

Carl Orff

Carmina¹ Burana

(Chorus parts)

IPA TRANSCRIPTION AND LITERAL TRANSLATION

[NB: The pronunciation of the Latin text given in this transcription is a mixture of Italianate and Germanic Latin. The vowels are pronounced as they would be in Italianate Latin. The consonants, however, are (mostly) pronounced as in Germanic Latin. The pronunciation of the Middle High German follows the instructions given in Chapter 15 of McGee, Rigg and Klausner: *Singing Early Music*. LHS]

1. O FORTUNA

O Fortúna vélut Lúna státu variábilis, sémper créscis [krɛstsis] aut
decréscis

O Fortune as the moon in a state variable, always you increase or you
decrease

[dɛkrɛstsis]; víta detestábilis nunc obdúrat et tunc cúrat lúdo méntis
life horrible now hardens and then pampers by a game of the mind

áciem [atsiɛm], egestátem [ɛgɛstatɛm], potestátem dissólvit ut gláciem [glatsiɛm].
the keenness, poverty, power destroy as ice

Sors immánis et inánis, róta tu volúbilis, státus málus, vána sálus sémper
Fate horrible and empty, wheel you turning, state bad, void welfare always

dissolúbilis, obumbráta et veláta míchi [miki] quóque níteris; nunc per lúdum
dórsum
dissolvable, covered up and veiled to me also you attack; now through a game
back

núdum féro túi scéleris [tsɛlɛris].
bare I bear of your crime.

Sors salútis et virtútis míchi [miki] nunc contrária; est afféctus et deféctus
Fate of health and of virtue to me now (is) opposed; is zeal and failure

sémper in angária [aŋgaria]. Hac [hak] in hóra [hɔra] síne móra córde
always in struggle. This In hour without delay in (my) heart

púlsum tángite [taŋgitɛ]; quod per sórtem stérnit fórtem, mécum ómnes
the pulse touche; which through fate overthrows strong, with me all

¹ Please note: the word is CARmen, CARminis, n. (CARmina, pl.) with the accent always on the first syllable, not the second. Yes, you will almost always hear it pronounced incorrectly with the accent on the second syllable, but that is no reason why we have to. LHS

plángite [plangite]!
lament!

2. FORTUNE PLANGO VULNERA

Fortúne (ę=ae) [fortune] plango [plango] vúlnera stillántibus océllis [ɔtsɛlis]
Of Fortune I lament the wounds with tearing eyes

quod súa míchi [miki] múnera súbtrahit [subtrahit] rebéllis. Vérum est, quod
because her from me gifts take away always making war. True it is what

légitur [legitur], frónte capilláta, sed plerúmque séquitur Occásio calváta.
Is read, with a forehead with long hair, but usually it follows chance bald.

In Fortúne [fortune] sólio séderam elátus, prosperitátis vário flóre
On Fortune's throne I sat exalted, of riches with a colorful flower

coronátus; quísqúid támen² flóruí félix et beátus, nunc a súmmo
crowned; with whatever nevertheless I flourished lucky and happy, now from the top

córroi glória privátus.
I fell by glory deprived

Fortúne [fortune] róta vólvitur: descéndo [dɛstsɛndɔ] minorátus; álter in áltum
Fortune's wheel turns: I fall diminished; one into another

tóllitur; nímis exaltátus rex sédet in vértice [vɛrtitsɛ] cáveat ruínam!
is displayed; too much raised a king sits on the summit, let him beware the ruin

nam sub áxe [aksɛ] légimus [legimus] Hécubam [hɛkubam] regínam [rɛginam].
for under the (wheel's) axle we read "Hecuba the queen."

3. VERIS LETA FACIES

Véris léta [leta] fácies [fatsiɛs] mún-do propinátur, hiemális [hiɛmalis]
Spring's glad face to the earth toasts, of the winter

ácies [atsiɛs] vícta iám [jam] fugátur. In vestítu vário Flóra
the sharpness conquered now is driven. In garment colorful Flora

principátur [printsipatur], némorum dulcisóno [dultsisɔno] que cántu

² Not "énim" as is printed in the parts.

reigns, of the forests sweet-sounding who with a song

celebrátur [tʃelɛbratur].

Is celebrated.

Flórę [flɔrɛ] fúsus grémio Phébus [fɛbus] nóvo móre rísum dat,
Flora's poured into the lap Phoebus in a new manner laughter gives,

hoc [hɔk] vário iám [jam] stipátur³ flóre. Zéphyrus [tsɛfirus] nectáreo spírans
by this colorful now Is surrounded by a flower. Zephyrys fragrant blowing

in⁴ odóre; cértatim [tsɛrtatim] pro brávio currámus in amóre.
in scent; eagerly for the prize let us compete in love.

Cytharízat [tsitaritsat] cántico dúlcis [dultsis] Philoména [filɔmɛna], flóre
Sings in a song sweet the nightingale, with flower

rident vário práta iám [jam] seréna, sálit cétus [tsetus] ávium sílvę [silvɛ] per
smile colorful fields now bright, hop a flock of birds of the forest through

aména [amɛna], chórus [kɔrus] prómit vírginum [virginum] iám [jam]
the pleasantness, a chorus utters of girls now

gáudia [(here) gaũdja] milléna.
the joys thousands.

5. ECCE GRATUM

Écce [ɛktsɛ] grátum et optátum Ver redúcit [rɛdutsit] gáudia, purpurátum
Behold pleasing and longed-for spring brings back joys, purple

flóret prátum, Sol serénat ómnia. lám [jam] iám [jam] cédant [tsɛdant] trístia!
blossoms the field, the sun brightens everything. Now let go away sad things

Éstas [estas] rédit, nunc recédit [rɛtsɛdit] Hýemis [hiɛmis] sɛvítia [sevitsia].
Summer returns, now recedes winter's harshness.

lám [jam] liquéscit [likwɛstsit] et decréscit [dɛcrɛstsit] grándo, nix [niks] etcétera
Now melts and decreases hail, snow and the rest;
[ɛtsɛtɛra]; brúma fúgit [fugit], et lám [jam] súde [sude] Ver Ẽstátis [estatis] úbera;
winter flees, and now sinks spring summer's breast;

³ Not “stipate” as printed in the parts.

⁴ May be misprinted “it” in some chorus parts.

illi mens est mísera, qui nec vívit, nec lascívit [lastsivit] sub Ëstátis [estatis]
to this one the mind is unhappy who neither lives nor frolics under summer's
déterta [dekstera].
right hand.

Gloriántur et lètántur [letantur] in melle dulcédinis [dultsedinis], qui conántur,
They boast and rejoice in the honey of sweetness, who strive,
ut utántur prémio Cupídinis; símus jússu Cýpridis [tsipridis] gloriántes et
to enjoy the prize of Cupid; let us be by the order of Venus boasting and
letántes [letantəs] páres ésse Páridis.
rejoicing equals to be Paris.

7. FLORET SILVA NOBILIS

Flóret sílva nóbilis, flóribus et fóliis. Úbi est antíquus [antikwus] méus
amícus?
Blooms the forest noble, with flowers and foliage. Where is former my lover?

Hinc [hiŋk] equitávit [ekvitavit], éia [ɛja], quis me amábit?
From here he rode away, eja, who me will love?

nax min gəsələn ist mir we
Flóret sílva úndique, nah minə gesellen ist mir wê.
Blooms the forest on all sides, for my sweetheart is to me pain.

gruonət dər walt alenthalbən wa ist min gəsələ also lange dər ist geritən
Gruonet der walt allenthalben, wâ ist min geselle also lange? Der ist geriten
Grows green the forest everywhere, why is my sweetheart so long away? He has ridden

hinən o wi wər sol mix minən
hinnen, o wî, wer soll mich minnen?
Away, oh dear, who shall me love?

8. CHRAMER, GIP DIE VARWE MIR

kramər gip diə farwə mir diə min wəŋgəl røtə damit ix diə jüŋgən
Chramer, gip die varwe mir, die min wengel roete, damit ich die jungen
Shopkeeper, give the color to me, that my cheeks make red, so that I the young

man an ir danŋ dər minənliäbə nøtə
man an ir dank der minnenliebe noete.
man to you thanks the love needs.

minæt tugentlixæ man minæclixæ frōwæn minæ tuōt y hox gæmuōt undæ
Minnet, tugentliche man, minnecliche frouwen! minne tuot iu hoch gemuot
unde
Courting, graceful man, lovely women! love makes you highly noble and

lat yx in hoxæn eræn fōwæn
lat iuch in hohen eren schouwen.
lets you in high respect be seen.

wol dir wêrlt das du bist also frœyðænrixæ ix wil dir sin undertan
Wol dir, Werlt, daz du bist also freudenriche! ich will dir sin undertan
Good for you, world, that you are so rich in pleasures! I will you be obedient

durx dīn liābæ īmæ sīxærlīxæ
durch din liebe immer sicherliche.
through your love always certain.

sæxt mīx an jungæn man lat mīx y gæfalæn
Seht mich an, jungen man! lat mich iu gevallen!
Look me at, young man! let me you please!

9. REIE

swas hiō gat umbæ das sint alæs mægedæ diō wælant an man alæ disæn
Swaz hie gat umbe das sint alles megede, die wellent an man alle disen
What here goes around, those are all maidens, they want without a man all this

sumær gan a sla
sumer gan! Ah! Sla!
summer go!

kumæ kum gæselæ min ix enbite hartæ din
Chume, chum, geselle min, ih enbite harte din.
Come, come, sweetheart my, I await impatiently you.

susær rosænfærwær munt kum unt maxæ mīx gæsunt
Suzer rosenvarwer munt, chum uñ (uñ=und) mache mich gesunt.
Sweet rose-colored mouth, come and make me well.

10. WERE DIU WERLT ALLE MIN

wære dy wêrlt alæ min fōn dæm mæ run tsan dæn rin dæs wōlt ix mīx darbæn
Were diu werlt alle min von dem mere unze an den Rin, des wolt ih mih
darben,
Were the world all mine from the sea on to the Rhine, that would I from me give up

das dy kynægin fōn engēlant lēgæ an minæn armæn hēi
daz diu chünegin von Engellant lege an minen armen. Hei!

that the queen of England lie in my arms.

12. CIGNUS USTUS CANTAT

Miser, miser! módo níger [nigər] et ústus fórtiter!

Wretched, wretched! just now black and roasted very much!

13. EGO SUM ABBAS

wafna ha ha

Wafna!⁵ Ha ha!

14. IN TABERNA QUANDO SUMUS

In tabérna cuándo súmus, non curámus quid sit húmus [humus],

In the tavern when we are, not we are mindful of what would be the grave

sed ad lúdum properámus, cúí sémper insudámus. Quid agátur in tabérna úbi
but to gambling we rush, at which always we sweat. What is done in the tavern where

númmus est pincérna [pintɜrna], hoc [hɔk] est ópus ut querátur [kweratur], si quid
money is the cup-bearer, It is necessary to ask, if what

lóquar, audiátur.

I speak, let it be heard.

Quídam lúdunt, quídam bíbunt, quídam indisgréte vívunt. Sed in lúdo qui
Some Gamble, some drink, some indiscreetly live. But in the game who

morántur, ex his [his] quídam denudántur quídam íbi vestiúntur, quídam
die, from this some are stripped bare some there are clothed, some

sáccis [saktis] induúntur. Íbi núllus tímet mórtem sed pro Báculo [bakɔ]
in rags are dressed. There no one fears death but for Bacchus

míttunt sórtem.

they throw the dice.

Prímo pro nummáta víni, ex hac [hak] bíbunt libertíni; sémel

First for the payment of wine, from this drink the libertines; once again

bíbunt pro captívis, post hęc [hek] bíbunt ter pro vívis, quáter pro
they drink for the captives, after this they drink thrice for the living, four times for

Christiánis [kristjanis] cúntis [kunktis], quínquies [kwinkwjes] pro fidélibus defúntis
Christians all, five times for the faithful deceased,

⁵ Or [vafna], following the soloist.

[dɛfʊŋktis], séxies [sɛksɪɛs] pro soróribus vánís, sépties [sɛptsɪɛs] pro milítibus silvánis.
six times for the sisters vain, seven times for the outlaws of the forest.

Ócties [ɔktsɪɛs] pro frátribus pervérsis, nónies [nɔniɛs] pro monáchis [mɔnakis]
Eight times for the friars sinning, nine times for the monks

dispérsis, décies [dɛtsɪɛs] pro navigántibus, undécies [undɛtsɪɛs] pro discortántibus,
dispersed, ten times for the sailors, eleven times for those who are angry,

duodécies [dwɔdɛtsɪɛs] pro peniténtibus [penitɛntibus], tredécies [trɛdɛtsɪɛs] pro íter
twelve times for the repentant, thirteen times for a journey

agéntibus [agentibus]. Tam pro pápa quam pro rége [rɛgɛ] bíbunt ómnes
those making. Both for the Pope and alike for the king drink all

síne lége [lɛgɛ].
without moderation.

Bíbit héra [hɛra], bíbit hérus [hɛrus], bíbit míles, bíbit clérus,
Drinks the wife, drinks the husband, drinks the soldier, drinks the clergyman

bíbit ílle, bíbit ílla, bíbit sérvus cum ancílla [antsila], bíbit vélox [velɔks],
drinks he, drinks she, drinks the servant with the maidservant, drinks the energetic,

bíbit píger [piger] bíbit álbis, bíbit níger [niger], bíbit cónstans, bíbit
drinks the lazy, drinks the white, drinks the black, drinks the settled, drinks

vágus, bíbit rúdis, bíbit mágus. Bíbit páuper et ęgrótus [egrɔtus], bíbit
the roaming, drinks the rough, drinks the scholar. Drinks the poor and the sick, drinks

éxul [ɛksul] et ignótus [ignɔtus], bíbit púer, bíbit cánus, bíbit pręsul [presul]
the exile and the unknown, drinks the boy, drinks the old man, drinks the bishop

et decánus, bíbit sórór, bíbit fráter, bíbit ánus, bíbit máter,
and the deacon, drinks the sister, drinks the brother, drinks the old woman, drinks, the mother,

bíbit íste, bíbit ílle, bíbunt céntum [tsɛntum], bíbunt mília.
drinks she, drinks he, drink one hundred, drink one thousand.

Párum sexcéntę [sekstsɛnte] nummáte dúrant, cum immoderate bíbunt
Hardly six hundred of the coin suffices, when immoderately they drink

ómnes síne méta, quámvis bíbant ménte lęta [leta]; sic nos ródunt ómnes
all without limit although they drink with a mind happy; thus us slander all

géntes [gentəs], et sic érimus egéntes [egentəs]. Qui nos ródunt confundántur
people, and so we should be needy. Who us slander are confounded

et cum iústis non scribántur. Ió [jo]!
And with the just not are written. Jo!

15. AMOR VOLAT UNDIQUE

Ámor vólat úndique; cáptus est libídine. Júvenes, iuvénculę [juvɛŋkule]
Love flies on all sides; captured is desire. Young men, young girls

coniungúntur [konjunguntur] mérito. Fit res amaríssima.
are united deservedly. It becomes a fate most bitter.

18. CIRCA MEA PECTORA

Círca [tsirka] méa péctora múlta sunt suspíria.
Around my breasts many are the sighs.

Túi lúcent [lutsɛnt] óculi sícut sólís rádii.
Your glow eyes as if of the sun rays.

Véllet déus, véllent díi [dɪ], quod ménte propósui.
May grant God, may grant the gods, what in my mind I have proposed.

manda liēt manda liēt min gəsələ komət niēt
Manda liet, manda liet, min geselle chōmet niet.
my sweetheart comes not.

19. SI PUER CUM PUELLULA

Si púer cum puéllula moráretur in célula [tsɛlula], felix
If a boy with a girl should delay in a little room, happy (is)

coniúntio [konjunktɕio]. Amóre suscrescénte [suskrɛstsɛntɛ]. Avúlso⁶ prócul
the union. Love increasing. Removed after

tędio [tedio], fit lúdus ineffábilis mémbri, lacértis [latsɛrtis], lábiis.
Weariness, it becomes a pleasure inexpressible limbs, muscles, lips.

20. VENI, VENI, VENIAS

Véni, véni, vénias, ne me móri fácias [fatsias],
Come, come, may you come, not me to die make

⁶ Perhaps “propúlso” as is given in Judith Sebesta’s book.

hýrca [hirka], hýrce [hirtsɛ], nazáza [nadzadzɔ], trilirívos!

Púlchra tíbi fácies [fatsiɛs] oculórum ácies [atsiɛs], capillórum séries,
Beautiful your face of the eyes glance, of the hair braiding,

o quam clára spécies [spɛtsiɛs]! Rósa rubicúndior, lílio candídior, ómnibus
oh how lovely sight! Than a rose more rosy, than a lily more fair, than all

formósior, sémper in te glórior!
prettier, always in you I glory!

22. TEMPUS ES IOCUNDUM

Témpus est iocúndum, o vírgines [virginɛs], módo congaudéte [kɔŋgaʊdɛtɛ]
The season is pleasing, oh maidens, just now rejoice

vos iúvenes.
you youths.

Méa me confórtat promíssio, méa me depórtat negátio [nɛgatsiɔ].
My me delights yielding, my me displeases denial.

Témpore brumáli vir pátiens [patsiɛns] ánimo vernáli lascíviens [lastsiviɛns].
In the time of winter man quiet with the spirit of spring frolicking.

Méa mécum lúdit virgínitas [virginitas], méa me detrúdit simplícitas [simplitsitas].
My with me teases virginity, my me drives away innocence.

Véni, domicélla [dɔmitsɛla], cum gáudio, véni, véni, púlchra, iám péreo.
Come, little mistress, with joy, cone, cone, beauty, now I die.

Oh, oh, oh, tótus flóreo, iám amóre virgináli [virginali] tótus árdeo, nóvus amor est.
Oh, oh, oh, all I bloom, now with love of a girl all I burn, new love is.

... quo péreo.
... by which I die.

24. AVE FORMOSISSIMA

Áve formosíssima gémma [gɛma] pretiósa [prɛtsiɔsa], áve decus vírginum
[virginum],

Hail prettiest gem precious, hail glory of women,

vírgo gloriósa, áve múndi lúminar, áve múndi rósa,
maiden glorious, hail of the world light, hail of the world rose.

Blánziflor [blantsɪflɔr] et Héléna [hɛlɛna], Vénus generósa [ɣɛnɛɾɔsa]!
Blanziflor and Helena, Venus noble!

PRONUNCIATION GUIDE FOR SINGING THE GERMAN TEXT OF CARMINA BURANA

1. VOWELS (IPA symbols)

Front Vowels (from closed to open)

- [i] is pronounced like the "ee" in see; "closed i"
- [ɪ] is pronounced like the "i" in sit; "open i"
- [e] is pronounced like the "a" in say [seɪ] but without the final "y" [ɪ]; "closed e"
- [ɛ] is pronounced like the "e" in set; "open e"
- [a] is pronounced like the "a" in French or Italian la or the first part of the diphthong in English high [haɪ]; "front a"

Back Vowels (from closed to open)

- [u] is pronounced like the "oo" in soon; "closed u"
- [ʊ] is pronounced like the "u" in put; "open u"
- [o] is pronounced like the "o" in obey; it must not have a final [ʊ] glide; "closed o"
- [ɔ] is pronounced like the "aw" in saw; "open o"

Central Vowel

- [ə] is pronounced in conversation like the "a" in sofa; "schwa." In lyric German diction this vowel must be brought forward to the tongue position of [ɛ] and covered (rounded slightly); it is not rounded as far as for [œ].

Rounded Vowels

- [y] is pronounced like [i] with the lip-rounding of [u]; like French "ü"
- [ʏ] is pronounced like [ɪ] with the lip-rounding of [ʊ]; (does not exist in French)
- [ø] is pronounced like [e] with the lip-rounding of [o]; like French long "œ"
- [œ] is pronounced like [ɛ] with the lip-rounding of [ɔ]; like French short "œ"

2. GLIDE SYMBOL (IPA symbol)

- [j] is pronounced like the "y" in yes

3. DIPHTHONGS (as written in the Middle High German text)

ei = [ɛɪ], e.g., hei [hɛɪ]

ie = [iə], e.g., die [diə]

uo = [ʊɔ], e.g., tuot [tuɔt]

ou = [ɔʊ], e.g., frouwen [frɔʊwən]

eu = [œʏ], e.g., freudenriche [frœʏdənrixə]

oe = [ø] and iu = [y], i.e., they are not diphthongs, but the Middle High German symbols for long umlauted vowels; e.g., roete [røtə], diu [dy]

4. CONSONANTS (as written in the Middle High German text)

w = [w] not [v] as in modern German, e.g., werlt [wɛrlt]

v = [f], e.g., varwe [farwɛ]

r = [r] Even though "r" is pronounced with a uvular trill in conversational German, a flip or trill of the tip of the tongue that characterizes the "r" of Italian and Latin is always used in lyric German diction. (This sound is much like the British (Gilbert and Sullivan) pronunciation of: "veRy, veRy, meRRy.")

ng = [ŋg] like the "ng" in English finger, e.g., junger [juŋgər]

s = [s], never [z] as in modern German, e.g., geselle [gəsɛlə], e.g., seht [sɛxt]

ich = [ɪx] [x] is a raspy sound formed in the back of the mouth that is pronounced like the "ch" in Scottish loch; it is never pronounced [ɪç] as in Modern German, e.g., mich [mɪx]

h (initial) = [h], e.g., hinnen [hɪnən]

ch (initial) = [k], e.g., chramer [kramər]

h/ch (all other positions) = [x], e.g., hochen [hɔxən]

z (after a consonant) = [ts], e.g., unze [untsə]

z (all other positions) = [s], e.g., swaz [swas]

3. REFERENCES

McGee, Timothy J., with A.G. Rigg and David N. Klausner. *Singing Early Music: The Pronunciation of European Languages in the Late Middle Ages and Renaissance*, Indiana University Press, 1996: Chapter 15 by Peter Frenzel, pp. 219-242.

Austin, John. "Pronunciation of the Middle High German Sections of Carl Orff's *Carmina Burana*" in *Choral Journal*, September 1995, pp. 15-18.

PRONUNCIATION GUIDE FOR SINGING THE LATIN TEXT OF CARMINA BURANA

1. LATIN VOWELS [as in Italianate Latin]

- a is pronounced like the "a" in French or Italian la [a]; "front a"
E.g., luna [luna], vana [vana]
- e is pronounced like the "e" in set [ɛ]; "open e"
E.g., velut [velut], semper [sempɛr]
- i and y are pronounced like the "ee" in see [i]
E.g., vita [vita], Zephyrus [tsɛfirus]
- o is pronounced like the "aw" in saw [ɔ], "open o"
E.g., ludo [ludɔ], rota [rɔta]
- u is pronounced like the "oo" in soon [u]
E.g., luna [luna], tunc [tunɕ]
- u in the combination qu is pronounced [w]
E.g., que [kwɛ], quisquid [kwiskwid]

2. LATIN GLIDE

- i/j is pronounced like the "y" in yes [j]
E.g., iam [jam], io [jo]

3. LATIN CONSONANTS [as in Germanic Latin]

The consonants b, d, f, k, l, m, n, p, s, t and v are pronounced as in English.

- c before the vowels a (but not ae), o, u; before other consonants (including the combination initial ch); and at the end of a word is pronounced like the "k" in keep [k]
E.g., crescis [krɛstsis], nunc [nunɕ], chorus [kɔrus]
- c before the vowels e, i, y, ae, oe and eu is pronounced like the "ts" in cats [ts]
E.g., ocellis [ɔtsɛlis], centum [tsɛntum]
- g is always pronounced like the "g" in give [g]
E.g., tangite [tanɕite], legimus [lɛgimus]
- gn is pronounced as g+n
E.g., ignotus [ignɔtus]
- n followed by c or g is pronounced like the "ng" in sing [ŋ]
E.g., tangite [tanɕite], plango [planɕɔ]
- h is pronounced [h] except in the word mihi/michi where it is pronounced [k]
E.g., hora [hɔra], mihi/michi [miki]
- ph is pronounced [f]
E.g., Zephyrus [tsɛfirus]
- q is pronounced [k]
E.g., que [kwɛ], quisquid [kwiskwid]

r	is rolled when it occurs at the beginning of a word; it is lightly flipped when it occurs in the middle or at the end of a word. (The non-initial sound is much like the British, Gilbert and Sullivan pronunciation of: "veRy, veRy, meRRy.") E.g., rota [rɔta], dorsum [dɔrsum], semper [sɛmpɐr]
s	between vowels is pronounced like the "s" in sing [s], never like the "z" in zebra [z] E.g., dulcisono [dultsisonɔ], fusus [fusus]
sc	after a vowel and before the vowels e, i, y, ae, oe and eu is pronounced [sts] E.g., crescis [crɛstsis], lascivit [lastsivit]
sc	initial, is pronounced [ts] E.g., sceleris [tsɛlɛris]
th	is pronounced [t] E.g., Cytharizat [tsitaritsat]
ti	when followed by a vowel and preceded by any letter except s, t or x is pronounced [tsi] E.g., patiens [patsiɛns], octies [ɔktsiɛs]
ti	when followed by a vowel and preceded by s, t or x or when followed by a consonant is pronounced [ti] E.g., salutis [salutis]
x	is pronounced [ks] E.g., axe [aksɛ], rex [rɛks]
z	is pronounced [ts] E.g. Zephrus [tsɛfirus]

4. REFERENCES

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