

# The Italian Module

A large coverage dictionary

## LEXICAL RESOURCES FOR ITALIAN

### Dictionaries

	<b>Entries</b>	<b>Inflections</b>	<i>Infl. descr./gram.</i>
<i>(A) Simple words</i>	129.519	683	
Verbs	9.588	325	<i>Infl. descr.</i>
Nouns	69.178	314	<i>Infl. gram.</i>
Adjectives	34.233	11	
Detrminers and Pronouns	269	33	<i>Infl. gram.</i>
Prepositions and Conjunctions	210	0	
Adverbs	15.558	0	
Interjections	483		
<i>(B) Compound nouns</i>	69.000	356	<i>Infl. gram.</i>
<i>(C) Others (Contractions, elisions, toponyms, proper names)</i>	4.930		
<b>Total (A) + (B) + (C)</b>	<b>203.449</b>	<b>1.039</b>	

# The dictionary of verbs

- a) a verb can be “transitive” (t), “intransitive” (i), “pronominal” (PRX or PRXCOMP)

Notice: a verb can have a transitive and an intransitive usage:

- a) *fuggire Luca* (t), *fuggire a casa* (i) “to run away”, “escape”  
b) *correre i cento metri* (t), *correre a casa* (i) “to run”

- b) on the basis of (a), verbs can take, as auxiliaries for compound tenses, “avere” for “transitive” verbs, “essere” for “pronominal” verbs; “intransitive” verbs can take either “essere” (*è andato*, *è costato* (=to go, to cost)) or “avere” (*ha telefonato*, *ha vagabondato* (=to phone, to wander) or both (*ha/è decollato*, *approdato*, *tuonato*, *piovuto* (=to take off, to dock, to thunder, to rain)).

Taken into consideration the properties above, strings look like:

<i>correre</i> ,V+i+e+FLX=V34	“run to”
<i>correre</i> ,V+t+a+FLX=V34	“run 100 metres”
<i>inginocchiarsi</i> ,V+i+e+PRX+FLX=V250	“to kneel down”
<i>fregarsene</i> ,V+i+e+PRXCOMP+FLX=V389	“not to give a damn”

# The derivation

The DRV feature has been taken into account for two derivational processes:

1. the derivation of an adjective from a verb by means of the suffix -BIL- (meaning “able to” or “likely to”, as in “ascoltare-ascoltabile” (listen-listenable), “percorrere-percorribile”): 18 different derivational descriptions have been built;
2. the derivation of a verb by means of the repetition prefix RI- (meaning “again”), as in “riascoltare, rimettere” (to listen again-relisten, to put again-reput)), and the allomorphs RE- and R-, as in re-impostare, r-impostare (to reset): 3 different derivational descriptions have been built

The derivational behaviour of verbs is the following:

<i>Verbs</i>	9.588	
transitive *-BIL-	7.573 125	dare, comportare, costare, impossibilitare, ?sapere, sgradire, ?significare, valere, volere
intransitive -BIL-	2.015 15	accedere (access), ridere (lugh), deperire (deteriorare),
<b>Total of verbs which take -BIL-</b> of which and	<b>7.463</b> 6.859 603	are regular in the derivation (-are, -ire) show an irregular behaviour

The irregular derivation for these 603 entries is of the following type:

- a) 506 entries ending in -ere (abbattere = “knock down, fell”)
- b) 15 entries ending in i-ere (accogliere = “accept”)
- c) 15 entries as “fare” and correlated verbs (contraffare = “counterfeit”)
- d) the 3 entries “dire, maledire, predire” and the 3 entries “marcire, concupire, percepire”
- e) 64 entries ending in -rre (estrarre (13), porre (36), sedurre (15))

More specifically:

a) 506 entries ending in -ere (abbattere,) “knock down, fell”

The three following verbs (ending in -ere) have the same inflectional description, however they show three different derivational behaviour with the suffix -BIL-:

chiudere, V+t+a+FLX=V34+DRV=IBILE:N79

persuadere, V+t+a+FLX=V34+DRV=IBILE:N79+DRV=SIBILE:N79

ridere, V+i+a+FLX=V34+DRV=SIBILE:N79

On the basis of the following derivational descriptions:

IBILE = <B3>ibile/A

SIBILE = <B4>sibile/A

they produce the derived word forms:

chiudere → chiudibile, \*chiusibile

persuadere → persuadibile, persuasibile

ridere → \*ridibile, risibile

The 506 verbs ending in –ere show a highly idioyncratic behaviour; moreover, it is also possible to produce more than one derivation for the same verb, as the following table shows:

	<B3>IBILE	<B6>ISSIBILE	<B4>SSIBILE	<B5>SSIBILE	<B6>USIBILE	<B5>ISIBILE	<B2>VIBILE	<B4>SIBILE
accedere	+	-	+	-	-	-	-	-
bere	-	-	-	-	-	-	+	-
chiudere	+	-	-	-	-	-	-	-
flettere	+	-	-	+	-	-	-	-
fondere, diffondere	+	-	-	-	+	-	-	-
persuadere	+	-	-	-	-	-	-	+
ridere	-	-	-	-	-	-	-	+
trasmettere	+	+	-	-	-	-	-	-
vedere	+	-	-	-	-	+	-	-

b) 15 entries ending in i-ere (accogliere) “accept”

If a verb ends in –ere and is preceded by the vowel “i”, the derivation is different from (a):

IIBILE = <B3>bile/A (accogli-ere → accogli-bile)

c) 15 entries as “fare” and correlated verbs:

fare → fattibile, \*facibile, \*fascibile

soddisfare → \*soddisfattibile, soddisfacibile, \*soddiscibile

liquefare → liquefacibile, liquefattibile, \*liquescibile

putrefare → putrefattibile, ?\*putrefacibile, putrescibile

d) 6 entries ending in -ire:

dire, maledire, predire → di-cibile, maledi-cibile, predi-cibile

marcire → marci-bile, marc-escibile

concupire → concupi-bile, concupi-scibile

percepire → percepi-bile, perce-ttile

e) 64 entries ending in -rre: for these verbs the derivation depends on the vowel immediately preceding -rre:

contrar-rre, estrarre, detrarre → contra-ibile, estraibile, detraibile

poo-rre, oppororre, sottopororre → po-nibile, opponibile, sottoponibile

seduu-rre, ridururre, tradururre → sedu-cibile, riducibile, traducibile

In the Italian dictionary for INTEX, all these derived forms were just coded and lemmatized as adjectives. In the Italian dictionary for NOOJ they are considered as being derived forms. Particular attention has to be paid to those adjectives which are not derived or (no more) correlated to verbs. Italian shows more than 500 cases, as for example:

- “agibile” which is not correlated to “agire”, but it is etymological derived from the latin verb “*agĕre*”;
- “riversibile”, “intelleggibile”, (plausibile, solvibile), “commestibile” cannot be derived by verbs since \*rivertere, \*intellegere, \*commestire do not exist in Italian; they are rather derived from latin *revĕrti* (tornare indietro, ritornare), *intelligĕre* “intendere, *comedĕre* “mangiare
- some adjectives in -BIL- co-occur only with specific nouns as in “pista ciclabile”, “passo carrabile” which are compound nouns.

# Problems to be solved

One problem that has to be solved with the DRV feature in dictionary is the possibility that the output of a derivation is the input of another one. In Italian, the derived adjective in -BILE can take another derivational process by adding the morpheme of negation IN- (ex: traducibile → intraducibile). However, this derivational process depends on the initial phoneme of the adjective for a phenomenon known because of *assimilation*:

- if the initial phoneme is a bilabial (P, B, M) the prefix IN → IM, as in “possibile → impossibile”;
- if the initial phoneme is the lateral L then the prefix IN → IL as in “limitabile → illimitabile”;
- if the initial phoneme is the vibrant R then IN → IR, as in “ripetibile → irripetibile”;
- the prefix IN- is used in all other cases. So, it is necessary to code the entries in the dictionary on the basis of these 4 allomorphs

As regards the derivational process which involves the prefixes of repetition RI-, and the allomorph RE- e R-, verbs have to be coded one by one (as in the case of -BIL- ), taking into account that those verbs which start with the vowel "i" can take the allomorph RE- and/or R-, in other words the E→0 (as in re-impostare o r-impostare) while the allomorph RI- is prefixed in all the other cases (as in in ri-abbracciare, ri-mescolare).

Particular attention has to be paid to the fact that RE-, RI, and R- are not necessarily only and always prefixes, as the following 5 different cases show:

1) entries have to be doubled because prefixed and lexicalized entries are both present:

RI+METTERE (reput) # RIMETTERE (to throw up)

RI+CORRERE (rerun) # RICORRERE (to recur)

RI+MONTARE (remount, reassemble) # RIMONTARE (to catch up, *sport*)

RI+USCIRE (to go out again)# RIUSCIRE (to succeed)

RI+FERIRE (to rewound)# RIFERIRE (to refer, report)

2) entries in which RI- is a false prefix:

RIBIONDIRE (\*BIONDIRE)

RIMODERNARE (\*MODERNARE) (renovate)

3) entries as FARE, ANDARE can be prefixed RI+FARE, RI+ANDARE, but it is not possible to derive one from the other since the inflectional description changes. So, for example we have “fa, va” but “rifà, rivà”, with the variants (rifa’ and riva’) (3rd s.p. indicative present )

Finally, in some cases as in RI+PIEGARE the prefix RI- can be not only a repetition prefix but also a “strengthening prefix”.

# This is a sample of the dictionary

abbattere, V+t+a+FLX=V68+DRV=RI+DRV=IBILE:N79  
accogliere, V+t+a+FLX=V26+DRV=RI+DRV=IIBILE:N79  
concupire, V+t+a+FLX=V201+DRV=BILE:N79+DRV=SCIBILE:N79  
contraffare, V+t+a+FLX=V14+DRV=TTIBILE:N79+DRV=DICIBILE:N79  
correre, V+i+e+FLX=V34+DRV=RI  
correre, V+t+a+FLX=V34+DRV=RI+DRV=IBILE:N79  
dire, V+t+a+FLX=V206+DRV=RI+DRV=DICIBILE:N79  
estrarre, V+t+a+FLX=V241+DRV=RI+DRV=IBILE:N79  
fare, V+t+a+FLX=V7+DRV=TTIBILE:N79  
maledire, V+t+a+FLX=V216+DRV=RI+DRV=DICIBILE:N79  
marcire, V+t+a+FLX=V201+DRV=BILE:N79+DRV=ESCIBILE:N79  
mettere, V+t+a+FLX=V28+DRV=RI+DRV=IBILE:N79  
montare, V+t+a+FLX=V3+DRV=RI+DRV=BILE:N79  
percepire, V+t+a+FLX=V201+DRV=BILE:N79+DRV=CETTIBILE:N79  
porre, V+t+a+FLX=V240+DRV=RI+DRV=NIBILE:N79  
predire, V+t+a+FLX=V217+DRV=DICIBILE:N79  
ricorrere, V+t+a+FLX=V34+DRV=IBILE:N79  
rifare, V+t+a+FLX=V14+DRV=DICIBILE:N79+DRV=TTIBILE:N79  
rimettere, V+t+a+FLX=V28+DRV=IBILE:N79  
rimontare, V+i+e+FLX=V3  
riuscire, V+i+e+FLX=V212  
sedurre, V+t+a+FLX=V242+DRV=CIBILE:N79  
uscire, V+i+e+FLX=V212+DRV=RI

At the moment, the Italian dictionary of simple words contains a description of two derivations for the whole dictionary. Nonetheless, it can furtherly implemented considering more complex derivational processes as, for example the possibility of deriving those verbs which can be prefixed with AUTO-, as in:

- candidare (transitive+avere) → \*autocandidare → autocandidarsi (pronominal+essere)
- gestire (transitive+avere) → autogestire(transitive+avere), → autogestirsi (pronominal+essere)
- decidere (transitive+avere) → \*autodecidere → \*autodecidersi.

As the examples show, in deriving the AUTO- prefixed verbs, three main problems have been solved: a) not all transitive verbs can be prefixed, b) not always the prefixed verb has to change only into a pronominal verb with a subsequent modification of the syntax, c) verbs prefixed in such a way can be suffixed with -BILE, as in:

autogestire → autogestibile	(to self-manage)
autocandidarsi → *autocandidabile	(to propose as a candidate)
autolavarsi (es: (*Max + la macchina) si autolava)	
→ autolavabile	(to self-wash)