Semi-Automated Language Changes from Latin to Spanish

Chen Zhaoyang zc23@illinois.edu

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Abstract
This paper talks about an implementation of rule-based phonology in a high-level programming language.

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Glossary

1.1 Nominal

1.1.1 Declension I

LATINA	Español
CAPRA	cabra

1.1.2 Declension п

LATINA	Español
MURUS	muro

1.1.3 Declension III

LATINA	Español
PANIS	pan

1.1.4 Declension IV

LATINA	Español
FRUCTUS	fructo ¹

1.1.5 Declension v

LATINA	Español
DIES	día

¹Old Spanish frucho

1.2 Pronoun

LATINA	Español
EGO	yo
TV	tú
NOS	nosotros ²
vos	vosotros ³
ILLE	él
ILLI	ellos

1.3 Numeral

LATINA	Español
VNVS	uno
DVO	dos
TRES	tres
QVATTVOR	cuatro
QVINQVE	cinco
SEX	seis
SEPTEM	siete
ОСТО	ocho
NOVEM	nueve
DECEM	diez

1.4 Verbal

1.4.1 Conjugation I

LATINA	Español
PENSARE	pensar

1.4.2 Conjugation II

LATINA	Español
HABERE	haber

1.4.3 Conjugation III

LATINA	Español
PERDERE	perder

²Old Spanish *nos* ³Old Spanish *vos*

1.4.4 Conjugation IV

LATINA	Español
PARTIRE	partir

Representation of Segments

- 2.1 Vocalic
- 2.2 Consonantal

Representation of Syllables

- **3.1 Onset**
- 3.1.1 Onset Cluster
- 3.2 Nucleus
- 3.3 Coda
- 3.3.1 Coda Cluster
- 3.4 Syllable Weight and Stress

Representation of Phonotactics and Sound Changes

- 4.1 Phonotactics
- 4.2 Cardinality in String Rewriting
- 4.3 Context and Admissibility
- 4.4 Semantics of Sound Changes

Representation of Morphophonology

- 5.1 Nominal
- 5.2 Pronoun
- 5.3 Verbal

$\textbf{Latin} \rightarrow \textbf{Proto-Romance}$

- **6.1** Anthology of Sound Changes
- 6.1.1 Vocalism
- 6.1.2 Consonantism
- **6.2** Reflexes by Grammatical Categories
- 6.2.1 Nominal
- 6.2.2 Pronoun
- 6.2.3 Numeral
- **6.2.4** Verbal

Proto-Romance \rightarrow **Western Romance**

- 7.1 Anthology of Sound Changes
- 7.1.1 Vocalism
- 7.1.2 Consonantism
- **7.2** Reflexes by Grammatical Categories
- **7.2.1** Nominal
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Western Romance \rightarrow **Iberian Romance**

- 8.1 Anthology of Sound Changes
- 8.1.1 Vocalism
- 8.1.2 Consonantism
- **8.2** Reflexes by Grammatical Categories
- 8.2.1 Nominal
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- 8.2.3 Numeral
- **8.2.4** Verbal

$\textbf{Iberian Romance} \rightarrow \textbf{Old Spanish}$

- 9.1 Anthology of Sound Changes
- 9.1.1 Vocalism
- 9.1.2 Consonantism
- 9.2 Reflexes by Grammatical Categories
- 9.2.1 Nominal
- 9.2.2 Pronoun
- 9.2.3 Numeral
- **9.2.4** Verbal

$\mathbf{Old}\;\mathbf{Spanish}\to\mathbf{Modern}\;\mathbf{Spanish}$

- 10.1 Anthology of Sound Changes
- 10.1.1 Vocalism
- 10.1.2 Consonantism
- 10.2 Reflexes by Grammatical Categories
- **10.2.1** Nominal
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