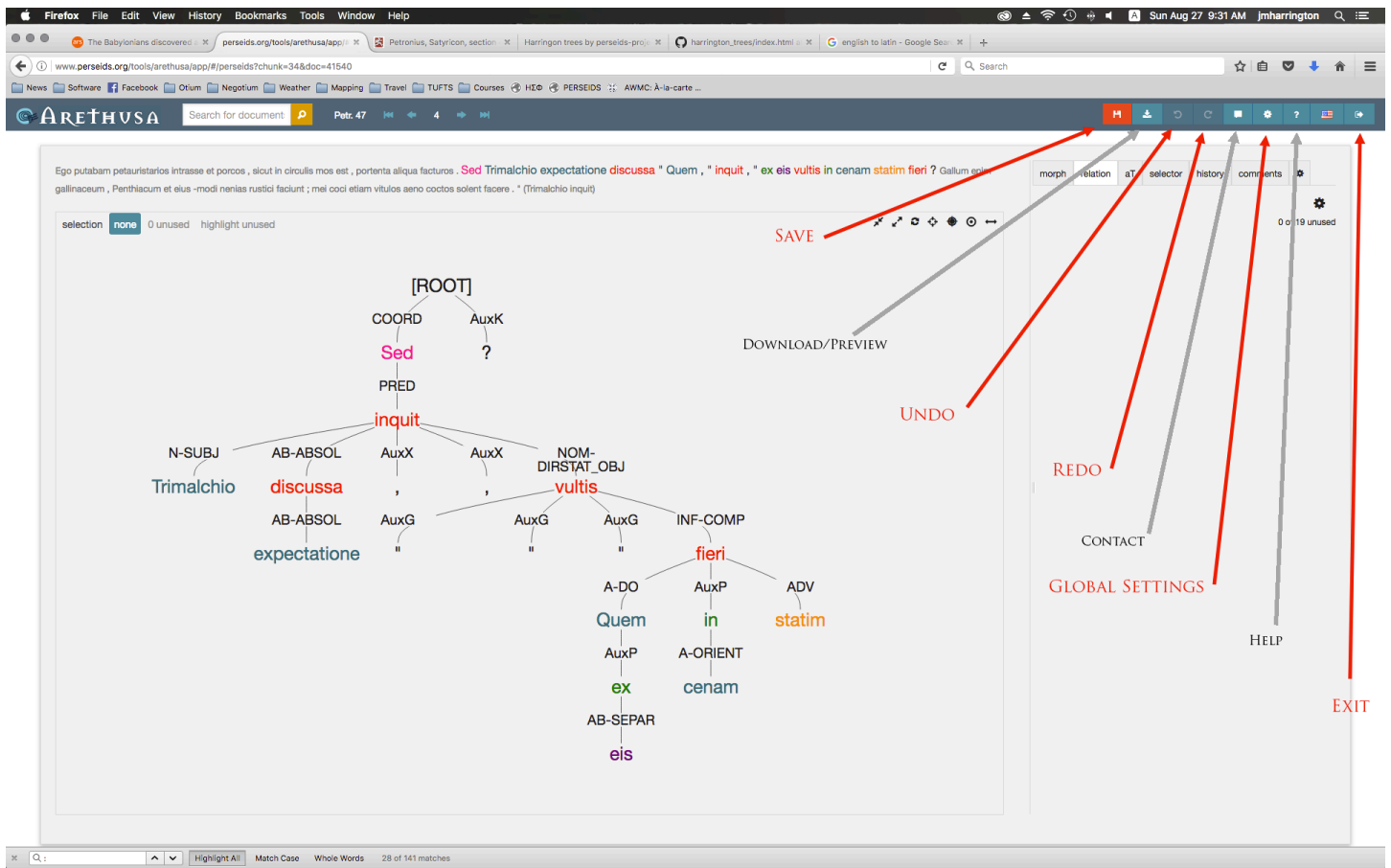
- I. in Firefox (or Chrome) go to <http://sosol.perseids.org/sosol/signin> ;
- II. log in by clicking on Tufts icon at left of screen (or the Google+);
- III. once logged in, go to your HOME via link at top right;
- IV. Click “New Treebank Annotation” at center;
- V. Paste the assigned lines together into the text box under “Input Text” at left;
- VI. Select the button left of “Latin” under the “Language” header at top right;
- VII. Click on “Click to toggle advanced options...” under the blue “Edit” button;
- VIII. Select the button next to “JMH Latin Tagset”
- IX. Click the blue “Edit” button at right;
- X. Wait for the text to be converted to XML code and appear in the editing window.

Load an existing XML file:

- I. in Firefox (or Chrome) go to <http://sosol.perseids.org/sosol/signin>;
- II. log in by clicking on Tufts icon at left of screen (or the Google+);
- III. once logged in, go to your HOME via link at top right;
- IV. Click “New Treebank Annotation” at center;
- V. Select the button left of “Latin” under the “Language” header at top right;
- VI. Click on “Click to toggle advanced options...” under the blue “Edit” button;
- VII. Select the button next to “JMH Latin Tagset”
- VIII. Scroll to the bottom left of the window and click the "Browse" button under "From file";
- IX. select the XML file on your computer and click "Open";
- X. Wait for the text to be converted to XML code and appear in the editing window.

Navigating the Treebanking Window:

- I. **SAVE YOUR WORK FREQUENTLY** by clicking on the farthest left icon at top right (it will be red when there is work that can be saved);
- II. “Undo” and “Redo” buttons are immediately to the right of the “Save” button **at top right**;
- III. when a word is selected, typing “w” will select the next word, and typing “e” will select the previous word



Editing the Tree:

- I. click on a word to select it (highlights in yellow); click on same word to de-select, OR
- II. click on another word to make the selected 1st word dependent on the about to be clicked 2nd word.
- III. at top left of tree window, you can see how many words still need to be connected; you can click on the numbers to highlight all unused words.

Editing the Morphology:

- I. click on a word to select it (highlights in yellow); click on same word to de-select OR
- II. click on the “morph” tab at top right
- III. click on the correct morphological analysis; BE SURE, DO NOT GUESS
 - a. consult section V for how to add a word use the entries for each lemma within Logeion and/or Perseus to make sure that the form selected is from the correct word; there may be many morphological possibilities listed, but only one is correct.
- IV. type “w” to move to the next word, or type "e" to move back to the previous word.
- V. It is best to go in sequence through all the words so that none are missed; make sure that the selected morphology matches the structure of the tree and the intended syntax.

The screenshot shows the ARETHUSA web application interface. At the top, there's a browser window with the URL `www.perseids.org/tools/arethusa/app/#/perseids?chunk=37&doc=41540`. Below the browser, the ARETHUSA logo and search bar are visible. The main content area shows a Latin text snippet: "Non mercurius illi ignoscere... qui relaxato in hilaritatem vultu... Ergo, inquit, quia tam malae memoriae es, palam nobis illum exintera." The word "relaxato" is highlighted in yellow. Below the text is a syntax tree diagram. On the right side, there's a "morph" tab with a list of morphological options for "relaxato". The second option, "relaxo v-s rppnb-verb.sg.perf.part.pass.masc.abl", is selected with a checkmark. A red arrow points to the "morph" tab header, another red arrow points to the selected morphological entry, and a third red arrow points to the "Create new form" button at the bottom of the list. The interface also shows a search bar at the top and various navigation controls.

Editing the Syntax:

- I. click on a word to select it (highlights in yellow); click on same word to de-select OR
- II. click on the “relation” (syntactic relationship) tab at top right
- III. pull down to the correct syntactic analysis
- IV. type “w” to move to the next word, or type “e” to move back to the previous word.
- V. It is best to go in sequence through all the words so that none are missed; make sure that the selected syntax matches the structure of the tree and the intended morphology.

The screenshot shows the ARETHUSA web application interface. At the top, a Firefox browser window displays the URL `www.perseids.org/tools/arethusa/app/#/perseids?chunk=34&doc=41540`. Below the browser, the application header includes the ARETHUSA logo and a search bar. The main content area is divided into two parts: a syntax tree on the left and a control panel on the right. The syntax tree shows the hierarchical structure of the Latin sentence, with nodes like [ROOT], PRED, AuxX, COORD, N-SUBJ, and various grammatical functions. The control panel has tabs for 'morph', 'relation', 'aT', 'selector', 'history', and 'comments'. The 'relation' tab is selected, showing a list of syntactic relations. A pull-down menu is open under 'accusative', showing a submenu of case usage tags. Red arrows point to the 'relation' tab, the first pull-down menu, the second pull-down menu, and the submenu.

III. MORPHOLOGICAL TAG-SET LIST**First (Left-Hand) Pull-Down Menu**

BASIC	PRED	Predicate
	PRED-HORT	Hortatory Subjunctive Predicate
	PRED-DELIB	Deliberative Subjunctive Predicate
	PRED-POTENT	Potential Subjunctive Predicate
	PRED-OPT	Optative Subjunctive Predicate
	INTRJ	Interjection
	PARENTH	Parenthesis (i.e. an aside to the audience external to the syntax of the sentence)
AUX	(Auxiliary words and punctuation)	
	AUX-C	Subordinating Conjunction
	AUX-P	Preposition
	AUX-V	Auxiliary Verb
	AUX-Y	Sentence Adverbial
	AUX-G	Bracketing Punctuation (‘ “ [(-)
	AUX-K	Final Punctuation (. ! ?)
	AUX-X	Comma (or other non-final punctuation , ; :)
ATR	Attribute (i.e. adjectival modification)	
ADV	Adverb (i.e. true morphological adverbs and indeclinable adverbials)	
COORD	Coordinating Conjunction or element	
APOS	Apposition	
Nominative	N-SUBJ	Subject Nominative
	N-PRED	Predicate Nominative
Genitive	G-POSS	Genitive of Possession
	G-PART	Partitive Genitive
	G-OBJEC	Objective Genitive
	G-DESC	Genitive of Description
	G-CHAR	Genitive of Characteristic
	G-VALUE	Genitive of Value
	G-MATER	Genitive of Material
G-CHARGE	Genitive of the Charge	
Dative	D-IO	Indirect Object
	D-INTER	Dative of Interest
	D-POSS	Dative of Possession
	D-REFER	Dative of Reference
	D-AGENT	Dative of Agent
	D-PURP	Dative of Purpose
Accusative	A-DO	Direct Object
	A-INTOBJ	Interior Object
	A-PRED	Predicate Accusative
	A-SUBJ	Accusative Subject
	A-ORIENT	Accusative of Orientation
	A-EXTENT	Accusative of Extent
	A-RESPECT	Accusative of Respect
	A-ADVERB	Adverbial Accusative
A-EXCLAM	Accusative of Exclamation	

Ablative	AB-ORIENT	Ablative of Orientation
	AB-SEPAR	Ablative of Separation
	AB-CAUSE	Ablative of Cause
	AB-AGENT	Ablative of Agent
	AB-ABSOL	Ablative Absolute
	AB-COMPAR	Ablative of Comparison
	AB-LOCAT	Ablative of Location
	AB-RESPECT	Ablative of Respect
	AB-ACCOMP	Ablative of Accompaniment
	AB-DESCRIP	Ablative of Description
	AB-MEANS	Ablative of Means
	AB-MANN	Ablative of Manner
	AB-PRICE	Ablative of Price
AB-DEGDIF	Ablative of Degree of the Difference	
V-VOC		Vocative
L-LOCAT		Locative
Adjectival Clause	ADJ-RC	Relative Clause
	ADJ-RCCHAR	Relative Clause of Characteristic
	ADJ-RCINDSTAT	Relative Clause in Indirect Statement
Adverbial Clause	ADV-PURP	Purpose Clause
	ADV-RESULT	Result Clause
	ADV-CONSEC	Consecutive Clause
	ADV-PROTAS	Conditional Protasis
	ADV-TEMPOR	Temporal Clause
	ADV-CIRCUMS	Circumstantial Clause
	ADV-CAUSAL	Causal Clause
	ADV-CONCESS	Concessive Clause
	ADV-COMPAR	Clause of Comparison
	ADV-PROVISO	Proviso Clause
	ADV-RCPURP	Relative Clause of Purpose
ADV-RCRESULT	Relative Clause of Result	
ADV-RCCONDIT	Conditional Relative Clause	
Nominal Clause	NOM-SUBST	Substantive Noun Clause (aka Indirect Command)
	NOM-FEARCL	Fear Clause
	NOM-INDQUES	Indirect Question
	NOM-INDSTAT	Indirect Statement
	NOM-DIRSTAT	Direct Statement
	NOM-DS-HORT	Direct Statement Hortatory Subjunctive
	NOM-DS-DELIB	Direct Statement Deliberative Subjunctive
	NOM-DS-POTENT	Direct Statement Potential Subjunctive
	NOM-DS-OPT	Direct Statement Optative Subjunctive
Infinitive Uses	INF-COMP	Complimentary Infinitive
	INF-HIST	Historical Infinitive
	INF-EXPL	Explanatory Infinitive
	INF-PURP	Infinitive of Purpose
	INF-EXCLAM	Exclamatory Infinitive

Second (Right-Hand) Pull-Down Menu

-
- CO** Coordinated element (an element hanging under a COORD tag that is coordinated with other element(s))
- AP** Element in Apposition (an element hanging under a APOS tag that is in apposition to other element(s))
- SBJ** Clause functioning as a Subject
 - SBJ-CO** Clause in Coordination functioning as a Subject
 - SBJ-AP** Clause in Apposition functioning as a Subject
- PRED** Clause functioning as a Predicate
 - PRED-CO** Clause in Coordination functioning as a Predicate
 - PRED-AP** Clause in Apposition functioning as a Predicate
- OBJ** Clause functioning as an Object
 - OBJ-CO** Clause in Coordination functioning as an Object
 - OBJ-AP** Clause in Apposition functioning as an Object

The screenshot shows the ARETHUSA web interface. At the top, there's a browser window with the URL `www.perselsids.org/tools/arethusa/app/#/perselsids?chunk=378.doc=41540`. Below the browser, the ARETHUSA logo and search bar are visible. The main content area displays a Latin text snippet: `Non mehercules illi ignoscere[m], si placem praerasset. (inquam) At non (ita fuit) Trimalchio, qui relaxato in hilaritatem vultu Ergo, inquit, quia tam malae memoriae es, palam nobis illum exintera. Recepta cocus tunica cultum arripuit, porci-que ventrem hinc atque illic timida manu secuit.`

The text is annotated with various tags and colors. A tree diagram is shown below the text, with nodes labeled with morphological and syntactic tags like [ROOT], COORD, APOS, PRED, ADV, N-SUBJ, ADJ-RC, AUX, NOM-DIRSTAT_OBJ, etc. The word `relaxato` is highlighted in yellow.

On the right side, there's a pull-down menu for the word `relaxato`. The menu shows the current tag `ablative > AB-ABSOL` and a list of other tags: `---`, `CO`, `AP`, `SBJ`, `PRED`, `OBJ`, `PRED-CO`, and `PRED-AP`. Red arrows point to this menu with the label `SECOND (RIGHT-HAND) PULL-DOWN MENU`. Another red arrow points to the `PRED` tag in the menu with the label `SUBMENU OF COORDINATION/APPOSITION TAGS UNDER PRED`. A third red arrow points to the `relaxato` tag in the tree diagram with the label `FIRST (LEFT-HAND) PULL-DOWN MENU`.

IV. TAG-SET INSTRUCTIONS

A. Substantives (nouns, pronouns, and adjectives functioning as nouns) are labeled with the appropriate tag for their particular case usage: e.g. an accusative adjective functioning as a *Direct Object* uses the **A-DO** tag.

Adjectives that modify other words – use the **ATR** (attribute) tag. The adjective is just agreeing with its head; it is not the *Direct Object*, for example.²

Adjectival use of pronouns – use the **ATR** (attribute) tag: e.g. *ille canis*.

B. Subordinated Clauses (nominal, adjectival, and adverbial clauses) are labeled on the highest verbal form in the clause³ with the appropriate tag for their particular clause usage found in the “adjectival clause,” “adverbial clause,” or “nominal clause” pull-down menus: e.g. a *Purpose Clause* uses the **ADV-PURP** tag found in the “adverbial clause” pull-down menu. Nominal clauses must also be labeled with the appropriate functional tag in the second (right hand) pull-down menu (**_OBJ**, **_SBJ**, **_PRED**): e.g. an *Indirect Statement* functioning as an *Object* uses the **NOM-INDSTAT** tag with the **_OBJ** modifier in the second (right hand) pull-down menu.

Subordinating Conjunctions – use the **AuxC** (subordinator) tag in the “AUX” pull-down menu: e.g. *cum*, *dummodo*, *etsī*, *modo*, *nē*, *nisi*, *quam*, *quamquam*, *quamvis*, *quandō*, *quasi*, *quia*, *quod*, *quoniam*, *sī*, *sīn*, *sīve*, *tametsī*, *tamquam*, *unde*, *ut*, *utī*, *velut*. Note that some words can be used as prepositions AuxP or as subordinators AuxC: e.g. *cum*.⁴

C. Coordination – coordinating conjunctions are labeled with the **COORD** tag. The elements that are so coordinated (linked under the coordinator) are labeled with the **_CO** tag in the second (right hand) pull-down menu, in addition to their own proper tag in the first (left hand) pull-down menu: (e.g. conjunctive: *et*, *atque*, *ac*, *-que*; adversative: *sed*, *at*; disjunctive: *aut*, *vel*, *-ve*). In the case of the combined forms (*ne*)-*que*, (*ne*)-*c*, the *ne* is adverbial (ADV) typically modifying a verbal form, and the enclitic *-que*, *-c* functions as a coordinator (COORD).

Asyndeton – frequently, Latin authors do not use coordinating conjunctions. In these instances, the editor of the text has usually added commas, which can be used in place of conjunctions in the tree and labeled with the **COORD** tag. If no commas are available, add an ellipsis with the coordinator *et* within parentheses (cf. section E below) to represent the coordination: i.e. (et).

Polysyndeton – frequently, Latin authors use more coordinating conjunctions than strictly required. The “extra” coordinators have an adverbial force, conveying something like “and even” or “also.” In these instances, the “extra” coordinators are adverbial in function and should be labeled with the **ADV** tag: e.g. the second and third coordinators in “*et... et... que*.”

“Nested” Coordination – frequently, Latin authors create larger structures (often balanced) using coordinating conjunctions to group some elements of the coordination more closely than others. In these instances, the “extra” coordinators are dependent on another coordinator and function as true coordinators (COORD) of other coordinated elements: e.g. *A et B aut C et D* (A is directly coordinated to B, but not to C; the unit AB is coordinated to the unit CD).

² Pronouns functioning adjectivally are also labeled with the ATR tag: e.g. *eō diē*.

³ A result clause, for example, would be labeled on the verb under the “ut”, not on the “ut” itself.

⁴ Subordinating conjunctions are often adverbial (not morphological adverbs) in nature, effectively modifying the main verb of the subordinate clause. Unlike, for instance, relative pronouns, these subordinating conjunctions do not decline and thus their subordinating function is more important than their case (in most instances a fossilized case usage).

Differential Emphasis in Coordination – The various coordinators do not have the same semantic force, particularly in the case of *atque/ac*, which conveys more the sense of “and indeed” than the unmarked “and” conveyed by *et*. For example, the earlier (often two) elements will be coordinated by *et*, while the final (often more elaborated) element will be coordinated with *atque/ac*: the first two elements are coordinated, and that combined unit is coordinated with the more strongly emphasized (by *atque/ac*) final element.

Sentence Connecting Coordinators – Latin sentences often begin with the coordinators *et* or *sed* functioning to join the sentence to the ideas of the previous sentence. In these instances, that coordinator is placed directly under the ROOT and should be labeled with the **COORD** tag. The predicate is placed under the sentence connecting coordinator and does not use a **_CO** tag in the second (right hand) pull-down menu.

D. Apposition –When two (or more) elements are in apposition (the element(s) later in sequence rename the first element) they are labeled with the **_AP** tag in the second (right hand) pull-down menu, in addition to their own proper tag in the first (left hand) pull-down menu: e.g. A-DO_**AP**

Nota Bene – in Latin, there is no word that signals apposition, and thus there is nothing specific from which to hang the forms in apposition. In these instances, if the editor of the text has added a comma or other punctuation, this can be used to join the elements in apposition in the tree and the comma is labeled with the **APOS** tag. If there is no comma that can be used, it is necessary to create an ellipsis (cf. section E below) using a pair of square brackets with a single space between them to stand for an appositional node: i.e. [] .

E. Ellipsis – Latin authors frequently do not repeat verbs that would be used in parallel clauses, they omit forms of *esse*, or do not use coordination. These instances are not mistakes; the forms are just not necessary, and would even harm the stylistics of the author - were they present. For the sake of clarity, however, such forms are represented in the tree with an ellipsis character. (DO NOT ADD UNNECESSARY ELLIPSES.)

Add an Ellipsis character:

1. Click the “aT” tab at the top right of the editor window;
2. click the “Create” button;
3. click the cross-hairs button under “Insertion Point”;
4. select the word or punctuation next to the place where the “elided” word would have been, and click the arrow at right to select in front of or behind the selected word;
5. fill in the appropriate form within parentheses: e.g. (**est**), (**et**), or use empty square brackets [] for an apposition or coordination;
6. click the “Add Token” button;
7. link the ellipsis character to the tree as if it were the “missing” element.

F. Modification of a Coordinated Structure – When an adjective, *Subject Nominative*, or other modifier modifies all parts of a coordinated structure, it is dependent on (hangs under) the coordinator, indicating that it modifies all of the coordinated forms hanging under the coordinator and marked with the **_CO** tag.

Ablative Absolutes – the noun is placed under (hangs from) the verbal adjective; both are labeled with the **AB-ASOL** tag in the “ablative” pull-down menu: e.g. *Caesare dīcente* – *Caesare* is placed under *dīcente*. If there is no participle, place the adjective or title under the name or pronoun: e.g. *mē consule* – *consule* is placed under *me*; *Caesare vīvō* – *vīvō* is placed under *Caesare*.

Adjectives with “Unusual” Cases or Constructions – There are a few Latin adjectives and participles that routinely attract standard uses of specific cases or constructions, *exemplī gratiā*:

dignus – typically attracts an *Ablative of Respect* **AB-RESPECT** to express in respect to what factor something is worthy

parātus – typically attracts a *Complimentary Infinitive* **INF-COMP** to express what something is prepared to do

plēnus – typically attracts a *Partitive Genitive* **G-PART** to express what something is full of, or an *Ablative of Means* **AB-MEANS** to express what something is filled with.

similis – typically attracts a *Dative of Reference* **D-REFER** to express what something is similar to, or a *Genitive of Possession* **G-POSS** to express what something is a representation of.

Adverbs and Adverbials – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu. Use this tag for true morphological adverbs like *sevērē* or *tristiter*, as well as for words of obscured origin like *diū* and fossilized adverbial accusatives like *sensim*: e.g. *adeo, etiam, ita, item, nec, non, nondum, numquam, nunc, omnino, praecipue, quantum, quasi, quoque, statim, tantum, tunc, and umquam*.⁵ Adverbial forms most frequently modify verbal forms, but they may modify adjectives, nouns, and even other adverbial forms.

1. Adverbial uses of case forms are normally neuter.

Aposiopesis – a sentence may be broken off abruptly for rhetorical or dramatic effect, which is termed an *aposiopesis*. Use a pair of square brackets with the word "aposiopesis" and a single space before and after it to stand for the missing syntactic elements: i.e. [**aposiopesis**]. This symbol can be labeled with the appropriate tag for a missing sentence element: e.g. a verbal form, *Direct Object*, or clause.

Case Usage – Consult Logeion (and/or other dictionaries) to see what cases and constructions normally construe with a particular verb – CHECK THE SEMANTIC/SYNTACTIC USAGES OF A WORD IN THE DICTIONARIES. Remember that the cases have particular basic meanings that are not interchangeable; do not be misled by the syntax of the English verb – LATIN SYNTAX OFTEN DIFFERS SIGNIFICANTLY FROM THE ENGLISH SYNTAX

Case Usage Terminology – I have worked carefully to create a tagset that can describe all unique syntactic relationships while maintaining the greatest possible simplicity. For this reason, common terms that do not describe syntactically or semantically different relationships are mostly elided: e.g. the *Ablative of the Time at Which* and the *Ablative of the Place at Which* are not different types of Ablative usage - the ablative content of such a usage only indicates location, but it is the semantic force of the particular word that indicates time or place: e.g. *horā* could be called *Ablative of the Time at Which* only because the word *hora* has to do with time. All such ablative usages are thus tagged with the Ablative of Location tag: **AB-LOCAT**. Below is a list of case usage terminology in common use in relation to my tagset.

Subjective Genitive	<i>Genitive of Possession</i>	G-POSS
Genitive of Definition	<i>Genitive of Description</i>	G-DESC
Predicate Genitive	<i>Genitive of Characteristic</i>	G-CHAR

⁵ For forms using productive case usages like “*multo*” (*Ablative of the Degree of Difference*) and “*multum*” (*Adverbial Accusative*), use the appropriate case usage tag: **A-ADVERB**. A productive case usage is a case form that can be normally produced from a word in common usage. *Multus, -a, -um* normally produces both *multo* and *multum* as part of its declension.

Genitive of the Crime	<i>Genitive of the Charge</i>	G-CHARGE
Dative of Advantage/Disadvantage	<i>Dative of Interest</i>	D-INTER
Dative of Separation (e.g. <i>auferō</i>)	<i>Dative of Interest</i>	D-INTER
Dative of Separation (e.g. <i>absum</i>)	<i>Dative of Reference</i>	D-REFER
Ethical Dative	<i>Dative of Reference</i>	D-REFER
Dative of Person Judging	<i>Dative of Reference</i>	D-REFER
Predicate Dative	<i>Dative of Purpose</i>	D-PURP
Cognate Accusative	<i>Accusative Internal Object</i>	A-INTOBJ
Internal Accusative	<i>Accusative Internal Object</i>	A-INTOBJ
Object Compliment	<i>Predicate Accusative</i>	A-PRED
Accusative of Place Toward Which	<i>Accusative of Orientation</i>	A-ORIENT
Accusative of Purpose	<i>Accusative of Orientation</i>	A-ORIENT
Accusative of Duration of Time	<i>Accusative of Extent</i>	A-EXTENT
Accusative of Extent of Space	<i>Accusative of Extent</i>	A-EXTENT
Ablative of Place from Which	<i>Ablative of Orientation</i>	AB-ORIENT
Ablative of Origin/Source	<i>Ablative of Orientation</i>	AB-ORIENT
Ablative of Accordance	<i>Ablative of Orientation</i>	AB-ORIENT
Ablative of Time at Which	<i>Ablative of Location</i>	AB-LOCAT
Ablative of Time Within Which	<i>Ablative of Location</i>	AB-LOCAT
Ablative of Place at Which	<i>Ablative of Location</i>	AB-LOCAT
Ablative of Attendant Circumstances (instr)	<i>Ablative of Manner</i>	AB-MANN
Ablative of Attendant Circumstances (loc)	<i>Ablative of Accompaniment</i>	AB-ACCOMP

Clause of Comparison – The clause of comparison will be dependent on the comparative form within its main clause, an adverbial form like *sīc*, or it will be dependent on the verbal form that it compares the manner of action with. Use the **AuxC** (subordinating conjunction) tag in the “BASIC” pull-down menu for the subordinator: e.g., *ac, quasi, quam, tamquam, ut*. Use the **ADV-COMPAR** (Clause of Comparison) tag for the highest verbal form within the clause; note that a clause of comparison usually does not have an explicit verbal form within it; it is commonly necessary to add the appropriate verbal form that is understood from the context by adding a form in parentheses (e.g. **(est)**) using the procedure in section E. (In addition to comparative adjectives and adverbs, there are many other forms that have an idea of comparison or specification: e.g. *aliter, alius, ante, post, sīc, et cētera*.)

Correlatives – The indefinite correlative (and its clause) is dependent on the demonstrative correlative: *qualis* is dependent on *talis*. The "Q" form explains the exact semantic force of the "T" form.

Dates – The date may be expressed simply by an *Ablative of Location* arranged before a prepositional phrase with *ante* and an *Accusative of Orientation* using *Kalendae, Nōnnae, or Idūs*: e.g. *tertiō diē ante Kalendās Iānuāriās* or elided as *tertiō Kalendās Iānuāriās*. (The names of the months are adjectives that depend on the *Kalendae, Nōnnae, or Idūs* and are tagged with **ATR**.) Similarly, *prīdiē* and *postrīdiē* are used as *Ablative of Location* followed by an *Accusative of Orientation*: e.g. *prīdiē Kalendās Iānuāriās*. The standard formulation of the date in many authors is effectively ungrammatical and may result from transpositions of *ante* coupled with reanalysis of *diē* into *diem*: e.g. *ante diem III Kalendās Iānuāriās*. The element [*ante diem*] functions as an indeclinable phrase, even being employed as “object” of other prepositions: e.g. *ex ante diem III Kalendās Iānuāriās* (from the third day before the January Kalends).

Direct Statement (sustained without a subordinating verbal form within the sentence) – In extended directly quoted speeches, it is typical to not repeat the subordinating verbal form as the Predicate: e.g. *inquit*. In these instances, the last explicit verbal form should be carried forward as an ellipsis in the following sentences, using the procedure in Section E: e.g. (*inquit*) as the *Predicate* using the **PRED** tag.

1. Place any final punctuation related to the *Direct Statement* on the highest element of that clause.

- If a section of the text that is set in direct speech is longer than 5-6 sentences, just treebank the sentence that includes the verb of saying with the subordinated indirect or direct speech, and treebank the remaining sentences as ordinary predicates.
- If the quoted speech uses a subjunctive as its main verb (hortatory, deliberative, potential, optative), select the appropriate tag use the tags in the pull-down menu within the NOM-DIRSTAT tag:

NOM-DS-HORT	Direct Statement Hortatory Subjunctive
NOM-DS-DELIB	Direct Statement Deliberative Subjunctive
NOM-DS-POTENT	Direct Statement Potential Subjunctive
NOM-DS-OPT	Direct Statement Optative Subjunctive

and then add the appropriate `_OBJ` tag in the second pull-down menu.

Enclitics – Enclitics should be separated from the preceding word and morphologically identified with their hyphen: e.g. `-que`, `-ve`, `-ne`, `-c`. These are semantically distinct words that will be needed to correctly form the syntactic tree. Enclitic forms that are no longer productive in preserved Latin (i.e. those not able to be joined to any word like `-pte` or the `-ce` in *haec*) should not be separated.

Genitive describing/specifying – The adjectival force of the Genitive may be foremost, with the effect of describing or specifying what type of thing it limits: e.g. *liber lēgum* *Genitive of Description* **G-DESC**. When the genitive word describes the material from which the limited object is made, the more specific *Genitive of Material* **G-MATER** is used: e.g. *annulus aurī*. Some examples of this use of the genitive are sometime termed a genitive of definition or specification.

Indirect Statement (sustained or implied without a subordinating verbal form within the sentence) – In extended speeches, it is typical to not repeat the subordinating verbal form as the Predicate: e.g. *dīcit*. In these instances, the last explicit verbal form should be carried forward as an ellipsis in the following sentences, using the procedure in Section E: e.g. (*dīcit*) as the *Predicate* using the **PRED** tag.

- Verbal adjectives used as periphrastic verb within *Indirect Speech* will agree with their (typically accusative) *Subject*.

Infinitives – use the appropriate tag in the “infinitive uses” pull-down menu to label these neuter, verbal nouns:

INF-COMP	Complimentary Infinitives (functioning as the <i>Direct Objects</i> of certain verbs)
INF-HIST	Historical Infinitives (functioning as the <i>Predicate</i>)
INF-EXPL	Explanatory Infinitives (modifying certain adjectives)
INF-PURP	Infinitives of Purpose (functioning as the <i>Direct Objects</i> of certain verbs)
INF-EXCLAM	Exclamatory Infinitives (an exclamation in <i>Indirect Speech</i>)
N-SUBJ	Subject Infinitives (functioning as the <i>Subjects</i> of certain verbs, especially of impersonal verbs.)

Interjections – Distinct from sentence adverbials (e.g. inferential particles like *igitur*), interjections are somewhat separate from the syntactic structure of the sentence, much like a *Vocative* form: e.g. *attatae*, *ecce*, *en*, *euge*, *eugepae*, *euho*, *hahaha*, *hem*, *heu*, *papae*, *st*, *vae*. Interjections typically hang from the *predicate*, or sometimes a subordinated verbal form. Use the **INTRJ** (interjection) tag in the “BASIC” pull-down menu to label the interjection.

- Accusative* forms used as interjections (e.g. *malum*) are accusatives of exclamation and are labeled with the **A-EXCLAM** tag, and *Vocative* forms invoking a god (e.g. *Hercule*, *mehercule*) are labeled with the **V-VOC** tag.
- When paired with a *Vocative* form, the interjection will hang below the *Vocative*.

licet – When *licet* is used as the main verb of a subordinate clause, it will normally be a concessive clause: allowed that X is the case ≈ although. Use the **ADV-CONCESS** tag in the pull-down menu to label *licet*, and use the appropriate tag to label its subject - usually an infinitive or a substantive clause.

Locatives – use the **L-LOCAT** tag in the pull-down menu. A noun in the locative case functions like an *Ablative of Location*. *Locative* forms were in common use only for the names of cities, islands, and [*domī*, *humī*, *rūrī*, *forīs*, *mīlītiaē*, *bellī*, *animī*]; *Locative* forms indicating time were [*herī*, *vesperī*, *temperī*].

Names – use the **ATR** (attribute) tag in the “BASIC” pull-down menu to label *praenomina* and *cognomina*, which hang from the *nomen*. The *nomen* is labeled based on its case function. Any period after the abbreviated *praenomen* is labeled with **AuxG** and hangs from the *praenomen*. (The *nomen* is typically an **adjective**, but the *praenomen* is a noun, as is sometimes the *cognomen*. Thus the *Basilica Iūlia* is the Julian Basilica, not the Basilica of Julius: i.e. *Basilica Iūliī*.) When the author does not include the *nomen*, it should be added using the ellipsis procedure in Section E above: e.g. Ti. Neronem becomes Ti. (Claudium) Neronem, and both the *praenomen* Ti. And the *cognomen* Neronem hang from the *nomen* (Claudium).

Negation – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu: e.g. *nōn*, *nē*, or *ni-*. Note that some words can be used as negation (ADV) or as subordinators (AuxC): e.g. *nē*.

ne quidem – use the **ADV** (adverbial) tag in the “BASIC” pull-down menu to label both the *ne* and the *quidem*; the *ne* is dependent on the *quidem*, which is dependent on whatever work is emphasized: i.e. typically the word between the *ne* and the *quidem*.

nescioquis, quivīs, etc written as two words – there are a number of fixed phrases in common use that can be written as a single word or as two words in edited texts: e.g. *nescioquis* versus *nesciō quis*, meaning something like *aliquis quem nesciō* (The verbal form functions as an adjectival modifier of the pronomial form, in effect being a contracted form of a relative clause with the pronomial as its antecedent). Combine such forms into a single word, or use the **ATR** (attribute) tag in the “BASIC” pull-down menu for the indeclinable element of the compound.

Nominal Clauses – All nominal clauses (NOM-*) must be labeled with the appropriate functional tag from the 2nd pull-down menu: e.g. **_OBJ**, **_SBJ**, **_PRED**, **_PRED-CO**.

Nouns with “Unusual” Cases or Constructions – In addition to nouns derived from verbal stems, which typically attract the *Objective Genitive G-OBJEC*, there are a few Latin nouns that routinely attract standard uses of other cases or constructions; these case usages are congruent with the semantic force of the Latin construction – not the syntax in any potential English translations: *exemplī gratiā*: *opus est* – typically attracts an instrumental ablative: Ablative of Means AB-MEANS or Ablative of Manner AB-MANN to express by the work (necessity) must be done.

Ordinal Numbers used Adverbially – use the **A-ADVERB** tag in the “accusative” pull-down menu, indicating that these accusative, neuter, singular forms modify adverbially: e.g. *consul tertium id fēcit* (while being consul the third time he made it); *tertium* does not agree with *consul* or modify *fēcit*, but it modifies the verbal idea of being consul.

Parenthetical Statements – Parenthetical statements are complete statements that are not joined to the sentence using coordination or subordination (a grammatically independent structure within another sentence); they are frequently an aside from the speaker embedded within another sentence, much like an *Interjection*.

Hang the Parenthetical Statement from the first punctuation that separates it from the sentence, and hang the punctuation from the structure in the sentence that occasions the aside – usually a verbal form and often the Predicate. Label the connecting punctuation with the **PARENTH** tag in the “BASIC” pull-down menu the highest verbal form with the appropriate **PRED** tag in the “BASIC” pull-down menu. Many apparent asides are, however, abbreviated or atypical *Causal Clauses* or the like: i.e. they actually explain or otherwise modify the main clause, despite not using a common subordinator.

Periphrastic Verbal Forms – the auxiliary verbal form is taken as being dependent on (hangs under) the verbal adjective in the periphrastic forms. Use the **AuxV** (auxiliary verbal form) tag in the “BASIC” pull-down menu for finite verbs and infinitives used in a periphrastic verbal form: e.g. *futūrus est*, *amātum esse*, or *amanda sit*.⁶ Note that the Future Passive Infinitive uses an accusative supine expressing purpose (A-Orient), which is dependent on the infinitive *īrī*: e.g. *nocitum īrī* – *nocitum* is dependent on *īrī*.

Predicate – if they are indicative, the verb or verbs of the independent clause are labeled with the **PRED** tag in the “BASIC” pull-down menu; if they are subjunctive, use the tags in the pull-down menu within the **PRED** tag:

PRED-HORT	hortatory subjunctive
PRED-DELIB	deliberative subjunctive
PRED-POTENT	potential subjunctive
PRED-OPT	optative subjunctive (<i>utinam</i> is tagged with AuxY)

The predicate may be coordinated, like any other structure.

Prepositions – use the **AuxP** (preposition) tag in the “Aux” pull-down menu located in the “BASIC” pull-down menu: e.g. *dē*, *ad*, or *inter*. Note that some words can be used as prepositions or as adverbials: e.g. “ante”.

Remember that the case use attracts certain prepositions; the prepositions do not cause the case. Prepositions may themselves be modified by adverbial forms: e.g. in “*usque ad oppidum*”, *usque* (all the way) modifies the idea of “*ad*” (towards), in “*unā cum ceterīs*”, *unā* (at one) modifies the idea of “*cum*” (with). Label the substantive under the preposition with the appropriate tag for its particular clause usage, almost always *Accusative* or *Ablative* and usually (but not always) matching as below:

ad	<i>Accusative of Orientation</i>	secundum	<i>Accusative of Orientation</i>
adversus	<i>Accusative of Orientation</i>	sub (motion)	<i>Accusative of Orientation</i>
adversum	<i>Accusative of Orientation</i>	subter (motion)	<i>Accusative of Orientation</i>
ante	<i>Accusative of Orientation</i>	super (motion)	<i>Accusative of Orientation</i>
circā	<i>Accusative of Orientation</i>	suprā	<i>Accusative of Orientation</i>
circum	<i>Accusative of Orientation</i>	trāns (position)	<i>Accusative of Orientation</i>
cis/citrā	<i>Accusative of Orientation</i>	ultrā	<i>Accusative of Orientation</i>
contrā	<i>Accusative of Orientation</i>	versus	<i>Accusative of Orientation</i>
ergā	<i>Accusative of Orientation</i>		
extrā	<i>Accusative of Orientation</i>	apud	<i>Accusative of Extent</i>
in (motion)	<i>Accusative of Orientation</i>	inter	<i>Accusative of Extent</i>
īnfrā	<i>Accusative of Orientation</i>	per	<i>Accusative of Extent</i>
intrā	<i>Accusative of Orientation</i>	trāns (motion)	<i>Accusative of Extent</i>
iūxtā	<i>Accusative of Orientation</i>		
ob	<i>Accusative of Orientation</i>	cōram	<i>Ablative of Orientation</i>
penes	<i>Accusative of Orientation</i>	dē	<i>Ablative of Orientation</i>
post	<i>Accusative of Orientation</i>	palam	<i>Ablative of Orientation</i>
pōne	<i>Accusative of Orientation</i>	procul ā/ab	<i>Ablative of Orientation</i>
praeter	<i>Accusative of Orientation</i>	tenus	<i>Ablative of Orientation</i>
prope	<i>Accusative of Orientation</i>		
propter	<i>Accusative of Orientation</i>	ā/ab/abs	<i>Ablative of Orientation</i>

⁶ Since forms of [*esse*] are often omitted, placing the participle above them in the tree results in uniformity of arrangement between instance where they are present and when they are absent. Further, the main verbal force of the periphrastic verb is contained in the participle, with the form of [*esse*] merely supplying tense and mood, or marking the usage as infinitive.

<u>ē/ex</u>	<i>Ablative of Cause</i> (more rare) <i>Ablative of Orientation</i> <i>Ablative of Cause</i> (more rare)	super (location)	<i>Ablative of Location</i>
in (location)	<i>Ablative of Location</i>	cum	<i>Ablative of Accompaniment</i> <i>Ablative of Manner</i> (more rare)
prae	<i>Ablative of Location</i>	absque	<i>Ablative of Separation</i>
prō	<i>Ablative of Location</i>	sine	<i>Ablative of Separation</i> <i>Ablative of Manner</i> (more rare)
prōpe	<i>Ablative of Location</i>	tenu	<i>Objective Genitive</i>
sub (location)	<i>Ablative of Location</i>		
subter (location)	<i>Ablative of Location</i>		

Pronouns (used adjectivally) – Pronouns that adjectivally modify another word are tagged with **ATR**: e.g. eōdem modō.

Punctuation – When not otherwise needed to stand for coordination or apposition within a syntactic tree:

1. Commas (AuxX) and quotation marks (AuxG) are hung from the highest verbal form of the clause that necessitates their existence: e.g. a comma separating a *Purpose Clause* from the main clause hangs from the highest verbal form of the *Purpose Clause*, since the comma would not be there except to separate that clause from the *Main Clause*. (Do not hand them from the AuxC.)
2. Commas between elements in coordination are hung from the coordinator and retain their **AuxX** tag.
3. Final punctuation (. ! ?) remains hanging on the **ROOT** and retains its **AuxK** tag.
4. Colons and semicolons (; :) that separate clauses or other structures but do not end the sentence (e.g. in a list of statements) are marked with the **AuxX** tag.
5. Parentheses, brackets, and hyphens are labeled with the **AuxG** tag

Quotation Marks – Direct quotation should be surrounded by double quotation marks (“ ”), and a quotation embedded within another quotation should be surrounded by single quotation marks (‘ ’).

Relative Clause – In most instances, a *Relative Clause* just functions as an adjectival modifier of its antecedent, in which case it is labeled with the **ADJ-RC** tag (or other appropriate **ADJ-RC...** or **ADV-RC...** tag); however, a *Relative Clause* frequently stands without an antecedent as an object or subject of a verbal form. In these cases, also use the **_OBJ** or **_SBJ** modifier in the second (right hand) pull-down menu: e.g. **ADJ-RC_OBJ**.

1. Note that not every *Relative Clause* contains a simple relative pronoun: e.g. clauses subordinated by *ubi* or clauses containing indefinite relative pronouns like *quicumque*.

Relative Pronoun – The *Relative Pronoun* is tagged with the case tag specific to its role within its clause. It hangs from whatever form it is dependent upon due to its particular case usage. Identify the morphology as below:

qui1 – Interrogative adjective: qui, quae, quod

qui2 – Relative pronoun: qui, quae, quod

quis1 – Interrogative pronoun: quis, quid

quis2 – Indefinite pronoun: following *sī* or *nē*: effectively (ali)quis, (ali)qua, (ali)quid

Result Clause – In most instances, a *Result Clause* modifies an adverbial or adjectival form in its main clause to clarify that form. It does not typically modify a verbal form like the *Purpose Clause* does: e.g. *tam*.

Sentence Coordinators – Coordinators (e.g. et, sed, ac, atque, autem) are often used to link sentences semantically rather than to link structures within a particular sentence. These coordinators often come first

in sequence and depend on the ROOT. The predicate hanging under such a sentence coordinator is not marked with the _CO tag.

ubi – When it is used as a subordinator (**AuxC**) instead of an adverbial (**ADV**), *ubi* frequently sets up a *Relative Clause* (of space or, less frequently, time) which modifies its antecedent like any other *Relative Clause*, with the difference being that it usually does not contain a relative pronoun. The highest verbal form is labeled with the **ADJ-RC** tag (or potentially another **ADJ-RC...** or **ADV-RC...** tag).

Verbs with “Unusual” Cases – In addition to intransitive verbs (those that do not take an accusative *Direct Object*), there are a few Latin verbs that routinely attract standard uses of other cases or constructions; these case usages are congruent with the semantic force of the Latin verb – not the syntax of the verb in any potential English translations: *exemplī gratiā*:

- auferre – typically attracts a *Dative of Interest* **D-INTER** to express who is harmed by the removal of the *Direct Object* (the dative case cannot express motion away from something; there is no dative of separation).
- bibere – sometimes construed with an *Ablative of Orientation* **AB-ORIENT** (with or without a preposition) to indicate from what vessel something is drunk.
- carere – attracts an *Ablative of Separation* **AB-SEPAR** – to be deprived from something. (In pre-classical Latin may attract an Objective Genitive **G-OBJEC**.)
- continēre – finite forms may attract an *Ablative of Means* **AB-MEANS** or other instrumental ablative, or a *Dative of Reference* **D-REFER**. In the perfect passive participle often attracts an *Ablative of Location* **AB-LOCAT** (with or without a preposition) to indicate in what a thing is content (contained), or an *Explanatory Infinitive* **INF-EXPL**.
- crēdere – typically attracts a *Dative of Interest* **D-INTER** (person) to express for whom there is confidence; it can also attract an impersonal *Direct Object* or a *Substantive Clause* to indicate the thing or concept that is believed to be true.
- deceť – most frequently used in an impersonal manner with an infinitive or a nominal clause as the *Subject* and attracts an *Accusative Direct Object* (person) **A-DO** to indicate for whom an action is fitting.
- dēesse – most commonly attracts a *Dative of Interest* **D-INTER**
- displicēre – attracts a *Dative of Reference* (person) **D-REFER** to express to whom something is displeasing.
- doceō – typically attracts an *Accusative Direct Object* (person) **A-DO** with an infinitive *Interior Object* **A-INTOBJ** to express what content the person is being taught; may occur without the *Accusative Direct Object* (person) **A-DO** being explicitly stated.
- egēre – attracts either an *Ablative of Respect* **AB-RESPECT** – (to be needy in respect to something) or an Objective Genitive **G-OBJEC** – to be in need of something.
- frūī – attracts an *Ablative of Means* **AB-MEANS** or other instrumental ablative – to enjoy oneself by means of something.
- fungī – attracts an *Ablative of Means* **AB-MEANS** or other instrumental ablative – to busy oneself with something.
- gaudēre – attracts an *Ablative of Cause* **AB-CAUSE** (as well as causal clauses and other constructions) – to rejoice because of something.
- imperāre – typically attracts a personal *Dative Indirect Object* **D-IO** – to give a command to someone.
- iubēre – typically attracts a personal *Accusative Direct Object* **A-DO** and an infinitive *Interior Object* **A-INTOBJ** – to order X to do Y, in the passive X (nominative) is commanded to do Y (still infinitive *Interior Object*); sometimes attracts a substantive noun clause as *Interior Object*.
- iungere – typically attracts a *Accusative Direct Object* **A-DO** and a *Dative of Reference* **D-REFER** – to join something to something else.
- libet – impersonal usage with a nominative demonstrative or relative pronoun, or an infinitive or substantive noun clause as the *Subject*. Attracts a *Dative of Reference* **D-REFER** to indicate for whom something is pleasing.
- licet – attracts a *Dative of Reference* (person) **D-REFER** and often an infinitive as its *Nominative Subject* or a substantive clause as its *Subject*.
- meminisse – attracts the *Objective Genitive* **G-OBJEC** – to be mindful of something.
- miserārī – in poetry often attracts an *Objective Genitive* **G-OBJEC** instead of an *Accusative Direct Object*
- miserēre – attracts an *Objective Genitive* **G-OBJEC** and/or a *Direct Object* (person).
- nascī – typically construed with an *Ablative of Orientation* **AB-ORIENT** (with or without *ex* or *dē*, rarely with *ab*) to indicate from whom a person is engendered: e.g. *love nātus*.
- nīī – typically construed with an *Ablative of Location* **AB-LOCAT** or an *Ablative of Orientation* **AB-ORIENT** (often with *dē*) to indicate on or from what something rests or bears.
- oportet – takes an *Indirect Speech* as its *Subject*.
- paenitet – an *Accusative Direct Object* (person) **A-DO** with an *Objective Genitive* **G-OBJEC** to express what the regret concerns.

parcere – attracts a *Dative of Interest* **D-INTER** to indicate in whose interest mercy is shown.

parēre – typically attracts a *Dative of Interest* **D-INTER** – to render obedience unto.

pascī – attracts an *Ablative of Means* **AB-MEANS** or other instrumental ablative – to be gluttoned by means of something: e.g. *qui maleficio et scelere pascuntur*.

pīget – cause someone - *Accusative Direct Object* **A-DO** - to have a disgust of something - *Objective Genitive* **G-OBJEC**

placet – attracts a *Dative of Reference* (person) **D-REFER** and often an infinitive as its *Nominative Subject* to express to whom something is pleasing.

potirī – attracts either an *Ablative of Respect* **AB-RESPECT** – (to be powerful in respect to something) or an *Objective Genitive* **G-OBJEC** – (to have the control of something), or an *Accusative Direct Object* **A-DO** before or after the period of Classical Latin – (to control something).

repugnāre – typically attracts a *Dative of Interest* **D-INTER** to express who is fought against.

studēre – typically attracts a *Dative of Interest* **D-INTER** to express for whom or for what something has intense interest.

sufficere – typically attracts a *Dative of Interest* **D-INTER** to express for whom or for what something is supplied.

taedet – attracts a *Direct Object* (person) **A-DO** with an *Objective Genitive* **G-OBJEC** to express what the regret concerns.

utī – attracts an *Ablative of Means* **AB-MEANS** or other instrumental ablative – to set oneself to work by means of something.

vidērī – attracts a *Dative of Reference* **D-REFER** to indicate to whom X seems to be Y.

Vocatives – use the **V-VOC** tag in the pull-down menu, indicating that they are not part of the syntactic structure of the tree. A vocative normally depends on the main verbal form of the independent clause.

AuxY (sentence adverbials) – many adverbial forms (not generally true morphological adverbs) most often emphasize the sentence (independent clause) as a whole, rather than a particular word within the sentence: e.g. *alias, consequens, certe, contra, enim, ergo, ideo, igitur, immo, inde, ita, item, num, praeterea, propterea, sane, tamen, unde, utrum, and vero*. Note that most adverbial forms can be used in multiple manners, although the sentence adverbial (AuxY) usage may predominate. The AuxY most typically depends on the highest verbal form or coordinator, since it usually modifies the entire sentence. A sentence adverbial frequently ties the current sentence into ideas from a prior sentence: e.g. *ergo* ≈ "and because of what I just said".

V. MORPHOLOGY LABELING/EDITING INSTRUCTIONS

A. Label a word based on its morphology, not its function: e.g. a substantive adjective is morphologically an adjective, NOT a noun. (Most of the names of ethnicities/peoples are adjectives: e.g. *Rōmānī*.)

B. Know what you are looking for before selecting the morphological analysis. (Multiple distinct forms may derive from the same or similar roots; check the dictionary entries to be certain of the correct form.) If the precisely correct form is not present, you must create a new form: (DO NOT ADD UNNECESSARY FORMS.)

Create a new morphological analysis:

1. In the “Morph” tab at the top right of the editor window;
2. click the “Create new form” button;
3. in the “Lemma” box add the first word of the dictionary entry: e.g. *Caesar* instead of *Caesare* (in the case of abbreviations, use the complete word: e.g. *M.* would be *Marcus*);
4. select the part of speech in the “Part of Speech” pull-down menu (participles, gerundives, gerunds,⁷ supines,⁸ and infinities are lumped under “verb” and differentiated in the “Mood” drop-down menu);
5. select the properties of the word in the drop-down menus that appear;
6. when all properties are complete,⁹ click the “Save” button.

C. Make sure that the selected morphology and the syntactic TAG are in agreement: i.e. do not label *consule* AB-ABSOL and then identify the morphology as the dative of *consul*. (Check in both directions.)

D. The relative, interrogative, and indefinite pronouns and adjectives overlap morphologically in many places. Use the list below to help find the correct form. *quīs* (an alternate form of the plural abl/dat *quibus*) or other alternate forms will need to have a new morphological analysis created as in B above.

qui1 – Interrogative adjective: *qui, quae, quod*

qui2 – Relative pronoun: *qui, quae, quod*

quis1 – Interrogative pronoun: *quis, quid*

quis2 – Indefinite pronoun: following *sī* or *nē*: effectively (ali)quis, (ali)qua, (ali)quid

E. Enclitics should be separated from the preceding word and morphologically identified with their hyphen: e.g. *-que, -ve, -ne, -c*.

F. All adjectives and adverbs, including participles have degree. Adverbs that are derived from adjectives use the adjective nominative, singular, masculine in their morphology identification. (Even if an entry exists for a common form like *bene*, make sure to add an analysis as the positive adverb from the adjective *bonus*.)

⁷ All gerunds have no Person, but are singular, present, active/deponent (and neuter); their case cannot be Nominative.

⁸ All supines have no Person, but are singular, present, active/deponent; their case can only be Accusative or Ablative, with arguably a vanishingly few archaic Dative examples.

⁹ All Adjectives and Adverbs should have their degree specified; “ordinary” adjectives or adverbs are in the Positive Degree.

VI. EDITING THE XML CODE DIRECTLY

At times the automatic XML parser may make errors. Sometimes you may disagree with the editing choices of the editor of your text: e.g. punctuation, which manuscript reading to use, what word best solves a *crux* (a textual corruption induced problem in syntax). In these situations, you will need to directly edit the XML code. (Note that when you change the numbering of words within a sentence using many of these types of edit, the dependencies in the tree will need to be redone; when a word or punctuation is changed, it may have to be retagged and re-identified.)

EDITING THE XML CODE

- I. note which sentence you are currently editing
- II. save, and then exit the editor window by clicking on the exit arrow at top right
- III. select "EDIT XML" from the options in blue text near top of window
- IV. scroll to the appropriate sentence: e.g. sentence 4, then...

Divide a word

- I. select the entire word entry, including all brackets

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="3" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
  <word id="4" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
  <word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

- II. copy and paste in another copy of the word entry immediately after the first instance

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="indigestaque" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="3" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
  <word id="4" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
  <word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

- III. delete the 2nd word from the first entry, AND replace the 1st word in the second entry with a hyphen

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
```

```

<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="-que" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="4" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>

```

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Combine two words

I. find the two word entries that should be a single word entry

```

<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="eodem" lemma="eodem" postag="d-----" relation="ADV" head="12"/>
  <word id="2" form="non" lemma="non" postag="d-----" relation="ADV" head="16"/>
  <word id="3" form="be" lemma="bene" postag="d-----" relation="ADV" head="17"/>
  <word id="4" form="-ne" lemma="bene" postag="d-----" relation="ADV" head="17"/>
  <word id="5" form="iunctarum" lemma="jungo" postag="v-prppfg-" relation="ATR" head="20"/>
  <word id="6" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>

```

II. add the letters of the second word entry to the end on the first word, AND delete the second entry

```

<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="eodem" lemma="eodem" postag="d-----" relation="ADV" head="12"/>
  <word id="2" form="non" lemma="non" postag="d-----" relation="ADV" head="16"/>
  <word id="3" form="bene" lemma="bene" postag="d-----" relation="ADV" head="17"/>

  <word id="5" form="iunctarum" lemma="jungo" postag="v-prppfg-" relation="ATR" head="20"/>
  <word id="6" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>

```

III. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Combine two sentences

I. select the entire sentence end tag of the 1st sentence and the entire sentence beginning tag of the 2nd sentence, including all brackets

```

<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="iners" lemma="iners" postag="a-s---nn-" relation="ATR" head="10"/>

```

```
<word id="2" form="congesta" lemma="congero1" postag="v-prppnn-" relation="ATR" head="19"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="22"/>
<word id="4" form="eodem" lemma="eodem" postag="d-----" relation="ADV" head="12"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
```

</sentence>

<sentence id="5" document_id="" subdoc="" span="">

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
```

</sentence>

II. delete both tags entirely, including all brackets

<sentence id="4" document_id="" subdoc="" span="">

```
<word id="1" form="iners" lemma="iners" postag="a-s---nn-" relation="ATR" head="10"/>
<word id="2" form="congesta" lemma="congero1" postag="v-prppnn-" relation="ATR" head="19"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="22"/>
<word id="4" form="eodem" lemma="eodem" postag="d-----" relation="ADV" head="12"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
```

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
```

</sentence>

III. change punctuation at the end of the 1st sentence if necessary

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Separate one sentence into two sentences

I. select the entire sentence end tag of a sentence and the entire sentence beginning tag of the following sentence, including all brackets

<sentence id="4" document_id="" subdoc="" span="">

```
<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
```

```

<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
<word id="6" form="-c" lemma="-que" postag="c-----" relation="COORD" head="0"/>
<word id="7" form="quicquam" lemma="quisquam" postag="p-s---nn-" relation="N-PRED" head="24"/>
<word id="8" form="ni" lemma="ni" postag="d-----" relation="ADV" head="22"/>
<word id="9" form="-si" lemma="si" postag="c-----" relation="AuxC" head="24"/>
<word id="10" form="pondus" lemma="pondus" postag="n-s---nn-" relation="N-PRED_CO" head="13"/>

```

</sentence>

<sentence id="5" document_id="" subdoc="" span="">

```

<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>

```

</sentence>

II. copy both tags entirely, including all brackets

III. paste both tags entirely, including all brackets, between the final word of the 1st part of the sentence to be divided and the second part

<sentence id="4" document_id="" subdoc="" span="">

```

<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>

```

</sentence>

<sentence id="5" document_id="" subdoc="" span="">

```

<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
<word id="6" form="-c" lemma="-que" postag="c-----" relation="COORD" head="0"/>
<word id="7" form="quicquam" lemma="quisquam" postag="p-s---nn-" relation="N-PRED" head="24"/>
<word id="8" form="ni" lemma="ni" postag="d-----" relation="ADV" head="22"/>
<word id="9" form="-si" lemma="si" postag="c-----" relation="AuxC" head="24"/>
<word id="10" form="pondus" lemma="pondus" postag="n-s---nn-" relation="N-PRED_CO" head="13"/>

```

</sentence>

<sentence id="5" document_id="" subdoc="" span="">

```

<word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>

```



```
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

IV. add (copy & paste) a word entry for punctuation at the end of the 1st sentence if necessary

V. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Add punctuation

I. select the word entry for any punctuation, preferably the type that you want to add

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="tam" lemma="tam" postag="d-----" relation="ADV" head="4"/>
  <word id="2" form="miserum" lemma="miser" postag="a-s---na-" relation="ATR_CO" head="5"/>
  <word id="3" form="," lemma="comma" postag="c-----" relation="COORD" head="2"/>
  <word id="4" form="tam" lemma="tam" postag="d-----" relation="ADV" head="7"/>
  <word id="5" form="solum" lemma="solus" postag="a-s---na-" relation="ATR_CO" head="5"/>
  <word id="6" form="vidimus" lemma="video" postag="v1pria---" relation="PRED" head="0"/>
  <word id="7" form="ut" lemma="ut" postag="c-----" relation="AuxC" head="8"/>
  <word id="8" form="deterius" lemma="deterior" postag="a-s---nac" relation="N-PRED" head="31"/>
  <word id="9" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

II. copy the word entry for the punctuation

III. paste the word entry for the punctuation between two other word entries where needed

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="tam" lemma="tam" postag="d-----" relation="ADV" head="4"/>
  <word id="2" form="miserum" lemma="miser" postag="a-s---na-" relation="ATR_CO" head="5"/>
  <word id="3" form="," lemma="comma" postag="c-----" relation="COORD" head="2"/>
  <word id="4" form="tam" lemma="tam" postag="d-----" relation="ADV" head="7"/>
  <word id="5" form="solum" lemma="solus" postag="a-s---na-" relation="ATR_CO" head="5"/>
  <word id="6" form="vidimus" lemma="video" postag="v1pria---" relation="PRED" head="0"/>
  <word id="3" form="," lemma="comma" postag="c-----" relation="COORD" head="2"/>
  <word id="7" form="ut" lemma="ut" postag="c-----" relation="AuxC" head="8"/>
  <word id="8" form="deterius" lemma="deterior" postag="a-s---nac" relation="N-PRED" head="31"/>
  <word id="9" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

IV. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Remove punctuation

I. select the word entry for the punctuation needing to be removed

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
  <word id="4" form="," lemma="comma" postag="u-----" relation="AuxX" head="0"/>
  <word id="5" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
  <word id="6" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
  <word id="7" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

II. delete the word entry for the punctuation entirely, including all brackets

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>

  <word id="5" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
  <word id="6" form="ne" lemma="ne1" postag="d-----" relation="ADV" head="24"/>
  <word id="7" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

III. click on "SAVE" at the bottom of the page (there is no need to renumber the word entries)

Edit a single word or character

I. select the word or punctuation needing to be edited

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="2" form="innigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
  <word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
  <word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
  <word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>
```

II. make any needed edits or substitutions

```
<sentence id="4" document_id="" subdoc="" span="">
  <word id="1" form="rudis" lemma="rudis1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
```

```

<word id="2" form="indigesta" lemma="indigestus1" postag="a-s---fn-" relation="ATR_CO" head="3"/>
<word id="3" form="-que" lemma="-que" postag="c-----" relation="COORD" head="4"/>
<word id="4" form="moles" lemma="moles" postag="n-s---fn-" relation="N-PRED" head="23"/>
<word id="5" form="." lemma="punc1" postag="u-----" relation="AuxK" head="0"/>
</sentence>

```

III. click on "SAVE" at the bottom of the page

Add the line or paragraph numbers to every sentence:

I. In the header of each sentence, find: subdoc=""

```

<sentence id="21"
  document_id="urn:cts:latinLit:phi0690.phi003.perseus-lat2"
  subdoc=""
  span="">
  <word id="1" form="Se" lemma="sui" postag="p-p---ma-" relation="A-DO_CO" head="9"/>
  <word id="2" form="quoque" lemma="quoque" postag="d-----" relation="ADV" head="5"/>
  ...
</sentence>

```

II. Consult the line or paragraph numbering in the text and fill in the correct numbers: e.g. subdoc="1.488-489"

tum uero ingentem gemitum dat pectore ab imo, 1.485
 ut spolia, ut currus, utque ipsum corpus amici
 tendentemque manus Priamum conspexit inermis.
se quoque principibus permixtum agnouit Achiuis,
Eoasque acies et nigri Memnonis arma.
 ducit Amazonidum lunatis agmina peltis 1.490
 Penthesilea furens mediisque in milibus ardet,
 ...

```

<sentence id="21"
  document_id="urn:cts:latinLit:phi0690.phi003.perseus-lat2"
  subdoc="1.488-489"
  span="">
  <word id="1" form="Se" lemma="sui" postag="p-p---ma-" relation="A-DO_CO" head="9"/>
  <word id="2" form="quoque" lemma="quoque" postag="d-----" relation="ADV" head="5"/>
  ...
</sentence>

```

With *atque*: versantur retro contrario motu atque caelum, **Cic. Rep. 6, 17, 17.**—