

# PARAMORFO 1.1 QUICK REFERENCE

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## Installation

1. Uncompress the file that you downloaded. This will yield a directory (folder) called ParaMorfo-1.1, which contains all of the files that you need to run PARAMORFO.
2. Go to the ParaMorfo-1.1 directory (folder), and enter the following, making sure that you are running Python 3.0, 3.1, 3.2, 3.3, or 3.4.

```
python setup.py install
```

## Use

### STARTING THE PROGRAM

Start up the Python interpreter, again making sure that you are running at least Python 3.0, and type the following to load the program.

```
import l3
```

### FUNCTIONS

Options for each function are shown with their default values.

**anal(*language, word*)**

Options: raw=False

Performs morphological analysis of the word. With raw=False, prints out a verbose description of the analysis and returns nothing. With raw=True, returns a list of analyses, each a root, grammatical analysis pair.

```
>>> l3.anal('es', 'canciones')
palabra: canciones
raíz = <canción>
pos = n
```

```

número = plural

>>> l3.anal('es', 'cantaste')
palabra: cantaste
raíz = <cantar>
tiempo/aspecto/modo = pretérito
pos = v
sujeto = 2 persona singular

>>> l3.anal('gn', 'hogakuéra')
ñe'ẽ: hogakuéra
ñe'ẽrapo = <<hóga>
pos = n
+plural
posesivo = int

>>> l3.anal('gn', "nanemandu'áipa")
ñe'ẽ: nanemandu'áipa
ñe'ẽrapo = <mandu'a>
modo = indicativo
voz = simple
+interrogativo
sujeto = 2 persona singular
pos = v
aspecto temporal = -continuativo, -anterior, -remoto
+negativo
aspecto = -dubitativo

>>> l3.anal('gn', "nanemandu'áipa", raw=True)
[("mandu'a", [asp=[-dubit], caso=None, cat='che', +inter, mod='ind', +neg,
+neg1, -nte1, -nte2, obj=[-1, -2], pos='v', -rel, -rztrans, sj=[-1, +2, -
p], tasp=[-ant, -cont, -rem], -trans, voz='smp'], 100)]

```

**anal\_file**(*language*, *input\_file*, *output\_file*)

Options: raw=False

Runs anal on the words in a file.

```
>>> l3.anal_file('es', 'l3/languages/es/data/es.txt',
    'l3/languages/es/data/es_out.txt')
```

Analyzing words in l3/languages/es/data/es.txt

Writing to l3/languages/es/data/es\_out.txt

**gen**(*language*, *root/stem*, [*grammatical\_features*])

Options: None

Generates the surface form of a word given a root or stem and optional grammatical features. With no features specified, a default form is output. Features must be a string with a bracketed list of feature-value pairs separated by '='.

```
>>> l3.gen('es', 'cantar')
canta
```

```
>>> l3.gen('es', 'cantar', '[sj=[-2,-p],tam=[+ipf]]')
cantaba
```

```
>>> l3.gen('gn', 'guata')
oguata
```

```
>>> l3.gen('gn', 'guata', '[sj=[+1,+2,+p],+neg]')
ndajaguatái
```