Lamda Grammar
with Texts and Vocabulary

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Table I: Consonants

	Labial	Alveolar	Postalveolar	Palatal	Velar	Glottal
Plosive	p	t d			k g	ʔ
Nasal	m	n		ɲ		
Trill		r				
Fricative	f	s	ʃ			h
Approximant	w	l			(w)	

Table II: Romanization of consonants

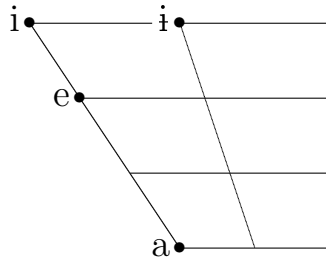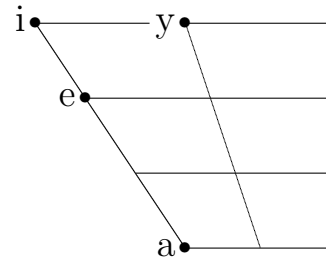|	Labial	Alveolar	Postalveolar	Palatal	Velar	Glottal
Plosive	p	t d			c/qu g/gu	'
Nasal	m	n	ñ			
Trill		r				
Fricative	f	z/c	x			j
Approximant	hu	l				

Figure I: Vowels

Figure II: Romanization of vowels

In unstressed syllables, /a/ is prounced as [v], and /i/ as [ɪ]. Spanish rules are followed when multiple romanizations given. For example, /si/ is written as ⟨ci⟩, but /sa/ is written as ⟨za⟩, /gi/ is written as ⟨gui⟩ but /ga/ is written as ⟨ga⟩. All syllables in Landa are (C)(C)V. Adjacent vowels are treated as nuclei of separate syllables. Stress can be varied, and is marked by the acute diacritic, unless stress is on the penultimate syllable of a multisyllabic word. If a monosyllabic word receives stress, its vowel is marked with an acute.

2 Grammar

2.1 *sre* $\cdots$ *ji* $\cdots$ *sre* — `let`
2.2 *la* $\cdots$ *y* — **function declaration**
2.3 *gte* — **monadic** `bind`
2.4 *nci* $\cdots$ *nci* — **multiple monadic** `bind`
2.5 *xe* $\cdots$ *xe* — `where`
2.6 *ne* — **the** `Statement` **monad**

3 Semantics and Lexicon

There are five semantic classes in Lamda: the `Human` class, only for humans, the `Action` class, for actions that can be carried out, the `Animate` non-human class, for animals, the `Concept` class, for abstract concepts, and the `Inanimate` class, for non-abstract, non-animate physical objects. Arguments can be broken into these classes, with cognate arguments in different semantic classes having different but often related meanings. Similarly, a single predicate can have several different but related meanings when taking different numbers of inputs and from different classes. These are defined in section 3.2, along with their class signatures. There is also a sixth semantic class: the `Foreign` class, for loan words and proper nouns.

3.1 Arguments

3.1.1 The human class

jen: "The generic argument; a human."

tweme: "woman."
zñawa: "man."

3.1.2 The action class

bary: "To speak."
cazte: "To compute."

jen: "The generic argument; to do."

mxeca: "To track the time."

3.1.3 The animate non-human class

jen: "The generic argument; an animal."

tweme: "female."
zñawa: "male."

3.1.4 The concept class

bary: "Human speech."
cazte: "Mathematics and computation."

jen: "The generic argument; a concept."
lamda: "Lambda calculus."

mxeca: "Time."

3.1.5 The inanimate class

cazte: "Computer."
jen: "The generic argument; a

thing."
mxeca: "Clock."

3.2 Predicates
bary [`Human` → `Concept`] : Someone's speech.
cazte [`Human` → `Action`] : To understand someone.
r'e [`Foreign` → `Human`] : Returns a person given their name..
xojque [`Action` → `Union{Human, Animate}`] : The performer of an action.
xojque [`Animal` → `Animal`] : The parent of an animal.
xojque [`Concept` → `Concept`] : The origin of a concept.
xojque [`Human` → `Human`] : The parent of a person.
xojque [`Inanimate` → `Union{Human, Animate}`] : The creator of an object.

4 Short texts