**Description**

Usually, we work with “full form” lexika, like e.g. Italian (source: [Morph-it!](https://github.com/giodegas/morphit-lemmatizer))

abbracci abbraccio noun gen=m num=p

abbraccio abbraccio noun gen=m num=s

For the representation in Ontolex, we use morphological patterns instead of full forms:

:lex\_abbraccio a ontolex:LexicalEntry ;

lexinfo:gender lexinfo:masculine ;

lexinfo:partOfSpeech lexinfo:noun ;

ontolex:canonicalForm [ ontolex:writtenRep "abbraccio"@it ] ;

**morph:hasParadigm :it-noun\_002 .**

From the full forms, we generate per script a paradigm, which looks as follows:

:it-noun\_002-infl a morph:InflectionType ;

morph:hasParadigm :it-noun\_002 ;

morph:inflects :it-noun\_002\_pl ,

:it-noun\_002\_sg .

:it-noun\_002\_pl a morph:InflectionRule ;

morph:generates [ lexinfo:number lexinfo:plural ] ;

morph:replacement [ morph:source "o$" ;

morph:target "" ] .

:it-noun\_002\_sg a morph:InflectionRule ;

morph:generates [ lexinfo:number lexinfo:singular ] ;

morph:replacement [ morph:source "$" ] .

:it-noun\_002 a morph:Paradigm ;

rdfs:comment "Italian -io/-i noun inflection" .

Unfortunately, we don’t have full form lexica in Latin. However, we can usually “reconstruct” them starting from the declared declension – e.g. in [Latin WordNet](https://github.com/latinwordnet/latinwordnet-archive):

,base,forms,uri,pos,number,gender,case,group,stem,degree

25,abdicatio,abdication,a0031,noun,singular,feminine,nominative,3,,

In this case, we would refer to a an “external” source for morphological patterns, instead of generating them from full forms.

:lex\_abdicatio a ontolex:LexicalEntry ;

lexinfo:gender lexinfo:feminine ;

lexinfo:partOfSpeech lexinfo:noun ;

**morph:hasParadigm :la-noun\_3 ;**

ontolex:evokes :a00031 ;

ontolex:canonicalForm [ ontolex:writtenRep "abdicatio"@la ] .

An external “source” for morphological patterns could look like follows:

(source: [Wikipedia](https://en.wikipedia.org/wiki/Latin_declension))

:la-noun\_3-infl a morph:InflectionType ;

morph:hasParadigm :la-noun\_3 ;

morph:inflects :la-noun\_3\_abl\_m-f\_pl ,

:la-noun\_3\_abl\_m-f\_sg ,

[...] .

:la-noun\_3g-infl a morph:InflectionType ;

morph:hasParadigm :la-noun\_3g ;

morph:inflects :la-noun\_3g\_abl\_m-f\_pl ,

:la-noun\_3g\_abl\_m-f\_sg ,

[...] .

:la-noun\_3i-infl a morph:InflectionType ;

morph:hasParadigm :la-noun\_3i ;

morph:inflects :la-noun\_3i\_abl\_m-f\_pl ,

:la-noun\_3i\_abl\_m-f\_sg ,

[...] .

:la-noun\_3\_abl\_m-f\_pl a morph:InflectionRule ;

morph:generates [ lexinfo:case lexinfo:ablative ;

lexinfo:gender lexinfo:feminine,

lexinfo:masculine ;

lexinfo:number lexinfo:plural ] ;

morph:replacement [ morph:source "$" ;

morph:target "ibus" ] .

:la-noun\_3\_abl\_m-f\_sg a morph:InflectionRule ;

morph:generates [ lexinfo:case lexinfo:ablative ;

lexinfo:gender lexinfo:feminine,

lexinfo:masculine ;

lexinfo:number lexinfo:singular ] ;

morph:replacement [ morph:source "$" ;

morph:target "e" ] .

[...]

:la-noun\_3\_nom\_m-f\_sg a morph:InflectionRule;

morph:generates [ lexinfo:case lexinfo:nominative ;

lexinfo:gender lexinfo:feminine,

lexinfo:masculine ;

lexinfo:number lexinfo:singular ] ;

morph:replacement [ morph:source "$" ;

morph:target "" ] .

[...]

:la-noun\_3 a morph:Paradigm ;

rdfs:comment "Latin 3rd noun declension" .

:la-noun\_3g a morph:Paradigm ;

rdfs:comment "Latin 3rd noun declension - g stem" .

:la-noun\_3i a morph:Paradigm ;

rdfs:comment "Latin 3rd noun declension - i stem" .

**Questions**

According to the current draft, LexicalEntry can take only a *hasParadigm → Paradigm* as argument. In order to ensure the correct full form generation in Latin, how to make sure that:

1. the lemma refers to the “correct” InflectionType definition?

Ex.: 19258,a0394,acoetis,n,1,n-s---fn3i,acoet,acoetis  
should take :la-noun\_3i-infl and *not* :la-noun\_3-infl

Max: create paradigms according to source data, i.e. 3 paradigms for 3, 3g and 3i have to be created

1. the inflected forms take root variations into account?

i.e. abdicatio-n-ibus and *not* \*abdicatio-ibus (see :la-noun\_3\_abl\_m-f\_pl)

Both pieces of information are actually included in the Latin WordNet database. So how to represent them correctly?

For 2) we could easily include the stem variation in a *new* InflectionType definition, e.g.

:la-noun\_3n-infl a morph:InflectionType ;

morph:hasParadigm :la-noun\_3 ;

morph:inflects :la-noun\_3n\_abl\_m-f\_pl ,

:la-noun\_3n\_abl\_m-f\_sg ,

[...] .

:la-noun\_3n\_abl\_m-f\_pl a morph:InflectionRule ;

morph:generates [ lexinfo:case lexinfo:ablative ;

lexinfo:gender lexinfo:feminine,

lexinfo:masculine ;

lexinfo:number lexinfo:plural ] ;

morph:replacement [ morph:source "$" ;

morph:target "nibus" ] .

:la-noun\_3n\_abl\_m-f\_sg a morph:InflectionRule ;

morph:generates [ lexinfo:case lexinfo:ablative ;

lexinfo:gender lexinfo:feminine,

lexinfo:masculine ;

lexinfo:number lexinfo:singular ] ;

morph:replacement [ morph:source "$" ;

morph:target "ne" ] .

Solution proposal: Different root variations receive separate InflectionType resources assigned to their according Paradigm resources → to be reviewed by Max because a new Paradigm should not be necessary

However, we would then run again into problem 1)