

phonItalia: a phonological lexicon for Italian

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Document Title: Descriptions of database fields and phonological alphabet

phonItalia Word Forms Fields

| | |
|----------------|--|
| NumLetters | Number of letters in the word |
| OrthVCV | The consonant vowel structure of the orthographic representation of the word |
| OrthUniq | Orthographic uniqueness point |
| OrthUniqM1 | Orthographic uniqueness point minus one |
| NumHomographs | Number of homographs |
| Phones | The phonological representation of the word form |
| PhonSyll | Phonological representation of the word form with syllable boundaries (.) |
| NumPhones | Number of phones in the word |
| PhonVCV | Consonant vowel structure of the phonological representation of the word |
| NumSylls | Number of syllables in the word |
| PhonUniq | Phonological uniqueness point |
| PhonUniqM1 | Phonological uniqueness point minus one |
| NumHomophones | Number of homophones |
| Orth_N | Size of the orthographic neighbourhood |
| Orth_N_MFreq | Mean log frequency of the orthographic neighbourhood |
| Orth_N_G | Number of orthographic neighbours with a higher frequency than the word |
| Orth_N_L | Number of orthographic neighbours with a lower frequency than the word |
| Orth_N_G_MFreq | Mean log frequency of the orthographic neighbours with a lower |

| | |
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| | frequency than the word |
| Orth_N_L_MFreq | Mean log frequency of the orthographic neighbours with a higher frequency than the word |
| Orth_N_RelFreq | Relative log frequency of the current word and that of its orthographic neighbourhood |
| OLD | Orthographic Levenshtein Distance 20 |
| OLDF | Mean log frequency of words of the 20 words used to calculate the OLD |
| OLD_RelF | Relative log frequency of the word and the 20 used to calculate the OLD |
| Phon_N | Size of the phonological neighbourhood |
| Phon_N_MFreq | Mean log frequency of the phonological neighbourhood |
| Phon_N_G | Number of phonological neighbours with a higher frequency than the word |
| Phon_N_L | Number of phonological neighbours with a lower frequency than the word |
| Phon_N_G_MFreq | Mean log frequency of the phonological neighbours with a lower frequency than the word |
| Phon_N_L_MFreq | Mean log frequency of the phonological neighbours with a higher frequency than the word |
| Phon_N_RelFreq | Relative log frequency of the current word and that of its phonological neighbourhood |
| PLD | Phonological Levenshtein Distance 20 |
| PLDF | Mean log frequency of words of the 20 words used to calculate the PLD |
| PLD_RelF | Relative log frequency of the word and the 20 used to calculate the PLD |

Fields inherited from Colfis¹ database

¹(Laudanna, Thorton, Brown, Burani, & Marconi, 1995; Bertinetto et al., 2005)

| | |
|---------|--|
| nLem | The associated lemma index number assigned to each of the Colfis word forms. This number can be used to match the wordform with the lemma in the Colfis lemma database. |
| fqTot | Total absolute frequency of the word form. |
| fqTotL | Total log frequency of the word form [fqTot] |
| fqQuo | Absolute frequency from newspapers |
| fqPer | Absolute frequency from periodical magazines |
| fqLib | Absolute frequency from books |
| dispT | Dispersion of total frequency [fqTot] |
| dispQuo | Dispersion of frequency from newspapers [fqQuo] |
| dispPer | Dispersion of frequency from periodical magazines [fqPer] |
| dispLib | Dispersion of frequency from books [fqLib] |
| fqRelT | Relative total frequency |
| fqRelQ | Relative frequency from newspapers |
| fqRelP | Relative frequency from periodical magazines |
| fqRelL | Relative frequency from books |
| rango | Word form index number from Colfis. |
| lung | Number of characters in orthographic word form [word] (excluding ‘) |
| word | Orthographic word form |
| lemma | Orthographic representation of lemma associated with the word form |
| gramCat | Grammatical category with the following classifications: <ul style="list-style-type: none"> B Adverb C Conjunction E Noun G Adjective I Interjection N Pronoun P Preposition K Punctuation R Article S Substantive |

V Verb

X Not identified

Z Symbol

NU Numeral

TC Composed verb

VA Auxilliary verb

U unknown

@ syntagmatic word (used in combination with another code, for example S IN E@, would be a noun in a syntagmatic word)

Derived Sub-Lexical Statistics

Phone Statistic Fields

| | |
|--------------|--|
| Single Onset | Statistics for phones found in a single consonant syllable onset. For example, the phone /n/ in the word /a.E.ro.pla.no/. |
| Onset /Cc/ | phones found in the first consonant of a double consonant syllable onset. For example, /p/ in /a.E.ro.pla.no/. |
| Onset /cC/ | phones in the second consonant of a double consonant syllable onset. For example, /l/ in /a.E.ro.pla.no/. |
| Onset /Ccc/ | phones in the first consonant of a triple consonant syllable onset. For example, /G/ in /Gan.Gljo/. |
| Onset /cCc/ | phones in the second consonant of a triple consonant syllable onset. For example, /l/ in /Gan.Gljo/. |
| Onset /ccC/ | phones in the third consonant of a triple consonant syllable onset. For example, /j/ in /Gan.Gljo/. |
| Nucleus | phones that form the nucleus of a syllable. For example /o/ is twice found as a nucleus in /a.E.ro.pla.no/. |
| Single Coda | provides statistics for phones found in a single consonant syllable coda. For example, /n/ in the word /lan.ce/. |
| 1st Coda | phones in the first consonant of a syllable coda (greater than one consonant in length). For example, /l/ in /film/. |
| 2nd Coda | phones in the second consonant of a syllable coda (greater than one consonant in length). For example, /m/ in /film/. |
| Geminate | phones that are found in geminate position in a word. For example, /g/ in the word /mag.go.re/. |

Syllable Statistic Fields

| | |
|----------------------|--|
| MonoSyll | provides frequency information for syllables that occur in monosyllabic words |
| Initial | describes syllables that occur word initially in multisyllabic words, for example /ti/ in / ti .fa.no/. |
| Medial | syllables found in multisyllabic words that are neither word initial nor final, for example /ti/ in /ul. ti .mo/. |
| Final | syllables found in multisyllabic words that are word final, for example, /ti/ in /van. ti /. |
| PhonSeq_Total | frequency of occurrence for the phone sequence of the syllable in the lexicon irrespective of syllable boundaries. e.g. /par/ in the word /pre. pa .ra/ |
| PhonSeq_Word_Initial | Only includes the statistics for words where the syllable phone sequence is found word initially. For the syllable /tar/ it would include an occurrence for the word / ta .ra.re/, but not in /kon. ta .re/. |

Syllable Onset and Coda Fields

| | |
|------------------|---|
| Total | statistics for syllable onsets or codas found in any word position |
| Word Initial | statistics for syllable onsets found in word initial position, for example, /t/ in /ti.fa.no/ |
| Word Medial | syllable onsets and codas that are medial to the word. For example, the onset /d/ or the coda /n/ in /mon.do/ |
| Word Final | only syllable codas that are found in word final position |
| Geminate | subset of the word medial statistics, and is limited to syllable onsets or codas that are geminate, for example, the onset and coda /l/ in /al.lo/. |
| Number of phones | number of phones in the syllable onset or coda |
| 1st phone | 1 st (leftmost) phone in the syllable onset or coda, for example /p/ in the onset /p ^{l} /, or /l/ in the coda /l ^{m} /. |
| 2nd phone | 2 nd phone in syllable onset or coda, for example /l/ in the onset /p ^{l} /, or /m/ in the coda /l ^{m} /. |
| 3rd phone | 3 rd phone in syllable onset or coda, this would be blank in the example of /p ^{l} /, or would be /s/ in the coda /rks/ from 'Marx' . |
| 4th phone | 4 th phone in syllable onset (this field is missing in the coda database) |

Character-bigram and Biphone Fields

| | |
|-----------------|---|
| Word Initial | statistics of bigrams that occur in word initial position. For example, the biphone /ko/ in /kon.trad.det.te/ or the character bigram 'se' in 'sempre' . |
| Word Medial | bigrams that occur word medially, For example, the biphone /on/ in /kon.trad.det.te/ or the character bigram 'mp' in 'sempre' . |
| Word Final | bigrams that occur word finally. For example, the biphone /te/ in /kon.trad.det.te/ or the character bigram 're' in 'sempre' . |
| Syllable Onset | biphones that are found in syllable initial position, for example /tr/ in /kon.trad.det.te/. This would include all occurrences in which the first and second phone of the biphone and syllable were shared. |
| Syllable Medial | biphones found in syllable medial position, for example /ra/ in /kon.trad.det.te/. This would include all occurrences where neither the first or second phone of the biphone coincided with the initial or final phone of a syllable. |
| Syllable Final | biphones that are found in syllable final position, for example /et/ in /kon.trad.det.te/. This would include all occurrences in which the final and penultimate phone of the bigram and a syllable were shared. |
| Cross Syllable | biphones that cross syllable boundaries. For example, /nt/ in /kon.trad.det.te/. In this case the first phone of the biphone must consist of the final phone of the syllable preceding the boundary, and the second phone the first phone of the syllable that proceeds the boundary. |

Description of the phonological alphabet used in phonItalia

| <i>Phone</i> <i>(IPA)</i> | <i>Phone</i> <i>(ascii)</i> | <i>Example</i> <i>(orthographic)</i> | <i>Example</i> <i>(phonological)</i> |
|------------------------------|--------------------------------|---|---|
| a | a | Rata | /rata/ |
| i | i | Mite | /mite/ |
| o | o | Dove | /dove/ |
| e | e | Rete | /rete/ |
| u | u | Muto | /muto/ |
| ɛ | E | Meta | /mEta/ |
| ɔ | O | Moto | /mOto/ |
| t | t | Tana | /tana/ |
| r | r | rete | /rete/ |
| n | n | nocca | /nOkka/ |
| s/z | s | sano | /sano/ |
| l | l | lama | /lama/ |
| k | k | Cane | /kane/ |
| m | m | molla | /mOlla/ |
| p | p | Pane | /pane/ |
| d | d | Danno | /danno/ |
| v | v | vano | /vano/ |
| j | j | ieri | /jEri/ |
| b | b | Banco | /banko/ |
| f | f | fame | /fame/ |
| tʃ | c | cena | /cena/ |
| ts | z | zitto | /zitto/ |
| dʒ | g | gamba | /gamba/ |
| g | G | gatto | /Gatto/ |
| w | w | uomo | /wOmo/ |
| ʌ | L | gli | /Li/ |
| dz | Z | zona | /ZOna/ |
| ʃ | S | scendo | /Sendo/ |
| ɲ | N | ogni | /oNNi/ |

All enquires, corrections, or requests for further information can be directed to
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