

[illegible]

## Appendix 2 - Symbols

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$\Psi$	<b>Phylogeny</b> The (possibly unknown) relationship between entities resulting from an evolutionary tree
$\tau$	<b>Tree topology</b> Information on the relationships of the languages
$\mu$	<b>Substitution rate</b> the rate at which the language changes
$N$	<b>Sampled languages</b> The number of languages in a sample
$\nu$	<b>Expected events</b> The expected number of evolutionary events that occurred between two languages
$t$	<b>Past times</b> Times of branch events
$B$	<b>Possible rooted trees</b>
$A$	<b>Segmental alignment</b> Constructed by combining the word segment information for the languages of interest with information on the homology of the segments
$S$	<b>Segmental information</b> Information on the homology of the segments
$s$	<b>Segment</b> Linguistic segment
$s_i$	<b>ith segment</b>
$H$	<b>Homology map</b> The map describing the alignment of the segments
$Q$	<b>Rate Matrix</b>
$\beta$	<b>Rate matrix scaling factor</b> Scales the rate matrix such that the average rate of segmental substitution is one
$P$	<b>Probability</b> The probability the process ends in certain state
$P$	<b>Marginal Likelihood</b>
$\pi$	<b>Equilibrium distribution</b>
$\lambda$	<b>Rate of segment insertion</b>
$\mu$	<b>Rate of segment deletion</b>

## Appendix 2 - Symbols

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$n$	<b>Word length</b> Number of segments in a word
$r$	<b>Rate parameter</b>
$\theta$	<b>Rate parameters</b> Parameters associated with the rate matrix
$\theta'$	<b>Proposal</b> New value proposal
$q$	<b>Proposal probability</b> Probability of new proposal
$u$	<b>Random number</b>
$R$	<b>Acceptance probability</b> Probability of accepting a proposed value
$M$	<b>Model</b> Mathematical model for linguistic parameters
$BF$	<b>Bayes Factor</b> A numerical factor related to the quality of the model fit
$X$	<b>Unknown</b>

### Appendix 3 - Segments used in the word list

Char.	Segment	Words containing this segment
0	e	<p>ego:, ew, jew, usted, vose, vose, voste, embra, femmina, femev, femjv, fembra, femeje, mulierem, muxer, moλλe, muλλe, muλλer, muλλe, mujere, done, hominem, ombre, infantem, infante, fante, nenē, nen, epuz, esposa, mulier, muxer, moλλe, muλλe, muλλer, muλλe, mujere, epu, esposo, matrem, mev, madre, madre, mev, patre, pev, padre, padre, nema:l, noma:je, piskem, peθ, peffe, pev, pevte, awem, abe, awikellum, use:l, passerem, passero, pasare, peduklus, pedoli, padukje, serpentem, sekpā, serpjente, serpente, sekpēfi, sərpen, farpe, serpens, sjerpe, serpe, serp, farpe, wermem, vev, berme, verme, vevmi, vermi, vjerme, arborem, albero, arbore, selba, selva, selve, flo:rem, fjo:re, floare, penna, pena, penv, pen, pene, pelo, pelu, kabejo, kapello, kabelu, keβelu, kaβeθa, kavettsa, kabese, keβese, testa, testā, teste, ne, nariife, gōle, el, ale, so:lem, sole, soare, soreli, lune, etwal, estreja, stella, istrelv, iftrelv, stele, age, ploje, plqaje, flu:men, fjume, xivjev, mare, mev, sa:lem, sale, se, sare, terra, tev, tjera, tev, tjere, kali:ginem, kalidzine, nebula, njebla, nebbja, newlā, negurā, tene:braj, tenebre, tene:bra:s, tenebv, tinjeblas, tenebre, tenebrās, fyme, fumate, θjelo, tfer, wentum, bjento, ben, gelu:, jelo, dger, fwego, no:men, nome, nume, no:minem, nombre, lengwa, bibere, beber, bere, bebev, biβer, bevi, komedere, komer, kome, kumer, manduka:re, māze, mandgare, mordre:re, morðer, mordre:re, movdex, murðer, morsika:re, morsikare, murseka, su:gere, syse, suðe, konspuere, kōspyre, eskupir, sputere, esputar, sputare, skire, sapere, saber, sabev, seber, kogno:skere, konoθer, konoffere, konesev, kupiser, kunqaste, ko:gita:re, kvide, kodzitare, kuðeta, pena:re, pāse, pensar, pensare, pēse, peṇsa:, time:re, temer, temere, temev, timer, temā, temi, teme, tremere, tremer, tremare, tremev, trimer, dormi:re, dormire, wi:were, vivere, vivev, viver, morire, moxev, muker, neka:re, nwaje, neka, anegar, annegare, tpe, tuwe, maktare, mate, okki:dere, uttfidere, utfide, pugnare, punpare, battuere, battere, batev, beter, bate, kaptiare, fase, kattfare, pulsare, puse, pulsare, seka:re, sje, segar, segare, segav, sea: kurtare, ekskurtare, ekurte, skortare, talia:re, taje, taλλa:re, di:widere, dividere, divide, skindere, sēde, findere, findere, ender, fendere, fēdev, fēder, parti:re, partire, se:para:re, sōnve, separar, separare, separav, separa:, separa, pungere, punðere, punðe, jugula:re, zygyle, jugula:re, ra:dere, raer, radere, kav, kev, rade, kaze, rasare, fodere, kaware, kavare, çavle, ekskaware, eskabar, skavare, nata:re, nwotare, naviga:re, naze, nabegar, navigare, wolare, vole, volare, vole, zvolare, fəmine, kamminare, tfinime, maxse, mergere, merðere, merðe, ambita:re, andare, wenire, benir, venire, veni, ekstendere, etādv, ekstender, estendere, istēdev, iftēder, æstendrā, ekstinde, jake:re, zeziv, jaθer, dzaife:re, zpev, zpev, dger, jesi, sedere, ser, sedere, sev, sedga, sedentare, sentar, senta:, sta:re, estar, stare, levare, lōve, jebar, levare, levav, leva:, altia:re, ose, altsare, torna:re, tūne, tornare, tur:ne, gyra:re, ziv, dger, vire, virare, torkw:re, torθer, tōrfere, turser, tqartfe, kadere, kaer, kadere, tjade, tōbe, tume, tene:re, tener, tenere, tev, ter, tsine, segurar, eksprimere, epēdv, ekspremir, spremere, ifpramev, ifpramer, æspremā, esprimi, skreme, serrere, sera:, seka, serare, seve, θerar, serrare, seve, appetora:re, apretar, stringere, etvēdv, estrepir, strindgere, stringe, strindge, frika:re, fveje, fregar, fregar, frea, freka, frika:re, fvote, frettare, laware, lave, lavare, tergere, terðere, ekstergere, estarsir, fterðe, eksuka:re, esqije, enxugar, affugare, suwe, limpidare, tirare, tike, tirare, tire, puse, trahere, trarre, traze, trezer, traðe, impingere, impindgere, impindge, jakta:re, zote, efar, dgettare, dgete, lankeare, lāse, lanfare, e:runka:re, arrontfare, liga:re, lie, legar, legare, lea:, lega, apta:re, ko:nsuere, koser, kufire, kuzer, qase, komputa:re, kōte, kontare, e:numera:re, enumeve, enumerar, enumerare, enumera, dikere, deθir, dire, dizer, zife, eksp</p> <p>o:nere, sporre, spune, kanta:re, fāte, kantare, tfaite, lu:dere, joka:re, zve, doker, dzuwe, flu:ktua:re, flyktpe, fluttuare, fluitare, fluitare, fluere, flye, fluire, ko:la:re, kule, kolare, kole, ekscurrere, eskurir, skorrere, ifkovv, ifkurer, skurðe, kurrere, korer, korrere, kovv, kuber, kurðe, gela:re, zole, elar, dgelare, dale, glakia:re, glase, gjatfare, inglakia:re, ingetsa, bōyle, brufare, bōule, kremare, kvame, kema:, kremare, kejmare, kejmave, flamma:re, flābe, flamear, fjammare, arde:re, arder, ardere, avdev, vder, arde, flagra:re, flagve, flagrare, inkendere, ēsādje, enθender, infendjare, isendjare, æsendrā, infindze, ustula:re, ustolare, alter, grandem, grande, grande, majjorem, mare, le, grabe, greve, grew, grew, lerdo, pesaðo, pesante, pezadu, pezant, pekeno, pekenu, pikenu, brewis, brebe, breve, brew, bref, etkwa, estrefo, stretto, menudo, delyaðo, delikato, dewgadu, subti:lem, sottile, subtsire, dekstrum, djestro, destrā, deretfo, drept, ruber, vermikulul, bermexo, vermiλλo, vevmevu, rubeus, rubeo, ruðe, wiridem, vev, berde, verde, verdi, verde, due, tres, tre, tref, kwi:nkwe, tfinjkw, ekkumhi:k, kwiem, kjen, tfine, ke, tfe, kome, tjemut, nek, ne, et, e</p>

### Appendix 3 - Segments used in the word list

1	g	ego:, gœl, gø:j, agwə, lago, lagu, ka:li:ginem, negurə, gelu:, fwego, fogu, lāg, leŋgwa, lingwa, liḡwə, musəga, musəgar, su:gere, sugaḡ, sugar, kogno:skere, ko:gita:re, nəga, anegar, annegare, segaḡ, pungere, jugula:re, zygye, nabegar, nəbəga, naviga, segurar, siguraḡ, fregar, frəga, iʃfriḡar, tergere, ekstergere, enxugar, aʃʃugare, ɛʃugar, əʃuga, liga:re, legar, legare, zogəḡ, zuga, flugtwar, gela:re, glakia:re, glase, gʃatʃjare, gləsa, inglakia:re, flagra:re, flagwə, flagrar, flagrare, flagrar, awgū, aʃgū, əlgu, gḡā, grande, grande, grēḡi, grēdi, longum, lungo, lōgu, largo, laḡu, largu, grawis, gḡav, grabe, grēve, gravi, gravi, grew, angustus, angosto, angusto, dewgadu
2	o:	ego:, no:s, no:i, no:, wo:s, vo:i, vo:, homo:, spo:s, o:b, flo:rem, fjo:re, flo:r, so:lem, no:men, no:me, no:minem, kogno:skere, ko:gitare, ko:nsuere, ekspo:nere, ko:la:re, to:tus, po:k, duo:s, k <sup>w</sup> ando:, k <sup>w</sup> o:modo, no:n
3	ʒ	ʒə, ʒə, pluʒə, kalizēj, kəlizēj, ʒel, ʒel, mǝʒe, mēʒaḡ, mēʒar, mənʒa, kuʒitaḡ, kuʒitar, pūʒiḡ, pūʒir, zygye, naʒe, zeziḡ, ʒəzeḡ, ʒəzer, ʒawrə, ʒiḡe, ʒirar, ʒira, əʃtriʒir, əʃtriʒir, əstəʒi, ʒəte, ʒejtar, ʒwe, zogəḡ, zuʒar, zuga, zuka, ʒəle, ʒilar, ʒəla, inʃfindʒe, laʒʒ, du:ʒe:, ʒuʒ
4	ə	ʒə, dənə, dɔamnə, ɔmə, əspoʒə, mərit, əspɔs, marə, parə, tatə, nəmajə, pasəre, pədukje, sərpen, abrə, ɔqadə, plomə, pənə, panə, pər, ʃəvə, kəbɛʌ, ʃəvɛ, testə, bokə, bukə, gurə, alə, ʌunə, lunə, əstɛl, ajɣwə, apə, pluʒə, terə, tsarə, newlə, negurə, tənɛbrəs, ʃɛaʃɛ, limbə, bɛwɾə, mənʒa, musəga, musəgar, musəʒa, əskupi, səʃɛ, kunɛʃə, pənsa, pəsa, temə, biwɾə, nəga, məta, batrə, kəsa, səʒa, təʌa, təja, fɛndrə, pərti, səvɛ, səpəra, rawrə, rəza, rəsa, kəba, nəda, nəbəga, ʃəmine, kəmina, vənix, bəni, əstendrə, ʒawrə, zəʃʒə, əsta, ləvə, ʌəba, əlsa, tɔrsə, kawrə, kəɟə, tənix, təni, iʃprəmeḡ, iʃprəmer, əspremə, sərar, səra, əʃtriʒir, əʃtriʒir, əstreɲə, frəga, frəsa, əstəʒi, əʃuga, trɛwɾə, əmpɛɲə, ʒəte, ʌənsa, kənta, əskorə, korə, ʒəle, ʒəla, gləsa, krəma, ənsendrə, əlgu, altrə, amplə, pəzā, pəzat, pəti, pətit, əstɛt, mənɣ, mənut, mərunt, dəlikat, destrə, bərmɛʌ, dowə, kwatrə, əʌa
5	j	jo, kabejo, estreja, jubja, jelo, jaθer, jɛbar, aja
6	o	jo, io, jo, nos, no, bos, vof, vos, vose, veste, moʌʌe, domina, doʒa, donɛ, hominem, ombre, omɛj, om, homo:, wəmo, nipo, nino, sponsa, esposa, ispoza, iʃpoʒə, moʌʌe, mariðo, marito, sponsus, esposo, spoʒo, ispozu, iʃpozu, sokius, sɔʃfo, sots, omaj, wazo, utʃello, paxaro, passero, pjoxo, pidəkkjo, pioʌu, poʌ, pedoli, arborem, arɔol, albero, aḡvori, arbore, palo, fruto, frutto, flor, floḡ, kola, koda, plomə, pelo, kabejo, kapello, naso, na:so, boka, bokka, bokɛ, bokə, gola, golə, sol, sole, solikulus, soreli, o, pjodɟa, ploje, rio, lago, lago, θjelo, ʃɛlo, bjento, vento, jelo, ɟelo, umo, fumo, fokum, fwego, fwəko, fogu, foʒu, fok, aʒo, anno, nomi, nomi, nombre, komedere, komer, kome, morde:re, moḡdɛḡ, morðer, moḡdɛḡ, morsika:re, moskar, morsikare, konspuere, kogno:skere, konəθer, konəʃfere, kəpəsɛḡ, kəpəsi, koɟitare, dormi:re, dormir, dormire, doḡmiḡ, dormi, morir, morire, moḡɛḡ, okki:dere, kortar, koḡtaḡ, skortare, kosaɟ, fodere, nwoʒare, wolare, vole, bolar, volare, voaḡ, zvolare, zvola:, ose, torna:re, tornar, tornare, toḡnaḡ, torna:, toḡk <sup>w</sup> :ere, toḡθer, appektora:re, fḡote, froʒar, arronʃare, koser, komputa:re, kontar, kontare, konta:, sporre, joʌa:re, ɟoʌare, zogəḡ, kolar, kolare, koaḡ, skorrere, iʃkoḡɛḡ, əskorə, skori:, korer, korrere, koḡɛḡ, korə, kori, ustolare, omnes, oʒpi, todo, tutto, todɣ, toðu, tot, muʃfo, molto, mol, molc, tanto, okɛ, alguno, alkuno, poko, pəko, powku, otɛ, otro, altro, owtru, mapo, mapo, majjore, longum, longo, lungo, ʌoŋ, larɣo, largo, lato, anʃfo, ampjo, lerdo, lordo, pesaðo, pekeɲo, pittʃino, pikkolo, korto, korto, angosto, angusto, estrefjo, stretto, menudo, minuto, delɣaðo, delikato, sottile, djestro, destro, deretʃfo, rubro, roxo, rosso, roʃɔ, roʃu, ros, roʃu, bermexo, vermiʌʌo, rubjo, rəbbjo, rubeo, uno, dos, dowə, k <sup>w</sup> attwor, kwatro, kwattro, θinko, kwando, k <sup>w</sup> o:modo, komo, kome, komu, no, non

### Appendix 3 - Segments used in the word list

7	i	io, noi, voi, femina, femmina, femine, mulierem, domina, hominem, infantem, infante, ifēfi, nipo, nino, ispoza, mulier, maži, mariđo, marito, maridu, meriđu, marit, mērit, ispozu, sokius, mari, pari, animalia, alimapa, be:stia, biffa, bife, bis, piskem, pejfi, avi, awikellum, pidakkjo, piođu, pedoli, seǵpēfi, sarpint, veǵmi, aǵvori, silwa, fǵqi, pilus, kapillus, fivja, kapitia, nariθ, nariǵe, naris, nēriǵ, solikulus, soreli, istrelē, pluwia, plqi, flumi, rio, ǵiw, ǵiu, riw, ri:paria, ǵivjeǵ, rivi:ǵ, ka:li:ginem, kalina, kaliđǵine, kalizēǵ, kēlizēǵ, tinjeblas, kajkia, vint, nomi, no:minem, ling <sup>w</sup> a, lingwa, limba, bibere, bevi, mwardi, morsika:re, morsikare, kuspiǵ, kuǵpir, eskupir, əskupi, fti, kinǵh, koposi, ko:gitare, kǵide, kwidar, kođitare, kuzitaǵ, kuzitar, timere, temi, trima:ǵ, dǵǵmiǵ, dormir, dormire, doǵmiǵ, durmir, durmi, dwaǵmi, dormi, vivǵ, bibir, vivere, viveǵ, viver, biwra, vivi, via, muǵiǵ, morir, morire, muri, mǵri, muri, tu:tari, əksiǵ, utǵidere, uksi, uǵide, batiǵ, bati, kaptia:re, taliare, di:widere, dibidir, dividere, đividiđǵi, dividiđir, dibidi, dividi, divide, skindere, findere, findere, paǵtiǵ, partir, partire, paǵfiǵ, pērtir, pērti, pǵ:rti, pǵziǵ, pǵzir, puni, fwiǵ, iǵkevaǵ, iǵkevar, naviga:re, navigare, naviga:ǵ, naviga, fǵmine, kaminaǵ, kamminare, kēmiǵaǵ, kēmiǵar, kēmina, fimine, camina:ǵ, vǵniǵ, benir, venire, viǵ, vir, bǵni, vini, viǵi, veni, istēdeǵ, iǵtēder, ekstinde, zeziǵ, jesi, altiare, ziǵe, xiraǵ, đirare, ziraǵ, zira, đira:ǵ, viǵe, biraǵ, virare, virar, bira, kēir, tǵniǵ, tǵni, tini, tinji, tsine, eksprimere, ekspremir, iǵpǵrēmeǵ, iǵpǵrēmer, esprimi, stringere, estēpēir, strindǵere, əǵtriziǵ, əǵtriziǵ, stringe, frika:re, frika:re, frisaǵ, estarsir, əstǵrzi, esqije, limpida:re, limpjar, tira:re, tiǵe, tiraǵ, tirare, fira, tira, tire, tira:ǵ, impingere, impindǵere, impindǵe, xita, ligare, lie, liǵa, kuǵfire, kuzi, kuzi, diǵ, deθir, dire, dizeǵ, di, ziǵe, ludir, fluitare, fluitare, fluir, fluire, flwiǵ, flwir, flui, eskurir, iǵkoǵeǵ, iǵkurer, kuǵiǵ, kori, glakia:re, inglakia:re, inkendere, inǵendjare, inǵindǵe, oǵpi, altri, alius, grēđǵi, grawis, gravi, gravi, pittitus, pēti, pētit, piti, pittinus, pitfino, putsin, pitulus, pikkolo, pitful, brewis, brevi, striktus, istrejtǵ, minu:tus, minuto, miudu, miudu, minu, minu:t, de:lika:tus, delikato, dēlikat, sutil, sottile, suǵiǵ, subtil, su:ti, subsire, direjte, direjte, vermikulus, vermiđu, wiridem, kwatri, θinko, finkwe, sinǵ, finǵ, finǵ, isi, aki, kwi, ǵki, illa:k, ibi, vi, ai, ei, k <sup>w</sup> is, ki, kwi, fine, k <sup>w</sup> id, ni, i, fi
8	w	ew, jew, wo:s, wǵmo, pwasō, awem, aw, awikellum, wazo, wermem, silwa, seǵwa, paw, kawde, kǵw, pwal, sǵw, etwal, aǵwa, akkwa, agǵwē, aǵwǵ, əw, pluwia, riwus, ǵiw, riw, riw, saw, nēvwē, newlǵ, seǵw, wentum, fwego, fwǵko, lengwa, lingwa, ligwē, bǵwǵ, bēwra, mwardi, sawǵw, kwidar, dwaǵmi, wi:were, biwra, nwaje, tuwe, di:widere, pwēđǵ, rawra, fwiǵ, kawa:re, ekskaware, nwotare, wola:re, vǵwǵ, wenire, zawra, swǵw, swǵw, kawra, laware, suwe, trēwra, zǵw, đǵuwe, flugtwar, flwiǵ, flwir, awǵū, powku, owtru, aw, grawis, grew, grew, brewis, brew, etǵwa, dewgadu, suǵiǵ, dǵwat, wiridem, dowǵ, tǵwǵ, k <sup>w</sup> attwor, kwatro, kwattro, kwatru, kwatra, kwat, kwatri, finkwe, kwi, kwi, kwa, kwe:ǵ, kwando, kwēđu, kwan, kwand, kwant
9	ǵ	zǵ, nǵjs, nǵf, vǵjs, vǵse, dǵnna, dǵnǵ, dǵne, əm, əmēǵ, əmǵ, əm, wǵmo, spǵza, əspǵzǵ, spǵzo, əspǵs, sǵfǵo, pidakkjo, flǵ, kǵw, kǵde, plǵm, bǵk, bǵce, gǵle, sǵw, sǵł, sǵł, sǵł, sǵł, njǵly, fwǵko, fǵk, nǵm, nǵn, mǵrdere, kǵnetǵ, kinǵh, dǵǵmiǵ, mǵri, əksiǵ, vǵle, tǵđǵ, tǵtfere, tǵrsǵ, lǵji, kǵle, tǵ, pǵko, pǵk, rǵs, rǵbbjo, rǵf, kǵmǵ, kǵm, kǵmē
10	đ	đǵi, pjodđǵa, kaliđǵine, đelo, đer, mandǵare, suđǵe, kođitare, kuđǵeta, đividiđǵi, punđǵere, punđǵe, nēđǵi, mēđǵere, merđǵe, đǵafē:re, đere, đirare, đira:ǵ, strindǵere, strindǵe, tēđǵere, fterđǵe, trađǵe, impindǵere, impindǵe, đettare, đēte, đǵokare, đǵuwe, đǵuja:ǵ, skurđǵe, kurđǵe, đelare, đale, isendǵiar, grēđǵi, ruđǵe
11	ǵ	đǵi, na:ris, isendǵiar
12	j	jo, jew, nǵjs, vǵjs, femjē, femeje, mujere, mujere, omaj, nēmaje, uǵjel, pjoxo, pidakkjo, pju, pǵdukje, serpjente, sǵǵpē, sjerpe, vjer, vjer, vjerme, frujt, fjo:re, pjuma, fivja, gǵj, jubja, pjodđǵa, ploje, plǵaje, fjume, ǵivjeǵ, tjera, tjere, njǵly, njebla, nebbja, tinjeblas, sjel, θjelo, bjento, skujpa, kujda, sje, taje, teji, taja:ǵ, tǵja, jugula:re, jugula:re, jake:re, jesi, fjade, tinji, esqije, suja:ǵ, limpjar, jaktare, lǵji, jǵka:re, đǵuja:ǵ, gǵatfjare, fǵammare, ēsǵđǵe, inǵendjare, isēđǵar, majjorem, ampjo, djestro, rubjo, rǵbbjo, kjen

### Appendix 3 - Segments used in the word list

13	n	no:s, nu, nos, no:i, nojs, nof, no, no:, noj, fe:mina, femmina, femine, domina, donna, done, dona, done, doamnə, hominem, infantem, infante, fante, nipo, nino, nenē, nen, sponsa, sponsus, animalia, nema:l, nəmaje, serpentem, serpente, sərpen, sarpiat, serpens, penna, pen, pene, pen, pene, panə, na:sus, ne, naso, na:so, nas, na:s, nariθ, nariŋe, naris, neriŋ, na:ris, lu:na, lyn, luna, lunə, lən, lune, lunə, flu:men, ka:li:ginem, kalina, kaliŋine, nebula, njoly, njebla, nebbja, nenvwə, newlə, negurə, tene:braj, tene:bre, tene:bra:s, tenebʁ, tinjeblas, tene:bre, tenebrəs, wentum, bjento, vento, ben, vint, vint, annum, anno, ɛnu, an, no:men, nō, no:me, nomi, nomi, nōm, nō, nōj, nume, no:minem, nombre, ling <sup>w</sup> a, lingwa, lenge, manduka:re, mandukar, mandzare, minka, konspuere, kogno:skere, kōnetʁ, konoθer, konoffere, kunefə, kinoh, kunqaste, pēnsa:re, pensar, pensare, pēnsa, neka:re, nwaje, nəga, neka, anegar, annegare, pugnare, skindere, findere, findere, ender, fēndere, fēndrə, pungere, punŋere, punŋe, nata:re, nadar, nadar, nwotare, nadaʁ, nəðar, nəda, nada, navigare, naze, nabegar, navigare, naviyax, nəviyar, nəbəga, nəŋi, naviga:, naviga, fəmine, kaminar, kamminare, kəmina, fimine, camina:, andar, andare, wenire, vənix, benir, venire, bəni, vini, veni, ekstendere, ekstender, estendere, əstendrə, ekstinde, sedenta:re, sentar, senta:, torna:re, tuʁne, tornar, tornare, toʁnar, turnar, turna, turne, torna:, turna, tene:re, tənix, tener, tenere, təni, tini, tinji, tsine, stringere, stringere, stringe, strēngi:, strinŋe, enxugar, impingere, impinŋere, impinŋe, lankeare, lanθar, lanŋare, lənsa, lancit, lanŋa:, ɛrunka:re, arankar, arronŋare, kōnsuere, kontar, kontare, konta:, ɛnumera:re, enumere, enumerar, enumerare, enumera, numara, ekspōnere, spune, kanta:re, kantar, kantare, kənta, cantar, kinta, inglakiare, ingetsa, inkendere, enθender, inŋendjare, isendjrar, ənsendrə, inŋindze, omne:s, tantus, tanto, tant, tanc, alguno, alkuno, magnum, grandem, grande, grande, gran, grant, longum, longo, lungo, lunk, lung, anŋo, pe:sant, pesante, pezant, pittinus, pitŋino, pekenu, pikenu, putsin, angustus, angosto, angusto, minutus, mən, menudo, minuto, mənut, minu, minut, mərunt, u:num, uno, un, unu, k <sup>w</sup> i:nk <sup>w</sup> e, θinko, fŋinŋ, kjen, fŋine, k <sup>w</sup> ando:, kwando, kwan, kwand, kwant, kind, no:n, nō, no, non, nəw, nu, nek, ni, ne, nəj, nəj, nə
14	s	no:s, nos, nojs, wo:s, bos, vojs, bus, vos, usted, vose, vose, voste, sponsa, esposa, spōza, ispoza, əspōzə, maritus, sponsus, esposo, spōzo, ispozu, əspōs, spo:s, sokius, sōfo, sots, be:stia, bis, piskem, pēs, pwasō, useł, passerem, passero, paseru, pasere, peduklus, serpentem, səpā, serpjente, serpente, səpēŋi, sirpēti, sərpen, sjəpē, sarpiat, serpens, sjerpe, serpe, serp, silwa, selba, selva, səwva, səlvə, səlve, pa:lus, fruktus, pilus, kapillus, kavettsa, kabesə, kəbesə, testa, testa, testə, testə, fēs, teste, na:sus, naso, na:so, nas, na:s, naris, na:ris, so:lem, sol, sole, sōw, sōl, sōl, sōl, sōare, solikulus, sōlēj, soreli, ste:lla, estreja, stella, istrele, əstəl, stō:l, stele, stēa, ri:wus, sa:lem, səl, sal, sale, saw, se, sa:l, sare, tene:bra:s, tinjeblas, tenebrəs, fumasə, sjel, səw, səl, si:ʁ, fu:mus, morsika:re, moskar, morsikare, musəga, musəgar, musəya, murseka, su:gere, syse, sugax, sugar, sysi, suŋe, konspuere, kōspye, kuspix, eskupir, əskupi, skujpa, sputere, esputar, sputare, spudax, skiire, sapere, savwar, saber, sabex, səber, səbe, savə:ʁ, save:, kogno:skere, kōnesə, kupiser, kōposi, pēnsa:re, pāse, pensar, pensare, pēsax, pēsar, pēnsa, pēse, pēnsa:, pēsa, əksiʁ, uksi, fase, kasax, kəsar, kəsa, fesi:, pulsare, puse, pulsare, pulsa:, pulsa, sekare, sje, segar, segare, segax, siyar, səya, sea:, ekskurtare, skortare, skurta, skurta, skindere, sēde, se:parare, səvə, separar, separare, separax, sipərar, səpəra, separax, separa, rasar, rasare, rasa:, raskar, rəska, kosał, kusar, ekskaware, eskabar, skavare, ekstendere, ekstender, estendere, istēdeʁ, əstendrə, ekstinde, jesi, sedere, swax, ser, sedere, səx, sedenta:re, sentar, sētar, senta:, stare, estar, stare, əsta, ɛs, sta:, sta, ose, əlsa, əlsar, əlsa, hō:si, turser, tōrsə, segurar, sigurar, siyurar, esprimere, ekspremir, spremere, əsprema, esprimi, skreme, serrare, serar, səra, sərar, səra, serare, səre, serrare, siʁar, sere, stringere, estrepir, strinŋere, əstreŋə, stringe, strēngi:, strinŋe, frisar, frəsa, ekstergere, estarsir, əstərzi, eksu:ka:re, esqije, suwe, suja, uska, puse, pu:si:, pulsa:, lāse, lēsa, lēsar, lənsa, kōnsuere, koser, qōase, ekspōnere, sporre, spune, ekskurrere, eskurir, skorrere, əskorə, skori:, skurŋe, glase, gləsa, ɛsəŋje, isendjrar, isēdjar, ənsendrə, ustulare, ustolare, ustura, omne:s, to:tus, multus, tantus, paʁkus, alius, grawis, lurdus, pe:sant, pesađo, pesante, pittitus, pittinus, pitulus, kurtus, brewis, angustus, angosto, angusto, ingust, striktus, estreŋo, stretto, istrejtə, əstret, stəx, strət, strimt, minutus, de:lika:tus, subtilē, sutil, sottile, sufŋw, suptil, sutil, subtsire, dekstrum, djestro, dēstro, destrə, destrə, direktus, destra, russus, rosso, ros, rəs, vermikulus, rubeus, duo:s, dos, dojs, duas, duəs, tre:s, tres, tres, sēk, siku, sinŋ, isi, k <sup>w</sup> is, si:k

### Appendix 3 - Segments used in the word list

15	u	nu, vu, bus, tu, usted, mulierem, muxer, му́лєк, му́лєк, му́лє, muir, mujere, epuz, mulier, muxer, му́лєк, му́лєк, му́лє, muir, mujere, maritus, maridu, meridu, sponsus, epu, ispozu, ifpozu, sokius, awikellum, utfello, useł, utfjel, paseru, peduklus, pu, piołu, pju, pødukje, arvuri, arbul, pølus, fruktus, fruto, frutto, frute, frujt, frut, frukt, kua, pluma, pjuma, plumę, pilus, pelu, pilu, kapillus, kabelu, kəbelu, nəsus, bukka, buf, bukə, gula, gurə, solikulus, luna, lue, lunə, lune, lunə, pluwia, jubja, juvə, pluzə, fjume, flumi, flumi, flum, ri:wus, xiu, lakum, lagu, layu, nebula, negurə, fumata, fuma:ta, fumase, fumate, kajlum, wentum, vētu, fu:mus, umo, fumo, fumu, fum, fokum, fogu, foyu, annum, enu, nume, kumer, manduka:re, mandukar, murðer, musəga, musəgar, musəya, murseka, sugax, sugar, cuca, suðge, konspuere, kuspiř, kufpir, eskupir, əskupi, skuja, sputere, sputar, sputare, spuda:, kupiser, kunefə, kunqaste, kuzitař, kuzitar, kujda, kuðeta, durmir, durmi, durmi, muřix, muxer, muri, muri, muri, tuwe, utfidere, uksi, ufide, pugna:re, pupar, puppare, pupa, battuere, pulsa:re, puse, puxar, pulsare, pufax, pufar, pulsa:, pulsa, kurtare, kurtar, ekskurtare, ekurte, skurtar, skurta, pungere, punðgere, pupi, punðge, jugula:re, jugula:re, kusar, bula, zbura, lua, tuřne, turnar, turna, turna, turser, tumber, tumba, tume, segurar, sigurax, siyurar, enxugar, affugare, efugar, efuyar, əfuga, suwe, suja:, uska, puse, pulsa:, e:runka:re, aruřka, ko:nsuere, kudř, kuřire, kuzer, kuzi, kuzi, komputa:re, kumta, e:numera:re, enumere, enumerar, enumerare, enumera, numara, spune, ludir, xugar, zuřar, zuga, đuwe, đuja:, zuka, fluktua:re, flugtwar, fluttuare, flutuax, flutuar, fluktua, fluctua, fluita:re, fluitare, fluere, fluir, fluire, flui, kule, kuar, kuła, ekskurrere, eskurir, ifkurer, skurðge, kurrere, kuřix, kuřer, kurðge, bruřfare, bruza:, ustula:re, ustolare, ustura, to:tus, tu, tutto, todū, dut, multus, mu, muřfo, mūřtu, mult, tantus, tētu, tētu, alguno, alkuno, əlgu, pařkus, powku, owtru, alius, magnum, longum, lungo, lōgu, lunk, lung, largum, lařgu, largu, la:tum, latu, amplum, efu, lurdus, luř, pezadu, pizađu, pittitus, pittinus, pekenu, pikenū, putsin, pitulus, piřful, kurtus, kuř, kuřtu, kurtu, kurt, kurt, angustus, angusto, iřgust, striktus, istrejtū, iftrejtū, minu:tus, menudo, minuto, miudu, miuđu, mənut, minu, mərunt, de:lika:tus, dewgadu, dełyađu, subti:lem, sutil, suřiw, suptil, suti:l, subtsire, dekstrum, deřtru, deřtru, di:re:ktus, ruber, rubro, russus, řu, řofu, řofu, vermikulus, veřmełū, virmejłū, rubeus, řuz, rubjo, rubeo, ruðge, u:num, uno, un, uř, unu, duo:s, duaj, due, duas, duřs, duřf, kwatru, patru, řiku, ekkumhi:k, kwēđu, komu, kum, nu
16	f	noř, vof, ifpoze, ifpozu, biřfa, biře, peřfe, peřfi, peřfi, peř, peřte, řarpe, řarpe, řəvə, řəve, teřte, neriř, buř, iftrele, juvə, treveř, kufpir, řti, konoffere, kunefə, kunqaste, řase, puřax, puřar, findere, řařkař, řeřkar, ifkevař, ifkevar, řəmine, mařfe, iftēder, řeðə, iftar, alřfa:, řwař, ifprəmeř, ifprəmer, əřtriřzir, əřtriřzir, iffriřgar, iffriřyar, řterðge, affugare, efugar, efuyar, əfuga, řāte, ifkořeř, ifkurer, efu, iftrejtū, deřtru, řofř, řofu, řofu, dořf, duřf, treř, ři
17	oj	noj, voj, froj, rojb, dojs, dořf, doj
18	v	vu, voi, vojs, vof, vos, vo:, voj, vose, vose, veste, avi, avi, veř, verme, veřmi, vermi, veřm, vjer, vjer, vjerme, ařvori, arvuri, selva, řəvva, řəlvə, řelve, řəvə, řivja, cavej, řəve, kavetřsa, juvə, řivjeř, řivi:ř, řəvwe, treveř, vā, vento, vētu, vē, vint, vint, bevi, řavwař, řavə:ř, řave:, řivř, vivere, řiveř, řiver, řivi, via, dividere, điviđiř, řiviđir, řividi, řivide, řəvve, řavare, řəvař, řəvar, řəvle, řava:, řkavare, ifkevař, ifkevar, řřava:, řaviga:re, řavigare, řaviřař, řəviřar, řaviga:, řaviga, vole, volare, voax, vwar, vōle, zvolare, zvola:, řəniř, řenire, řiv, řir, řini, řiři:, řeni, řəva:re, řəve, řəvare, řəvař, řivar, řəva:, řive, řirare, řirar, řave, řavare, řəvar, řava:, řřav, řreve, řravi, řavi, řrav, řrevi, řreve, řrevi, vermikulus, veřmej, řermiłlo, veřmełū, virmejłū, veř, řerde, řerdi, řert, veř, řert, řerde, ři
19	b	bos, bus, embra, fembra, ombre, be:stia, biřfa, biře, bis, abe, berme, arborem, ařbř, albero, ařrə, o:b, arbul, arbore, selba, kabejo, kabelu, kəbeł, kabesə, bukka, buř, boka, bokka, bokə, bokə, bōk, bōce, bukə, jubja, nebula, njebla, nebbja, tene:braj, tenebre, tene:bra:s, tenebř, tinjeblas, tenebre, tenebrəs, bjento, ben, nombre, limbə, bibere, bwař, beber, bere, bebeř, biřer, bəwra, bə:ř, bevi, řəa, řaber, řabeř, řeber, řibir, řiwrə, battuere, batř, batir, battere, bateř, bəter, batrə, bate, bati, řibidir, řibidi, kabar, kəba, eskabar, nabegar, nəbəga, bolar, bula, zbura, ambita:re, řeniř, řəni, řebar, řəba, řirar, řira, řōbe, tumber, řōbař, řōbar, tumba, břyle, bruřfare, břu:le, bruza:, řlābe, řrabe, řrewis, břef, řrebe, řreve, řrevi, řrevi, řrew, břef, subti:lem, subtsire, ruber, rubro, řermexo, řərmēł, rubeus, rubjo, řōbbjo, rubeo, rojb, berde, řibi:



### Appendix 3 - Segments used in the word list

20	t	tu:, ty, tu, usted, voste, infanтем, infante, fante, ifēti, mari:tus, marito, marit, mari:t, mērit, matrem, patre, tata, tatə, be:stia, pešte, utffello, serpentem, serpente, serpente, sirpēti, sarpint, fruktus, fruto, frutto, frutə, frujt, frut, frukt, kapitia, kavettsa, testa, tət, testa, tēstə, tējtə, testə, tēstə, stella, etwal, estreja, stella, istrelə, iftrele, əstəl, stə:l, stele, stęa, lat, terra, tēx, tjera, terra, tēxə, tēxə, tērə, tēx, tjere, tene:braj, tēnebre, tene:bras, tenebɤ, tinjeblas, tēnebre, trēvəf, tēnebrəs, fu:ma:ta, fumata, fuma:ta, fumate, wentum, bjento, vento, vētu, vint, vint, sputere, esputar, sputare, fti, kənētɤ, kunqafte, ko:gita:re, kodžitare, kuzitaɤ, kuzitar, kuđgeta, timere, temer, temere, teməx, timer, temə, temi, teme, tremere, tremər, tremare, treməx, trimer, trima:, tu:ta:ri, tųe, tuwe, maktare, mate, matar, mataɤ, mētar, mēta, utffidere, battuere, batɤ, batir, battere, bateɤ, bēter, batrə, bate, bati, kaptiare, katffare, kurta:re, kortar, koxtaɤ, kurtar, ekskurta:re, ekuxte, skortare, skurta:, skurta, taliare, taje, taxar, tałłare, tałłar, tēłar, tēłar, tēji:, taja:, tējt, partire, partitɤ, partir, partire, pertir, pērti, pō:rti, parti:, nata:re, nwotare, ambita:re, ekstendere, etādx, ekstender, estendere, istēdex, iftēder, əstendrə, ekstinde, sedenta:re, sentar, sētar, senta:, stare, etɤ, estar, stare, iftar, əsta, sta:, sta, altiare, altfa:, torna:re, tuɤne, tornar, tornare, toɤnaɤ, turnar, turna, turne, torna:, turna, tork <sup>w</sup> ere, tōdx, torθer, tōrfere, turser, tōrsə, tōarfe, tōbe, tumbar, tōbaɤ, tōbar, tumba, tume, tene:re, tēniɤ, tener, tenere, tēx, ter, tēni, tini, tinji, appektora:re, apretar, ɤpirtar, stringere, etēdx, estrepir, strindgere, əftrizir, əftrizir, əstrēpə, stringe, strēngit, strindge, friktare, fɤote, frotar, frettare, tergere, tēdgere, ekstergere, estarsir, əstərzi, fterdge, tira:re, tixe, tīar, tirare, tira, tire, tira:, trahere, tēx, trarre, traze, trēzər, trēwər, traj, trađe, jaktare, zōte, đettare, zejtar, xita, đete, apta:re, atar, ɤtar, komputa:re, kōte, kontar, kontare, kōtar, kumta, konta:, kanta:re, fāte, kantar, kantare, kētar, kēnta, fāte, canta:, kinta, fluktua:re, flyktųe, flugtwar, fluttuare, flutuəx, flutuar, fluktua, fluctua, fluita:re, fluitare, gjattffare, ustula:re, ustolare, ustura, to:tus, tu, todo, tutto, todə, tođu, tot, tō, dut, multus, molto, mūjtu, mult, tantus, tanto, tētu, tētu, tant, tanc, alter, otɤ, otro, altro, owtru, altrə, ət, altri, alt, grant, latum, lato, latu, lat, pesant, pesante, pəzat, pezant, pittitus, pēti, pētit, piti, pittinus, pitffino, pitulus, kurtus, korto, korto, kuɤtu, kurtu, kurt, kurt, angustus, angosto, angusto, ingust, striktus, etɤwa, estrefo, stretto, istrejtə, iftrejtə, əstret, stɤə:, strət, strimt, minu:tus, minuto, mēnut, minu:t, mērun, delika:tus, delikato, dēlikat, subtil:lem, sutil, sottile, suptil, sut:ti, sut:il, dekstrum, djestro, dēstro, destrə, đestru, destrə, di:rektus, dɤwat, destra, dirējtə, dirējtə, dret, drət, dret, drept, ɤert, ɤert, tress, tɤwa, tres, tre, tref, tres, trə:, tre:, trej, k <sup>w</sup> attwor, katɤ, kwatro, kwattro, kwatru, kwatrə, kwat, kwatri, patru, kwant, fjemu:t, et
21	u:	tu:, u:hē, fruktus, plu:ma, lu:na, plu:ɤ, flu:men, fu:ma:ta, gelu:, fu:mus, fu:k, su:gere, tu:ta:ri, turne, eksu:ka:re, pu:si, ludere, fluktua:re, bɤule, ku:ɤ, minu:tus, minu:t, du:ze:, sut:ti, u:num, fjemu:t
22	y	ty, fry, plym, lyn, ɤy, njoly, fyme, syse, sysi:, kōspye, zygye, gyra:re, flyktųe, flye, bɤyle, mēny
23	d	usted, domina, dam, doɤa, dōna, done, dōnə, dēm, dōne, dōamnə, maridu, madre, padre, peduklus, pidəkkjo, pedoli, pēdukje, kaɤda, koda, kawdə, kōde, cōadə, pjodđa, komedere, manduka:re, mandukar, morder:re, moɤdx, mōrdere, moɤdex, mwardi, spuda:, kuide, kwidar, kujda, kōēdx, dormi:re, dōɤmiɤ, dormir, dormire, dōɤmiɤ, durmir, durmi, dwaɤmi, durmi:, dormi, okki:dere, utffidere, utffide, di:widere, dibidir, dividere, diviđir, dibidi, dividi, divide, skindere, sēde, findere, findere, fādx, ender, fēdere, fēdex, fēder, fēndrə, pwēdx, radere, radere, rada:, rade, fodere, nadar, nadaɤ, nāda, nada:, andar, andare, ēdaɤ, ēdar, ekstendere, etādx, ekstender, estendere, istēdex, iftēder, əstendrə, ekstinde, sedere, sedere, sedęa, sedenta:re, tōdx, kadere, kadere, ffjade, kōdeɤ, epēdx, etēdx, limpida:re, kudɤ, dikere, diɤ, deθir, dire, dizer, di, di:ɤ, di:, lu:dere, ludir, arde:re, aɤdx, arder, ardere, aɤdex, ɤrder, arde, inkendere, ēsādje, enθender, infēndjare, isēdjar, əsēndrə, infindze, todo, todə, dut, grandem, grande, grande, grēdi, lurdus, lerdo, lordo, pezadu, menudo, miudu, delika:tus, du:ze:, delyađo, delikato, dewgadu, dēɤađu, dēlikat, dekstrum, djestro, dēstro, destrə, đestru, destrə, di:rektus, dɤwat, derefo, destra, dirējtə, dirējtə, dret, drət, dret, drept, wiridem, berde, verde, verdi, verde, duo:s, dō, dos, dojs, dojf, dō:, doj, duaj, due, dowə, duas, duəs, duəf, k <sup>w</sup> id, k <sup>w</sup> ando:, kwando, kwēdu, kwand, kind, k <sup>w</sup> o:modo
24	f	femina, fam, femmina, femeɤ, femje, fembra, foem, femine, femeje, infanтем, afā, infante, fante, ifēfi, ifēti, efā, fruktus, fɤqi, fruto, frutto, frutə, frujt, fry, frut, frukt, flo:rem, fləx, flor, fjo:re, flox, flə, flə:ɤ, flo:r, floare, ca:f, flu:men, fjume, flumi, flumi, flum, fu:ma:ta, fyme, fumata, fuma:ta, fumasə, fumate, fu:mus, fumo, fumu, fum, fokum, fə, fwego, fwəko, fogu, foyu, fək, fə:, fu:k, fok, findere, fādx, fēdere, fēdex, fēder, fēndrə, fēt, fodere, fwix, frika:re, fɤeje, fregar, fregare, fraga, froj, frea, freka, iffrigar, iffriyar, friktare, fɤote, frotar, frettare, frisar, frasa, fluktua:re, flyktųe, flugtwar, fluttuare, flutuəx, flutuar, fluktua, fluctua, fluita:re, fluitare, fluere, flye, fluir, fluire, flwix, flwir, flui, flamma:re, flābe, flamear, fjammare, flāma, flagra:re, flagɤe, flagrar, flagrare, flagɤaɤ, flagrar, bɤef, bɤef

### Appendix 3 - Segments used in the word list

25	e:	fe:mina, be:stia, pe:l, ste:l:la, tene:braj, tene:bra:s, morde:re, save:, pe:nsa:re, time:re, se:para:re, jake:re, đʒaʃe:re, sede:re, tork <sup>w</sup> :e:re, tene:re, e:runka:re, e:numera:re, arde:re, omne:s, pe:sant, de:lika:tus, du:ze:, di:re:ktus, tre:s, tre:
26	m	femina, fam, embra, femmina, femev, femjv, fembra, fœm, fəmine, femeje, mulierem, muxer, moλλe, muλev, muλer, muλe, muir, mujere, domina, dam, dœm, dɔamə, hominem, ɔm, ombre, oměj, ɔměj, ɔmə, ɔm, om, homo:, wɔmo, infantem, mulier, muxer, moλλe, muλev, muλer, muλe, muir, mujere, maritus, maʔi, marido, marito, maridu, mɛriðu, marit, mari:t, mərit, ma:trem, mev, maðre, ma:dre, měj, maɔ, mev, mari, animalia, omaj, alimaʔa, nema:l, nəmaje, piskem, awem, awikellum, passerem, serpentem, wermem, berme, verme, vevmi, vermi, vɛrm, vjerme, arborem, flo:rem, plu:ma, plym, pluma, pjuma, plomə, plɔm, plumɛ, so:lem, flu:men, fjume, flumi, flumi, flum, lakum, mare, mev, mar, maʔ, mar, mev, ma:r, sa:lem, ka:li:ginem, fu:ma:ta, fyne, fumata, fuma:ta, fumasv, fumate, kajlum, wentum, fu:mus, umo, fumo, fumu, fum, fokum, annum, no:men, no:me, nomi, nomi, nɔm, nume, no:minem, nombre, limbə, komedere, komer, kome, kumer, manduka:re, mɔze, mandukar, mandɔare, mějzə, mějzar, məʔza, maʔi, maʔja, minka, morde:re, moɔdɔ, moɔder, moɔdere, moɔdev, muɔder, mwardi, morsika:re, moskar, morsikare, musəga, musəgar, musəya, murseka, time:re, temer, temere, temev, timer, temə, temi, teme, tremere, tremer, tremare, tremev, trimer, trima:, dormi:re, dɔvmiv, dormir, dormire, dɔvmiv, durmir, durmi, dwəvmi, durmi, dormi, muviv, morir, morire, moxev, muxer, muri, məri, muri, muri, makta:re, mate, matar, mataʔ, mətar, məta, maʃa:, fəmine, kaminar, kamminare, kəmiʔəʔ, kəmiʔar, kəmina, ʃimine, camina:, maʃe, ma:ʃfi:, mergere, mɛrɔgere, mɛrɔge, ambita:re, tumbə, tumba, tume, eksprimere, ekspremir, spremer, iʃprəmev, iʃprəmer, əspremə, esprimi, skreme, limpidare, limpjar, impingere, impinɔgere, əmpɛʔə, impinɔge, komputa:re, kumta, e:numera:re, enumev, enumerar, enumerare, enumera, numara, krema:re, kvame, kemar, kremare, kəjmare, kəjmaʔe, krəma, flamma:re, flamear, fjammare, fłama, omne:s, multus, mu, muʃo, molto, mŭjtu, mol, molc, mult, magnum, maʔo, maʔno, grandem, majjorem, mare, longum, largum, la:tum, amplum, ampjo, amplə, strimt, minu:tus, məny, menudo, minuto, miudu, miuðu, mənut, minu, minu:t, mərunt, subtil:em, dekstrum, vermikulus, vɛvměj, bermexo, vermiλλo, vɛvmeλu, virmějλu, bərmɛλ, wiridem, u:num, ekkumhi:k, k <sup>w</sup> em, k <sup>w</sup> o:modo, kɔmā, komo, kome, komu, kɔm, kɔmɛ, ʃemu:t, kum

### Appendix 3 - Segments used in the word list

27	a	<p>fe:mina, fam, embra, femmina, fembra, domina, dam, dopa, dōnna, infantem, infante, fante, sponsa, esposa, spoza, ispoza, maritus, maṣi, mariḏo, marito, maridu, marit, marit, maḏre, marə, mari, patre, paḏre, parə, pari, tata, tatə, animalia, omaj, alimapa, nəmaje, be:stia, biḡja, pwasō, awem, abe, avi, avī, aw, awikellum, wazo, passerem, paxaro, passero, paseru, pasere, sarpint, farpe, farpe, arborem, aḡbḡ, aḡbol, albero, aḡvori, arvuri, abrə, arbul, arbore, silwa, selba, selva, sēwva, pal, palo, paw, par, kaḡda, kola, koda, kawḏe, kua, plu:ma, pluma, pjuma, penna, peṇa, panə, pwal, kapillus, kabejo, kapello, kabelu, ḡvivja, cavej, kapitia, kaḡeḡa, kavettsa, kabese, kap, testa, tēsta, naso, nas, nariḡ, nariḡe, naris, bukka, boka, bokka, gula, gola, a:la, ala, a, alə, ale, lu:na, luna, ste:lla, etwal, estreja, stella, ak<sup>w</sup>a, aḡwa, akkwa, agwə, age, apə, pluwia, jubja, pjodḡa, ri:paria, lakum, lak, lago, lago, lagu, laḡu, ḡak, mare, mar, maḡ, mar, sal, sale, saw, sare, terra, tjera, terra, tsarə, kalina, kalidḡine, kalizēḡ, nebula, njebla, nebbja, tinjeblas, fu:mata, fumata, fuma:ta, fuma:ta, fumase, fumate, kajkia, annum, apo, anno, aḡ, aḡ, an, ling<sup>w</sup>a, lengwa, lingwa, manduka:re, mandukar, mandḡare, mēzaḡ, mēzar, məṇza, maṇi, maṇja, minka, mwardi, moskar, morsikare, musəga, musəgar, musəya, murseka, sugaḡ, sugar, skuja, esputar, sputare, sapere, savwaḡ, saber, sabēḡ, savə:ḡ, save:, kwidar, koḡitare, kuḡitaḡ, kuḡitar, kujda, kuḡeta, pensar, pensare, pēsḡ, pēsar, pənsa, pəsa, tremare, dwaḡmi, via, nəga, neka, anegar, annegare, maktare, mate, matar, mataḡ, metar, mēta, maḡja, puṇar, puṇpare, puṇa, battuere, batḡ, batir, battere, bateḡ, batrə, bate, bati, kaptiare, fase, kaḡar, katḡare, kasḡ, kesar, kəsa, caḡja, puxar, pulsare, puḡḡ, pufar, pulsa, segar, segare, segaḡ, siyar, səya, kortar, koḡtar, kurtar, skortare, skurta, taxar, taḡḡare, taḡḡ, teḡar, təḡa, taja, taja, parti:re, paḡtiḡ, partir, partire, paḡḡiḡ, parti, se:para:re, separar, separare, separaḡ, sipərar, səpəra, separa, separa, raer, radere, ḡaḡ, rawrə, rada, rade, rasar, rasare, ḡazaḡ, ḡezar, rəza, rasa, raskar, ḡaḡkaḡ, ḡeḡkar, rəska, kosaḡ, kusar, kawa:re, kabar, kavare, kəvaḡ, kəvar, kəba, ḡavar, ekskawa:re, eskabar, skavare, iḡkevaḡ, iḡkəvar, zḡavar, nata:re, nadar, nwotare, nadaḡ, nəḡar, nəda, nada, naviga:re, naḡe, nabegar, navigare, naviḡḡ, nəviḡar, nəbəga, naviga, naviga, bolar, volare, voaḡ, vwar, bula, zvolare, zbura, kaminar, kamminare, kəmiṇaḡ, kəmiṇar, kəmina, camina:, maḡe, ambita:re, andar, andare, ēḡaḡ, ēḡar, jake:re, jaḡer, ḡaḡe:re, zawrə, swaḡ, sentar, sētar, estar, stare, iḡtar, əsta, sta, jebar, levare, levaḡ, livar, ḡəba, lua, altiare, alḡar, altsare, aḡsa, aḡsar, əlsa, alḡja, tornar, tornare, toḡnaḡ, turnar, turna, turna, xirar, ḡirare, zirar, zira, birar, virare, virar, bira, kadere, fwaḡ, kaer, kadere, kawrə, ḡjade, tumbar, tōbaḡ, tōbar, tumba, segurar, siguraḡ, siyurar, serar, seḡa, sərar, səra, serare, ḡerar, serrare, siḡar, appekto:re, apretar, epirtar, fregar, fregare, frəga, frea, freka, iḡfrigar, iḡfriḡar, frotar, frettare, frisar, frəsa, lawa:re, lave, laḡar, lavare, levar, lava:, la, estarsir, enxugar, affugare, ēḡugar, ēḡuḡar, əfuga, uska, limpjar, lipar, tirar, tirare, ḡira, tira, trahere, trarre, traze, traḡe, jaktare, eḡar, ḡettare, zejtar, xita, lankea:re, lanḡar, lanḡare, lēsa, lēsar, ḡənsa, lanci:, lanḡja, arankar, arronḡare, arunḡa, legar, legare, ḡiḡa, lega, apta:re, atar, etar, kontar, kontare, kōtar, kumta, enumerar, enumerare, enumera, numara, kantare, kantar, kantare, kētar, kənta, canta:, kinta, xugar, ḡokare, zogaḡ, zuḡar, zuga, zuka, flugtwar, fluttuare, flutuḡ, flutuar, fluktua, fluctua, fluitare, kolar, kolare, koaḡ, kuar, kuḡa, elar, ḡelare, zilar, zəla, ḡale, glakia:re, glase, ḡatḡjare, gləsa, glaḡja, inglakia:re, ingetsa, bruḡare, kəame, kemar, kremare, kəjmare, kejmaḡ, krəma, flamma:re, flamear, fjammare, flama, ardere, aḡḡ, arder, ardere, aḡḡ, arde, flagra:re, flagḡe, flagrar, flagrare, flagḡaḡ, flagrar, inḡendjare, isenḡjar, isēḡjar, ustolare, ustura, tantus, tanto, tant, tanc, al</p> <p>guno, alkuno, awḡ, aḡḡ, alter, altro, altrə, altri, alt, alius, aw, aḡ, magnum, maṇo, maṇno, grandem, grande, gran, grant, mare, largum, laḡ, larḡo, largo, laḡgu, largu, ḡark, lark, larg, lato, latu, lat, amplum, anḡo, ampjo, amplə, grawis, ḡav, grabe, gravi, gravi, grav, pe:sant, pesaḡo, pesante, pezadu, pizaḡu, pəzat, pezant, angustus, angosto, angusto, etḡwa, deḡaḡo, delikato, dewgadu, deḡaḡu, dəlikat, dḡwat, destra, duas, k<sup>w</sup>attwor, katḡ, kwatro, kwattro, kwatru, kwatrə, kwat, kwatri, patru, aki, la, aja, əḡa, ai, kwa, k<sup>w</sup>ando:, kwando, kwan, kwand, kwant</p>
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### Appendix 3 - Segments used in the word list

28	r	embra, fembra, muxer, muſer, ombre, muxer, muſer, mariðo, maridu, mēriðu, marit, maðre, maŕə, paðre, paŕə, paxaro, paſeru, paſəre, serpjente, sirpēti, ſarpe, ſjerpe, ſerp, ſarpe, berme, vermi, verm, arþol, albero, akvori, arvuri, abra, par, fruto, frute, frujt, flor, fjo:re, flqare, pə, nariθ, naris, neriſ, gurə, sqare, estreja, istrele, iſtrele, mar, treveſ, tanebras, tfer, nombre, beber, bere, biþer, bewrə, komer, kumer, mandukar, mandqare, mēzar, morðer, murðer, moskar, morsikare, sugar, kuſpir, eskupir, esputar, sputare, saber, seber, konoθer, kuņiser, kwidar, kuzitar, pensar, pensare, pēsar, temer, timer, tremar, tremex, trimer, dormir, durmir, bibir, viver, biwrə, morir, muxer, muri, anegar, matar, metar, utfidere, pupar, batir, bēter, batrə, kaθar, keſar, puxar, pufar, segar, siyar, kortar, kurtar, taxar, tēlar, dibidir, diviðir, ender, fēder, fendrə, partir, pērtir, separar, separax, siperar, səpəra, pūzir, raer, vøer, rawrə, rasar, vøzar, raskar, vøſkar, kusar, kabar, kevar, eskabar, iſkevar, nadar, nwotare, neðar, nabegar, neviyar, bolar, volare, vwar, zvolare, zburə, kaminar, kamminare, keminar, andar, ēdar, benir, venire, vir, ekstender, iſtēder, əstendrə, jaθer, dʒaſe:re, zəzer, zawrə, ser, sentar, sētar, estar, iſtar, jebar, livar, alθar, aſsar, tornar, turnar, xirar, dʒirare, zilar, zira, birar, virare, virar, bira, torθer, kaer, kadere, keir, tumber, tōbar, tener, tenere, ter, segurar, ſigurax, siyurar, ekspremir, əspremə, serar, sərar, θerar, siyar, apretar, epirtar, estrepiſ, əstrepiə, fregar, frəga, iſffrigar, iſffriyar, frotar, frisar, frəsa, laþar, levar, estarsir, enxugar, əfugar, əfuyar, limpjar, lipar, tirar, tſira, tira, traze, trezer, trewrə, eſar, zejtar, lanθar, lēsar, arankar, aruſka, legar, atar, ətər, koser, kuzer, kontar, kōtar, enumerar, enumera, deθir, dizer, kantar, kētar, ludir, xugar, zuyar, flugtuar, flutuar, fluir, flwir, kolar, kuar, eskurir, iſkurer, skurdʒe, korer, kuwer, kurdʒe, elar, zilar, kemar, kejmare, flamear, arder, erder, arde, flagrar, flagrar, enθender, isendʒiar, isēdʒar, ənsendrə, otro, owtru, altrə, grande, grēdʒi, grēdi, mare, laryo, largu, ʌark, grabe, gravi, gravi, grew, grew, lerdo, korto, kurtu, kurt, brebe, brevi, brevi, brew, estreſo, iſtrejtu, iſtrejtu, əstret, djestro, destru, deſtru, destrə, dereſo, direjtə, dret, drept, roſu, bermexo, virməjʌu, berde, verdi, vert, verde, tres, tref, kwatro, kwatru, kwatrə
29	v	femeə, femje, done, iſpozə, mēriðu, biſvə, paſeru, seſvə, frute, kawdə, penə, keþelu, kabese, keþese, testə, teſtə, neriſ, boka, lue, istrele, iſtrele, agwə, fuvə, teke, teke, kelizēj, nevwe, treveſ, fumase, vnu, ligwə, seber, metar, bēter, keſar, tēlar, pērtir, siperar, vøer, vøzar, vøſkar, kevar, kevar, iſkevar, iſkevar, neðar, neviyar, keminar, keminar, zəzer, zəzer, keir, epirtar, levar, trezer, ətər, erder, direjtə, direjtə, dues, duəſ, eki, ei
30	œ	fœm, døem, flœx, gœl
31	ε	femine, efā, pes, pehō, utffello, uffjel, sjæpē, serpe, verm, vjer, vjer, sewva, seſvə, selve, kōde, plume, pen, penə, pene, pel, kəbeʌ, fəve, tet, testa, testə, teſtə, tſes, teste, bōce, əstel, stele, mek, sel, terra, teke, terə, tjere, nevwe, tenebæ, treveſ, sjel, tſelo, sew, sel, vento, zel, dʒelo, ze, lenge, bewrə, səþe, kōnetæ, kuneſə, tſesi, teji, fendere, fendrə, neđi, merdʒere, estendere, etæ, es, spremerə, sere, əstrepiə, strengi, terdʒere, teke, trewrə, əmpəni, dʒete, inffendjare, greve, grevi, bœf, breve, brevi, brevi, əstret, stret, deſyaðu, destro, destru, deſtru, destra, dret, dret, vœmej, bœmeʌ, vert, vœ, vert, tres, ke, ε
32	l	mulierem, mulier, animalia, alimapa, nema:l, awikellum, utffello, uffjel, peduklus, pedoli, arþol, albero, arbul, silwa, selba, selva, selve, pa:lus, pal, palo, pa:l, flo:rem, flœx, flor, flox, flo, flœx, flo:r, flqare, kola, plu:ma, plym, pluma, plomə, plom, plume, pilus, pwal, pelo, pelu, pilu, pel, pel:l, kapillus, kapello, kabelu, keþelu, gula, gœl, gola, golə, gōle, ala, el, ala, alə, ale, so:lem, sol, sole, sol, solə, solikulus, sōlej, soreli, lu:na, lyn, luna, lue, lōn, lune, lunə, stella, etwal, stella, istrele, iſtrele, əstel, stō:l, stele, pluwia, plqi, pluza, plu:æ, ploje, plqaje, flu:men, flumi, flumi, flum, lakum, lak, lago, lago, lagu, layu, lat, sa:lem, sel, sal, sale, sa:l, ka:li:ginem, kalina, kaliđine, kalizēj, kelizēj, nebula, njoly, njebla, newlə, tinjeblas, kajlum, sjel, θjelo, tſelo, sel, tſi:l, gelu, zel, jelo, dʒelo, lingwa, lōg, lengwa, lingwa, ligwə, lēu, lenge, limbə, pulsa:re, pulsare, pulsa: pulsa, ta:lia:re, jugula:re, zygye, jugula:re, çə:vle, wolare, vole, bolar, volare, bula, vōle, zvolare, zvola: levar, ləve, leware, levax, livar, leva: lua, altia:re, alθar, altsare, əlsa, altfa: laware, lave, laþar, lavare, levar, lava: la, limpida:re, limpjar, lipar, pulsa: lanke:re, lāse, lanθar, lanſare, lēsa, lēsar, lanci: lanſa: liga:re, lie, legar, legare, lōji: lea, lega, lude:re, ludir, flu:ktua:re, flyktqe, flugtuar, fluttuare, flutuax, flutuar, fluktua, fluctua, fluita:re, fluitare, fluere, flye, fluir, fluire, flwir, flui, kolare, kule, kolar, kolare, kōle, gelare, zōle, elar, dʒelare, zilar, zōla, dʒale, glakia:re, glase, glōsa, glaſar, inglakia:re, bōyle, bōule, flamma:re, flābe, flamear, flagra:re, flagæ, flagrar, flagrare, flagvax, flagrar, ustula:re, ustolare, multus, molto, mol, molc, mult, alguno, alkuno, əlgu, alter, altro, altrə, altri, alt, alius, longum, lō, longo, lungo, lōgu, lō, lunk, lung, largum, laɜz, laryo, largo, laɜgu, largu, lark, larg, la:tum, le, lato, latu, lat, amplum, āpl, amplə, lurdus, lue, lerdo, lordo, pitulus, pikkolo, piſful, de:lika:tus, delyaðo, delikato, dēlikat, subti:lem, sutil, sottile, suptil, suti:l, vermikulus, illa:k, la

### Appendix 3 - Segments used in the word list

33	r	mulierem, mui:r, mujere, mulier, mui:r, mujere, mari:tus, marito, mari:t, mōrit, mā:trem, mā:dre, mari, patre, pā:dre, pē:r, pari, passerem, passero, serpentem, serpente, sārpen, sarpint, serpens, sērpe, wermem, verme, vjēr, vjerme, arborem, arbul, arbore, fruk:tus, frutto, frut, frukt, flo:rem, flo:r, nari:ffe, nā:ris, soreli, ri:wus, rio, riw, riw, ri:pā:ria, rivi:κ, mare, mar, mā:r, sare, terra, tjera, terra, tērā, tjere, tsarā, negurā, tene:braj, tē:nebre, tene:bra:s, tē:nebre, djer, bibere, komedere, manduka:re, morde:re, mōrdere, mwardi, morsika:re, morsikare, musəgar, murseka, su:gere, konspuere, sputere, ski:re, sapere, kogno:skere, konoffere, kō:gita:re, kođgitare, pe:nsare, time:re, temere, tremere, tremare, trimar, dormi:re, dormire, durmi, durmi:, dormi, wi:were, vivere, morire, muri:, muri, neka:re, annegare, tu:ta:ri, makta:re, okki:dere, pugna:re, puṇṇare, battuere, battere, kaptiare, katfjare, pulsa:re, pulsare, sekare, segare, kurta:re, ekskurta:re, skortare, skurta:, skurta, taliare, tałłā:re, di:widere, dividere, skindere, jindere, findere, fendere, parti:re, partire, pērti, parti:, se:para:re, separare, separa:, separa, pungere, punđere, jugula:re, jugula:re, ra:dere, raer, radere, rawrā, rada:, rade, rasar, rasare, rāza, rasa:, raskar, raska, fodere, kawa:re, kavare, ekskawa:re, skavare, nata:re, naviga:re, navigare, wola:re, mergere, merđere, merđe, ambitare, andare, wenire, ekstendere, estendere, jake:re, dger, sedere, sedere, sedenta:re, stare, stare, leware, levare, altiare, altsare, torna:re, tornare, turna, tu:rne, torna:, turna, gyra:re, đirare, đira:, virare, tork <sup>w</sup> :ere, tōrtfere, turser, tōrsā, tōartfe, kadere, kawrā, tene:re, eksprimere, sprēmere, iṣprēmek, iṣprōmer, esprimi, skreme, serrare, serar, sōra, serare, ōerar, serrare, appektora:re, stringere, strinđere, əjtrizir, əjtrizir, stringe, strengi:, strinđe, frika:re, fregare, froj, frea, freka, frikta:re, frettare, frisar, lawa:re, lavare, tergere, terđere, ekstergere, əstərzi, sterđe, eksuka:re, affugare, limpida:re, tira:re, tirare, tire, tira:, trahere, trarre, traj, trađe, impingere, impinđere, jaktare, đettare, lankea:re, lanfjare, e:runka:re, arankar, arronfjare, liga:re, legare, apta:re, kōnsuere, kuṭfjare, komputa:re, kontare, e:numera:re, enumerare, numara, dikere, dire, eksponere, sporre, kanta:re, kantare, lu:dere, jōka:re, đokare, flu:kтуа:re, fluttuare, fluita:re, fluitare, fluere, fluire, ko:lare, kolare, ekskurrere, eskurir, skorrere, əskorā, skori:, kurrere, korer, korrere, korā, kori, gela:re, đelare, glakia:re, gjatfjare, inglakia:re, brufjare, bruza:, krema:re, kremare, krōma, flammare, fjammare, ardere, ardere, flagra:re, flagrare, inkendere, infendjare, ustulare, ustolare, ustura, alter, altro, altri, grandem, grande, gran, grant, majjorem, largum, largo, lark, larg, grawis, greve, grav, grēvi, lurdus, lordo, kurtus, korto, kurt, brewis, breve, striktus, stretto, stret, strimt, mārunt, subtsire, dekstrum, destro, dire:ktus, destra, dirējtē, drō:t, drēt, ruber, rubro, russus, roxo, rosso, ros, rōs, vermikululus, vermiłło, bērmēł, rubeus, rubjo, rōbbjo, rubeo, ruđe, rōf, rojb, wiridem, verde, vērt, tres, tre, trēs, trō:, tre:, trej, k <sup>w</sup> attwor, kwattro, kwatri, patru
34	x	muxer, muxer, paxaro, pjoxo, puxar, taxar, xirar, enxugar, xita, xugar, roxo, bermexo
35	ł	mołłe, mułek, mułer, mułe, mołłe, mułek, mułer, mułe, useł, piołu, poł, kōbeł, łunā, łak, tałłā:re, tałak, tēłar, tēłā, łōba, łōnsa, łiya, łoṇ, łark, vermiłło, vēmēłu, virmējłu, bērmēł, əłā
36	в	mułek, mułek, маки, мек, рек, сепрā, сепрēfji, sjēkrē, vek, vekmi, авк, авgori, fьцi, flæk, флөк, fløк, plu:κ, ку, viw, viu, vinvēκ, rivi:κ, мек, маκ, мек, тек, тевē, тевē, тē:κ, tenebκ, si:κ, bwak, bebek, bōκ, mēzak, mōκdκ, mōκdeκ, sugak, kuspiκ, savwak, sabek, kōnetκ, kopeseκ, kuzitaκ, pēsak, temek, kēēdκ, tremek, dōκmiκ, dōκmiκ, dwakmi, vivκ, viveκ, mukiv, mōvek, muker, mataκ, əksik, batκ, bateκ, kasak, puṭak, segak, kōtak, ekuκte, tałak, đividđiv, fādv, fēdeκ, paktiv, paktfiv, sōvke, sepaκak, pwēdv, rūziv, kaek, vøer, vaze, vazak, vøzar, vafkaκ, vøfkaκ, fwiv, kevak, ifkevak, nadaκ, navivak, voak, kēmiṇak, makfe, ēdaκ, vōniκ, viκ, etādv, istēdeκ, zeziv, zøzeκ, swak, sek, etκ, levaκ, tukne, toṇnak, zivē, vive, tōdv, fwaκ, tōbak, tōniκ, tek, siguraκ, epēdv, iṣprēmek, seka, seke, siκar, etēdv, fveje, fvote, tike, tveκ, kudκ, enumerate, diκ, di:κ, zogaκ, flutuaκ, flwiv, koak, ifkoek, kuκiv, koek, kuκer, bōyle, bvu:le, kvame, kejmaκe, avdv, avdeκ, flagve, flagvak, otκ, gvd, gvā, lavz, lavgu, gvaκ, luκ, kuκ, kuκtu, ku:κ, bōef, bōef, etκwa, stōκ:, dōwat, ku, vofv, vofu, vēmēj, vēmēłu, kuз, vek, vek, tōwā, katκ
37	i:	mui:r, mui:r, mari:tus, mari:t, ri:wus, ri:pā:ria, rivi:κ, ka:li:ginem, si:κ, fji:l, ma:ri:, sysi:, ski:re, dormi:re, durmi:, wi:were, muri:, okki:dere, fjesi:, teji:, di:widere, parti:re, parti:, neđgi:, ma:rtfji:, wenire, viji:, hō:si:, strengi:, pu:si:, lanci:, loji:, dikere, di:κ, di:, skori:, subti:lem, suti:l, di:re:ktus, k <sup>w</sup> i:nk <sup>w</sup> e, ekkumhi:k, ibi:, ki:, si:k
38	п	допа, піпо, alimaṇa, peṇa, peṇā, apo, ap, mārza, ma:ri:, kopeseκ, kupiser, koposi, puṇar, puṇṇare, puṇa, puṇi, kēmiṇak, kēmiṇar, viji:, estreṇir, əstreṇā, əmpeṇā, opṇi, maṇo, maṇṇo, pekeṇo
39	qa	qamṇā, floare, qadā, qare, plōaje, kunqafte, tōartfe, qōase
40	h	hominem, homo:, pēhō, u:hē:, kinōh, hō:si:, trahere, ekkumhi:k
41	ēj	omēj, omēj, nenēj, kalizēj, kēj, nēj
42	ō	ō, nō, kōspyē, lō, nō

### Appendix 3 - Segments used in the word list

43	ā	āfā, efā, sēpā, vā, ā, lāg, māze, pāse, fādā, etādā, lāse, fāte, fāte, flābe, ēsādje, gā, gā, āpl, pāzā, kā, kāmā
44	ī	īfēī, īfēti, ligwē, ātrīzīr, ātrīzīr, lipar, īsendjār, īsēdjār, siku
45	ē	īfēī, īfēti, mēzā, mēzār, ēdā, ēdar, lēsa, lēsar, kētar, tētu, tētu, grēdži, grēdi, ēfu, kwēdu
46	ī	īfēī, sōī, utīello, utīel, sēpēī, fivja, fēs, nariīe, fēatfē, fēlo, fēl, fēer, matfā, utīidere, utīide, katfāre, fēsī, catfā, pākfī, fīmine, mārfī, fātēre, zāfēa, tōrfēre, tōarfē, fēre, fjade, fīra, efar, lanfare, lanfā, arronfare, kufīre, zīfē, fāte, giatfjare, glafā, brufāre, infēndjare, infīndze, mufo, anfo, pitfīno, pitful, estrefo, sufiw, derefo, rōf, fīnkwe, fīnk, fīnf, fīne, fē, fēmut
47	i	īfēti, īspoze, īpozu, pejī, avi, sirpēti, vermi, arvuri, pīlu, īftrelē, flumi, riw, vint, nomi, biβer, minka, kupīser, timer, trimer, siyar, sipērar, navīyā, nevīyār, īftar, livār, sigurā, siyurar, sivar, epīrtar, strindze, īffrīgar, īffrīyār, impindze, kinta, zīlar, ingetsa, infīndze, grēdi, gravi, pīzadu, pīkenu, brēvi, īngust, īftrejtū, strimt, virmējā, verdi, ki, kind
48	p	sponsa, epuz, esposa, spōza, īspoza, īspoze, āspōzā, sponsus, epu, esposo, spōzo, īspozu, īpozu, āspōs, spōs, patre, pē, padre, padre, paj, parā, pēr, pari, piskem, peθ, peffe, pejī, pejī, pef, pēs, pefte, pwasō, pēhō, passerem, paxaro, passero, paseru, pasere, peduklus, pu, pjoxo, pidakkjo, pioļu, poā, pju, pedoli, pēdukje, serpentem, sēpā, serpjente, serpente, sēpēī, sirpēti, sērpen, sjērpē, sarpint, farpe, serpens, sjerpe, serpe, serp, farpe, pālus, pal, palo, paw, pāl, par, plu:ma, plym, pluma, pjuma, plomā, plōm, plumē, penna, pen, peja, penē, pējā, pen, pene, panā, pilus, pwal, pelo, pelu, pīlu, pēl, pēl, pēr, kapillus, kapello, kapitā, kap, apā, pluwia, plūi, pjoddža, pluzā, plu:k, ploje, plōaje, rī:pa:ria, konspuere, kōspyē, kuspi:k, kufpīr, eskupīr, āskupī, skujpa, sputere, esputar, sputare, spuda:, sapere, pēnsa:re, pāse, pensar, pensare, pēsā, pēsār, pēnsa, pēse, pejsa:, pēsa, pugna:re, puñar, puņnare, puja, kaptia:re, pulsa:re, puse, puxar, pulsare, pufā, pufar, pulsa:, pulsa, partire, paktīk, partīr, partire, pākfī, pērtīr, pērti, pō:rti, parti:, se:para:re, separar, separare, separā, sipērar, sēpāra, separa:, separa, pungere, pōēdā, pūndgere, pūzīk, pūzīr, pupi, pūndze, eksprimere, epēdā, ekspremir, spremerē, īfprēmē, īfprēmēr, āspremā, esprimi, apēktora:re, apretar, epīrtar, limpida:re, limpjar, lipar, puse, pu:si, pulsa:, impingere, impindgere, āmpējā, impindze, apta:re, komputa:re, ekspo:nere, sporre, spūne, paūkus, pō, pōko, pōko, powku, pōk, pō, pō:k, amplum, āpl, ampjo, amplā, pē:sant, pēzā, pesađo, pesante, pezadu, pīzadu, pēzat, pezant, pittitus, pēti, pētit, piti, pittinus, pekejo, pitfīno, pekenu, pīkenu, putsin, pitulus, pikkolo, pitful, suptil, drept, patru
49	z	epuz, spōza, īspoza, īspoze, āspōzā, spōzo, īspozu, īpozu, wazo, vaze, vazar, rēza, zjava:, zvolare, zvolā:, zbura, zezīk, zēzek, zēzer, zāfēa, traze, trēzer, kuzer, kuzi, kō:z, kuzi, dīzer, zīfē, bruza:, pēzā, pezadu, pīzadu, pēzat, pezant
50	đ	mariđo, mēriđu, mađre, pađre, morđer, murđer, diviđir, nēdar, tođu, pesađo, pīzadu, miuđu, delyađo, dēļāđu

### Appendix 3 - Segments used in the word list

51	k	sokius, piskem, awikellum, peduklus, pidəkkjo, pədukje, fru:ktus, frukt, kaɥda, kə, kola, koda, kawdɐ, kua, kəw, kədə, kapillus, kabejo, kapello, kabelu, kəβelu, kəβeɬ, kapitia, kaβeθa, kavettsa, kabesə, kəβesə, kap, bukka, boka, bokka, boke, bokə, bək, bukə, solikulus, akkwa, lakum, lak, ɬak, ka:li:ginem, kalina, kalidžine, kalizēj, kəlizēj, kajkia, kajlum, fokum, fwəko, fək, fu:k, fok, komedere, komer, kome, kumer, mandukare, mandukas, minka, morsikare, moskar, morsikare, murseka, konspuere, kōspye, kuspiɐ, kuspiɾ, eskupiɾ, əskupi, skujpa, ski:re, kogno:skere, kənetɐ, konoθer, konoffere, kopeseɐ, kupiser, kunɛfə, kinəh, koposi, kunqaste, ko:gita:re, kuɥide, kwidaɾ, koɟita:re, kuzitaɐ, kuzitar, kujda, kuɟeta, kəēdɐ, neka:re, neka, makta:re, okki:dere, əksiɐ, uksi, kaptiare, kaθar, katʃare, kasəɐ, kəsar, kəsa, sekare, kurta:re, kortar, koɽtaɐ, kurtaɾ, ekskurta:re, ekurte, skortare, skurtaɾ, skurta, skindere, raskar, ɤafkaɐ, ɤɛfkar, rəska, kosaɬ, kusar, kaware, kabar, kavare, kəvaɐ, kəvar, kəba, ekskaware, eskabar, skavare, ifkəvaɐ, ifkəvar, kaminar, kamminare, kəmiɤaɐ, kəmiɤar, kəmina, ekstendere, ekstender, ekstinde, jake:re, kadere, kaer, kadere, kəir, kawra, kədə, eksprimere, ekspremir, skreme, appektore:re, frika:re, freka, frikta:re, ekstergere, eksu:ka:re, uska, jakta:re, lankeare, erunka:re, arankar, aruɤka, ko:nsuere, kudɐ, koser, kuʃire, kuzer, kuzi, kə:z, kuzi, komputa:re, kōte, kontar, kontare, kōtar, kumta, kontar, di:kere, ekspone:re, kanta:re, kantar, kantare, kētar, kənta, kinta, joka:re, ɟokare, zuka, flu:ktua:re, flyktɥe, fluktua, ko:la:re, kule, kolar, kolare, koəɐ, kuar, kuɬa, kəle, ekskurrere, eskurir, skorrere, ifkoβeɐ, ifkurer, əskorə, skorɪ, skurɟe, kurrere, kuβiɐ, korer, korre, koβeɐ, kuβer, korə, kori, kurɟe, glakia:re, inglakia:re, krema:re, kɤame, kemar, kremare, kəjmaɐ, kəjmaɐ, krəma, inkendere, okə, alkuno, paɤkus, poko, pəko, powku, pək, pə:k, lunk, ɬark, lark, pekeɾo, pekenu, pikenu, pikkolo, kurtus, kuɐ, korto, korto, kuɐtu, kurtu, kurt, ku:ɐ, kurt, striktus, de:lika:tus, delikato, dəlikat, dekstrum, di:re:ktus, vermikulus, katɐ, kwatro, kwattro, kwatru, kwatrə, kwat, kwatri, sək, θinko, ʃiɤkwe, siku, siɤk, ʃiɤk, ekkumhi:k, aki, kwi, ɐki, illa:k, ki, ki, kwi, kjen, kēj, kēj, kwa, ke, ki, kə, kwə, kə, kwando, kwēdu, kwan, kwand, kwant, kind, kəmə, komo, kome, komu, kəmə, kəmə, kum, nek, si:k
52	ts	sots, tsarə, altsare, tsine, ingetsa, putsin, subtsire
53	a:	ma:trem, ma:dre, pa:dre, nema:l, pa:lus, pa:l, ca:f, na:sus, na:so, na:s, na:ris, a:la, ri:pa:ria, la:t, ma:r, sa:lem, sa:l, ka:li:ginem, tenebra:s, fu:ma:ta, fu:ma:ta, mandukare, maɤjaɾ, morsikare, cuca, spudaɾ, ko:gita:re, pe:nsare, pe:nsa, trima:re, neka:re, tu:ta:ri, makta:re, maʃa, pugnare, kaptiare, caʃa, pulsa:re, pulsaɾ, sekare, sea:re, kurta:re, ekskurta:re, skurta:re, ta:lia:re, taɬɬa:re, taja, se:parare, separa, jugula:re, jugula:re, ra:dere, rada, rasa, kaware, ɤavaɾ, ekskaware, zɤava, nata:re, nada, navigare, naviga, wola:re, zvola, camina, ma:rʃi, ambita:re, sedenta:re, senta, stare, sta, lewa:re, lewa, altiare, altfa, torna:re, torna, gya:re, ɟira, appektore:re, frika:re, frikta:re, lawa:re, lava, eksu:ka:re, suja, limpida:re, tira:re, tira, pulsa, jaktare, lankeare, lanʃa, erunkare, liga:re, lea, aptare, komputa:re, konta, enu:mera:re, kanta:re, cantar, joka:re, ɟuja, flu:ktua:re, fluita:re, ko:la:re, gela:re, glakia:re, glaʃa, inglakia:re, bruza, krema:re, flamma:re, flagra:re, ustula:re, la:tum, de:lika:tus, illa:k
54	ēj	mēj, kəlizēj, kēj, nēj
55	ɾ	meɾ, vjeɾ, fry, savə:ɾ, mɔri, pɔ:rti, ma:rʃi, ʃɛ:ɾ, səraɾ, sere, ifkurer
56	aj	paj, aɤwə, tenebraj, kajkia, kajlum, nwaje, traj, majjorem, duaj
57	ɛ:	peɾ, u:he, ɛ:w, te:ɐ, te:nebre, te:nebre, ʃɛ:ɾ, kwə:
58	θ	peθ, kaβeθa, nariθ, θjelo, konoθer, kaθar, jaθer, alθar, torθer, θerar, lanθar, deθir, enθender, θinko
59	ej	pejʃi, cavej, zejtar, kejməɐ, istrejtu, trej
60	ej	pejʃi, kejməɐ, iftrejtu, direjtu, direjtu, virmejlu
61	ō	pwasō, pəhō, nō, tōbe, tōbaɐ, tōbar, kōte, kōtar, pō, ōt, lōgu, lō, ō
62	ē	səpēʃi, sirpēti, sjəpē, vētu, vē, pəsəɐ, pəsar, kəēdɐ, fēdɐ, fēder, istēdɐ, iftēder, sētar, ɛʃugar, ɛʃugar, isēdjar, sək, nē
63	β	arβol, kəβelu, kaβeθa, kəβesə, biβer, səβe, laβar
64	ɬ	sɛɬve, sɔɬ, zɛɬ, aɬsa, aɬsar, kuɬa, flama, aɬgū, aɬ, deɬɤaɬu
65	ɥ	fɥqi, plɥi, kuɥide, tɥe, esɥije, flyktɥe
66	ø:	flø:ɐ, gø:j, stø:l, fø:, bø:ɐ, savø:ɾ, kə:z, stɔ:t, drø:t, dø:, trø:
67	aɥ	kaɥda, paɥkus
68	ø	kø, ʃəvø, løn, fø, pø, dø
69	c	cɔadə, cavej, ca:f, bɔce, cuca, caʃa, camina, lanci, cɔase, cantar, fluctua, molc, tanc

### Appendix 3 - Segments used in the word list

70	g	gula, gola, golə, gɔle, gurə, age, lago, lɛngɛ, pugna:re, segar, segare, jugula:re, naviga:re, naviga:, mergere, gyra:re, stringere, stringe, strɛngi:, fregare, impingere, lega, xugar, glaʃa:, ɪngɛtsa, flagkək, alguno, magnum, grandem, gran, gʁɑ̃, grant, longo, lung, largum, larg, grav, grɛvi, grew, ɪŋgust
71	ə	golə
72	ɛj	sɔlɛj, fʁɛje, vɛʁmɛj
73	ɛa	stɛa, ʃɛaʃə, bɛa, zəʃɛa, fɛdɛa, kədɛa
74	k <sup>w</sup>	ak <sup>w</sup> a, tork <sup>w</sup> :re, k <sup>w</sup> attwor, k <sup>w</sup> i:nk <sup>w</sup> e, k <sup>w</sup> is, k <sup>w</sup> em, k <sup>w</sup> id, k <sup>w</sup> ando:, k <sup>w</sup> o:modo
75	ʏ	aʏwa, aʏwə, laʏu, foʏu, musəʏa, siʏar, səʏa, naviʏar, nɛviʏar, siʏurar, ɪffriʏar, ɛʃuʏar, ʎiʏa, zuʏar, larʏo, dɛʏaðo, dɛʏaðu
76	ŋ	aŋ, nŋ, lɛŋgwa, maŋʃa:, pɛŋsa:, aruŋka, ʎoŋ, ɪŋgust, uŋ, ʃiŋkwe, siŋk, ʃiŋk
77	g <sup>w</sup>	ling <sup>w</sup> a
78	ẽu	lẽu
79	a	bwaɤ, taje, ʁaze, tɤwa
80	ʃ	maŋʃa:, ʃava:, zʃava:
81	ẽ	pẽse, sẽde, fẽt, pwẽdɤ, ɛpẽdɤ, etɤẽdɤ, ẽsɔdʒe, kɔmẽ
82	ɔ:	pɔ:rti, hɔ:si:
83	ũ	pũziɤ, pũziɤ, mũʃtu, awgũ, aʎgũ, ũ
84	ɫ	kosaɫ
85	ç	çɑ:vle
86	ɑ:	çɑ:vle
87	ʃ	mũʃtu
88	œ	okœ, œ
89	ʊ	ʁoʃʊ
90	ẽw	nẽw



## Appendix 4 - Word Lists by Language

### Latin

Cognate	IPA	Sounds
I	-ego:	ay-g-O
We	no:-s	n-O-s
YouPlural	wo:-s	w-O-s
YouSingular	tu:	t-U
Woman	fe:-mi-n-a	f-ai-m-e-n-ah
Woman-Mulier	mulierem	m-u-l-e-ay-r-ay-m
Woman-Domina	domina	d-oh-m-e-n-ah
ManHumanBeing	homi-nem	h-oh-m-e-n-ay-m
ManHumanBeing-Homo	h-omo:	h-oh-m-O
Child	infantem	e-n-f-ah-n-t-ay-m
Wife	-sponsa	s-p-oh-n-s-ah
Wife-Mulier	mulier-	m-u-l-e-ay-r
Husband	mari:tus	m-ah-r-E-t-u-s
Husband-Sponsus	-sponsus	s-p-oh-n-s-u-s
Husband-Socius	sokius	s-oh-k-e-u-s
Mother	ma:trem	m-A-t-r-ay-m
Father	patre	p-ah-t-r-ay
Father-Tata	tata	t-ah-t-ah
Animal	animalia	ah-n-e-m-ah-l-e-ah
Animal-Bestia	be:stia	b-ai-s-t-e-ah
Fish-Piskem	piskem	p-e-s-k-ay-m
Bird-Avem	awem	ah-w-ay-m
Bird-Avicellum	-awi-k-ellum	ah-w-e-k-ay-l-l-u-m
Bird-Passerem	passerem	p-ah-s-s-ay-r-ay-m
Louse	p-edu-klus	p-ay-d-u-k-l-u-s
Snake	s-erp-entem	s-ay-r-p-ay-n-t-ay-m
Snake-Serpens	s-erpens	s-ay-r-p-ay-n-s
Worm	wermem	w-ay-r-m-ay-m
Tree	arborem	ah-r-b-oh-r-ay-m
Forest	silwa	s-e-l-w-ah
Stick	pa:lus	p-A-l-u-s
Fruit	fru:-ktus	f-r-U-k-t-u-s
Flower	flo:rem	f-l-O-r-ay-m
Tail	kaṽda	k-au_diphthong-d-ah
Feather	plu:ma	p-l-U-m-ah
Feather-Penna	penna	p-ay-n-n-ah
Hair	p-ilus	p-e-l-u-s
Hair-Capillus	kapillus	k-ah-p-e-l-l-u-s
Head	kapi-tia	k-ah-p-e-t-e-ah
Head-Testa	testa	t-ay-s-t-ah
Nose	na:sus	n-A-s-u-s
Mouth	bukka	b-u-k-k-ah
Mouth-Gula	gula	j-u-l-ah
Wing	a:la	A-l-ah
Sun	so:lem	s-O-l-ay-m
Sun-Soliculus	solikulus	s-oh-l-e-k-u-l-u-s
Moon	lu:na	l-U-n-ah
Star	-st-e:lla	s-t-ai-l-l-ah
Water	a-k <sup>w</sup> -a	ah-kw-ah
Rain	plu-wia	p-l-u-w-e-ah
River	flu:men	f-l-U-m-ay-n
River-Rivus	ri:wus	r-E-w-u-s
River-Riparia	ri:p-a:ria	r-E-p-A-r-e-ah

## Appendix 4 - Word Lists by Language

Lake	lakum	l-ah-k-u-m
Sea	mare	m-ah-r-ay
Salt	'sa:lem	s-A-l-ay-m
Earth	t-erra	t-ay-r-r-ah
Fog	ka:li:ginem	k-A-l-E-g-e-n-ay-m
Fog-Nebula	n-e-bula	n-ay-b-u-l-ah
Fog-Tenebrae	tene:braj	t-ay-n-ai-b-r-aj_diphthong
Fog-Tenebras	t-en-e:bra:s	t-ay-n-ai-b-r-A-s
Fog-Fumata	fu:ma:ta	f-U-m-A-t-ah
Fog-Caecia	kajkia	k-aj_diphthong-k-e-ah
Sky	'k-ajlum	k-aj_diphthong-l-u-m
Wind	w-entum	w-ay-n-t-u-m
Ice	'gelu:	g-ay-l-U
Smoke	fu:mus	f-U-m-u-s
Fire-Focus	f-okum	f-oh-k-u-m
Year	annum	ah-n-n-u-m
Name-Nomen	no:men	n-O-m-ay-n
Name-Nominem	no:min-em	n-O-m-e-n-ay-m
Tongue	ling <sup>w</sup> -a	l-e-n-gw-ah
ToDrink	'bib-ere	b-e-b-ay-r-ay
ToEat	komedere	k-oh-m-ay-d-ay-r-ay
ToEat-Manducare	manduka:re	m-ah-n-d-u-k-A-r-ay
ToBite	m-orde:re	m-oh-r-d-ai-r-ay
ToBite-Morsicare	morsika:re	m-oh-r-s-e-k-A-r-ay
ToSuck	su:gere	s-U-g-ay-r-ay
ToSpit	konspuere	k-oh-n-s-p-u-ay-r-ay
ToSpit-Sputare	-sputere	s-p-u-t-ay-r-ay
ToKnow	ski:re	s-k-E-r-ay
ToKnow-Sapere	sap-ere	s-ah-p-ay-r-ay
ToKnow-Cognoscere	kogno:skere	k-oh-g-n-O-s-k-ay-r-ay
ToThink	k-o:gita:re	k-O-g-e-t-A-r-ay
ToThink-Pensare	pe:nsa:re	p-ai-n-s-A-r-ay
ToFear	time:re	t-e-m-ai-r-ay
ToFear-Tremere	trem-ere	t-r-ay-m-ay-r-ay
ToSleep	d-ormi:re	d-oh-r-m-E-r-ay
ToLive	wi:were	w-E-w-ay-r-ay
ToKill	n-eka:re	n-ay-k-A-r-ay
ToKill-Tutari	tu:-ta:ri	t-U-t-A-r-e
ToKill-Mactare	makta:re	m-ah-k-t-A-r-ay
ToKill-Occidere	okki:dere	oh-k-k-E-d-ay-r-ay
ToFight	pugna:re	p-u-j-n-A-r-ay
ToFight-Battuere	battuere	b-ah-t-t-u-ay-r-ay
ToHunt-Captiare	kaptia:re	k-ah-p-t-e-A-r-ay
ToHit	pulsa:re	p-u-l-s-A-r-ay
ToCut	s-eka:re	s-ay-k-A-r-ay
ToCut-Curtare	kurta:re	k-u-r-t-A-r-ay
ToCut-Excurtare	ekskurta:re	ay-k-s-k-u-r-t-A-r-ay
ToCut-Taliare	ta:-lia:re	t-A-l-e-A-r-ay
ToSplit	di:widere	d-E-w-e-d-ay-r-ay
ToSplit-Scindere	skindere	s-k-e-n-d-ay-r-ay
ToSplit-Findere	findere	f-e-n-d-ay-r-ay
ToSplit-Partire	parti:re	p-ah-r-t-E-r-ay
ToSplit-Separare	se:para:re	s-ai-p-ah-r-A-r-ay
ToStab	p-ungere	p-u-n-g-ay-r-ay
ToStab-Iugulare	jugula:re	jg-u-g-u-l-A-r-ay
ToScratch	ra:dere	r-A-d-ay-r-ay
ToDig	fodere	f-oh-d-ay-r-ay

## Appendix 4 - Word Lists by Language

ToDig-Cavare	kawa:re	k-ah-w-A-r-ay
ToDig-Excavare	ekskawa:re	ay-k-s-k-ah-w-A-r-ay
ToSwim	n-ata:re	n-ah-t-A-r-ay
ToSwim-Navigare	naviga:re	n-ah-v-e-j-A-r-ay
ToFly	wola:re	w-oh-l-A-r-ay
ToWalk-Mergere	mergere	m-ay-r-j-ay-r-ay
ToWalk-Ambitare	ambita:re	ah-m-b-e-t-A-r-ay
ToCome	weni:re	w-ay-n-E-r-ay
ToLieAsInABed	ekstendere	ay-k-s-t-ay-n-d-ay-r-ay
ToLieAsInABed-lacere	ja-ke:re	jg-ah-k-ai-r-ay
ToSit	s-edē:re	s-ay-d-ai-r-ay
ToSit-Sedentare	sedenta:re	s-ay-d-ay-n-t-A-r-ay
ToStand	-sta:re	s-t-A-r-ay
ToStand-Levare	leva:re	l-ay-v-A-r-ay
ToStand-Altiare	-altia:re	ah-l-t-e-A-r-ay
ToTurnIntransitive	torna:re	t-oh-r-n-A-r-ay
ToTurnIntransitive-Gyrare	gyra:re	j-eeh-r-A-r-ay
ToTurnIntransitive-Torquere	tork <sup>w</sup> e:re	t-oh-r-kw-ai-r-ay
ToFall	k-adere	k-ah-d-ay-r-ay
ToHold	ten-e:re	t-ay-n-ai-r-ay
ToSqueeze	eksprim-ere	ay-k-s-p-r-e-m-ay-r-ay
ToSqueeze-Serrere	serrere	s-ay-r-r-ay-r-ay
ToSqueeze-Serare	se-rare	s-ay-r-ah-r-ay
ToSqueeze-Appetorare	appetora:re	ah-p-p-ay-k-t-oh-r-A-r-ay
ToSqueeze-Stringere	-stringere	s-t-r-e-n-j-ay-r-ay
ToRub	frika:re	f-r-e-k-A-r-ay
ToRub-Frictare	frikta:re	f-r-e-k-t-A-r-ay
ToWash	lawa:re	l-ah-w-A-r-ay
ToWipe	tergere	t-ay-r-g-ay-r-ay
ToWipe-Extergere	ekstergere	ay-k-s-t-ay-r-g-ay-r-ay
ToWipe-Exsucare	eks-u:k-a:re	ay-k-s-U-k-A-r-ay
ToWipe-Limpidare	limpida:re	l-e-m-p-e-d-A-r-ay
ToPull	tira:re	t-e-r-A-r-ay
ToPull-Pulsare	pulsa:re	p-u-l-s-A-r-ay
ToPull-Trahere	trahere	t-r-ah-h-ay-r-ay
ToPush	impingere	e-m-p-e-n-j-ay-r-ay
ToThrow	jakta:re	jg-ah-k-t-A-r-ay
ToThrow-Lanceare	lankea:re	l-ah-n-k-ay-A-r-ay
ToThrow-Eruncare	e:runka:re	ai-r-u-n-k-A-r-ay
ToTie	liga:re	l-e-g-A-r-ay
ToTie-Aptare	apta:re	ah-p-t-A-r-ay
ToSew	ko:n-suere	k-O-n-s-u-ay-r-ay
ToCount	komputa:re	k-oh-m-p-u-t-A-r-ay
ToCount-Enumerare	e:numera:re	ai-n-u-m-ay-r-A-r-ay
ToSay	di:kere	d-E-k-ay-r-ay
ToSay-Exponere	eksponere	ay-k-s-p-O-n-ay-r-ay
ToSing-AncestralClass	kanta:re	k-ah-n-t-A-r-ay
ToPlay-Ludere	lu:dere	l-U-d-ay-r-ay
ToPlay-Jiocare	jo-ka:re	jg-oh-k-A-r-ay
ToFloat	flu:ktua:re	f-l-U-k-t-u-A-r-ay
ToFloat-Fluitare	fluita:re	f-l-u-e-t-A-r-ay
ToFlow	fluere	f-l-u-ay-r-ay
ToFlow-Colare	ko:la:re	k-O-l-A-r-ay
ToFlow-Excurrere	ekscurrere	ay-k-s-k-u-r-r-ay-r-ay
ToFlow-Currere	kurrere	k-u-r-r-ay-r-ay
ToFreeze	gela:re	g-ay-l-A-r-ay
ToFreeze-Glaciare	gla-kia:re	g-l-ah-k-e-A-r-ay

## Appendix 4 - Word Lists by Language

ToFreeze-Inglaciare	inglakia:re	e-n-g-l-ah-k-e-A-r-ay
ToBurn-Cremare	krema:re	k-r-ay-m-A-r-ay
ToBurn-Flammare	flamma:re	f-l-ah-m-m-A-r-ay
ToBurn-Ardere	arde:re	ah-r-d-ai-r-ay
ToBurn-Flagrare	flagra:re	f-l-ah-g-r-A-r-ay
ToBurn-Incendere	inkend-ere	e-n-k-ay-n-d-ay-r-ay
ToBurn-AncestralClass8	ustula:re	u-s-t-u-l-A-r-ay
All	omne:s	oh-m-n-ai-s
All-Totus	to:-tus	t-O-t-u-s
Many	multus	m-u-l-t-u-s
Many-Tantus	tantus	t-ah-n-t-u-s
Few	paukus	p-au_diphthong-k-u-s
Other	alter-	ah-l-t-ay-r
Other-Alius	alius	ah-l-e-u-s
Big	magnum	m-ah-j-n-u-m
Big-Grandem	grandem	j-r-ah-n-d-ay-m
Big-Majjorem	majjorem	m-aj_diphthong-jg-oh-r-ay-m
Long-Longum	'lo-ngum	l-oh-n-g-u-m
Long-Largum	largum	l-ah-r-j-u-m
Wide	'la:tum	l-A-t-u-m
Wide-Amplum	amplum	ah-m-p-l-u-m
Heavy	grawis	g-r-ah-w-e-s
Heavy-Lurdus	lurdus	l-u-r-d-u-s
Heavy-Pesant	pe:sant-	p-ai-s-ah-n-t
Small	pittitus	p-e-t-t-e-t-u-s
Small-Pittinus	'pittinus	p-e-t-t-e-n-u-s
Small-Pitulus	pi-tulus	p-e-t-u-l-u-s
Short	kurtus	k-u-r-t-u-s
Short-Brevis	brewis	b-r-ay-w-e-s
Narrow	angustus	ah-n-g-u-s-t-u-s
Narrow-Strictus	-str-i-ktus	s-t-r-e-k-t-u-s
Thin	minu:-tus	m-e-n-U-t-u-s
Thin-Delicatus	de:lika:tus	d-ai-l-e-k-A-t-u-s
Thin-Subtilis	subti:lem	s-u-b-t-E-l-ay-m
Right-Dextrem	d-ekstrum	d-ay-k-s-t-r-u-m
Right-Directum	di:r-e:ktus	d-E-r-ai-k-t-u-s
Red	ruber-	r-u-b-ay-r
Red-Russus	russus	r-u-s-s-u-s
Red-Vermiculus	vermikulus	v-ay-r-m-e-k-u-l-u-s
Red-Rubeus	ru-beus	r-u-b-ay-u-s
Green	'wiridem	w-e-r-e-d-ay-m
One	'u:num	U-n-u-m
Two-Duos	duo:s	d-u-O-s
Two-Duae	du-aj	d-u-aj_diphthong
Two-Duas	duas	d-u-ah-s
Three	tr-e:s	t-r-ai-s
Four	k <sup>w</sup> -attwor-	kw-ah-t-t-w-oh-r
Five	'k <sup>w</sup> i:nk <sup>w</sup> -e	kw-E-n-kw-ay
Here	-ekkumhi:k	ay-k-k-u-m-h-E-k
There	illa:k	e-l-l-A-k
There-Ibi	ibi:	e-b-E
Who-Qui	k <sup>w</sup> -is	kw-e-s
Who-Quem	k <sup>w</sup> -em-	kw-ay-m
What	'k <sup>w</sup> -id	kw-e-d
When-Quando	k <sup>w</sup> -ando:	kw-ah-n-d-O
How-Quomodo	'k <sup>w</sup> o:modo	kw-O-m-oh-d-oh
Not	no:n	n-O-n

## Appendix 4 - Word Lists by Language

Not-Nec	nek	n-ay-k
And-Et	et	ay-t
And-Si	si:k	s-E-k

### French

Cognate	IPA	Sounds
I	ʒə--	gzah-aah
We	nu--	n-u
YouPlural	vu--	v-u
YouSingular	ty	t-eeh
Woman	fa-m-----	f-ah-m
Woman-Domina	dam---	d-ah-m
ManHumanBeing	-ɔm-----	euH-m
ManHumanBeing-Homo	--ɔ--	oon
Child	ã-fã----	NasalA-f-NasalA
Wife	e-pu-z-	ay-p-u-zz
Husband	maʁi---	m-ah-rr-e
Husband-Sponsus	e-pu----	ay-p-u
Mother	me-ʁ--	m-ay-rr
Father	pe-ʁ-	p-ay-rr
Animal	o--ma-j-	oh-m-ah-jg
Fish-Pescion	pwasɔ	p-w-ah-s-on
Bird-Avicellum	wa---z-o----	w-ah-zz-oh
Louse	p-u-----	p-u
Snake	s-ɛʁp-ã----	s-ay-rr-p-NasalA
Worm	veʁ---	v-ay-rr
Tree	aʁb-ʁ--	ah-rr-b-rr
Stick	pal--	p-ah-l
Fruit	fʁɥi----	f-rr-eu-e
Flower	flœʁ--	f-l-OpenMidNearFrontRounded-rr
Tail	kø--	k-uu
Feather	plym-	p-l-eeh-m
Feather-Penna	pe-n-	p-eh-n
Hair	pwal--	p-w-ah-l
Hair-Capillus	ʃəvø----	shh-aah-v-uu
Head	ʃəvɛ----	shh-aah-v-eh
Head-Testa	tɛ-t-	t-eh-t
Nose	ne---	n-ay
Mouth	bu-ʃ-	b-u-shh
Mouth-Gula	gœl-	g-OpenMidNearFrontRounded-l
Wing	el-	ay-l
Sun-Soliculus	sɔlej----	s-euh-l-eh_diphthong
Moon	lyn-	l-eeh-n
Star	e-twa-l-	ay-t-w-ah-l
Water	o----	oh
Rain	plɥ--i-	p-l-eu-e
River-Rivus	ʁy---	rr-eeh
River-Riparia	ʁivjeʁ--	rr-e-v-jg-ay-rr
Lake	lak--	l-ah-k
Sea	mɛʁ-	m-eh-rr
Salt	sɛl--	s-eh-l
Earth	t-e-ʁ-	t-ay-rr
Fog-Nebula	nʒo---ly	n-jg-euh-l-eeh
Fog-Tenebras	t-en-ɛbʁ-	t-ay-n-eh-b-rr
Fog-Fumata	fyme--	f-eeh-m-ay

## Appendix 4 - Word Lists by Language

Sky	sjɛl--	s-jg-eh-l
Wind	v-ɑ----	v-NasalA
Ice	ʒɛl-	gzah-eh-l
Fire-Focus	f-ø---	f-uu
Year	ã----	NasalA
Name-Nomen	nõ---	n-oon
Tongue	lã-g--	l-NasalA-g
ToDrink	b--wax-	b-w-a-rr
ToEat-Manducare	mã-ʒ--e--	m-NasalA-gzah-ay
ToBite	m-oxd-ɤ-	m-oh-rr-d-rr
ToSuck	syse--	s-eeh-s-ay
ToSpit	kõ-spye-	k-oon-s-p-eeh-ay
ToKnow-Sapere	savwax-	s-ah-v-w-ah-rr
ToKnow-Cognoscere	kõ-ne-tɤ-	k-euh-n-eh-t-rr
ToThink	kɥ--ide--	k-eu-e-d-ay
ToThink-Pensare	pã-se--	p-NasalA-s-ay
ToFear-Tremere	kɤẽ-d-ɤ-	k-rr-ehn-d-rr
ToSleep	d-ɔkmix-	d-euh-rr-m-e-rr
ToLive	viv-ɤ-	v-e-v-rr
ToDie	muxix-	m-u-rr-e-rr
ToKill	nwaje--	n-w-aj_diphthong-ay
ToKill-Tutari	t-ɥ-e--	t-eu-ay
ToKill-Mactare	ma-te--	m-ah-t-ay
ToKill-Occidere	ɔksi--ɤ-	euh-k-s-e-rr
ToFight-Battuere	bat--ɤ-	b-ah-t-rr
ToHunt-Captiare	ʃa-s-e--	shh-ah-s-ay
ToHit	pu-se	p-u-s-ay
ToCut	sje----	s-jg-ay
ToCut-Excurtare	e--kuxte--	ay-k-u-rr-t-ay
ToCut-Taliare	taj--e--	t-a-jg-ay
ToSplit-Scindere	s-ɛ-de--	s-ehnn-d-ay
ToSplit-Findere	fã-d-ɤ-	f-NasalA-d-rr
ToSplit-Partire	paktix-	p-ah-rr-t-e-rr
ToSplit-Separare	sə-v---ɤe	s-aah-v-rr-ay
ToStab	pwẽ-d-ɤ-	p-w-ehnn-d-rr
ToStab-Iugulare	ʒygyle--	gzah-eeh-g-eeh-l-ay
ToScratch-Rasare	kaze--	rr-a-zz-ay
ToDig	fwix	f-w-e-rr
ToSwim-Navigare	na--ʒe--	n-ah-gzah-ay
ToFly	vole--	v-oh-l-ay
ToWalk	ʃəmine--	shh-aah-m-e-n-ay
ToWalk-Marcher	makʃe	m-ah-rr-shh-ay
ToCome	vəniɤ-	v-aah-n-e-rr
ToLieAsInABed	e-tã-d-ɤ-	ay-t-NasalA-d-rr
ToLieAsInABed-lacere	ʒe-zix-	gzah-ay-zz-e-rr
ToSit	swa--ɤ-	s-w-ah-rr
ToStand	ɛ-t-ɤ-	eh-t-rr
ToStand-Levare	løve--	l-aah-v-ay
ToStand-Altiare	-o-s-e--	oh-s-ay
ToTurnIntransitive	tuxne--	t-u-rr-n-ay
ToTurnIntransitive-Gyrare	ʒixe--	gzah-e-rr-ay
ToTurnIntransitive-AncestralClass3	vixe--	v-e-rr-ay
ToTurnIntransitive-Torquere	tɔkd-ɤ-	t-euh-rr-d-rr
ToFall	ʃwa--ɤ-	shh-w-ah-rr
ToFall-Tumbare	tõ-be-	t-on-b-ay
ToHold	tən-iɤ-	t-aah-n-e-rr
ToSqueeze	e--pɤẽ-d-ɤ-	ay-p-rr-ehnn-d-rr

## Appendix 4 - Word Lists by Language

ToSqueeze-Serare	se-ke--	s-ay-rr-ay
ToSqueeze-Stringere	e-tʰe-d-ɣ-	ay-t-rr-ehnn-d-rr
ToRub	fʰeje--	f-rr-eh_diphthong-ay
ToRub-Frictare	fʰote--	f-rr-oh-t-ay
ToWash	lave--	l-ah-v-ay
ToWipe-Exsucare	e-sʉi-je--	ay-s-eu-e-jg-ay
ToPull	tike--	t-e-rr-ay
ToPull-Pulsare	pu-se--	p-u-s-ay
ToPull-Trahere	tʰ-εɣ-	t-rr-eh-rr
ToThrow	ʒə-te	gzah-aah-t-ay
ToThrow-Lanceare	la-s-e-	l-NasalA-s-ay
ToTie	li-e--	l-e-ay
ToSew	ku-d---ɣ-	k-u-d-rr
ToCount	kō---te--	k-on-t-ay
ToCount-Enumerare	enumeke--	ay-n-u-m-ay-rr-ay
ToSay	di--ɣ	d-e-rr
ToSing-AncestralClass	ʃā-te--	shh-NasalA-t-ay
ToPlay-Jiocare	ʒ-w-e--	gzah-w-ay
ToFloat	flyktʉe--	f-l-eeh-k-t-eu-ay
ToFlow	flye--	f-l-eeh-ay
ToFlow-Colare	kule--	k-u-l-ay
ToFlow-Currere	ku-ɣiɣ-	k-u-rr-e-rr
ToFreeze	ʒəle--	gzah-aah-l-ay
ToFreeze-Glaciare	gla-s-e--	g-l-ah-s-ay
ToBurn-Brojan	bʰyle--	b-rr-eeh-l-ay
ToBurn-Cremare	kʰame--	k-rr-ah-m-ay
ToBurn-Flammare	flā-be--	f-l-NasalA-b-ay
ToBurn-Ardere	aʰd-ɣ-	ah-rr-d-rr
ToBurn-Flagrare	flagke--	f-l-ah-g-rr-ay
ToBurn-Incendere	ε-sā-dje--	ehnn-s-NasalA-d-jg-ay
All-Totus	tu----	t-u
Many	mu---	m-u
Some	o-kæ-	oh-k-uuh
Few	pø---	p-uu
Other	o-t-ɣ-	oh-t-rr
Big-Grandem	gʰā---	g-rr-NasalA
Long-Longum	lō-----	l-oon
Long-Largum	laʰʒ--	l-ah-rr-gzah
Wide	le---	l-ay
Wide-Amplum	ā-pl--	NasalA-p-l
Heavy	gʰav--	g-rr-ah-v
Heavy-Lurdus	luɣ---	l-u-rr
Heavy-Pesant	pəzā---	p-aah-zz-NasalA
Small	pə-ti---	p-aah-t-e
Short	kuɣ---	k-u-rr
Short-Brevis	bʰef--	b-rr-eh-f
Narrow-Strictus	e-tʰwa-----	ay-t-rr-w-ah
Thin	məny----	m-aah-n-eeh
Thin-Delicatus	du:--ʒe:---	d-U-gzah-ai
Right-Directum	d-ɣwa-t--	d-rr-w-ah-t
Red-Russus	ɣu----	rr-u
Red-Vermiculus	vεɣmej----	v-eh-rr-m-eh_diphthong
Red-Rubeus	ɣu-ʒ---	rr-u-gzah
Green	vεɣ----	v-ay-rr
One	œ---	uuh
Two-Duos	d-ø-	d-uu
Three	tʰwa-	t-rr-w-a

## Appendix 4 - Word Lists by Language

Four	k-a-t--k-	k-ah-t-rr
Five	sê-k--	s-ehn-k
Here	i--s---i-	e-s-e
There	--la-	l-ah
Who-Qui	k-i-	k-e
What	kwa-	k-w-ah
When-Quando	k-ã---	k-NasalA
How-Quomodo	kômã--	k-euh-m-NasalA
Not	nõ-	n-oon
Not-Nec	ni-	n-e
And-Et	e-	ay

## Spanish

Cognate	IPA	Sounds
I	j--o	VdPalatalFricative-oh
We	no-s	n-oh-s
YouPlural	bo-s	b-oh-s
YouSingular	tu	t-u
YouSingular-VostramMercedem	-usted	u-s-t-ay-d
Woman	-e-m-br-a	ay-m-b-er-ah
Woman-Mulier	mux-er--	m-u-xha-ay-er
Woman-Domina	do--ɲa	d-oh-VdPalatalNasal-ah
ManHumanBeing	om-bre-	oh-m-b-er-ay
Child	infante-	e-n-f-ah-n-t-ay
Child-Ninnus	nijo	n-e-VdPalatalNasal-oh
Wife	espo-sa	ay-s-p-oh-s-ah
Wife-Mulier	mux-er-	m-u-xha-ay-er
Husband	mariðo-	m-ah-er-e-dd-oh
Husband-Sponsus	espo-so-	ay-s-p-oh-s-oh
Mother	maðre-	m-ah-dd-er-ay
Father	paðre	p-ah-dd-er-ay
Father-Tata	tata	t-ah-t-ah
Animal	alimaɲ-a	ah-l-e-m-ah-VdPalatalNasal-ah
Fish-Piskem	peθ---	p-ay-th
Bird-Avem	abe-	ah-b-ay
Bird-Passerem	pa-xaro-	p-ah-xha-ah-er-oh
Louse	pjo--x-o-	p-jg-oh-xha-oh
Snake	s-erpjente-	s-ay-er-p-jg-ay-n-t-ay
Snake-Serpens	sjerpe--	s-jg-ay-er-p-ay
Worm	berme-	b-ay-er-m-ay
Tree	arβol--	ah-er-bb-oh-l
Forest	selba	s-ay-l-b-ah
Stick	palo-	p-ah-l-oh
Fruit	fru--to-	f-er-u-t-oh
Flower	floc--	f-l-oh-er
Tail	kola	k-oh-l-ah
Feather	pluma	p-l-u-m-ah
Feather-Penna	pe-ɲa	p-ay-VdPalatalNasal-ah
Hair	p-elo-	p-ay-l-oh
Hair-Capillus	kabe-jo-	k-ah-b-ay-VdPalatalFricative-oh
Head	kaβe-θ-a	k-ah-bb-ay-th-ah
Nose	naso-	n-ah-s-oh
Nose-Nares	nariθ-	n-ah-er-e-th
Mouth	bo-ka	b-oh-k-ah
Mouth-Gula	gola	j-oh-l-ah



## Appendix 4 - Word Lists by Language

Wing	ala	ah-l-ah
Sun	sol--	s-oh-l
Moon	luna	l-u-n-ah
Star	estre-ja	ay-s-t-er-ay-VdPalatalFricative-ah
Water	'a-ywa	ah-juh-w-ah
Rain	j-u-bja	VdPalatalFricative-u-b-jg-ah
River-Rivus	ri-o-	r-e-oh
Lake	lago-	l-ah-j-oh
Sea	mar-	m-ah-er
Salt	sal--	s-ah-l
Earth	'tje-ra	t-jg-ay-r-ah
Fog	kali--na-	k-ah-l-e-n-ah
Fog-Nebula	nje-b-la	n-jg-ay-b-l-ah
Fog-Tenebras	t-injeblas	t-e-n-jg-ay-b-l-ah-s
Fog-Fumata	fumata	f-u-m-ah-t-ah
Sky	'θjelo	th-jg-ay-l-oh
Wind	'bjento-	b-jg-ay-n-t-oh
Ice	jelo	VdPalatalFricative-ay-l-oh
Smoke	-umo-	u-m-oh
Fire-Focus	fwego-	f-w-ay-g-oh
Year	a-po-	ah-VdPalatalNasal-oh
Name-Nominem	nom-bre-	n-oh-m-b-er-ay
Tongue	'lengwa	l-ay-nya-g-w-ah
ToDrink	beb-er-	b-ay-b-ay-er
ToEat	kome--r-	k-oh-m-ay-er
ToEat-Manducare	mandukar-	m-ah-n-d-u-k-ah-er
ToBite	m-orðer-	m-oh-er-dd-ay-er
ToBite-Morsicare	mo-s-kar-	m-oh-s-k-ah-er
ToSpit-Exconspuere	esku-pir	ay-s-k-u-p-e-er
ToSpit-Sputare	esputar	ay-s-p-u-t-ah-er
ToKnow-Sapere	sab-er-	s-ah-b-ay-er
ToKnow-Cognoscere	ko-noθer-	k-oh-n-oh-th-ay-er
ToThink	kw--idar-	k-w-e-d-ah-er
ToThink-Pensare	pensar-	p-ay-n-s-ah-er
ToFear	temer-	t-ay-m-ay-er
ToFear-Tremere	trem-er-	t-er-ay-m-ay-er
ToSleep	d-ormir-	d-oh-er-m-e-er
ToLive	bibir-	b-e-b-e-er
ToDie	morir-	m-oh-er-e-er
ToKill-Adnecare	a-negar-	ah-n-ay-g-ah-er
ToKill-Mactare	ma-tar-	m-ah-t-ah-er
ToFight	pu-ñar-	p-u-VdPalatalNasal-ah-er
ToFight-Battuere	ba-t-ir-	b-ah-t-e-er
ToHunt-Captiare	ka-θ-ar-	k-ah-th-ah-er
ToHit	pu-xar-	p-u-xha-ah-er
ToCut	s-egar-	s-ay-j-ah-er
ToCut-Curtare	kortar-	k-oh-er-t-ah-er
ToCut-Taliare	ta-x-ar-	t-ah-xha-ah-er
ToSplit	dibidir-	d-e-b-e-d-e-er
ToSplit-Findere	-ender-	ay-n-d-ay-er
ToSplit-Partire	partir-	p-ah-er-t-e-er
ToSplit-Separare	separar-	s-ay-p-ah-er-ah-er
ToScratch	ra-er-	r-ah-ay-er
ToScratch-Rasare	rasar-	r-ah-s-ah-er
ToScratch-Rasicare	raskar	r-ah-s-k-ah-er
ToDig-Cavare	kabar	k-ah-b-ah-er
ToDig-Excavare	eskabar-	ay-s-k-ah-b-ah-er

## Appendix 4 - Word Lists by Language

ToSwim	n-adar-	n-ah-d-ah-er
ToSwim-Navigare	nabegar-	n-ah-b-ay-g-ah-er
ToFly	bolar-	b-oh-l-ah-er
ToWalk	kaminar-	k-ah-m-e-n-ah-er
ToWalk-Ambitare	and--ar-	ah-n-d-ah-er
ToCome	benir-	b-ay-n-e-er
ToLieAsInABed	ekstender-	ay-k-s-t-ay-n-d-ay-er
ToLieAsInABed-lacere	ja-θer-	VdPalatalFricative-ah-th-ay-er
ToSit	s-e--r-	s-ay-er
ToSit-Sedentare	se--ntar-	s-ay-n-t-ah-er
ToStand	estar-	ay-s-t-ah-er
ToStand-Levare	jēbar-	VdPalatalFricative-ay-b-ah-er
ToStand-Altiare	-alθ-ar-	ah-l-th-ah-er
ToTurnIntransitive	tornar-	t-oh-er-n-ah-er
ToTurnIntransitive-Gyrare	xirar-	xha-e-er-ah-er
ToTurnIntransitive-AncestralClass3	birar-	b-e-er-ah-er
ToTurnIntransitive-Torquere	torθer-	t-oh-er-th-ay-er
ToFall	k-a-er-	k-ah-ay-er
ToFall-Tumbare	tumbar	t-u-m-b-ah-er
ToHold	ten-er-	t-ay-n-ay-er
ToHold-Segurar	segurar	s-ay-g-u-er-ah-er
ToSqueeze	eksprem-ir-	ay-k-s-p-er-ay-m-e-er
ToSqueeze-Serrere	se-rar	s-ay-r-ah-er
ToSqueeze-Serare	θe-rar-	th-ay-r-ah-er
ToSqueeze-Appetorare	a-p--retar-	ah-p-er-ay-t-ah-er
ToSqueeze-Stringere	estrep-ir-	ay-s-t-er-ay-VdPalatalNasal-e-er
ToRub	fregar-	f-er-ay-g-ah-er
ToRub-Frictare	frotar-	f-er-oh-t-ah-er
ToRub-Frictiare	frisar	f-r-e-s-ah-er
ToWash	laβar-	l-ah-bb-ah-er
ToWipe-Extergere	e-starsir-	ay-s-t-ah-er-s-e-er
ToWipe-Exsucare	enx-ug-ar-	ay-n-xha-u-g-ah-er
ToWipe-Limpidare	limpj-ar-	l-e-m-p-jg-ah-er
ToPull	tirar-	t-e-er-ah-er
ToPull-Pulsare	pu-xar-	p-u-xha-ah-er
ToThrow	-e-θār	ay-ts-ah-er
ToThrow-Lanceare	lanθ-ar-	l-ah-n-th-ah-er
ToThrow-Eruncare	a-rankar	ah-r-ah-n-k-ah-er
ToTie	legar-	l-ay-g-ah-er
ToTie-Aptare	a-tar-	ah-t-ah-er
ToSew	ko--s-er-	k-oh-s-ay-er
ToCount	kon--tar-	k-oh-n-t-ah-er
ToCount-Enumerare	enumerar-	ay-n-u-m-ay-er-ah-er
ToSay	deθir	d-ay-th-e-er
ToSing-AncestralClass	kantar-	k-ah-n-t-ah-er
ToPlay-Ludere	ludir-	l-u-d-e-er
ToPlay-Jiocare	xu-gar-	xha-u-j-ah-er
ToFloat	flugtwar-	f-l-u-g-t-w-ah-er
ToFlow	fluir-	f-l-u-e-er
ToFlow-Colare	kolar-	k-oh-l-ah-er
ToFlow-Excurrere	e-skurir-	ay-s-k-u-r-e-er
ToFlow-Currere	ko-rer-	k-oh-r-ay-er
ToFreeze	-elar-	ay-l-ah-er
ToBurn-Cremare	k-emar-	k-ay-m-ah-er
ToBurn-Flammare	fla-mear	f-l-ah-m-ay-ah-er
ToBurn-Ardere	arder-	ah-er-d-ay-er
ToBurn-Flagrare	flagrar	f-l-ah-g-er-ah-er

## Appendix 4 - Word Lists by Language

ToBurn-Incendere	enθend-er-	ay-n-th-ay-n-d-ay-er
All-Totus	to-do-	t-oh-d-oh
Many	mu-ŋfo-	m-u-ts-oh
Many-Tantus	tanto-	t-ah-n-t-oh
Some	alguno	ah-l-j-u-n-oh
Few	poko-	p-oh-k-oh
Other	o-t-ro	oh-t-er-oh
Big	ma-ŋo-	m-ah-VdPalatalNasal-oh
Big-Grandem	grande-	g-er-ah-n-d-ay
Long-Longum	lo-ngo-	l-oh-n-j-oh
Long-Largum	laryo-	l-ah-er-juh-oh
Wide	lato-	l-ah-t-oh
Wide-Amplum	anŋ-o-	ah-n-ts-oh
Heavy	grabe-	g-er-ah-b-ay
Heavy-Lurdus	lerdo-	l-ay-er-d-oh
Heavy-Pesant	pesa-ðo	p-ay-s-ah-dd-oh
Small-Pittinus	pe-kepo-	p-ay-k-ay-VdPalatalNasal-oh
Short	korto-	k-oh-er-t-oh
Short-Brevis	brebe-	b-er-ay-b-ay
Narrow	angosto-	ah-n-g-oh-s-t-oh
Narrow-Strictus	estr-e-ŋfo-	ay-s-t-er-ay-ts-oh
Thin	menu-do-	m-ay-n-u-d-oh
Thin-Delicatus	del-yaðo-	d-ay-l-juh-ah-dd-oh
Thin-Subtilis	su-til--	s-u-t-e-l
Right-Dextrem	dje-stro-	d-jg-ay-s-t-er-oh
Right-Directum	der-e-ŋfo-	d-ay-er-ay-ts-oh
Red-Russus	ro-xo-	r-oh-xha-oh
Red-Vermiculus	bermexo---	b-ay-er-m-ay-xha-oh
Red-Rubeus	ru-bjo-	r-u-b-jg-oh
Green	ber-de-	b-ay-er-d-ay
One	'uno-	u-n-oh
Two-Duos	d-os	d-oh-s
Three	tr-es	t-er-ay-s
Four	kwa-t--ro	k-w-ah-t-er-oh
Five	'θink-o	th-e-n-k-oh
Here	-a-k---i-	ah-k-e
There	a-ja-	ah-VdPalatalFricative-ah
There-Adlbi	ai	ah-e
Who-Quem	kjen-	k-jg-ay-n
What	k-e-	k-ay
When-Quando	kwando	k-w-ah-n-d-oh
How-Quomodo	komo--	k-oh-m-oh
Not	no-	n-oh
Not-Nec	ni-	n-e
And-Et	i-	e

## Italian

Cognate	IPA	Sounds
I	i--o	e-oh
We	no:i-	n-O-e
YouPlural	'vo:i-	v-O-e
YouSingular	tu	t-u
Woman	femmi-n-a	f-ay-m-m-e-n-ah
Woman-Mulier	moʎʎe---	m-oh-yuh-yuh-ay
Woman-Domina	dɔn-na	d-euh-n-n-ah

## Appendix 4 - Word Lists by Language

ManHumanBeing-Homo	-wɔmo	w-euh-m-oh
Child	--fante-	f-ah-n-t-ay
Child-Ninnus	nino	n-e-n-oh
Wife	-spɔ-za	s-p-euh-zz-ah
Wife-Mulier	moʎʎe--	m-oh-yuh-yuh-ay
Husband	marito-	m-ah-r-e-t-oh
Husband-Sponsus	-spɔ-zo-	s-p-euh-zz-oh
Husband-Socius	sɔʎf-o-	s-euh-ts-oh
Mother	ma:dre-	m-A-d-r-ay
Father	pa:dre	p-A-d-r-ay
Father-Tata	tata	t-ah-t-ah
Animal-Bestia	biʎʎ-a	b-e-shh-shh-ah
Fish-Piskem	peʎʎe-	p-ay-shh-shh-ay
Bird-Avicellum	--u-tʃf-ɛllo-	u-t-ts-eh-l-l-oh
Bird-Passerem	passero-	p-ah-s-s-ay-r-oh
Louse	p-idɔkkjo-	p-e-d-euh-k-k-jg-oh
Snake	s-erp-ente-	s-ay-r-p-ay-n-t-ay
Snake-Serpens	s-ɛrpe--	s-eh-r-p-ay
Worm	verme-	v-ay-r-m-ay
Tree	albero-	ah-l-b-ay-er-oh
Forest	selva	s-ay-l-v-ah
Stick	palo-	p-ah-l-oh
Fruit	fru-tto-	f-r-u-t-t-oh
Flower	'fjo:re-	f-jg-O-er-ay
Tail	koda	k-oh-d-ah
Feather	pjuma	p-jg-u-m-ah
Feather-Penna	penna	p-ay-n-n-ah
Hair	p-elo-	p-ay-l-oh
Hair-Capillus	kapello-	k-ah-p-ay-l-l-oh
Head	kavettsa	k-ah-v-ay-t-t-s-ah
Head-Testa	testa	t-eh-s-t-ah
Nose	na:so-	n-A-s-oh
Nose-Nares	nariʎe	n-ah-r-e-ts-ay
Mouth	bokka	b-oh-k-k-ah
Mouth-Gula	gola	j-oh-l-ah
Wing	ala	ah-l-ah
Sun	sole-	s-oh-l-ay
Moon	luna	l-u-n-ah
Star	-st-ella	s-t-ay-l-l-ah
Water	akkwa	ah-k-k-w-ah
Rain	pjoddʒ-a	p-jg-oh-d-VdPalatoAlveolarSibilant-ah
River	fjume-	f-jg-u-m-ay
River-Rivus	ri-o-	r-e-oh
Lake	lago-	l-ah-g-oh
Sea	mare	m-ah-r-ay
Salt	sale-	s-ah-l-ay
Earth	't-erra	t-eh-r-r-ah
Fog	kalidʒine-	k-ah-l-e-VdPalatoAlveolarSibilant-e-n-ay
Fog-Nebula	n-ebb-ja	n-ay-b-b-jg-ah
Fog-Tenebrae	tɛ:nebre	t-Eh-n-ay-b-r-ay
Fog-Tenebras	t-ɛ:n-ebre-	t-Eh-n-ay-b-r-ay
Fog-Fumata	fuma:ta	f-u-m-A-t-ah
Sky	'ʃf-elo-	ts-eh-l-oh
Wind	'v-ento-	v-eh-n-t-oh
Ice	dʒelo	VdPalatoAlveolarSibilant-eh-l-oh
Smoke	fumo-	f-u-m-oh
Fire-Focus	fwoko-	f-w-euh-k-oh

## Appendix 4 - Word Lists by Language

Year	anno-	ah-n-n-oh
Name-Nomen	no:me-	n-O-m-ay
Tongue	'lingwa	l-e-n-g-w-ah
ToDrink	be---re	b-ay-er-ay
ToEat-Manducare	mandʒ--are	m-ah-n-VdPalatoAlveolarSibilant-ah-er-ay
ToBite	m-ordere	m-euh-r-d-ay-r-ay
ToBite-Morsicare	morsikare	m-oh-r-s-e-k-ah-er-ay
ToSpit-Sputare	-sputare	s-p-u-t-ah-er-ay
ToKnow-Sapere	sap-ere	s-ah-p-ay-r-ay
ToKnow-Cognoscere	ko-noʃfere	k-oh-n-oh-shh-shh-ay-r-ay
ToThink	k-odʒitare	k-oh-VdPalatoAlveolarSibilant-e-t-ah-r-ay
ToThink-Pensare	pensare	p-ay-n-s-ah-er-ay
ToFear	temere	t-ay-m-ay-r-ay
ToFear-Tremere	trem-are	t-r-ay-m-ah-r-ay
ToSleep	d-ormire	d-oh-r-m-e-r-ay
ToLive	vivere	v-e-v-ay-r-ay
ToDie	morire	m-oh-r-e-r-ay
ToKill-Adnecare	annegare	ah-n-n-ay-g-ah-r-ay
ToKill-Occidere	utʃidere	u-t-ts-e-d-ay-er-ay
ToFight	pugnare	p-u-VdPalatalNasal-VdPalatalNasal-ah-r-ay
ToFight-Battuere	batt-ere	b-ah-t-t-ay-r-ay
ToHunt-Captiare	kattʃ-are	k-ah-t-ts-ah-r-ay
ToHit	pulsare	p-u-l-s-ah-r-ay
ToCut	s-egare	s-ay-j-ah-r-ay
ToCut-Excurtare	--skortare	s-k-oh-r-t-ah-r-ay
ToCut-Taliare	ta-ʕʕa:re	t-ah-yuh-yuh-A-r-ay
ToSplit	dividere	d-e-v-e-d-ay-r-ay
ToSplit-Scindere	ʃ-indere	shh-e-n-d-ay-r-ay
ToSplit-Findere	fendere	f-eh-n-d-ay-r-ay
ToSplit-Partire	partire	p-ah-r-t-e-r-ay
ToSplit-Separare	separare	s-ay-p-ah-r-ah-r-ay
ToStab	p-undʒere	p-u-n-VdPalatoAlveolarSibilant-ay-r-ay
ToStab-Iugulare	jugula:re	jg-u-j-u-l-A-r-ay
ToScratch	radere	r-ah-d-ay-r-ay
ToScratch-Rasare	rasare	r-ah-s-ah-r-ay
ToDig-Cavare	kavare	k-ah-v-ah-r-ay
ToDig-Excavare	--skavare	s-k-ah-v-ah-r-ay
ToSwim	nwotare	n-w-oh-t-ah-er-ay
ToSwim-Navigare	navigare	n-ah-v-e-g-ah-r-ay
ToFly	volare	v-oh-l-ah-er-ay
ToFly-Exvolare	zvolare	zz-v-oh-l-ah-er-ay
ToWalk	kamminare	k-ah-m-m-e-n-ah-er-ay
ToWalk-Mergere	merdʒere	m-eh-r-VdPalatoAlveolarSibilant-ay-r-ay
ToWalk-Ambitare	and--are	ah-n-d-ah-r-ay
ToCome	venire	v-ay-n-e-er-ay
ToLieAsInABed	e-stendere	ay-s-t-eh-n-d-ay-r-ay
ToLieAsInABed-Iacere	dʒa-ʃe:re	VdPalatoAlveolarSibilant-ah-ts-ai-er-ay
ToSit	s-edere	s-ay-d-ay-r-ay
ToStand	-stare	s-t-ah-r-ay
ToStand-Levare	levare	l-ay-v-ah-r-ay
ToStand-Altiare	-altsare	ah-l-VlAlveolarSibilantAffricate-ah-r-ay
ToTurnIntransitive	tornare	t-oh-r-n-ah-r-ay
ToTurnIntransitive-Gyrare	dʒirare	VdPalatoAlveolarSibilant-e-r-ah-er-ay
ToTurnIntransitive-AncestralClass3	virare	v-e-r-ah-er-ay
ToTurnIntransitive-Torquere	torʃere	t-euh-r-ts-ay-r-ay
ToFall	k-adere	k-ah-d-ay-er-ay
ToHold	ten-ere	t-ay-n-ay-er-ay

## Appendix 4 - Word Lists by Language

ToSqueeze	--sprēm-ere	s-p-r-eh-m-ay-r-ay
ToSqueeze-Serare	serrare	s-ay-r-r-ah-r-ay
ToSqueeze-Stringere	-strindžere	s-t-r-e-n-VdPalatoAlveolarSibilant-ay-r-ay
ToRub	fregare	f-r-ay-j-ah-r-ay
ToRub-Frictare	frettare	f-r-ay-t-t-ah-r-ay
ToWash	lavare	l-ah-v-ah-r-ay
ToWipe	terdžere	t-eh-r-VdPalatoAlveolarSibilant-ay-r-ay
ToWipe-Exsucare	aʃʃ-ug-are	ah-shh-shh-u-g-ah-r-ay
ToPull	tirare	t-e-r-ah-r-ay
ToPull-Pulsare	pulsare	p-u-l-s-ah-r-ay
ToPull-Trahare	trar-re	t-r-ah-r-r-ay
ToPush	impindžere	e-m-p-e-n-VdPalatoAlveolarSibilant-ay-r-ay
ToThrow	džettare	VdPalatoAlveolarSibilant-ay-t-t-ah-r-ay
ToThrow-Lanceare	lanʃfare	l-ah-n-ts-ah-r-ay
ToThrow-Eruncare	arronʃfare	ah-r-r-oh-n-ts-ah-r-ay
ToTie	legare	l-ay-g-ah-r-ay
ToSew	ku--ʃf-ire	k-u-ts-e-r-ay
ToCount	kon--tare	k-oh-n-t-ah-r-ay
ToCount-Enumerare	enumerare	ay-n-u-m-ay-r-ah-r-ay
ToSay	di--re	d-e-r-ay
ToSay-Exponere	--spor-re	s-p-oh-r-r-ay
ToSing-AncestralClass	kantare	k-ah-n-t-ah-r-ay
ToPlay-Jiocare	džo-kare	VdPalatoAlveolarSibilant-oh-k-ah-r-ay
ToFloat	fluttuare	f-l-u-t-t-u-ah-r-ay
ToFloat-Flutare	flutare	f-l-u-e-t-ah-r-ay
ToFlow	fluire	f-l-u-e-r-ay
ToFlow-Colare	kolare	k-oh-l-ah-r-ay
ToFlow-Excurrere	--skorrere	s-k-oh-r-r-ay-r-ay
ToFlow-Currere	korrere	k-oh-r-r-ay-r-ay
ToFreeze	dželare	VdPalatoAlveolarSibilant-ay-l-ah-r-ay
ToFreeze-Glaciare	gʃatʃʃare	g-jg-ah-t-ts-jg-ah-r-ay
ToBurn-Brojan	bruʃfare	b-r-u-ts-ah-r-ay
ToBurn-Cremare	kremare	k-r-ay-m-ah-r-ay
ToBurn-Flammare	fjammare	f-jg-ah-m-m-ah-r-ay
ToBurn-Ardere	ardere	ah-r-d-ay-r-ay
ToBurn-Flagrare	flagrare	f-l-ah-g-r-ah-r-ay
ToBurn-Incendere	inʃʃendjare	e-n-ts-eh-n-d-jg-ah-r-ay
ToBurn-AncestralClass8	ustolare	u-s-t-oh-l-ah-r-ay
All	opni-	oh-VdPalatalNasal-VdPalatalNasal-e
All-Totus	tutto-	t-u-t-t-oh
Many	molto-	m-oh-l-t-oh
Many-Tantus	tanto-	t-ah-n-t-oh
Some	alkuno	ah-l-k-u-n-oh
Few	poko-	p-euh-k-oh
Other	alt-ro	ah-l-t-r-oh
Big	maʃno-	m-ah-VdPalatalNasal-VdPalatalNasal-oh
Big-Grandem	grande-	g-r-ah-n-d-ay
Long-Longum	lu-ngo-	l-u-n-g-oh
Long-Largum	largo-	l-ah-r-g-oh
Wide	lato-	l-ah-t-oh
Wide-Amplum	ampjo-	ah-m-p-jg-oh
Heavy	greve-	g-r-eh-v-ay
Heavy-Lurdus	lordo-	l-oh-r-d-oh
Heavy-Pesant	pesante	p-ay-s-ah-n-t-ay
Small-Pittinus	pitʃino-	p-e-t-ts-e-n-oh
Small-Pitulus	pikkolo-	p-e-k-k-oh-l-oh
Short	korto-	k-oh-r-t-oh

## Appendix 4 - Word Lists by Language

Short-Brevis	breve-	b-r-eh-v-ay
Narrow	angusto-	ah-n-g-u-s-t-oh
Narrow-Strictus	-str-e-tto-	s-t-r-ay-t-t-oh
Thin	minu-to-	m-e-n-u-t-oh
Thin-Delicatus	delikato-	d-ay-l-e-k-ah-t-oh
Thin-Subtilis	sottile-	s-oh-t-t-e-l-ay
Right-Dextrem	d-ε-stro-	d-eh-s-t-r-oh
Right-Directum	dextra	d-eh-s-t-r-ah
Red	rub-ro	r-u-b-r-oh
Red-Russus	rosso-	r-oh-s-s-oh
Red-Vermiculus	vermiλ-λo-	v-ay-r-m-e-yuh-yuh-oh
Red-Rubeus	rōbbjo-	r-euh-b-b-jg-oh
Green	ver-de-	v-ay-r-d-ay
One	'uno-	u-n-oh
Two-Duae	du-e	d-u-ay
Three	'tr-e-	t-r-ay
Four	kwatt--ro	k-w-ah-t-t-r-oh
Five	'fīŋkwe	ts-e-nya-k-w-ay
Here	--kw--i-	k-w-e
There	--la-	l-ah
There-Ibi	-vi	v-e
Who-Qui	k-i-	k-e
What	k-e-	k-ay
When-Quando	kwando	k-w-ah-n-d-oh
How-Quomodo	kome--	k-oh-m-ay
Not	non	n-oh-n
Not-Nec	ne-	n-ay
And-Et	e-	ay

## Brazilian Portuguese

Cognate	IPA	Sounds
I	-e-w	ay-w
We	nɔj-s	n-euh-jg-s
YouPlural	vɔjs	v-euh-jg-s
YouSingular	tu	t-u
YouSingular-VostramMercedem	vos-e-	v-oh-s-ay
Woman	fe-me---ø	f-ay-m-ay-ahh
Woman-Mulier	muλ-eκ--	m-u-yuh-ay-rr
Woman-Domina	do--nø	d-oh-n-ahh
ManHumanBeing	omẽj---	oh-m-nasal_diphthong_portuguese1
Child	ĩ-fẽ-ʃĩ-	een-f-ahn-ts-e
Child-Ninnus	nenẽj	n-ay-n-nasal_diphthong_portuguese1
Wife	ispo-za	e-s-p-oh-zz-ah
Wife-Mulier	muλ-eκ-	m-u-yuh-ay-rr
Husband	maridu-	m-ah-er-e-d-u
Husband-Sponsus	ispo-zu-	e-s-p-oh-zz-u
Mother	mẽj----	m-nasal_diphthong_portuguese2
Father	paj---	p-aj_diphthong
Father-Tata	tata	t-ah-t-ah
Animal-Bestia	bi-ʃ-ø	b-e-shh-ahh
Fish-Piskem	peĩʃ-i-	p-ej_diphthong-shh-e
Bird-Avem	avi-	ah-v-e
Bird-Passerem	pa-søru-	p-ah-s-ahh-er-u
Louse	p-i-o-λu-	p-e-oh-yuh-u
Snake	s-ekp-ẽ-ʃĩ-	s-ay-rr-p-ehn-ts-e

## Appendix 4 - Word Lists by Language

Worm	veꞑmi-	v-ay-rr-m-e
Tree	akꞑori-	ah-rr-v-oh-er-e
Forest	sewva	s-eh-w-v-ah
Stick	paw--	p-ah-w
Fruit	fru--tə-	f-er-u-t-ahh
Flower	floꞑ--	f-l-oh-rr
Tail	kawde	k-ah-w-d-ahh
Feather-Penna	pe-nə	p-ay-n-ahh
Hair	p-elu-	p-ay-l-u
Hair-Capillus	kabe-lu-	k-ah-b-ay-l-u
Head	kabe-s-ə	k-ah-b-ay-s-ahh
Head-Testa	testə	t-eh-s-t-ahh
Nose-Nares	naris-	n-ah-er-e-s
Mouth	bo-kə	b-oh-k-ahh
Wing	a--	ah
Sun	sow--	s-euh-w
Moon	lu-ə	l-u-ahh
Star	istre-lə	e-s-t-er-ay-l-ahh
Water	'a-gwə	ah-g-w-ahh
Rain	ʃ-u-v-ə	shh-u-v-ahh
River	flumi	f-l-u-m-e
River-Rivus	ꞑi-w-	rr-e-w
Lake	lagu-	l-ah-g-u
Sea	maꞑ-	m-ah-rr
Salt	saw--	s-ah-w
Earth	't-e-ꞑə	t-ay-rr-ahh
Fog	kalizẽj---	k-ah-l-e-gzah-nasal_diphthong_portuguese1
Fog-Nebula	n-ε-vw-ə	n-eh-v-w-ahh
Fog-Fumata	fumase	f-u-m-ah-s-ahh
Sky	s-εw--	s-eh-w
Wind	'v-ẽ-tu-	v-ehn-t-u
Smoke	fumu-	f-u-m-u
Fire-Focus	f-ogu-	f-oh-g-u
Year	ə-nu-	ahh-n-u
Name-Nomen	nomi-	n-oh-m-e
Tongue	'lĩ-gwə	l-een-g-w-ahh
ToDrink	beb-eꞑ-	b-ay-b-ay-rr
ToEat	kome---	k-oh-m-ay
ToEat-Manducare	mẽ-ʒ--aꞑ-	m-ahn-gzah-ah-rr
ToBite	m-okdeꞑ-	m-oh-rr-d-ay-rr
ToBite-Morsicare	mu-səga--	m-u-s-aah-g-ah
ToSuck	sugaꞑ-	s-u-g-ah-rr
ToSpit	ku-spiꞑ	k-u-s-p-e-rr
ToKnow-Sapere	sab-eꞑ-	s-ah-b-ay-rr
ToKnow-Cognoscere	ko-ꞑes-eꝼ-	k-oh-VdPalatalNasal-ay-s-ay-rr
ToThink	k-uʒitaꝼ-	k-u-gzah-e-t-ah-rr
ToThink-Pensare	pẽ-saꝼ-	p-ehn-s-ah-rr
ToFear	temeꝼ-	t-ay-m-ay-rr
ToFear-Tremere	trem-eꝼ-	t-er-ay-m-ay-rr
ToSleep	d-okmiꝼ-	d-oh-rr-m-e-rr
ToLive	viveꝼ-	v-e-v-ay-rr
ToDie	moꝼeꝼ-	m-oh-rr-ay-rr
ToKill-Mactare	ma-taꝼ-	m-ah-t-ah-rr
ToFight-Battuere	ba-t-eꝼ-	b-ah-t-ay-rr
ToHunt-Captiare	ka-s-aꝼ-	k-ah-s-ah-rr
ToHit	pu-ʃaꝼ-	p-u-shh-ah-rr
ToCut	s-eꝼgaꝼ-	s-ay-g-ah-rr



## Appendix 4 - Word Lists by Language

ToCut-Curtare	kortak-	k-oh-rr-t-ah-rr
ToCut-Taliare	ta-ʎ-ak-	t-ah-yuh-ah-rr
ToSplit	dʒividʒik-	VdPalatoAlveolarSibilant-e-v-e-VdPalatoAlveolarSibilant-e-rr
ToSplit-Findere	fē-dek-	f-ehn-d-ay-rr
ToSplit-Partire	paʃʃik-	p-ah-rr-ts-e-rr
ToSplit-Separare	separaκ-	s-ay-p-ah-er-ah-rr
ToStab	p-ū-zik-	p-ooo-gzah-e-rr
ToScratch	ka-ek-	rr-ah-ay-rr
ToScratch-Rasare	kazak-	rr-ah-zz-ah-rr
ToScratch-Rasicare	kaʃkaκ	rr-ah-shh-k-ah-rr
ToScratch-Coctiare	kosaʎ	k-oh-s-ah-VdRetroflexApproximant
ToDig-Cavare	kəvaκ	k-ahh-v-ah-rr
ToDig-Excavare	i-ʃkəvaκ-	e-shh-k-ahh-v-ah-rr
ToSwim	n-adaκ-	n-ah-d-ah-rr
ToSwim-Navigare	naviyaκ-	n-ah-v-eee-juh-ah-rr
ToFly	vo-ak-	v-oh-ah-rr
ToWalk	kəmiɲaκ-	k-ahh-m-e-VdPalatalNasal-ah-rr
ToWalk-Ambitare	ẽ-d--ak-	ahn-d-ah-rr
ToCome	v--ik-	v-e-rr
ToLieAsInABed	istē-dek-	e-s-t-ehn-d-ay-rr
ToLieAsInABed-lacere	ʒə-zek-	gzah-ahh-zz-ay-rr
ToSit	s-e--κ-	s-ay-rr
ToSit-Sedentare	sē---tar-	s-ehn-t-ah-er
ToStand	ʃtar-	eee-shh-t-ah-er
ToStand-Levare	levaκ-	l-ay-v-ah-rr
ToStand-Altiare	-aʎs-a--	ah-ssha-s-ah
ToTurnIntransitive	toɲnaκ-	t-oh-rr-n-ah-rr
ToTurnIntransitive-Gyrare	ʒiraɲ-	gzah-e-er-ah-er
ToTurnIntransitive-AncestralClass3	viɲaɲ-	v-e-er-ah-er
ToTurnIntransitive-Torquere	turser-	t-u-r-s-ay-r
ToFall	k-ə-ir-	k-ahh-e-er
ToFall-Tumbare	tō-baκ	t-on-b-ah-rr
ToHold	te---κ-	t-ay-rr
ToHold-Segurar	siguraκ	s-eee-g-u-er-ah-rr
ToSqueeze	i-ʃpɾəm-ek-	e-shh-p-r-aah-m-ay-rr
ToSqueeze-Serrere	se-ka--	s-ay-rr-ah
ToSqueeze-Serare	si-kaɲ-	s-eee-rr-ah-er
ToSqueeze-Appetorare	ə-pi-r-tar-	ahh-p-eee-er-t-ah-er
ToSqueeze-Stringere	əʃtri-ʒir-	aah-shh-t-r-een-gzah-e-r
ToRub-Exfricare	ʃʃriɲaɲ	eee-shh-f-er-eee-g-ah-er
ToWash	lɛvaɲ-	l-ahh-v-ah-er
ToWipe-Exsucare	ẽ-ʃ-ug-ar-	ehn-shh-u-g-ah-er
ToWipe-Limpidare	li-p--ar-	l-een-p-ah-er
ToPull	ʃira--	ts-e-er-ah
ToPull-Pulsare	pu-ʃaɲ-	p-u-shh-ah-er
ToPull-Trahare	traze--	t-er-ah-zz-ay
ToThrow	ʒejtaɲ	gzah-ej_diphthong-t-ah-er
ToThrow-Lanceare	lɛ-s-a--	l-ahn-s-ah
ToTie-Aptare	ə-taɲ-	ahh-t-ah-er
ToSew	ku--z-er-	k-u-zz-ay-er
ToCount	kō---tar-	k-on-t-ah-er
ToCount-Enumerare	enumerar-	ay-n-u-m-ay-er-ah-er
ToSay	diz-er	d-e-zz-ay-er
ToSing-AncestralClass	kē-taɲ-	k-ahn-t-ah-er
ToPlay-Jiocare	ʒo-gaκ-	gzah-oh-g-ah-rr
ToFloat	flu-tuaκ-	f-l-u-t-u-ah-rr
ToFlow	flwiɲ-	f-l-w-e-rr

## Appendix 4 - Word Lists by Language

ToFlow-Colare	ko-ak-	k-oh-ah-rr
ToFlow-Excurrere	i-ʃko-ʋek-	e-shh-k-oh-rr-ay-rr
ToFlow-Currere	ko-ʋek-	k-oh-rr-ay-rr
ToFreeze	ʒilar-	gzah-eee-l-ah-er
ToBurn-Cremare	k-ʋjmare	k-diphthong_portuguese-m-ah-er-ay
ToBurn-Ardere	akdek-	ah-rr-d-ay-rr
ToBurn-Flagrare	flagkak-	f-l-ah-j-rr-ah-rr
ToBurn-Incendere	ĩ-sendʒiar-	een-s-ay-n-VdPalatoAlveolarSibilant-NearCloseFrontUnrounded-ah-er
All-Totus	to-du-	t-oh-d-u
Many	mũj-tu	m-ooo-jn-t-u
Many-Tantus	tẽ-tu	t-ahn-t-u
Some	awgũ--	ah-w-g-ooo
Few	powku	p-oh-w-k-u
Other	owt-ru	oh-w-t-er-u
Other-Alius	aw---	ah-w
Big-Grandem	grẽ-dʒi-	g-er-ahn-VdPalatoAlveolarSibilant-e
Long-Longum	lõ-gu-	l-on-g-u
Long-Largum	laʒgu-	l-ah-rr-g-u
Wide	latu-	l-ah-t-u
Wide-Amplum	ẽ-ʃ-u-	ahn-shh-u
Heavy	gravi-	g-er-ah-v-e
Heavy-Lurdus	lerdo-	l-ay-er-d-oh
Heavy-Pesant	peza-du	p-ay-zz-ah-d-u
Small-Pittinus	pe-kenu-	p-ay-k-ay-n-u
Short	kugtu-	k-u-rr-t-u
Short-Brevis	'brevi-	b-er-eh-v-e
Narrow-Strictus	istr-ej--tu-	e-s-t-er-ej_diphthong-t-u
Thin	mi-u-du-	m-e-u-d-u
Thin-Delicatus	dew-gadu-	d-ay-w-g-ah-d-u
Thin-Subtilis	su-ʃi-w--	s-u-ts-e-w
Right-Dextrem	d-ε-stru-	d-ch-s-t-er-u
Right-Directum	dir-ẽj-tẽ-	d-e-er-diphthong_portuguese-t-ahh
Red-Russus	ko-ʃu-	rr-oh-shh-NearCloseBackRounded
Red-Vermiculus	vekme--ʃu-	v-ay-rr-m-ay-yuh-u
Red-Rubeus	ru-beo-	r-u-b-ay-oh
Green	ver-di-	v-ay-er-d-eee
One	ũ---	ooo
Two-Duos	d-ojs	d-oj_diphthong-s
Two-Duas	dues	d-u-ahh-s
Three	tr-es	t-er-ay-s
Four	kwa-t--ru	k-w-ah-t-er-u
Five	'sĩ-k-u	s-eeen-k-u
Here	-a-k---i-	ah-k-e
There	--la-	l-ah
There-Adlbi	ai	ah-e
Who-Quem	k-ẽj--	k-nasal_diphthong_portuguese1
What	k-i-	k-e
When-Quando	kwẽ-du	k-w-ahn-d-u
How-Quomodo	komu--	k-oh-m-u
Not	nẽw	n-au_diphthong_nasal
Not-Nec	nẽj	n-nasal_diphthong_portuguese1
And-Et	i-	e

## Portuguese

## Appendix 4 - Word Lists by Language

Cognate	IPA	Sounds
I	-e-w	ay-w
We	nɔːʃ	n-euh-shh
YouPlural	voːʃ	v-oh-shh
YouSingular	tu	t-u
YouSingular-VostramMercedem	vɔs-e-	v-euh-s-ay
Woman	ˈfe-mj---ə	f-ay-m-jg-ahh
Woman-Mulier	muʎ-er--	m-u-yuh-ay-er
Woman-Domina	do--nə	d-oh-n-ahh
ManHumanBeing	ɔmɛj---	euh-m-nasal_diphthong_portuguese1
Child	ĩ-fɛ-ti-	een-f-ahn-t-eee
Child-Ninnus	nenɛj	n-ay-n-nasal_diphthong_portuguese1
Wife	ifpo-zə	eee-shh-p-oh-zz-ahh
Wife-Mulier	muʎ-er-	m-u-yuh-ay-er
Husband	mɛriðu-	m-ahh-er-e-dd-u
Husband-Sponsus	ifpo-zu-	eee-shh-p-oh-zz-u
Mother	mɛj---	m-nasal_diphthong_portuguese2
Father	paj---	p-aj_diphthong
Father-Tata	tata	t-ah-t-ah
Animal-Bestia	bi-ʃ-ə	b-e-shh-ahh
Fish-Piskem	pɛijf-i-	p-diphthong_portuguese-shh-eee
Bird-Avem	avi-	ah-v-eee
Bird-Passerem	pa-sɛru-	p-ah-s-ahh-er-u
Louse	p-i-o-ʎu-	p-e-oh-yuh-u
Snake	s-irp-ɛ-ti-	s-eee-er-p-ehn-t-eee
Worm	vermi-	v-ay-er-m-eee
Tree	arvuri-	ah-er-v-u-er-eee
Forest	sɛʎə	s-eh-ssha-v-ahh
Stick	paw--	p-ah-w
Fruit	fru--tə-	f-er-u-t-ahh
Flower	flor--	f-l-oh-er
Tail	kawdə	k-ah-w-d-ahh
Feather-Penna	pe-nə	p-ay-n-ahh
Hair	p-ilu-	p-eee-l-u
Hair-Capillus	kəʎe-lu-	k-ahh-bb-ay-l-u
Head	kəʎe-s-ə	k-ahh-bb-ay-s-ahh
Head-Testa	tɛʃtə	t-eh-shh-t-ahh
Nose-Nares	nɛriʃ-	n-ahh-er-e-shh
Mouth	bo-kə	b-oh-k-ahh
Wing	a--	ah
Sun	sɔʎ--	s-euh-ssha
Moon	lu-ə	l-u-ahh
Star	iftre-lə	eee-shh-t-er-ay-l-ahh
Water	ˈa-gwə	ah-g-w-ahh
Rain	ʃ-u-v-ə	shh-u-v-ahh
River	flumi-	f-l-u-m-eee
River-Rivus	ʁi-u-	rr-e-u
Lake	layu-	l-ah-juh-u
Sea	mar-	m-ah-er
Salt	sal--	s-ah-l
Earth	ˈt-ɛ-kə	t-eh-rr-ahh
Fog	kɛliʒɛj---	k-ahh-l-e-gzah-nasal_diphthong_portuguese2
Fog-Nebula	n-ɛ-vw-ə	n-eh-v-w-ahh
Fog-Tenebras	tr---ɛv-ɛʃ	t-er-eh-v-ahh-shh
Fog-Fumata	fumasə	f-u-m-ah-s-ahh
Sky	s-ɛw--	s-eh-w

## Appendix 4 - Word Lists by Language

Wind	'v-ẽ-tu-	v-ehn-t-u
Smoke	fumu-	f-u-m-u
Fire-Focus	f-oýu-	f-oh-juh-u
Year	ẽ-nu-	ahh-n-u
Name-Nomen	nomi-	n-oh-m-eee
Tongue	'lĩ-gwẽ	l-een-g-w-ahh
ToDrink	biß-er-	b-eee-bb-ay-er
ToEat	kum--er-	k-u-m-ay-er
ToEat-Manducare	mẽ-ʒ--ar-	m-ahn-gzah-ah-er
ToBite	m-urðer-	m-u-er-dd-ay-er
ToBite-Morsicare	mu-səgar-	m-u-s-aah-g-ah-r
ToSuck	sugar-	s-u-g-ah-er
ToSpit	ku-ʃpir	k-u-shh-p-e-er
ToKnow-Sapere	səb-er-	s-ahh-b-ay-er
ToKnow-Cognoscere	ku-nis-er-	k-u-VdPalatalNasal-eee-s-ay-er
ToThink	k-uʒitar-	k-u-gzah-e-t-ah-er
ToThink-Pensare	pẽ-sar-	p-ehn-s-ah-er
ToFear	timer-	t-eee-m-ay-er
ToFear-Tremere	trim-er-	t-er-eee-m-ay-er
ToSleep	d-urmir-	d-u-er-m-e-er
ToLive	viver-	v-e-v-ay-er
ToDie	muxer-	m-u-rr-ay-er
ToKill-Mactare	mə-tar-	m-ahh-t-ah-er
ToFight-Battuere	bə-t-er-	b-ahh-t-ay-er
ToHunt-Captiare	kə-s-ar-	k-ahh-s-ah-er
ToHit	pu-ʃar-	p-u-shh-ah-er
ToCut	s-iyar-	s-eee-juh-ah-er
ToCut-Curtare	kurtar-	k-u-er-t-ah-er
ToCut-Taliare	tə-ʎ-ar-	t-ahh-yuh-ah-er
ToSplit	dividiŕ-	d-e-v-e-dd-e-er
ToSplit-Findere	fẽ-der-	f-ehn-d-ay-er
ToSplit-Partire	pərtir-	p-ahh-er-t-e-er
ToSplit-Separare	sipərar-	s-eee-p-ahh-er-ah-er
ToStab	p-ũ-ʒir-	p-ooo-gzah-e-er
ToScratch	ʁə-er-	rr-ahh-ay-er
ToScratch-Rasare	ʁəzar-	rr-ahh-zz-ah-er
ToScratch-Rasicare	ʁəʃkar	rr-ahh-shh-k-ah-er
ToScratch-Coctiare	kusar	k-u-s-ah-er
ToDig-Cavare	kəvar	k-ahh-v-ah-er
ToDig-Excavare	i-ʃkəvar-	e-shh-k-ahh-v-ah-er
ToSwim	n-əðar-	n-ahh-dd-ah-er
ToSwim-Navigare	nevīyar-	n-ahh-v-eee-juh-ah-er
ToFly	vw-ar-	v-w-ah-er
ToWalk	kəmpar-	k-ahh-m-e-VdPalatalNasal-ah-er
ToWalk-Ambitare	ẽ-d--ar-	ahn-d-ah-er
ToCome	v--ir-	v-e-er
ToLieAsInABed	iftẽ-der-	e-shh-t-ehn-d-ay-er
ToLieAsInABed-lacere	ʒə-zər-	gzah-ahh-zz-ay-er
ToSit	s-e--r-	s-ay-er
ToSit-Sedentare	sẽ---tar-	s-ehn-t-ah-er
ToStand	iftar-	eee-shh-t-ah-er
ToStand-Levare	livar-	l-eee-v-ah-er
ToStand-Altiare	-aʎs-ar-	ah-ssha-s-ah-er
ToTurnIntransitive	turnar-	t-u-er-n-ah-er
ToTurnIntransitive-Gyrare	ʒirar-	gzah-e-er-ah-er
ToTurnIntransitive-AncestralClass3	ʒirar-	gzah-e-er-ah-er
ToTurnIntransitive-Torquere	turser-	t-u-r-s-ay-r

## Appendix 4 - Word Lists by Language

ToFall	k-ɐ-ir-	k-ahh-e-er
ToFall-Tumbare	tõ-bar	t-on-b-ah-er
ToHold	te---r-	t-ay-er
ToHold-Segurar	siyurar	s-eee-juh-u-er-ah-er
ToSqueeze	i-ʃprəm-er-	e-shh-p-r-aah-m-ay-r
ToSqueeze-Serrere	sə-rar-	s-aah-VIUvularTrill-ah-er
ToSqueeze-Serare	si-rar-	s-eee-rr-ah-er
ToSqueeze-Appetorare	ɐ-pi-r-tar-	ahh-p-eee-er-t-ah-er
ToSqueeze-Stringere	əʃtrɪŋir-	aah-shh-t-r-een-gzah-e-r
ToRub-Exfricare	ɪʃfriɣar	eee-shh-f-er-eee-juh-ah-er
ToWash	lɐvar-	l-ahh-v-ah-er
ToWipe-Exsucare	ẽ-ʃ-uɣ-ar-	ehn-shh-u-juh-ah-er
ToWipe-Limpidare	li-p--ar-	l-een-p-ah-er
ToPull	tirar-	t-e-er-ah-er
ToPull-Pulsare	pu-ʃar-	p-u-shh-ah-er
ToPull-Trahere	trɛzer-	t-er-ahh-zz-ay-er
ToThrow	zɛjtar	gzah-ej_diphthong-t-ah-er
ToThrow-Lanceare	lɛ-s-ar-	l-ahn-s-ah-er
ToTie-Aptare	ɐ-tar-	ahh-t-ah-er
ToSew	ku--z-er-	k-u-zz-ay-er
ToCount	kõ---tar-	k-on-t-ah-er
ToCount-Enumerare	enumerar-	ay-n-u-m-ay-er-ah-er
ToSay	diz-er	d-e-zz-ay-er
ToSing-AncestralClass	kẽ-tar-	k-ahn-t-ah-er
ToPlay-Jiocare	ʒu-ɣar-	gzah-u-juh-ah-er
ToFloat	flu-tuar-	f-l-u-t-u-ah-er
ToFlow	flwir-	f-l-w-e-er
ToFlow-Colare	ku-ar-	k-u-ah-er
ToFlow-Excurrere	i-ʃku-rer-	e-shh-k-u-VIUvularTrill-ay-er
ToFlow-Currere	ku-ker-	k-u-rr-ay-er
ToFreeze	ʒilar-	gzah-eee-l-ah-er
ToBurn-Cremare	k-ejmake	k-ej_diphthong-m-ah-rr-ay
ToBurn-Ardere	ɐrder-	ahh-er-d-ay-er
ToBurn-Flagrare	flagrar-	f-l-ah-g-er-ah-er
ToBurn-Incendere	ĩ-sẽ-djar-	een-s-ehn-d-jg-ah-er
All-Totus	to-ðu-	t-oh-dd-u
Many	mũj-tu	m-ooo-jn-t-u
Many-Tantus	tɛ-tu-	t-ahn-t-u
Some	atgũ--	ah-ssha-g-ooo
Few	powku	p-oh-w-k-u
Other	owt-ru	oh-w-t-er-u
Other-Alius	at--	ah-ssha
Big-Grandem	grɛ-di-	g-er-ahn-d-eee
Long-Longum	lõ-gu-	l-on-g-u
Long-Largum	largu-	l-ah-er-g-u
Wide	latu-	l-ah-t-u
Wide-Amplum	ẽ-ʃ-u-	ahn-shh-u
Heavy	gravi-	g-er-ah-v-eee
Heavy-Lurdus	lerdo-	l-ay-er-d-oh
Heavy-Pesant	piza-ðu	p-eee-zz-ah-dd-u
Small-Pittinus	pi-kenu-	p-eee-k-ay-n-u
Short	kurtu-	k-u-er-t-u
Short-Brevis	'brevi-	b-er-eh-v-eee
Narrow-Strictus	ɪʃtr-ɛj--tu-	eee-shh-t-er-diphthong_portuguese-t-u
Thin	mi-u-ðu-	m-e-u-dd-u
Thin-Delicatus	deʃ-ɣaðu-	d-eh-ssha-juh-ah-dd-u
Thin-Subtilis	su-ʃiɰw--	s-u-ts-e-w

## Appendix 4 - Word Lists by Language

Right-Dextrem	d-ɛ-ʃtru-	d-eh-shh-t-er-u
Right-Directum	dir-ɛj-tɐ-	d-e-r-diphthong_portuguese-t-ahh
Red-Russus	ʁo-ʃu-	rr-oh-shh-u
Red-Vermiculus	virmej--ʃu-	v-eee-er-m-diphthong_portuguese-yuh-u
Red-Rubeus	ru-beo-	r-u-b-ay-oh
Green	ver-di-	v-ay-er-d-eee
One	ũ---	ooo
Two-Duos	d-ojʃ	d-oj_diphthong-shh
Two-Duas	duɐʃ	d-u-ahh-shh
Three	tr-ɛʃ	t-er-ay-shh
Four	kwa-t--ru	k-w-ah-t-er-u
Five	'sĩ-k-u	s-een-k-u
Here	-ɐ-k---i-	ahh-k-e
There	--la-	l-ah
There-Adlbi	ɛi	ahh-e
Who-Quem	k-ɛj--	k-nasal_diphthong_portuguese2
What	k-i-	k-eee
When-Quando	kwẽ-du	k-w-ahn-d-u
How-Quomodo	kõmu--	k-oh-m-u
Not	nẽw	n-au_diphthong_nasal
Not-Nec	nẽj	n-nasal_diphthong_portuguese2
And-Et	i-	e

## Catalan

Cognate	IPA	Sounds
I	ʒ--ɔ	gzah-euh
YouPlural	bu-s	b-u-s
YouSingular	tu	t-u
YouSingular-VostramMercedem	voste-	v-oh-s-t-ay
Woman	fe-m-br-a	f-ay-m-b-er-ah
Woman-Mulier	muʎ-e---	m-u-yuh-ay
Woman-Domina	dɔ--nə	d-euh-n-aah
ManHumanBeing	-ɔmə---	euh-m-aah
Child-Ninnus	nen-	n-ay-n
Wife	əspɔ-zə	aah-s-p-euh-zz-aah
Wife-Mulier	muʎ-e-	m-u-yuh-ay
Husband	marit--	m-ah-er-e-t
Husband-Sponsus	əspɔ-s--	aah-s-p-euh-s
Mother	ma-rə-	m-ah-er-aah
Father	pa-rə	p-ah-er-aah
Fish-Piskem	peʃ---	p-ay-shh
Bird-Avem	aw--	ah-w
Bird-Avicellum	--u--s-e-ʎ--	u-s-ay-yuh
Louse	p-o---ʎ--	p-oh-yuh
Snake	s-ərp-en---	s-aah-r-p-ay-n
Snake-Serpens	s-erp---	s-ay-er-p
Worm	vɛrm--	v-eh-er-m
Tree	a-b-rə-	ah-b-er-aah
Forest	selba	s-ay-l-b-ah
Stick	pal--	p-ah-l
Fruit	fruj-t--	f-er-u-jg-t
Flower	flɔ---	f-l-euh
Tail	ku-a	k-u-ah
Feather	plomə	p-l-oh-m-aah
Feather-Penna	pɛ-ɲə	p-eh-VdPalatalNasal-aah

## Appendix 4 - Word Lists by Language

Hair	p-ɛl--	p-eh-l
Hair-Capillus	kəbɛ-ʌ--	k-aah-b-eh-yuh
Head	kap-----	k-ah-p
Head-Testa	testə	t-ay-s-t-aah
Nose	nas--	n-ah-s
Nose-Nares	na:ris-	n-A-r-NearCloseFrontUnrounded-s
Mouth	bo-kə	b-oh-k-aah
Mouth-Gula	golə	j-oh-l-Schwa
Wing	alə	ah-l-aah
Sun	səl--	s-euh-l
Moon	ʌunə	yuh-u-n-aah
Star	əst-ɛ-l-	aah-s-t-eh-l
Water	'aj-ɣwə	aj_diphthong-juh-w-aah
Rain	plu-ʒ-ə	p-l-u-gzah-aah
River-Rivus	ri-w-	r-e-w
Lake	ʌak--	yuh-ah-k
Sea	mar-	m-ah-r
Salt	sal--	s-ah-l
Earth	't-ɛ-rə	t-eh-r-aah
Fog-Nebula	n-ɛ--wlə	n-ay-w-l-aah
Fog-Tenebras	t-ən-ɛbrəs	t-aah-n-ay-b-er-aah-s
Sky	s-ɛl--	s-eh-l
Wind	b-en---	b-ay-n
Ice	ʒɛl-	gzah-eh-ssha
Smoke	fum--	f-u-m
Fire-Focus	f-ək--	f-euh-k
Year	a-ɲ--	ah-VdPalatalNasal
Name-Nomen	nəm--	n-euh-m
ToDrink	bɛw--rə	b-eh-w-er-aah
ToEat-Manducare	məɲʒ--a--	m-aah-VdPalatalNasal-gzah-ah
ToBite-Morsicare	mu-səɣa--	m-u-s-aah-juh-ah
ToSpit-Exconspuere	əsku-pi	aah-s-k-u-p-e
ToKnow-Sapere	səβ-ɛ--	s-aah-bb-eh
ToKnow-Cognoscere	ku-nɛʃ-ə--	k-u-n-eh-shh-aah
ToThink	k-u-jda--	k-u-jg-d-ah
ToThink-Pensare	pənsa--	p-aah-n-s-ah
ToFear	temə--	t-ay-m-aah
ToSleep	d-urmi--	d-u-r-m-e
ToLive	biw-rə	b-e-w-er-aah
ToDie	muri--	m-u-er-e
ToKill	n-əga--	n-aah-g-ah
ToKill-Mactare	mə-ta--	m-aah-t-ah
ToKill-Occidere	uksi----	u-k-s-e
ToFight	pu-ɲa--	p-u-VdPalatalNasal-ah
ToFight-Battuere	ba-t--rə	b-ah-t-er-aah
ToHunt-Captiare	kə-s-a--	k-aah-s-ah
ToCut	s-əɣa--	s-aah-juh-ah
ToCut-Taliare	tə-ʌ-a--	t-aah-yuh-ah
ToSplit	dibidi--	d-e-b-e-d-e
ToSplit-Findere	fɛnd-rə	f-eh-n-d-er-aah
ToSplit-Partire	pərti--	p-aah-r-t-e
ToSplit-Separare	səpəra--	s-aah-p-aah-er-ah
ToStab	p-up-i--	p-u-VdPalatalNasal-e
ToScratch	raw-rə	r-ah-w-er-aah
ToScratch-Rasare	rəza--	r-aah-zz-ah
ToScratch-Rasicare	rəska-	r-aah-s-k-ah
ToDig-Cavare	kəba	k-aah-b-ah

## Appendix 4 - Word Lists by Language

ToSwim	n-əda--	n-aah-d-ah
ToSwim-Navigare	nəbəga--	n-aah-b-aah-g-ah
ToFly	bula--	b-u-l-ah
ToWalk	kəmina--	k-aah-m-e-n-ah
ToCome	bəni--	b-aah-n-e
ToLieAsInABed	ə-stend-rə	aah-s-t-ay-n-d-er-aah
ToLieAsInABed-lacere	zaw--rə	gzah-ah-w-er-aah
ToStand	əsta--	aah-s-t-ah
ToStand-Levare	ləba--	yuh-aah-b-ah
ToStand-Altiare	-əls-a--	aah-l-s-ah
ToTurnIntransitive	turna-	t-u-r-n-ah
ToTurnIntransitive-Gyrate	zira--	gzah-e-er-ah
ToTurnIntransitive-AncestralClass3	bira--	b-e-er-ah
ToTurnIntransitive-Torque	tərsə--	t-euh-r-s-aah
ToFall	k-aw-rə	k-ah-w-r-aah
ToFall-Tumbare	tumba-	t-u-m-b-ah
ToHold	tən-i--	t-aah-n-e
ToSqueeze	ə-sprem-ə--	aah-s-p-er-ay-m-aah
ToSqueeze-Serrere	sə-ra--	s-aah-r-ah
ToSqueeze-Stringere	əstreŋə	aah-s-t-er-eh-VdPalatalNasal-aah
ToRub	frəga--	f-er-aah-g-ah
ToRub-Frictiare	frəsa-	f-er-aah-s-ah
ToWash	ləba--	yuh-aah-b-ah
ToWipe-Extergere	ə-stərzi--	aah-s-t-aah-r-gzah-e
ToWipe-Exsucare	ə-f-uga--	aah-shh-u-g-ah
ToPull	tira--	t-e-er-ah
ToPull-Trahere	trəw-rə	t-er-eh-w-er-aah
ToPush	əmpɛŋ-ə--	aah-m-p-eh-VdPalatalNasal-aah
ToThrow	xita	xha-e-t-ah
ToThrow-Lanceare	ləns-a--	yuh-aah-n-s-ah
ToTie	liya--	yuh-e-juh-ah
ToSew	ku--z-i--	k-u-zz-e
ToCount	kum--ta--	k-u-m-t-ah
ToCount-Enumerare	enumera--	ay-n-u-m-ay-er-ah
ToSay	di	d-e
ToSing-AncestralClass	kənta--	k-aah-n-t-ah
ToPlay-Jiocare	zu-ga--	gzah-u-g-ah
ToFloat	fluktua--	f-l-u-k-t-u-ah
ToFlow	flui--	f-l-u-e
ToFlow-Colare	kula--	k-u-ssha-ah
ToFlow-Excurrere	ə-sko-rə--	aah-s-k-oh-r-aah
ToFlow-Currere	ko-rə--	k-oh-r-aah
ToFreeze	zəla--	gzah-aah-l-ah
ToFreeze-Glaciare	glə-s-a--	g-l-aah-s-ah
ToBurn-Cremare	krəma--	k-r-aah-m-ah
ToBurn-Flammare	flama--	f-ssha-ah-m-ah
ToBurn-Incendere	ənsend--rə	aah-n-s-ay-n-d-er-aah
All-Totus	to-t--	t-oh-t
Many	mol---	m-oh-l
Many-Tantus	tant--	t-ah-n-t
Some	əlgə--	aah-l-g-u
Few	pək--	p-euh-k
Other	alt-rə	ah-l-t-er-aah
Big-Grandem	gran---	j-r-ah-n
Long-Longum	ləo-ŋ---	yuh-oh-nya
Long-Largum	ləark--	yuh-ah-er-k
Wide-Amplum	amplə-	ah-m-p-l-aah



## Appendix 4 - Word Lists by Language

Heavy	grew--	g-er-ay-w
Heavy-Pesant	pəza-t-	p-aah-zz-ah-t
Small	pətit--	p-aah-t-e-t
Short	kurt--	k-u-er-t
Short-Brevis	brew--	b-er-ay-w
Narrow-Strictus	əstr-ε--t--	aah-s-t-er-eh-t
Thin	mənu-t--	m-aah-n-u-t
Thin-Delicatus	dəlikat--	d-aah-l-e-k-ah-t
Thin-Subtilis	suptil--	s-u-p-t-e-l
Right-Dextrem	d-e-strə-	d-ay-s-t-er-aah
Right-Directum	dɹet	d-er-eh-t
Red-Russus	rɔ-s--	r-oh-s
Red-Vermiculus	bərmε--λ--	b-aah-r-m-eh-yuh
Red-Rubeus	ru-ɖʒe--	r-u-VdPalatoAlveolarSibilant-ay
Green	vɛr-t--	v-eh-er-t
One	'un--	u-n
Two-Duos	d-os	d-oh-s
Three	'tr-εs	t-r-eh-s
Four	kwa-t--rə	k-w-ah-t-er-aah
Five	'sɪŋk--	s-e-nya-k
Here	-a-k---i-	ah-k-e
There	ə-λa-	aah-yuh-ah
Who-Qui	k-i-	k-e
What	k-ε-	k-eh
When-Quando	kwan	k-w-ah-n
How-Quomodo	kəm---	k-euh-m
Not	no-	n-oh
Not-Nec	ni-	n-e
And-Et	i-	e

## Walloon

Cognate	IPA	Sounds
I	ɖʒɪ--	VdPalatoAlveolarSibilant-NearCloseFrontUnrounded
We	no--	n-oh
YouPlural	vo-s	v-oh-s
YouSingular	ty	t-eeh
Woman	fœ-m-----	f-OpenMidNearFrontRounded-m
Woman-Domina	dœm---	d-OpenMidNearFrontRounded-m
ManHumanBeing	-ɔm----	euh-m
Child	ε-fâ----	eh-f-NasalA
Mother	mɛ-r--	m-ay-VIUvularTrill
Father	pɛ:-r-	p-Eh-r
Fish-Pescion	p-εhð	p-eh-h-on
Bird-Avicellum	--u:-h-ε:----	U-h-Eh
Louse	pju-----	p-jg-u
Snake	sʒεʁp-ě----	s-jg-eh-rr-p-ehn
Worm	vʒɛr--	v-jg-eh-VIUvularTrill
Tree	o:-b----	O-b
Fruit	fry-----	f-VIUvularTrill-eeh
Flower	flø:ʁ--	f-l-o-rr
Tail	kɔw--	k-euh-w
Feather	płɔm-	p-l-euh-m
Feather-Penna	pɛ-n-	p-ay-n
Hair-Capillus	ʃivj-a-	ts-e-v-jg-ah
Head-Testa	ʃɛs--	ts-eh-s

## Appendix 4 - Word Lists by Language

Nose	ne---	n-ay
Mouth	bøk--	b-euh-k
Mouth-Gula	gø:j-	g-o-jg
Wing	el-	ay-l
Sun	solo-	s-euh-l-euh
Moon	løn-	l-uu-n
Star	-st-ø:-l-	s-t-o-l
Water	ε:--w-	Eh-w
Rain	plu:-k--	p-l-U-rr
River-Riparia	rivi:-k--	r-e-v-E-rr
Lake	lak--	l-ah-k
Sea	meɣ-	m-ay-rr
Salt	se---	s-ay
Earth	t-ε:-k-	t-Eh-rr
Sky	s-i:k--	s-E-rr
Wind	v-ẽ----	v-ehn
Fire-Focus	f-ø:---	f-o
Year	ã----	NasalA
Name-Nomen	nõ---	n-on
Tongue	lẽu----	l-eu_nasalized_diphthong
ToDrink	b---ø:k-	b-o-rr
ToEat-Manducare	maɲ---i:--	m-ah-VdPalatalNasal-E
ToSuck	sysi:--	s-eeh-s-E
ToKnow-Sapere	sav-ø:r-	s-ah-v-o-VIUvularTrill
ToKnow-Cognoscere	ki-nõh----	k-e-n-euh-h
ToThink-Pensare	pẽ-sc--	p-ehnn-s-ay
ToSleep	dwaɣmi--	d-w-ah-rr-m-e
ToDie	mõri--	m-euh-VIUvularTrill-e
ToKill-Tutari	tuw-e--	t-u-w-ay
ToFight-Battuere	bat-e--	b-ah-t-ay
ToHunt-Captiare	ʃɛ-s-i:--	ts-eh-s-E
ToCut-Taliare	tɛ--ji:--	t-eh-jg-E
ToSplit-Findere	fɛ-t--	f-ehnn-t
ToSplit-Partire	pɔ:rti--	p-LongOpenMidBackRounded-VIUvularTrill-t-e
ToDig-Cavare	çɑ:v-le	sh-aay-v-l-ay
ToSwim-Navigare	nɛ--dʒi:--	n-eh-VdPalatoAlveolarSibilant-E
ToFly	vøle--	v-euh-l-ay
ToWalk	ʃimine--	ts-e-m-e-n-ay
ToWalk-Marcher	ma:Rʃi:	m-A-VIUvularTrill-ts-E
ToCome	vini--	v-e-n-e
ToLieAsInABed-lacere	dʒe--re	VdPalatoAlveolarSibilant-ay-r-ay
ToStand	ɛs----	eh-s
ToStand-Levare	løve--	l-aah-v-ay
ToStand-Altiare	hɔ:-s-i:	h-LongOpenMidBackRounded-s-E
ToTurnIntransitive	tu:rne-	t-U-r-n-ay
ToTurnIntransitive-AncestralClass3	vike--	v-e-rr-ay
ToFall	ʃf-ε:--R-	ts-Eh-VIUvularTrill
ToFall-Tumbare	tum-e-	t-u-m-ay
ToHold	tin-i--	t-e-n-e
ToSqueeze-Serare	se-re--	s-eh-VIUvularTrill-ay
ToSqueeze-Stringere	stringe	s-t-r-e-n-j-ay
ToRub	froj----	f-r-øj_diphthong
ToRub-Frictare	fɔte--	f-rr-oh-t-ay
ToWash	lave--	l-ah-v-ay
ToWipe-Exsucare	--s-u-we--	s-u-w-ay
ToPull	tire--	t-e-r-ay
ToPull-Pulsare	pu:si:--	p-U-s-E

## Appendix 4 - Word Lists by Language

ToThrow	dʒete	VdPalatoAlveolarSibilant-eh-t-ay
ToThrow-Lanceare	lanc-i:-	l-ah-n-tya-E
ToTie	lɔji:-	l-euh-jg-E
ToSew	kø:--z----	k-o-zz
ToCount	kõ---te--	k-on-t-ay
ToSay	di:--ʁ	d-E-rr
ToSing-AncestralClass	ʃũ-te--	ts-NasalA-t-ay
ToPlay-Jiocare	dʒuw-e--	VdPalatoAlveolarSibilant-u-w-ay
ToFlow-Colare	kɔle--	k-euh-l-ay
ToFreeze	dʒale--	VdPalatoAlveolarSibilant-ah-l-ay
ToBurn-Brojan	bʁu:le--	b-rr-U-l-ay
All-Totus	tɔ----	t-euh
Few	põ---	p-on
Other	õ-t---	on-t
Big-Grandem	gʁã---	j-rr-NasalA
Long-Longum	lõ-----	l-on
Heavy	grav--	j-r-ah-v
Small	pi-ti---	p-e-t-e
Short	ku:ʁ---	k-U-rr
Short-Brevis	bʁɛf--	b-rr-ay-f
Narrow-Strictus	-stʁ-ø:-----	s-t-rr-o
Thin	minu----	m-e-n-u
Thin-Subtilis	su:-ti---	s-U-t-e
Right-Directum	drø:t	d-r-o-t
Red-Rubeus	rɔ-ʃf---	r-euh-ts
Green	vɛʁ----	v-eh-rr
One	õ---	on
Two-Duos	d-ø:-	d-o
Three	tr-ø:-	t-r-o
Four	kwa-t----	k-w-ah-t
Five	sɛ-k--	s-ehn-k
There	--la-	l-ah
Who-Qui	k-i:-	k-E
What	kʷɛ:-	k-w-Eh
When-Quando	kʷand	k-w-ah-n-d
How-Quomodo	kɔmẽ--	k-euh-m-ehnn
Not-Nec	nẽ-	n-ehn
And-Et	ɛ-	eh

## Friulian

Cognate	IPA	Sounds
I	j--o	jg-oh
We	no:--	n-O
YouPlural	vo:--	v-O
YouSingular	tu	t-u
Woman	fɛ-mi-n-ɛ	f-eh-m-e-n-eh
Woman-Mulier	mu--i:r--	m-u-E-r
Woman-Domina	dɔ--ne	d-euh-n-ay
ManHumanBeing	-ɔm----	euh-m
Wife-Mulier	mu-i:r-	m-u-E-r
Husband	mari:t--	m-ah-r-E-t
Husband-Sponsus	-spo:-s--	s-p-O-s
Mother	ma-ri-	m-ah-r-e
Father	pa-ri	p-ah-r-e
Animal	nema:l--	n-ay-m-A-l

## Appendix 4 - Word Lists by Language

Animal-Bestia	bis---	b-e-s
Fish-Piskem	pɛs---	p-eh-s
Bird-Avicellum	--u--ʃjɛ-l--	u-ts-jg-eh-l
Louse	p-edo-li-	p-ay-d-oh-l-e
Snake	s-arp-int--	s-ah-r-p-e-n-t
Worm	vjer--	v-jg-eh-r
Tree	arbul--	ah-r-b-u-l
Forest	sɛlvɛ	s-eh-l-v-ay
Stick	pa:l-	p-A-l
Fruit	fru--t--	f-r-u-t
Flower	flo:r--	f-l-O-r
Tail	kɔdɛ	k-euh-d-eh
Feather	plumɛ	p-l-u-m-eh
Feather-Penna	pɛ-ne	p-eh-n-ay
Hair	p-e:l--	p-ai-l
Hair-Capillus	cavej----	tya-ah-v-ej_diphthong
Head	ca:f----	tya-A-f
Head-Testa	tɛstɛ	t-eh-s-t-ay
Nose	na:s--	n-A-s
Mouth	bɔ-cɛ	b-euh-tya-eh
Mouth-Gula	gɔlɛ	j-euh-l-ay
Wing	alɛ	ah-l-ay
Sun-Soliculus	sore--li-	s-oh-r-ay-l-e
Moon	lunɛ	l-u-n-ay
Star	-st-ɛ-le	s-t-eh-l-ay
Water	a-g-e	ah-j-ay
Rain	plo--je	p-l-oh-jg-ay
River	flum--	f-l-u-m
Lake	la:t--	l-A-t
Sea	ma:r-	m-A-r
Salt	sa:l--	s-A-l
Earth	tjɛ-re	t-jg-eh-r-ay
Fog-Fumata	fumate	f-u-m-ah-t-ay
Sky	ʃ-i:l--	ts-E-l
Wind	'v-int--	v-e-n-t
Smoke	fum--	f-u-m
Fire-Focus	f-u:k--	f-U-k
Year	a-ŋ--	ah-nya
Name-Nomen	nɔŋ--	n-euh-nya
Tongue	'lɛŋ-ɛ	l-eh-n-j-eh
ToDrink	bevi--	b-ay-v-e
ToEat-Manducare	maŋj--a:--	m-ah-nya-VdPalatalStop-A
ToBite	mwardi--	m-w-ah-r-d-e
ToSuck	cuca:--	tya-u-tya-A
ToSpit-Sputare	spuda:--	s-p-u-d-A
ToKnow-Sapere	sav-e:--	s-ah-v-ai
ToKnow-Cognoscere	ko-ŋɔs-i--	k-oh-VdPalatalNasal-oh-s-e
ToThink-Pensare	peŋsa:--	p-ay-nya-s-A
ToFear	temi--	t-ay-m-e
ToFear-Tremere	trim-a:--	t-r-e-m-A
ToSleep	d-urmi:--	d-u-r-m-E
ToLive	vivi--	v-e-v-e
ToDie	muri:--	m-u-r-E
ToKill-Mactare	maʃ-a:--	m-ah-ts-A
ToFight-Battuere	bat-i--	b-ah-t-e
ToHunt-Captiare	ca-ʃ-a:--	tya-ah-ts-A
ToHit	pulsa:-	p-u-l-s-A

## Appendix 4 - Word Lists by Language

ToCut	s-e-a:--	s-ay-A
ToCut-Excurtare	--skurta:--	s-k-u-r-t-A
ToCut-Taliare	ta--ja:--	t-ah-jg-A
ToSplit	dividi--	d-e-v-e-d-e
ToSplit-Partire	parti:--	p-ah-r-t-E
ToSplit-Separare	separa:--	s-ay-p-ah-r-A
ToScratch	rada:--	r-ah-d-A
ToScratch-Rasare	rasa:--	r-ah-s-A
ToDig-Cavare	java:	VdPalatalStop-ah-v-A
ToDig-Excavare	--zjava:--	zz-VdPalatalStop-ah-v-A
ToSwim	n-ada:--	n-ah-d-A
ToSwim-Navigare	naviga:--	n-ah-v-e-j-A
ToFly-Exvolare	zvola:--	zz-v-oh-l-A
ToWalk	camina:--	tya-ah-m-e-n-A
ToCome	viji:-	v-e-VdPalatalNasal-E
ToLieAsInABed-lacere	je-si--	jg-ay-s-e
ToSit-Sedentare	se--nta:--	s-ay-n-t-A
ToStand	-sta:--	s-t-A
ToStand-Levare	leva:--	l-ay-v-A
ToStand-Altiare	-altj-a:	ah-l-t-shh-A
ToTurnIntransitive	torna:--	t-oh-r-n-A
ToTurnIntransitive-Gyrare	džira:--	VdPalatoAlveolarSibilant-e-r-A
ToTurnIntransitive-AncestralClass3	džira:--	VdPalatoAlveolarSibilant-e-r-A
ToFall	ʃjade--	ts-jg-ah-d-ay
ToHold	tinji--	t-e-n-jg-e
ToSqueeze	e-sprim-i--	ay-s-p-r-e-m-e
ToSqueeze-Stringere	strengi:--	s-t-r-eh-n-j-E
ToRub	fre-a--	f-r-ay-ah
ToWash	lava:--	l-ah-v-A
ToWipe-Exsucare	--s-u-ja:--	s-u-jg-A
ToPull	tira:--	t-e-r-A
ToPull-Pulsare	pulsa:--	p-u-l-s-A
ToPull-Trahere	traj---	t-r-aj_diphthong
ToThrow-Lanceare	lanʃa:--	l-ah-n-ts-A
ToTie	le-a:--	l-ay-A
ToSew	ku--zi---	k-u-zz-e
ToCount	kon--ta:--	k-oh-n-t-A
ToSay	di:	d-E
ToSing-AncestralClass	canta:--	tya-ah-n-t-A
ToPlay-Jiocare	džuj-a:--	VdPalatoAlveolarSibilant-u-jg-A
ToFlow-Excurrere	--sko-ri:--	s-k-oh-r-E
ToFlow-Currere	ko-ri--	k-oh-r-e
ToFreeze-Glaciare	gla-ʃ-a:--	j-l-ah-ts-A
ToBurn-Brojan	bruza:--	b-r-u-zz-A
All-Totus	du-t--	d-u-t
Many	molc--	m-oh-l-tya
Many-Tantus	tanc--	t-ah-n-tya
Few	po:k	p-O-k
Other	alt-ri	ah-l-t-r-e
Big-Grandem	grant--	j-r-ah-n-t
Long-Longum	lunk--	l-u-n-k
Long-Largum	lark--	l-ah-r-k
Heavy	grēvi-	j-r-eh-v-e
Heavy-Pesant	pezant-	p-ay-zz-ah-n-t
Small-Pitulus	pi-ʃful--	p-e-ts-u-l
Short	kurt--	k-u-r-t
Narrow-Strictus	-str-ē-t--	s-t-r-eh-t

## Appendix 4 - Word Lists by Language

Thin	minu:-t--	m-e-n-U-t
Thin-Subtilis	su-ti:l--	s-u-t-E-l
Right-Directum	'dret	d-r-eh-t
Red-Russus	rɔ-s--	r-euh-s
Green	ver-t--	v-eh-r-t
One	uŋ--	u-nya
Two-Duos	d-oj-	d-oj_diphthong
Three	'tr-e:-	t-r-ai
Four	kwa-t--ri	k-w-ah-t-r-e
Five	'fɪŋk--	ts-e-nya-k
Here	-a-k---i-	ah-k-e
Who-Qui	kwi-	k-w-e
What	f-e-	ts-ay
When-Quando	kwant	k-w-ah-n-t
How-Quomodo	fɛmu:t-	ts-ay-m-U-t
Not	no-	n-oh
And-Et	e-	ay

## Romanian

Cognate	IPA	Sounds
I	je-w	jg-ay-w
We	noj-	n-oj_diphthong
YouPlural	voj-	v-oj_diphthong
YouSingular	tu	t-u
Woman	fe-me--je	f-ay-m-ay-jg-ay
Woman-Mulier	mu-jere-	m-u-jg-ay-r-ay
Woman-Domina	doam-nə	d-midback_diphthong_romanian-m-n-aah
ManHumanBeing	-om----	oh-m
Wife-Mulier	mu-jere	m-u-jg-ay-r-ay
Husband	mərit--	m-aah-r-e-t
Husband-Socius	sɔs---	s-oh-VlAlveolarSibilantAffricate
Father-Tata	tatə	t-ah-t-aah
Animal	-nəma-je	n-aah-m-ah-jg-ay
Fish-Piskem	pefte-	p-ay-shh-t-ay
Bird-Passerem	pa-səre-	p-ah-s-aah-er-ay
Louse	p-ədu-kje-	p-aah-d-u-k-jg-ay
Snake	f-arɥ-e----	shh-ah-er-p-ay
Snake-Serpens	f-arpe--	shh-ah-er-p-ay
Worm	vjerme	v-jg-ay-r-m-ay
Tree	arbore-	ah-r-b-oh-r-ay
Stick	par--	p-ah-er
Fruit	fru-kt--	f-r-u-k-t
Flower	floare-	f-l-midback_diphthong_romanian-er-ay
Tail	coadə	tya-midback_diphthong_romanian-d-aah
Feather-Penna	pa-nə	p-ah-n-aah
Hair	p-ər--	p-aah-er
Head	kap-----	k-ah-p
Nose	nas--	n-ah-s
Mouth	bu-kə	b-u-k-aah
Mouth-Gula	gurə	j-u-er-aah
Sun	soare-	s-midback_diphthong_romanian-er-ay
Moon	lunə	l-u-n-aah
Star	-st-ɛa---	s-t-midfront_diphthong_romanian
Water	a-p-ə	ah-p-aah
Rain	ploa--je	p-l-midback_diphthong_romanian-jg-ay

## Appendix 4 - Word Lists by Language

River-Rivus	ri-w-	r-eee-w
Lake	lak--	l-ah-k
Sea	mare	m-ah-r-ay
Salt	sare-	s-ah-r-ay
Earth	ts-a-rə	VlAlveolarSibilantAffricate-ah-r-aah
Fog-Nebula	negurə	n-ay-g-u-r-aah
Fog-Caecia	ʃeəʃ-ə	ts-midfront_diphthong_romanian-ts-aah
Sky	ʃ-er--	ts-ay-er
Wind	v-int--	v-eee-n-t
Ice	dʒer-	VdPalatoAlveolarSibilant-ay-r
Smoke	fum--	f-u-m
Fire-Focus	f-ok--	f-oh-k
Year	an---	ah-n
Name-Nomen	nume-	n-u-m-ay
Tongue	'limb-ə	l-e-m-b-aah
ToDrink	b---eə--	b-midfront_diphthong_romanian
ToEat-Manducare	min--ka--	m-eee-n-k-ah
ToBite-Morsicare	murseka--	m-u-r-s-ay-k-ah
ToSuck	sudʒe--	s-u-VdPalatoAlveolarSibilant-ay
ToSpit-Exconspuere	-skujpa	s-k-u-jg-p-ah
ToKnow	ʃti--	shh-t-e
ToKnow-Cognoscere	ku-noaʃte--	k-u-n-midback_diphthong_romanian-shh-t-ay
ToThink	k-udʒeta--	k-u-VdPalatoAlveolarSibilant-ay-t-ah
ToThink-Pensare	pə-sa--	p-aah-s-ah
ToFear	teme--	t-ay-m-ay
ToSleep	d-ormi--	d-oh-r-m-e
ToLive	vi-a--	v-e-ah
ToDie	muri--	m-u-r-e
ToKill	n-eka--	n-ay-k-ah
ToKill-Occidere	u-ʃʃide--	u-ts-e-d-ay
ToFight-Battuere	bat-e--	b-ah-t-ay
ToHit	pulsa--	p-u-l-s-ah
ToCut-Excurtare	--skurta--	s-k-u-r-t-ah
ToCut-Taliare	tə--ja--	t-aah-jg-ah
ToSplit	divide--	d-e-v-e-d-ay
ToSplit-Separare	separa--	s-ay-p-ah-r-ah
ToStab	pundʒe--	p-u-n-VdPalatoAlveolarSibilant-ay
ToScratch	rade--	r-ah-d-ay
ToSwim-Navigare	naviga--	n-ah-v-e-g-ah
ToFly-Exvolare	zbura--	zz-b-u-er-ah
ToWalk-Mergere	merdʒe--	m-ay-r-VdPalatoAlveolarSibilant-ay
ToCome	veni--	v-ay-n-e
ToLieAsInABed	ekstinde--	ay-k-s-t-e-n-d-ay
ToLieAsInABed-lacere	zə-ʃeə--	zz-aah-ts-midfront_diphthong_romanian
ToSit	ʃ-edea--	shh-ay-d-midfront_diphthong_romanian
ToStand	-sta--	s-t-ah
ToStand-Levare	l-ua--	l-u-ah
ToTurnIntransitive	turna--	t-u-r-n-ah
ToTurnIntransitive-Torquere	toartʃe--	t-midback_diphthong_romanian-r-ts-ay
ToFall	kədea--	k-aah-d-midfront_diphthong_romanian
ToHold	tsin-e--	VlAlveolarSibilantAffricate-e-n-ay
ToSqueeze	-sk-reme--	s-k-r-ay-m-ay
ToSqueeze-Stringere	strindʒe--	s-t-r-eee-n-VdPalatoAlveolarSibilant-ay
ToRub	freka--	f-r-ay-k-ah
ToWash	la---	l-ah
ToWipe-Extergere	--ʃterdʒe--	shh-t-ay-r-VdPalatoAlveolarSibilant-ay
ToWipe-Exsucare	u-s--k-a--	u-s-k-ah

## Appendix 4 - Word Lists by Language

ToPull-Pulsare	pulsa--	p-u-l-s-ah
ToPull-Trahere	tradʒe--	t-r-ah-VdPalatoAlveolarSibilant-ay
ToPush	impindʒe--	eee-m-p-e-n-VdPalatoAlveolarSibilant-ay
ToThrow-Eruncare	a-runʒka	ah-er-u-nya-k-ah
ToTie	lega--	l-ay-j-ah
ToSew	coʒa--s-e--	tya-midback_diphthong_romanian-s-ay
ToCount-Enumerare	-numara--	n-u-m-ah-r-ah
ToSay	ziʒfe	zz-e-ts-ay
ToSay-Exponere	--spune	s-p-u-n-ay
ToSing-AncestralClass	kinta--	k-eee-n-t-ah
ToPlay-Jiocare	ʒu-ka--	gzah-u-k-ah
ToFloat	fluctua--	f-l-u-tya-t-u-ah
ToFlow-Excurrere	--skurdʒe--	s-k-u-er-VdPalatoAlveolarSibilant-ay
ToFlow-Currere	kurdʒe--	k-u-er-VdPalatoAlveolarSibilant-ay
ToFreeze-Inglaciare	ing-ets-a--	eee-n-j-ay-VlAlveolarSibilantAffricate-ah
ToBurn-Ardere	arde--	ah-er-d-ay
ToBurn-Incendere	inʒindʒe--	eee-n-ts-e-n-d-gzah-ay
ToBurn-AncestralClass8	ustura--	u-s-t-u-r-ah
All-Totus	to-t--	t-oh-t
Many	mult--	m-u-l-t
Other	alt---	ah-l-t
Big-Majjorem	ma---re	m-ah-er-ay
Long-Longum	lung--	l-u-n-j
Long-Largum	larg--	l-ah-r-j
Wide	lat--	l-ah-t
Heavy	grew--	j-er-ay-w
Small-Pittinus	pu-tsin--	p-u-VlAlveolarSibilantAffricate-e-n
Narrow	ingust--	eee-nya-j-u-s-t
Narrow-Strictus	-str-im-t--	s-t-r-eee-m-t
Thin	mərunt--	m-aah-r-u-n-t
Thin-Subtilis	subtsire-	s-u-b-VlAlveolarSibilantAffricate-e-r-ay
Right-Directum	drept	d-er-ay-p-t
Red-Russus	ro-fu-	er-oh-shh-u
Red-Rubeus	roj-b---	r-oj_diphthong-b
Green	ver-de-	v-ay-er-d-ay
One	unu-	u-n-u
Two-Duos	d-oj-	d-oj_diphthong
Two-Duae	dowə	d-oh-w-aah
Three	tr-ej-	t-r-ej_diphthong
Four	p-a-t--ru	p-ah-t-r-u
Five	ʒintʒ--	ts-e-n-ts
There	--la-	l-ah
Who-Quem	ʒf-ine	ts-e-n-ay
What	ʒf-e-	ts-ay
When-Quando	k-ind	k-eee-n-d
How-Quomodo	kum---	k-u-m
Not	nu-	n-u
And-Et	e-	ay
And-Si	ʒi-	shh-e



## Appendix 5 - Segment Groups

### Pulmonic Consonants

Manner	Bilabial	Labial-Velar	Labio-Dental	Linguo-Labial	Dental	Alveolar	Post-Alveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal Epiglottal	Glottal
Nasal	m					n			ɲ	ŋ			
Stop	p b	k <sup>w</sup> g <sup>w</sup>				t d			c ɟ	k g			
Sibilant, Fricative						s z	ʃ ʒ						
Fricative	β		f v		θ ð				ç ʝ	x ɣ	ʁ		h
Approximant								ɻ	j				
Tap/Flap						ɾ							
Trill						r					R		
Lateral, Fricative													
Lateral, Approximant						l			ʎ				
Lateral, Tap/Flap													

Shaded areas denote articulations judged to be impossible. Where symbols appear in pairs, the one to the right represents a modally voiced consonant.

### Non-Pulmonic Consonants

Manner	Bilabial	Labio-Dental	Velar	Uvular	Pharyngeal Epiglottal
Ejective, Stop					
Ejective, Fricative					
Ejective, Lateral, Fricative					
Tenuis, Click					
Nasal, Click					
Tenuis, Lateral, Click					
Implosive					

Shaded areas denote articulations judged to be impossible. Where symbols appear in pairs, the one to the right represents a modally voiced consonant.

## Appendix 5 - Segment Groups

### Vowels

	Front	Near-Front	Central	Near-Back	Back
Close	i • y		ɨ		u
Near-close		ɪ		ʊ	
Close-mid	e • ø		ə		o
Mid			ə		
Open-mid		œ • ɛ			ɔ
Near-open			ɐ		
Open		a			ɑ

Where symbols appear in pairs, the one to the right represents a rounded vowel.

### Long Vowels

	Front	Near-Front	Central	Near-Back	Back
Close	iː				uː
Mid	eː				oː
Open-mid		ɛː			ɔː
Open	øː		aː		ɑː

### Pulmonic Affricates

Manner	Bilabial	Labio-Dental	Alveolar	Palato-Alveolar	Velar	Uvular	Pharyngeal Epiglottal	Glottal
Sibilant			ts	tʃ				
Non-Sibilant								
Lateral								

Shaded areas denote articulations judged to be impossible.

### Ejective Affricates

Manner	Bilabial	Labio-Dental	Pharyngeal Epiglottal	Glottal
Central				
Lateral				

Shaded areas denote articulations judged to be impossible.

## Appendix 5 - Segment Groups

### Other Segments

<b>e</b> Close-mid Front Vocoid Vowel Continuant	<b>g</b> Velar Voiced Pulmonic Stop Occlusive
<b>oː</b> Mid Back Rounded Vocoid Long Vowel Continuant	<b>ʒ</b> Post-Alveolar Voiced Pulmonic Sibilant Fricative Strident Obstruent Continuant
<b>ə</b> Close-mid Central Vowel	<b>j</b> Palatal Voiced Pulmonic Fricative Obstruent Continuant
<b>o</b> Close-mid Back Rounded Vocoid Vowel Continuant	<b>i</b> Close Front Vocoid Vowel Continuant
<b>w</b> Labial-Velar Vocoid Semivowel Voiced Approximant Continuant	<b>ɔ</b> Open-mid Back Rounded Vocoid Vowel Continuant
<b>dʒ</b> Palato-Alveolar Voiced Sibilant Affricate	<b>ɪ</b> Near-close Near-Front Vowel
<b>j</b> Palatal Vocoid Semivowel Voiced Pulmonic Approximant Continuant	<b>n</b> Alveolar Voiced Pulmonic Nasal Occlusive
<b>s</b> Alveolar Pulmonic Sibilant Fricative Strident Obstruent Continuant	<b>u</b> Close Back Rounded Vocoid Vowel Continuant
<b>ʃ</b> Post-Alveolar Pulmonic Sibilant Fricative Strident Obstruent Continuant	<b>oj</b> Mid Front Vowel Diphthong
<b>v</b> Labio-Dental Voiced Pulmonic Fricative Strident Obstruent Continuant	<b>b</b> Bilabial Voiced Pulmonic Stop Occlusive
<b>t</b> Alveolar Pulmonic Stop Occlusive	<b>uː</b> Close Back Rounded Long Vowel
<b>y</b> Close Front Rounded Vocoid Vowel Continuant	<b>d</b> Alveolar Voiced Pulmonic Stop Occlusive
<b>f</b> Labio-Dental Pulmonic Fricative Strident Obstruent Continuant	<b>eː</b> Mid Front Vocoid Long Vowel Continuant
<b>m</b> Bilabial Voiced Pulmonic Nasal Occlusive	<b>a</b> Open Near-Front Vocoid Vowel Continuant
<b>ɾ</b> Alveolar Voiced Pulmonic Tap/Flap Rhotic Vibrant Liquid	<b>ɐ</b> Near-open Central Rounded Vowel
<b>œ</b> Open-mid Near-Front Rounded Vocoid Vowel Continuant	<b>ɛ</b> Open-mid Near-Front Vocoid Vowel Continuant
<b>l</b> Alveolar Vocoid Voiced Pulmonic Lateral Approximant Rhotic Liquid	<b>r</b> Alveolar Voiced Pulmonic Trill Rhotic Vibrant Liquid
<b>x</b> Velar Pulmonic Fricative Obstruent Continuant	<b>ʎ</b> Palatal Vocoid Voiced Pulmonic Lateral Approximant Rhotic Liquid
<b>ʁ</b> Uvular Voiced Pulmonic Fricative Rhotic Strident Obstruent Continuant Liquid	<b>iː</b> Close Front Vocoid Long Vowel Continuant
<b>ɲ</b> Palatal Voiced Pulmonic Nasal Occlusive	<b>o</b> Mid Front Vowel Diphthong
<b>h</b> Glottal Pulmonic Fricative	<b>ẽj</b> Mid Front Nasal Vowel Diphthong
<b>ɔ̃</b> Open-mid Back Rounded Nasal Vowel	<b>ã</b> Near-close Back Nasal Vowel
<b>ĩ</b> Close Front Nasal Vowel	<b>ẽ</b> Near-open Central Rounded Nasal Vowel
<b>ʈʂ</b> Palato-Alveolar Pulmonic Sibilant Affricate	<b>ɨ</b> Close Central Vowel

## Appendix 5 - Segment Groups

<b>p</b> Bilabial Pulmonic Stop Occlusive	<b>z</b> Alveolar Voiced Pulmonic Sibilant Fricative Strident Obstruent Continuant
<b>ð</b> Dental Voiced Pulmonic Fricative Obstruent Continuant	<b>k</b> Velar Pulmonic Stop Occlusive
<b>ts</b> Alveolar Pulmonic Sibilant Affricate Occlusive Strident	<b>a:</b> Open Central Vocoid Long Vowel Continuant
<b>ẽj</b> Mid Front Nasal Vowel Diphthong	<b>ʀ</b> Uvular Pulmonic Trill Rhotic Vibrant Liquid
<b>aj</b> Mid Front Vowel Diphthong	<b>ɛ:</b> Open-mid Near-Front Vocoid Long Vowel Continuant
<b>θ</b> Dental Pulmonic Fricative Obstruent Continuant	<b>ej</b> Mid Front Vowel Diphthong
<b>ɐj</b> Mid Front Vowel Diphthong	<b>õ</b> Close-mid Back Rounded Nasal Vowel
<b>ẽ</b> Close Back Nasal Vowel	<b>β</b> Bilabial Voiced Pulmonic Fricative Obstruent Continuant
<b>ɭ</b> Alveolar Voiced Velarized Pulmonic Lateral Approximant	<b>ɥ</b> Labial-Palatal Vocoid Semivowel Voiced Approximant Continuant
<b>ø:</b> Open Front Rounded Vocoid Long Vowel	<b>a</b> Mid Front Vowel Diphthong
<b>ø</b> Close-mid Front Rounded Vocoid Vowel Continuant	<b>c</b> Palatal Pulmonic Stop Occlusive
<b>g</b> Velar Voiced Pulmonic Stop Occlusive	<b>ə</b> Mid Central Vowel
<b>ɛj</b> Mid Front Vowel Diphthong	<b>ɛ̃</b> Mid Front Vowel Diphthong
<b>k</b> Labial-Velar Pulmonic Stop Occlusive	<b>ɣ</b> Velar Voiced Pulmonic Fricative Obstruent Continuant
<b>ŋ</b> Velar Voiced Pulmonic Nasal Occlusive	<b>ɡ</b> Labial-Velar Voiced Pulmonic Stop Occlusive
<b>ẽ</b> Mid Front Nasal Vowel Diphthong	<b>ɑ</b> Open Back Vocoid Vowel Continuant
<b>ʃ</b> Palatal Voiced Pulmonic Stop Occlusive	<b>ẽ</b> Open-mid Near-Front Nasal Vowel
<b>ɔ:</b> Open-mid Back Rounded Vocoid Long Vowel Continuant	<b>ũ</b> Open Back Nasal Vowel
<b>ɭ</b> Retroflex Vocoid Voiced Pulmonic Approximant Rhotic Liquid	<b>ç</b> Palatal Pulmonic Fricative Obstruent Continuant
<b>ɑ:</b> Open Back Long Vowel	<b>ʝ</b> Palatal Nasal Approximant
<b>œ̃</b> Open-mid Near-Front Rounded Nasal Vowel Diphthong	<b>ʊ</b> Near-close Near-Back Rounded Vowel

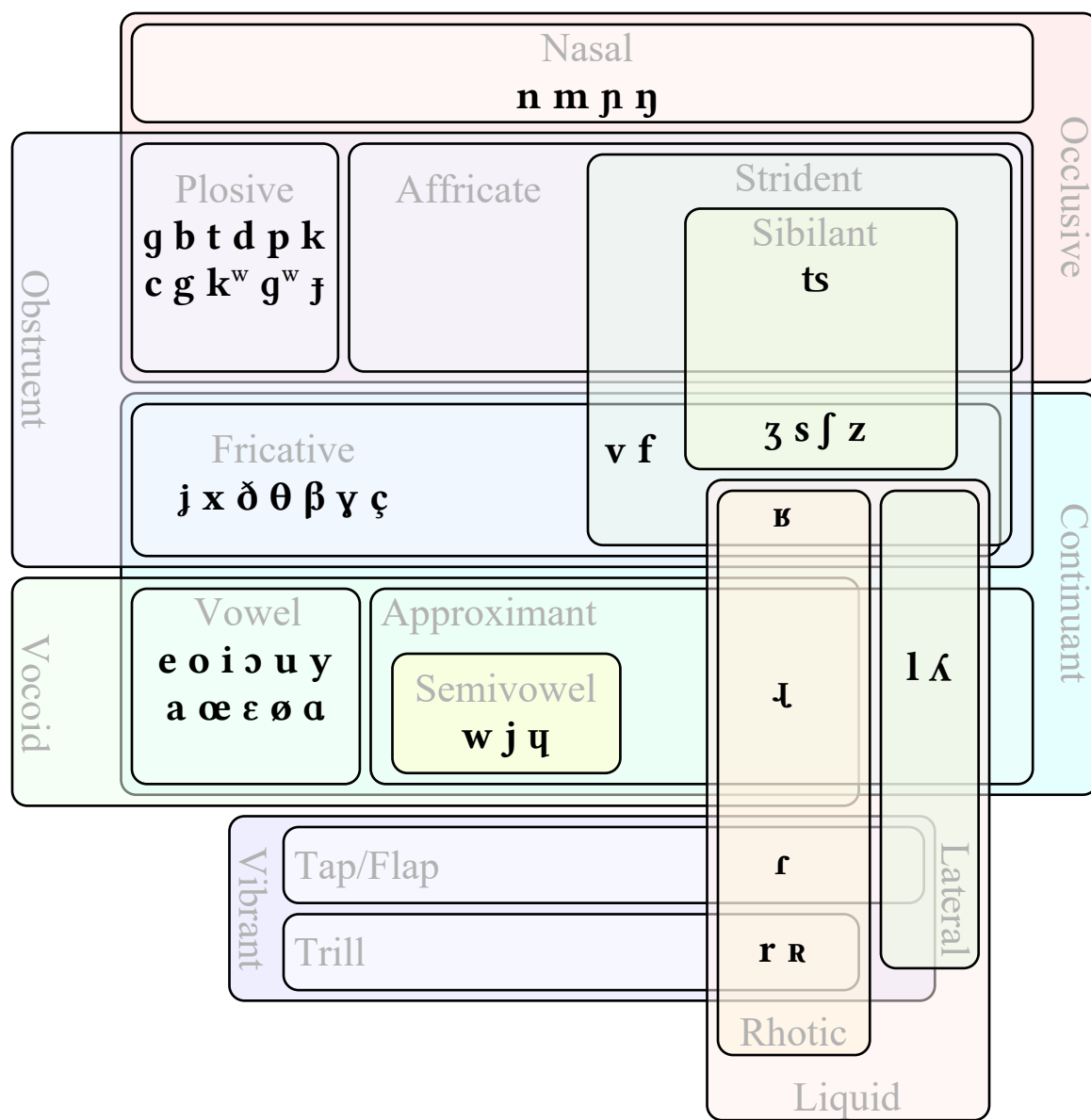
## Appendix 5 - Segment Groups

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ẽ

Mid Front Nasal Vowel Diphthong

## Appendix 6 - Euler Feature Diagram



## Appendix 7 - International Phonetic Alphabet

### IPA Segments

ẽ	θ	β	ʈʃ
1EBD Close Back Nasal Vowel	03B8 Dental Pulmonic Fricative Obstruent Continuant	03B2 Bilabial Voiced Pulmonic Fricative Obstruent Continuant	02A7 Palato-Alveolar Pulmonic Sibilant Affricate
ts	ɖʒ	j	ʒ
02A6 Alveolar Pulmonic Sibilant Affricate Occlusive Strident	02A4 Palato-Alveolar Voiced Sibilant Affricate	029D Palatal Voiced Pulmonic Fricative Obstruent Continuant	0292 Post-Alveolar Voiced Pulmonic Sibilant Fricative Strident Obstruent Continuant
ʎ	ʊ	ʃ	ʁ
028E Palatal Vocoid Voiced Pulmonic Lateral Approximant Rhotic Liquid	028A Near-close Near-Back Rounded Vowel	0283 Post-Alveolar Pulmonic Sibilant Fricative Strident Obstruent Continuant	0281 Uvular Voiced Pulmonic Fricative Rhotic Strident Obstruent Continuant Liquid
ʀ	ɾ	ɭ	ɲ
0280 Uvular Pulmonic Trill Rhotic Vibrant Liquid	027E Alveolar Voiced Pulmonic Tap/Flap Rhotic Vibrant Liquid	027B Retroflex Vocoid Voiced Pulmonic Approximant Rhotic Liquid	0272 Palatal Voiced Pulmonic Nasal Occlusive
ɭ	ɪ	ɨ	ɥ
026B Alveolar Voiced Velarized Pulmonic Lateral Approximant	026A Near-close Near-Front Vowel	0268 Close Central Vowel	0265 Labial-Palatal Vocoid Semivowel Voiced Approximant Continuant
ʎ	ɡ	ʝ	ɛ
0263 Velar Voiced Pulmonic Fricative Obstruent Continuant	0261 Velar Voiced Pulmonic Stop Occlusive	025F Palatal Voiced Pulmonic Stop Occlusive	025B Open-mid Near-Front Vocoid Vowel Continuant
ə	ɔ	ɑ	ɐ
0259 Close-mid Central Vowel	0254 Open-mid Back Rounded Vocoid Vowel Continuant	0251 Open Back Vocoid Vowel Continuant	0250 Near-open Central Rounded Vowel

## Appendix 7 - International Phonetic Alphabet

ə	ũ	œ	ŋ
01DD	0169	0153	014B
Mid Central Vowel	Open Back Nasal Vowel	Open-mid Near-Front Rounded Vowel Continuant	Velar Voiced Pulmonic Nasal Occlusive
ĩ	ø	õ	ð
0129	00F8	00F5	00F0
Close Front Nasal Vowel	Close-mid Front Rounded Vowel Continuant	Close-mid Back Rounded Nasal Vowel	Dental Voiced Pulmonic Fricative Obstruent Continuant
ç	ʒ	y	x
00E7	007A	0079	0078
Palatal Pulmonic Fricative Obstruent Continuant	Alveolar Voiced Pulmonic Sibilant Fricative Strident Obstruent Continuant	Close Front Rounded Vowel Continuant	Velar Pulmonic Fricative Obstruent Continuant
w	v	u	t
0077	0076	0075	0074
Labial-Velar Vowel Semivowel Voiced Approximant Continuant	Labio-Dental Voiced Pulmonic Fricative Strident Obstruent Continuant	Close Back Rounded Vowel Continuant	Alveolar Pulmonic Stop Occlusive
s	r	p	o
0073	0072	0070	006F
Alveolar Pulmonic Sibilant Fricative Strident Obstruent Continuant	Alveolar Voiced Pulmonic Trill Rhotic Vibrant Liquid	Bilabial Pulmonic Stop Occlusive	Close-mid Back Rounded Vowel Continuant
n	m	l	k
006E	006D	006C	006B
Alveolar Voiced Pulmonic Nasal Occlusive	Bilabial Voiced Pulmonic Nasal Occlusive	Alveolar Vowel Voiced Pulmonic Lateral Approximant Rhotic Liquid	Velar Pulmonic Stop Occlusive
j	i	h	g
006A	0069	0068	0067
Palatal Vowel Semivowel Voiced Pulmonic Approximant Continuant	Close Front Vowel Continuant	Glottal Pulmonic Fricative	Velar Voiced Pulmonic Stop Occlusive



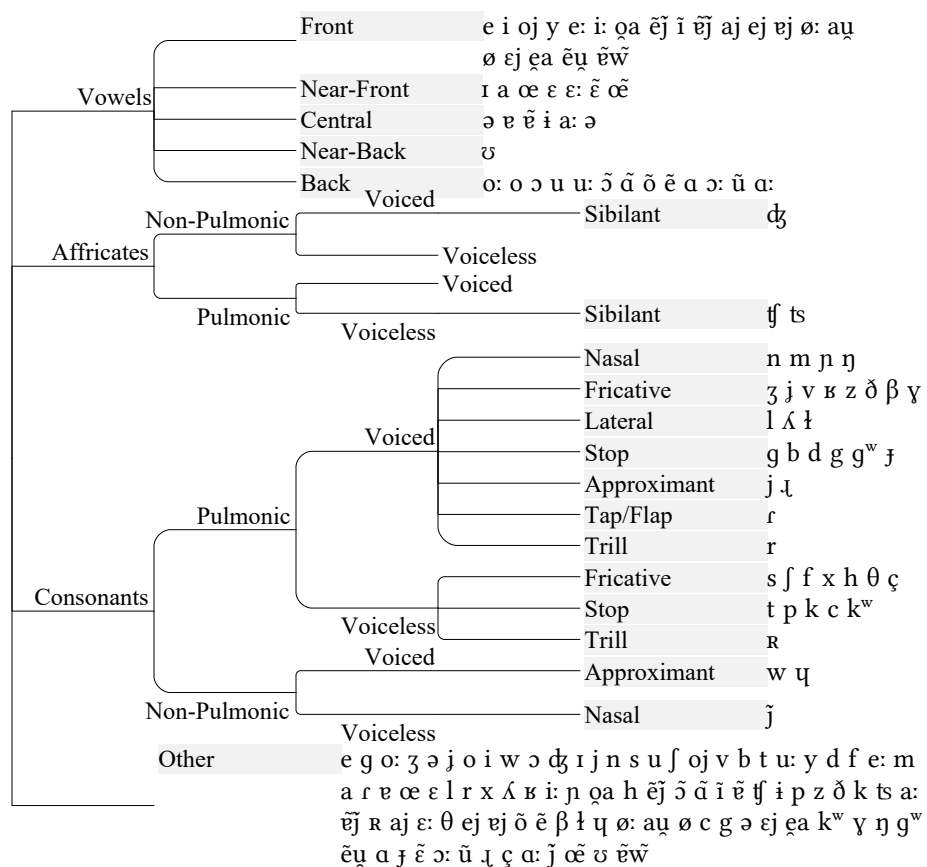
## Appendix 7 - International Phonetic Alphabet

<b>f</b>	<b>e</b>	<b>d</b>	<b>c</b>
0066 Labio-Dental Pulmonic Fricative Strident Obstruent Continuant	0065 Close-mid Front Vocoid Vowel Continuant	0064 Alveolar Voiced Pulmonic Stop Occlusive	0063 Palatal Pulmonic Stop Occlusive
<b>b</b>	<b>a</b>	<b>g<sup>w</sup></b>	<b>ẽ</b>
0062 Bilabial Voiced Pulmonic Stop Occlusive	0061 Open Near-Front Vocoid Vowel Continuant	0261, 02B7 Labial-Velar Voiced Pulmonic Stop Occlusive	025B, 0303 Open-mid Near-Front Nasal Vowel
<b>ɛ:</b>	<b>ɛj</b>	<b>ĩ</b>	<b>ɔ:</b>
025B, 02D0 Open-mid Near-Front Vocoid Long Vowel Continuant	025B, 006A Mid Front Vowel Diphthong	0254, 0303 Open-mid Back Rounded Nasal Vowel	0254, 02D0 Open-mid Back Rounded Vocoid Long Vowel Continuant
<b>ã</b>	<b>ɑ:</b>	<b>ẽ</b>	<b>ɐj</b>
0251, 0303 Near-close Back Nasal Vowel	0251, 02D0 Open Back Long Vowel	0250, 0303 Near-open Central Rounded Nasal Vowel	0250, 006A Mid Front Vowel Diphthong
<b>œ</b>	<b>ø:</b>	<b>u:</b>	<b>o:</b>
0153, 0303 Open-mid Near-Front Rounded Nasal Vowel Diphthong	00F8, 02D0 Open Front Rounded Vocoid Long Vowel	0075, 02D0 Close Back Rounded Long Vowel	006F, 02D0 Mid Back Rounded Vocoid Long Vowel Continuant
<b>oj</b>	<b>k<sup>w</sup></b>	<b>ĩ</b>	<b>i:</b>
006F, 006A Mid Front Vowel Diphthong	006B, 02B7 Labial-Velar Pulmonic Stop Occlusive	006A, 0303 Palatal Nasal Approximant	0069, 02D0 Close Front Vocoid Long Vowel Continuant
<b>e:</b>	<b>ej</b>	<b>a:</b>	<b>aj</b>
0065, 02D0 Mid Front Vocoid Long Vowel Continuant	0065, 006A Mid Front Vowel Diphthong	0061, 02D0 Open Central Vocoid Long Vowel Continuant	0061, 006A Mid Front Vowel Diphthong

## Appendix 7 - International Phonetic Alphabet

ẽu	ẽj	ɔa	ɛa
1EBD, 0075, 032F Mid Front Nasal Vowel Diphthong	1EBD, 006A, 0303 Mid Front Nasal Vowel Diphthong	006F, 032F, 0061 Mid Front Vowel Diphthong	0065, 032F, 0061 Mid Front Vowel Diphthong
au	ẽw	ẽj	
0061, 0075, 032F Mid Front Vowel Diphthong	0250, 0303, 0077, 0303 Mid Front Nasal Vowel Diphthong	0250, 0303, 006A, 0303 Mid Front Nasal Vowel Diphthong	

## Appendix 8 - Feature Tree



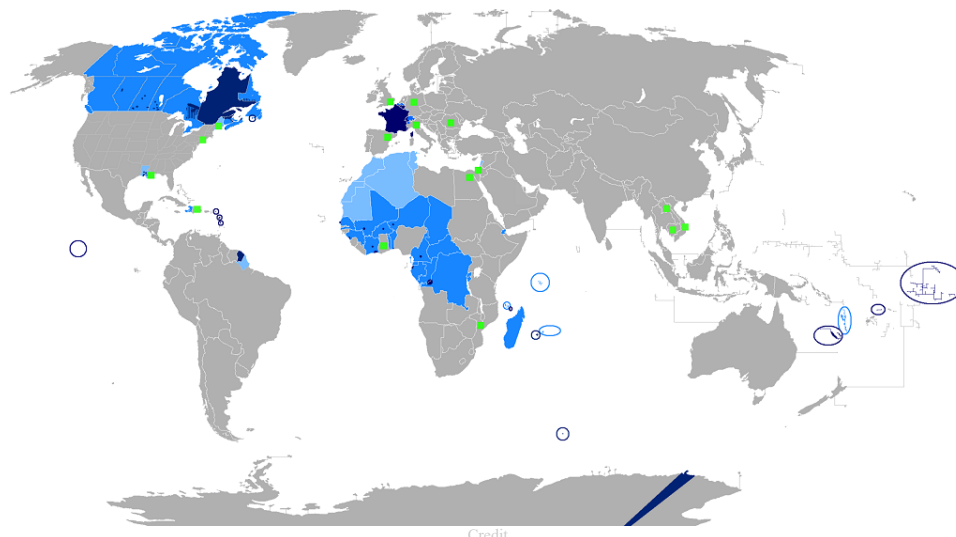
## Appendix 9 - Diacritics

### Diacritics

	Undefined escape character	~	Nasalized	..	Centralized
+	Advanced	-	Retracted	˘	RisingTone
◦	Voiceless		Implosive	˙	Syllabic
ˈ	Ejective	ʕ	Pharyngealized	ˆ	Falling tone
˘	Non-syllabic	˘	No audible release	ˆ	Rhotic hook
˘	Advanced tongue root	˘	Apical	˘	Extra low tone
˘	Low rising tone	˘	Less rounded	˘	Dental
˘	Velarized or Pharyngealized	˘	Global fall	˘	Velarized
˘	High tone	˘	High rising tone	˘	Aspirated
j	Palatalized	˘	Creaky voiced	˘	Low tone
l	Lateral release	˘	Mid tone	˘	Laminal
˘	Linguo-Labial	˘	Nasal release	˘	More rounded
˘	Lowered	˘	Retracted tongue root	˘	Global rise
˘	Rising falling tone	˘	Raised	˘	Extra high tone
˘	Breathy voiced	˘	Voiced	˘	Labialized
˘	Extra short	˘	Mid-centralized	˘	Down-step
˘	Up-step	˘	Long	˘	Half-long
˘	Indeterminacy in french vowels	˘	Begin Non-segmental notation	˘	End non-segmental notation
˘	Voiced epiglottal fricative	˘	Post-alveolar click	˘	Minor group
˘	Dental click	˘	Major group	˘	Alveolar lateral click
˘	Palatal click	˘	Voiceless descender	˘	Combining macron
˘	Tie-bar below	˘	Tie-bar above	˘	Ready made combination
→	Becomes	˘	Separator		



### French

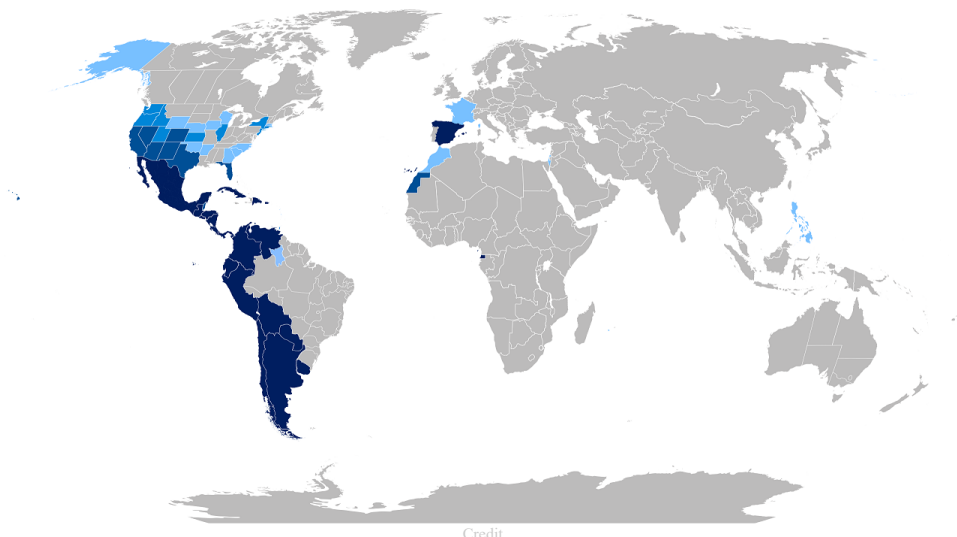


A Romance language of the Indo-European family. It descended from the Vulgar Latin of the Roman Empire, as did all Romance languages. French evolved from Gallo-Romance, the Latin spoken in Gaul, and more specifically in Northern Gaul. Its closest relatives are the other langues d'oïl—languages historically spoken in northern France and in southern Belgium, which French (Francien) largely supplanted.

French was also influenced by native Celtic languages of Northern Roman Gaul like Gallia Belgica and by the (Germanic) Frankish language of the post-Roman Frankish invaders. Today, owing to France's past overseas expansion, there are numerous French-based creole languages, most notably Haitian Creole. A French-speaking person or nation may be referred to as Francophone in both English and French.

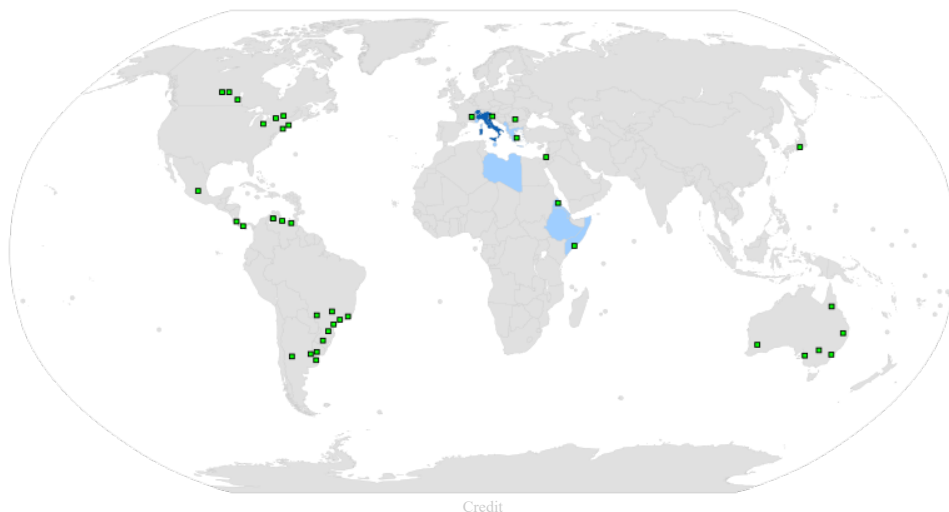
French is an official language in 29 countries across multiple continents, most of which are members of the Organisation internationale de la Francophonie (OIF), the community of 84 countries which share the official use or teaching of French. French is also one of six official languages used in the United Nations. It is spoken as a first language (in descending order of the number of speakers) in France; the Democratic Republic of Congo; Algeria; Morocco; Canada (provinces of Quebec, Ontario and New Brunswick as well as other Francophone regions); Cameroon; Belgium (Wallonia and the Brussels-Capital Region); Ivory Coast; Tunisia; western Switzerland (Romandy—all or part of the cantons of Bern, Fribourg, Geneva, Jura, Neuchâtel, Vaud, Valais); Monaco; parts of Luxembourg; parts of the United States (the states of Louisiana, Maine, New Hampshire and Vermont); northwestern Italy (autonomous region of Aosta Valley); and various communities elsewhere.

### Spanish



A Romance language that originated in the Iberian Peninsula of Europe. Today, it is a global language with nearly 500 million native speakers, mainly in Spain and the Americas. It is the world's second-most spoken native language after Mandarin Chinese, and the world's fourth-most spoken language overall after English, Mandarin Chinese, and Hindi.

### Italian



A Romance language of the Indo-European language family. Italian is the closest national language to Latin, from which it descends via vulgar Latin of the Roman Empire. Taking into account both national and regional languages, it is seen that Italian and Sardinian are together the least differentiated from Latin. Italian is an official language in Italy, Switzerland (Ticino and the Grisons), San Marino, and Vatican City. It has an official minority status in western Istria (Croatia and Slovenia).

It formerly had official status in Albania, Malta, Monaco, Montenegro (Kotor), Greece (Ionian Islands and Dodecanese), and is generally understood in Corsica by Corsican speakers (many linguists classify Corsican as an Italian dialect). It used to be an official language in the former colonial areas of Italian East Africa and Italian North Africa, where it still has a significant role in various sectors.

Italian is also spoken by large immigrant and expatriate communities in the Americas and Australia. Italian is included under the

## Appendix 10 - Languages

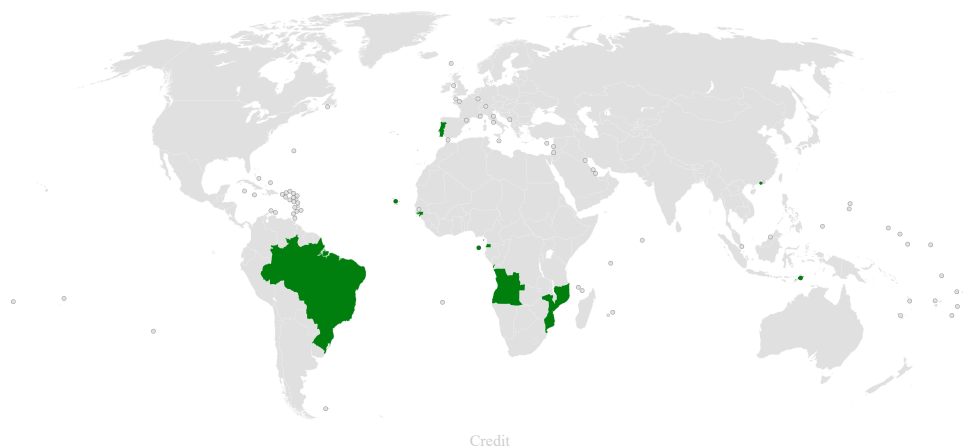
languages covered by the European Charter for Regional or Minority languages in Bosnia and Herzegovina and in Romania, although Italian is neither a co-official nor a protected language in these countries. Many speakers of Italian are native bilinguals of both Italian (either in its standard form or regional varieties) and another regional language of Italy.

### Brazilian Portuguese



The set of dialects of the Portuguese language native to Brazil and the most influential form of Portuguese worldwide. It is spoken by almost all of the 200 million inhabitants of Brazil and spoken widely across the Brazilian diaspora, today consisting of about two million Brazilians who have emigrated to other countries. With a population of over 205 million, Brazil is by far the world's largest Portuguese-speaking nation and the only one in the Americas.

### Portuguese



A Romance language originating in the Iberian Peninsula of Europe. It is the sole official language of Portugal, Angola, Mozambique, Guinea-Bissau, Cape Verde, São Tomé and Príncipe, and Brazil, while having co-official language status in East Timor, Equatorial Guinea, and Macau. A Portuguese-speaking person or nation is referred to as "Lusophone" (lusófono). As the result of expansion during colonial times, a cultural presence of Portuguese and Portuguese creole speakers are also found around the world. Portuguese is part of the Ibero-Romance group that evolved from several dialects of Vulgar Latin in the medieval Kingdom of Galicia and the County of Portugal, and has kept some Celtic phonology and its lexicon.



## Appendix 10 - Languages

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### Catalan



Credit

Catalan (/ˈkætələn, -æn, ˌkætəˈlæn/; autonym: català or llengua catalana; Eastern Catalan: [kətəˈla]), known in the Valencian Community and Carche as Valencian, is a Western Romance language derived from Vulgar Latin. It is the official language of Andorra, and a co-official language of three autonomous communities in eastern Spain: Catalonia, the Valencian Community and the Balearic Islands. It also has semi-official status in the Italian comune of Alghero. It is also spoken in the Pyrénées-Orientales department of France and in two further areas in eastern Spain: the eastern strip of Aragon and the Carche area in the Region of Murcia. The Catalan-speaking territories are often called the Països Catalans or "Catalan Countries".

The language evolved from Vulgar Latin in the Middle Ages around the eastern Pyrenees. Nineteenth-century Spain saw a Catalan literary revival, culminating in the early 1900s.

### Walloon



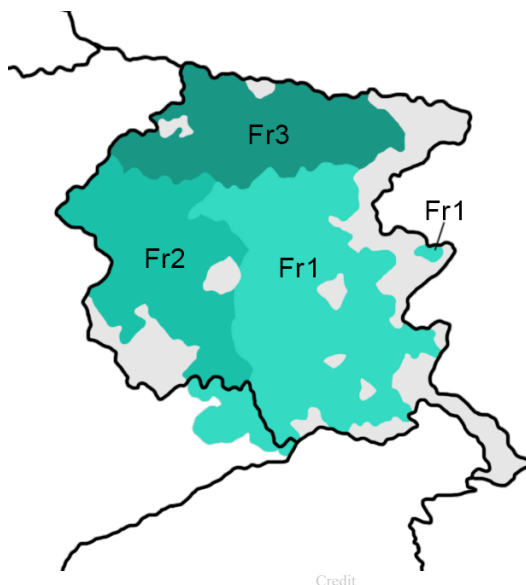
Credit

## Appendix 10 - Languages

A Romance language that is spoken in much of Wallonia and (to small extent) in Brussels, Belgium; some villages near Givet, northern France; a clutch of communities in northeastern Wisconsin, U.S.; and in some parts of Canada. It belongs to the langue d'oïl language family, the most prominent member of which is the French language. The historical background of its formation was the territorial extension since 980 of the Principality of Liège to the south and west.

Despite its rich literature, beginning anonymously in the 16th century and with well-known authors since 1756, the use of Walloon has decreased markedly since France's annexation of Wallonia in 1795. This period definitively established French as the language of social promotion, far more than it was before. After World War I, public schools provided French-speaking education to all children, inducing a denigration of Walloon, especially when accompanied by official orders in 1952 to punish its use in schools. Subsequently, since the middle of the 20th century, generational transmission of the language has decreased, resulting in Walloon almost becoming a dead language. Today it is scarcely spoken among younger people, with vast majority of its native speakers being the elderly (aged 65 and over). In 2007, the number of people with knowledge of the language was estimated at 600,000.

### Friulian



Friulian (/friˈuːliən/ free-OO-lee-ən) or Friulan (natively About this soundfurlan or marilenghe; Italian: friulano; German: Furlanisch; Slovene: furlanščina) is a Romance language belonging to the Rhaeto-Romance family, spoken in the Friuli region of northeastern Italy. Friulian has around 600,000 speakers, the vast majority of whom also speak Italian.

It is sometimes called Eastern Ladin since it shares the same roots as Ladin, but over the centuries, it has diverged under the influence of surrounding languages, including German, Italian, Venetian, and Slovene. Documents in Friulian are attested from the 11th century and poetry and literature date as far back as 1300. By the 20th century, there was a revival of interest in the language.

### Romanian



Romanian (obsolete spellings: Rumanian or Roumanian; autonym: *limba română* ['limba ro'minə] (About this soundlisten), or *românește*, lit. 'in Romanian') is a Balkan Romance language spoken by approximately 24–26 million people as a native language, primarily in Romania and Moldova, and by another 4 million people as a second language. According to another estimate, there are about 34 million people worldwide who can speak Romanian, of whom 30 million speak it as a native language. It is an official and national language of both Romania and Moldova and is one of the official languages of the European Union.

Romanian is a part of the Eastern Romance sub-branch of Romance languages, a linguistic group that evolved from several dialects of Vulgar Latin which separated from the Western Romance languages in the course of the period from the 5th to the 8th centuries. To distinguish it within the Eastern Romance languages, in comparative linguistics it is called Daco-Romanian as opposed to its closest relatives, Aromanian, Megleno-Romanian and Istro-Romanian. Romanian is also known as Moldovan in Moldova, although the Constitutional Court of Moldova ruled in 2013 that "the official language of the republic is Romanian".